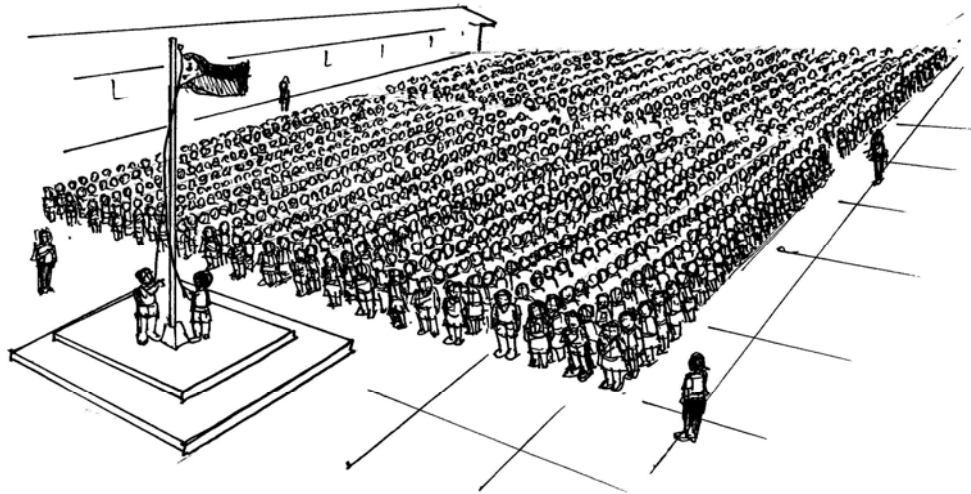## Lesson 1

Visualizing Numbers up to 5 000

All children in school line up during flag ceremony to honor the flag. Do you know how many children are in your school?

April 10, 2014

Activity 1

Visualize the following numbers using flats, longs and squares.

1) 485
2) 392
3) 590
4) 839
5) 248

Activity 2

A. Write the number represented by each set of number discs.

1) (1 000) (1 000) (100) (100) (100) (1) (1)

2) (1 000) (1 000) (1 000) (1 000) (100) (1) (1) (1)

B. Use the number discs to illustrate the numbers.

(1 000) (100) (10) (1)

1) 2 478

2) 3 275

3) 2 312

4) 3 621

5) 3 923

4

Activity 3

Use blocks, flats, longs and squares to illustrate the following numbers.
1) 1 375
2) 2 083
3) 3 260
4) One thousand, five hundred eighteen mahogany seedlings
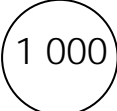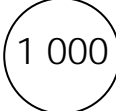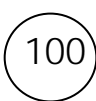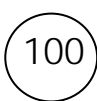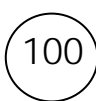5) Four thousand, two hundred thirty–one people attended a concert.

Activity 4

A. Use blocks, flats, longs and squares to illustrate the following numbers.
   1) 2 217
   2) 3 248
   3) 3 760

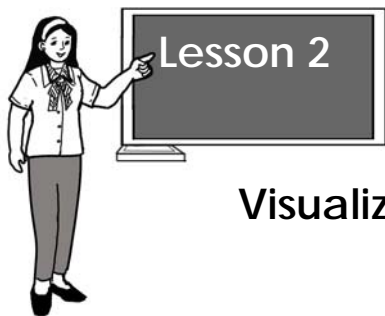B. Write the number represented by each set of number discs.

   1) (1 000) (1 000) (100) (100) (100) _____

2) (1 000) (1 000) (1 000) (1) _____

3) (1 000) (1 000) (1 000) (100) (100) (1) (1)

_____

4) (1000) (1000) (10) (1) (1) (1) _____

5) (1000) (100) (1) (1) _____

Activity 5

DRAFT

Use a graphing paper. Draw and color the following. Write the number they represent in symbols.
1) 1 block, 8 flats and 2 squares
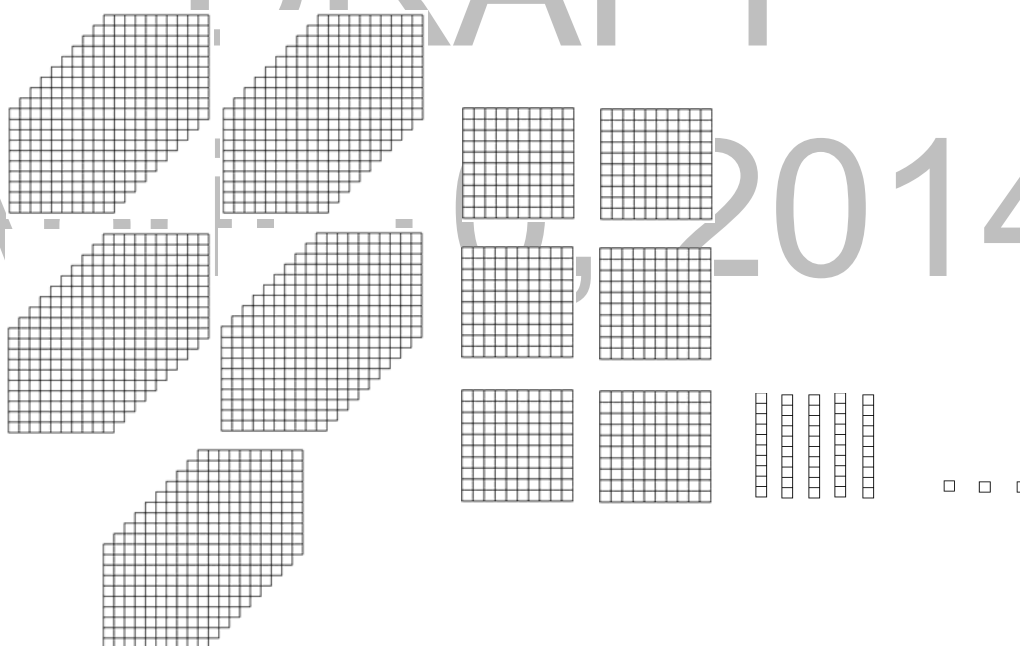2) 2 blocks, 5 flats, 7 longs, and 4 squares
3) 4 blocks and 9 longs

Visualizing Numbers up to 10 000

If you were to count starting from 5 000, what would be the next number?

Activity 1

Use blocks, flats, longs, and squares to visualize the following numbers. Example: **5 653**

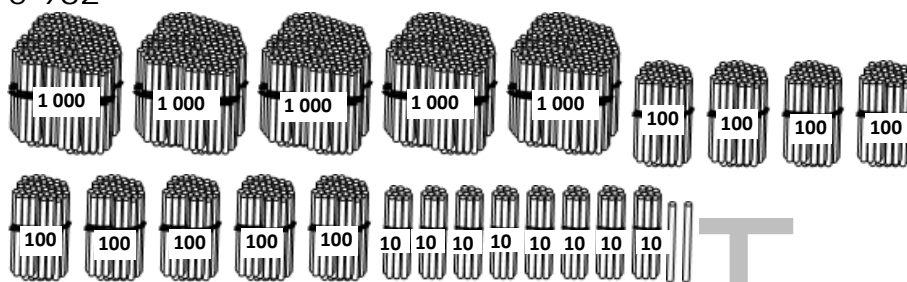5 blocks = 5 000   6 flats = 600   5 longs = 50   3 squares = 3

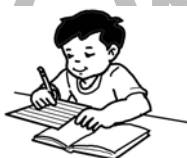1) 1 462

2) 2 195
3) 4 841
4) 5 235
5) 6 243

Activity 2

Use bundled straws (real or picture) to illustrate the following numbers. The first number is done for you.
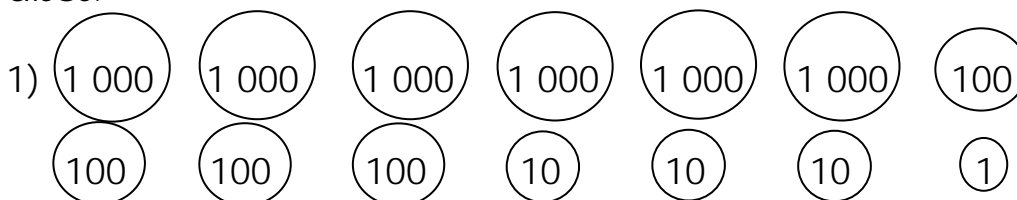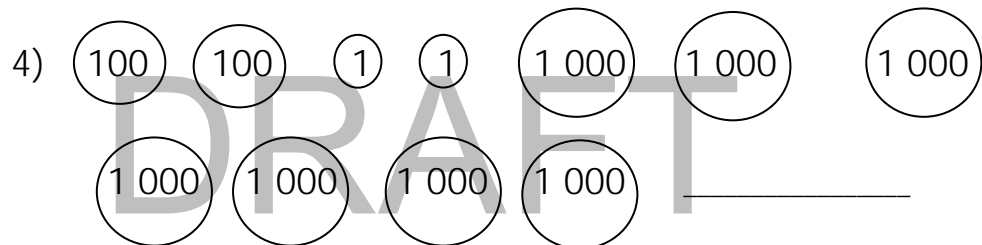1) 5 982

2) 8 361
3) 9 260
4) 7 834
5) 8 365

Activity 3

A. Write the number represented by each set of number discs.

1)

_____

2) (1 000) (1 000) (1 000) (1 000) (1 000) (1 000) (1 000)

    (100) (100) (100) (100) (100) (10) (1)

    (1) _____

3) (1 000) (1 000) (1 000) (1 000) (1 000) (100) (100)

    (100) (100) (100) (100) (100) (10) (10)

    (10) (10) (10) (1) (1) (1) (1) _____

4) (100) (100) (1) (1) (1 000) (1 000) (1 000)

    (1 000) (1 000) (1 000) (1 000) _____
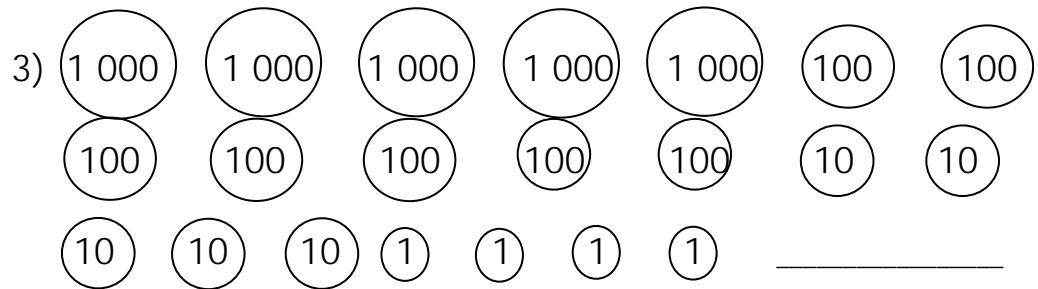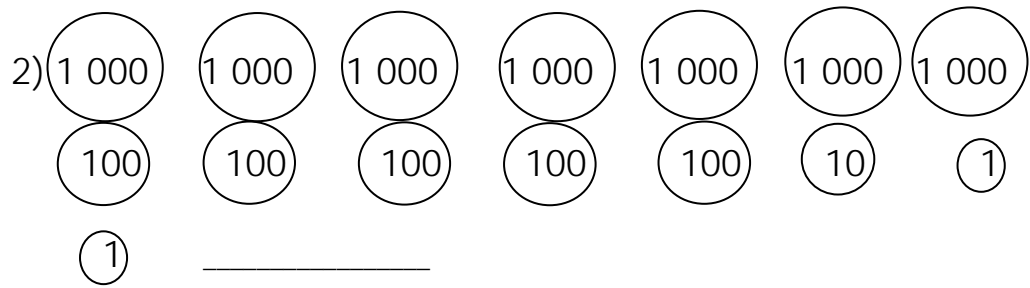
Activity 4

A. Use blocks, flats, longs and squares to illustrate the following numbers.

1) 8 765

2) 6 752

3) 5 534

4) 7438

5) 9 567

B. Use number discs $\left(\text{1 000}\right)$ $\left(\text{100}\right)$ $\left(\text{10}\right)$ $\left(\text{1}\right)$ to illustrate the following numbers.

1) 6 782

2) 8 294

3) 9 316

4) 7 415

5) 5 962

Activity 5

Use a graphing paper. Draw and color the following. Write the numbers they represent in symbol.

1) 5 blocks, 2 flats and 8 squares

2) 7 blocks, 4 flats, 8 longs and 5 squares

3) 10 blocks

Giving the Place Value and Value of Numbers up to 10 000

Look at the place value chart.
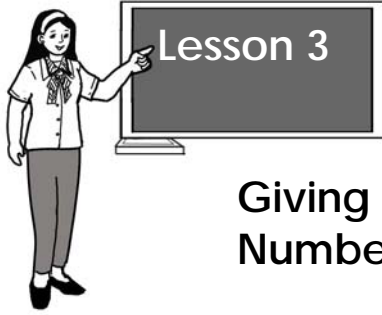
Ten thousands	Thousands	Hundreds	Tens	Ones
	3	5	0	8
1	0	0	0	0

In 3 508, what is the place value of 5? What is the value of 0? How about in 10 000, what is the place value of 1?

DRAFT
April 10, 2014

Activity 1

A. Read each number. Then, tell the digit in the hundreds place.

1)   670   2) 395   3) 522   4) 983   5) 722

B. Write the letter in your notebook corresponding to the correct number represented by the number discs below.

1) (100) (100) (100) (100)   (10)   (10)   (1)
   a. 412   c. 241
   b. 421   d. 214

2) (100) (10) (10) (10) (10) (1) (1)

   a. 124   c. 421
   b. 241   d. 142

3) (100) (100) (100) (10) (10) (10) (10)

   (1)   (1)

   a. 243   c. 342
   b. 432   d. 234

Activity 2

Give the number represented by the number discs on the place value chart.

Ten thousand	Thousand	Hundreds	Tens	Ones
	1 000 1 000 1 000 1 000 1 000	100 100 100	10 10 10 10 10 10 10	1 1

How many thousands are there?
How many hundreds are there? tens? ones ?

Write the number in expanded form.
Write the number on your notebook.
How many digits are there?
What is the place value of 5? 3? 7? 2?

Activity 3

A. Give the place value and the value of the underlined digit.
1) 1 785 _____ _____
2) 4 607 _____ _____
3) 8 931 _____ _____
4) 7 486 _____ _____
5) 3 958 _____ _____

B. Write the missing numbers.

1) 7 524 means _____ thousands + _____ hundreds + _____ tens + _____ ones
2) 9 841 means_____ thousands +_____ hundreds + _____ tens +_____ ones
3) 4 385 means _____ thousands +____hundreds + _____ tens + _____ones
4) 7 345 means 7 000 + 300 +_____+ 5
5) 5 446 means 5 000 + _____+ 40 + _____

C. Answer the following.
1) What are the place values in a 4-digit number?
2) In which group of number or period name is each place value found?
3) How do you find the value of a digit in a given number?

13

Activity 4

A. In the number 8 564, what digit is in the
   1) hundreds place? _____
   2) ones place?   _____
   3) thousands place? _____
   4) tens place?   _____

B. In which number has 8 a greater value? Write the
   number on your answer sheet.
   1) 8 342 or 5 328
   2) 8 931 or 9 285
   3) 6 489 or 2 830
   4) 5 768 or 2 899
   5) 9 845 or 1 798

Activity 5

A. Give the place value and the value of 5 in each
   number.
   1) 5 017   2) 7 305   3) 3 259
   4) 5 234   5) 2 513

B. Answer the following questions.
   1. Which digit has the greatest value in 2 179?
   2. Which digit has the least value in 5 378?
   3. To write the number two thousand, five hundred
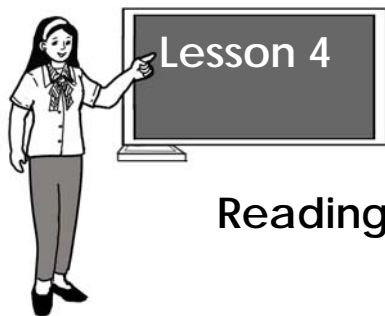   eight, do you need a 0? Why?

Find the numerals in the child's face. Using the numerals found, make five 4-digit numbers.

Reading and Writing Numbers up to 10 000

Read the problem.

Glenda heard from the newscaster that there are one thousand twenty-five voters in barangay Sta. Ana and one thousand three hundred twenty-four voters in barangay Nabalod. She wrote the numbers on her paper this way:

Barangay Sta. Ana – 1 250 voters
Barangay Nabalod – 1 324 voters

Is she correct in writing the numbers? Why?

Activity 1

A. Write these numbers in words.

1) 1 475

_____

2) 3 480

_____

3) 4 537

_____

4) 5 462

_____

5) 9 484

_____

B. Write these numbers in symbols.

1) two thousand, seven hundred-three _____
2) six thousand, five hundred forty-seven _____
3) nine thousand, one hundred thirty-two

_____
4) seven thousand, thirty-four _____
5) five thousand, three hundred-one _____

Activity 2

Write the number that is between the given numbers.
1) 6 462, _____, 6 464
2) 7 586, _____ , 7 588
3) 4 517,_____ , 4 519
4) 5 488,_____, 5 490
5) 9 536, _____, 9 538

Activity 3

A. Write the following in words:

1) 5 459

_____

2) 6 568

_____

3) 5 173

_____

4) 5 342

_____

5) 6 012

_____

B. Write each number in figures.

  1) five thousand, nine hundred sixty-one _____
  2) seven thousand, two hundred thirty-four _____
  3) eight thousand, forty-four _____
  4) nine thousand, three hundred seventy-three
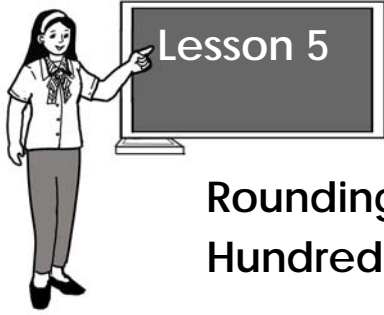   _____
  5) six thousand, ninety-seven _____

Activity 4

Read and answer each question.

  1. What is the largest 4-digit number having different digits? Write it in symbols and in words.
  2. What is the number next to 5 473? Write it in symbols and in words.

DRAFT

April 10, 2014

Lesson 5

Rounding Off Numbers to the Nearest Tens, Hundreds, and Thousands

Suppose it takes you 22 minutes to get home from school. Would you say it takes you about 20 minutes or about 30 minutes to get there? How do you round off numbers? Why is it important to know about rounding off numbers?
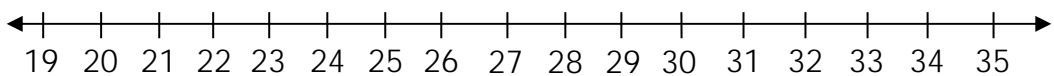
Activity 1

Read the problem and answer the questions.

A. John spent his vacation in Manila for 29 days. Rounded to the nearest tens, about how many days did John spend his vacation in Manila?

Study the number line to find the answer.

19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35

1. In which tens is 29 nearer, 20 or 30? _____.
   So, 29 rounded off to the nearest tens is_____.
   John spent his vacation in Manila for about _____ days.

2. 20, 21, 22, 23, 24, are nearer to 20, so their rounded number is _____.
Did you round up or down? _____

3. 25, 26, 27, 28, 29 are nearer to 30, so their rounded number is _____.
Did you round up or down? _____

B. Study the number line. Label it with the numbers 200, 210,…, 300.

200   210   220   230   240   250   260   270   280   290   300
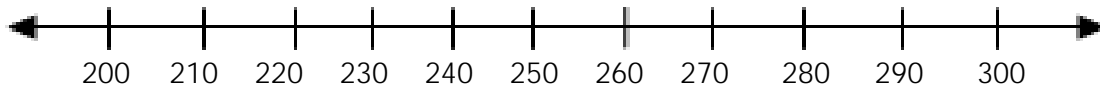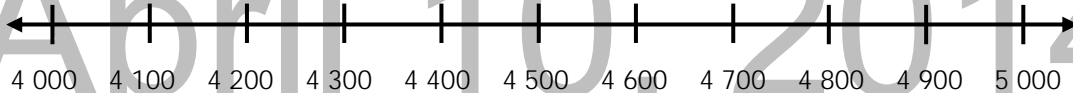
1. In which hundreds is 260 nearer, 200 or 300?
_____

2. So 260 rounds to _____.
3. What do you do when the digit to be rounded is below 4? 5 and above?

C. Study the number line. Label it with the numbers 4 000, 4 100,…, 5 000.

4 000   4 100   4 200   4 300   4 400   4 500   4 600   4 700   4 800   4 900   5 000

1. The number 4 300 is nearer to which value: 4 000 or 5 000? _____

2. So, 4 300 becomes _____ when rounded to the nearest thousands.

D. Round off the following to the nearest tens:
1) 56 _____   2) 84 _____   3) 38 _____
4) 69 _____   5) 91 _____

E. Round off the following to the nearest hundreds:
1) 149 _____   2) 269 _____   3) 576 _____
4) 304 _____   5) 438 _____

F. Round off the following to the nearest thousands:
1) 2 345 _____   3) 3 894 _____
2) 1 789 _____   4) 5 452 _____

G. Give your answers to the following:
1) What is the rounding place if a number is to be rounded off to tens? hundreds? thousands?
2) What digit should be to the right of the digit in the rounding place in order for you to round down?
3) What digit should be to the right of the digit in the rounding place in order for you to round up?

Activity 2

Which number inside the box answers each of the questions below? Write the number on your paper.

82	67	486	53
711	605	57	1 839

1) Which number can be rounded down to 50?
2) Which number can be rounded up to 60?
3) What number can be rounded down to 80?
4) Which 4-digit number can be rounded to 2 000?
5) Which number can be rounded up to 700?
6) Which 3-digit number that can be rounded to 500?

Activity 3

A. Choose the number to which the given number is closer. Write your answer in your notebook.
   1) 58 – 50 or 60
   2) 43 – 40 or 50
   3) 548 – 500 or 600
   4) 627 – 600 or 700
   5) 961 – 900 or 1 000

B. Round off each number to the indicated place value.
   1) 69 (tens)   4) 5 736 (thousands)
   2) 486 (hundreds)   5) 236 (tens)
   3) 392 (hundreds)

C. Round off each number in the box to the nearest tens, hundreds, or thousands. Write your answers in the correct column.

| 56 | 4 613 | 2 548 | 68 | 243 | 273 | 42 |
| 4 217 | 485 | 49 | 361 | 456 | 38 |

40	50	60	70	200	300	400	500	3 000	4 000	5 000

Read and answer each question.
1) There were 3 246 players in the athletic field during the Regional Palaro Parade. Round off this number to the nearest thousands.
2) A man could carry about 50 kilograms of rice. Which of these could he carry: 55 kg, 54 kg, 47 kg, 58 kg, 56 kg?
3) A bakery needs three hundred twenty-nine eggs for their egg pies. About how many eggs should they buy?
4) Two boy scouts will buy rope for knot-tying activities. The needed length of rope is 257 dm. Which length is more reasonable to buy: 250 dm, 260 dm or 300 dm? Why?
5) Mother will go to market to buy 1 kilo of fish, 1 kilo of chicken and 5 kilos of rice. Is PhP300 enough to buy all the items? Why?

A. Answer the following questions.
1) What is the greatest number that rounds off to 800 when rounded to the nearest hundred?
2) What is the least number that rounds to 800 when rounded to the nearest hundred?
3) What is the greatest and least numbers that round to 500 when rounded to the nearest hundred?

4)   What becomes of 9 124 when rounded to the nearest hundred?

5)   What becomes of 5 501 when rounded off to the nearest thousand?

B.   Write 5 numbers that would round off to:
1) 70   2) 400   3) 8 000

C.   When rounding off to the nearest hundred, in which of the numbers given below will you not change the digit in the hundreds place?

1) 351   6) 510
2) 220   7) 299
3) 207   8) 185
4) 918   9) 1 206
5) 840   10) 872

DRAFT
April 10, 2014
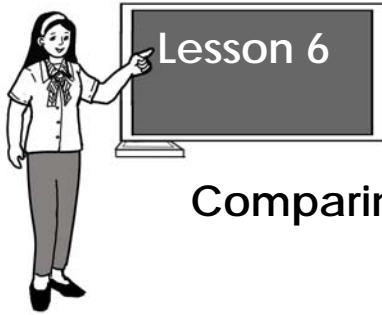
Comparing Numbers up to 10 000

Sally and Carmy are best friends. Look at the pictures of rubber bands each of them has collected. Who among them do you think collected more rubber bands? How would you compare the number of rubber bands they collected?

Sally and Carmy counted the rubber bands they collected and wrote these on a chart. Who collected more rubber bands?

Best Friends	Number of rubber bands collected
Sally	1 637
Carmy	1 259

Compare the numbers using the counters: blocks, flats, longs, and squares.

Compare the following numbers using the following arm positions.

less than   greater than   equal

1) 3 345 _____ 5 263
2) 6 232 _____ 6 348
3) 6 476 _____ 7 568
4) 8 315 _____ 9 806
5) 8 925 _____ 9 438
6) 2 040 _____ 2 000 + 0 + 40 + 0
7) 7 904 _____ 7 000 + 900 + 0 +4
8) 4 576 _____ 5 000 + 400 + 70 + 6
9) 9 300 _____ 9 000 + 300 + 0 + 0
10) 6 232 _____ 6 000 + 200 + 30 + 4

Activity 2

A. Read and answer the questions. Compare the numbers using symbols.

1) Mapayapa Elementary School has a population of 3 260 while Maligaya Elementary School has 20

more pupils than Mapayapa Elementary School. What is the population of Maligaya Elementary School?

2) Mother and father saved PhP3 475 in October. In December, they saved PhP3 125. In what month did they have lesser savings?

B. Which has more thousands?
1) 9 879 or 7 894
2) 4 800 or 8 400
3) 7 643 or 6 437
4) 6 897 or 1 689
5) 7 342 or 3 742

Activity 3

A. Compare the numbers. Write >, <, or = in the blank.
1) 3 860 _____ 5 487
2) 5 863 _____ 7634
3) 2 737 _____ 7 321
4) 7 876 _____ 6 787
5) 2 346 _____ 2 346
6) 1 678 _____ 1 785
7) 7 341 _____ 7 314
8) 3 413 _____ 3 712
9) 8 678 _____ 8 786
10) 7 891 _____ 7 891

B. Answer the following questions.
1) 426 and 624 have the same digits, but in a different order. Do they have the same values? Explain.

2) How will you compare the digit 4 in 934 with the 4 in 647? Explain.

C. Complete the sentence.
1) To compare 2 457 and 2 464, look at the digits in the _____ place.

2) To compare 1 830 and 1 799, look at the digits in the _____ place.

Activity 4

Write the correct symbol in the blank to make the number statement true.
1) 8 691 ____ 8 961
2) 5 287 ____ 5 827
3) 5 600 ____ 5 000 + 600 + 0 + 0
4) 4 993 ____ 4 939
5) 8 540 ____ 8 450
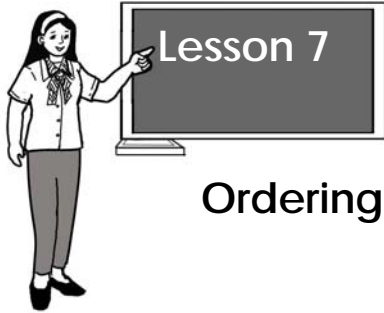
Ordering Numbers up to 10 000

If you were given a set of four-digit numbers, how would you arrange them in decreasing order? in increasing order?

Activity 1

Arrange the numbers from greatest to least. Write your answer on your paper.

1) 4 378   4 380   4 379   4 382   4 381

   _____   _____   _____   _____   _____

2) 5 320   5 324   5 732   5 322   5 326

   _____   _____   _____   _____   _____

3) 7 850   7 845   7 854   7 585   7 865

   _____   _____   _____   _____   _____

Activity 2

A. Arrange the following numbers in increasing order.

1) 2 786   2 790   2 788   2 787   2 789
2) 5 860   5 980   5 000   5 880   5 780
3) 9 904   9 832   10 000   8 461   9 742

B. Arrange the following numbers in decreasing order.

1) 4 989   4 986   4 985   4 987   4 988
2) 9 399   9 299   9 400   8 299   8 999
3) 6 090   5 610   6 000   9 967   8 374

Activity 3

1) These are the school population of four elementary schools. Arrange them in increasing order.

3 427   2 564   1 976   2 839

_____   _____   _____   _____

2) These are the number of people in four barangays. Write the numbers in decreasing order.

4 745   6 983   9 357   7 450

_____   _____   _____   _____

Write the following numbers in the ladder box.

1)   6 327   4 327   8 543   3 258   1 765

Start here ⟹

2)   4 452   9 778   7 675   4 231   5 189

Start here ⟹

Activity 5

A. Study the data on the collection of cash donations, then answer the questions that follow.

Two civic-organizations wanted to help the flood victims in Luzon. They asked their friends and relatives for cash donations to raise funds.

Study the table.

Amount of Cash Donations Collected (in pesos)		
Day	Organization A	Organization B
1	8 000	5 800
2	7 500	7 900
3	8 600	8 500
4	10 000	9 000
5	6 800	6 600

Order the amount of their collections in ascending and descending order.

	Organization A's Collection		Organization B's Collection	
	Ascending	Descending	Ascending	Descending
	_____	_____	_____	_____
	_____	_____	_____	_____
	_____	_____	_____	_____
	_____	_____	_____	_____
	_____	_____	_____	_____

How will you encourage the people in your community to be helpful and generous especially to the needy and victims of calamity?

B. Using the digits **1, 4, 6**, and **7, repetitions allowed**, form five 4-digit numbers and write them in order from greatest to least.

_____

Lesson 8
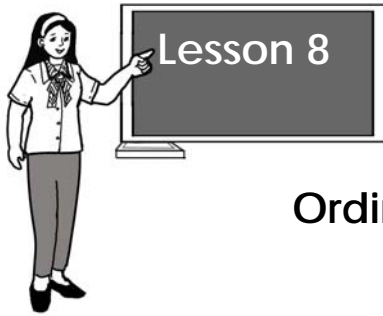
Ordinal Numbers from 1st to 100th

Do you have brothers and sisters? How many brothers and sisters do you have? Who is the oldest? the youngest? What is your position in the family?

Activity 1

A. Write the following ordinal numbers in symbol.

1) eighteenth _____
2) twenty-third _____
3) forty-third _____
4) eighty-first _____

5) twenty-fourth _____
6) twenty-ninth _____
7) seventy-sixth _____
8) eighty-eighth _____

B. Write the missing ordinal in each of the following:

1) 2nd, 4th, 6th, 8th, _____
2) 10th, 20th, 30th, _____
3) 12th, 13th, _____, 15th
4) 25th, 35th, 45th, _____
5) 35th, 40th, 45th, _____

6) 39th, 38th, 37th, _____
7) 41st, 42nd, 43rd, _____
8) 64th, _____, 66th, 67th
9) 78th, _____, 58th
10) 97th, 98th, 99th, _____

Activity 2

Using the ordinal symbols, complete the following:

1) National Hero's Day is celebrated on the _____ day of November.
2) New Year's day is the _____ day of January.
3) Christmas is celebrated on the _____ day of December.
4) Philippine Independence Day is celebrated on the _____ of June.
5) Grandfather will turn 75 this year. He will celebrate his _____ birthday in the family's old house.

Activity 3

A. Consider the situations below. Fill in the blanks with the correct answer. Write your answer in your paper.

1) There are 35 pupils in Mrs. Loren's list. Teresa comes before the last. Teresa is the _____ pupil in the list.

2) Mother is now 50 years old. In four years, she will celebrate her _____ birthday.

B. Repeat the order of the five objects up to the 100th place.

1st	2nd	3rd	4th	5th
6th	7th	8th	9th	10th
11th	12th	13th	…	…

1) Draw the object which is at the 21st place?

2) Draw the 100th object.

36

C. Give the word from the following sentence with "The" as the point of reference corresponding to the given position.

The	boys	and	girls	are	playing	in	the	playground	happily.

↖ (point of reference)

31st _____   36th _____

32nd _____   37th _____

33rd _____   38th _____

34th _____   39th _____

35th _____   40th _____

DRAFT
April 10, 2014

Activity 4

Study the pattern then identify the missing ordinal number as marked by the given figure. Write it on your paper.

1st						7th		☀	
11th		☀							
☀	22nd				☀				
									40th
		43rd	☀						☀
				55th					
61st						☀			
☀	72nd								
						87th			
☀	☀	94th			☀				☀

A. Copy the following month in 2012 and encircle the dates mentioned in the following questions.

OCTOBER 2012						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

1) In October 2012, what day of the week is the 15th of the month? _____
2) On what day does the 30th fall? _____
3) Starting with October 1 as the first day, what day of the week is the 21st? _____
4) How about the 10th day? _____

B. Challenge yourself. Read and answer each question.

1) Mary Joy is not the second. Faye comes after Nelia. Aliza is ahead of Mary Joy. Who is the 3rd? _____
2) What is 50th number starting from 22? _____
3) June 30, in a calendar falls on Wednesday. This was the first day of office of the newly elected mayor. He started visiting barangays on the 20th day. What day was it? What day is his 100th day in the office?
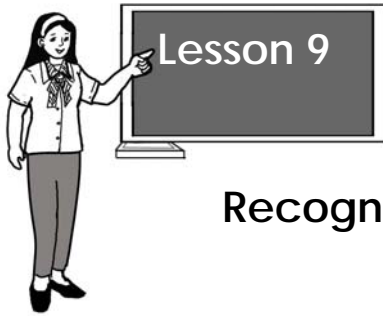
Recognizing Coins and Bills up to PhP1 000

Are you familiar with Philippine coins and bills? What is the biggest amount in the Philippine peso bill? What about the coin? What is the smallest amount of our coin? our bill? Can you identify them?

Activity 1

A. Give the color of each coin and bill and the amount in words.

	Color	Amount in symbol
1)	_____	_____
2)	_____	_____
3)	_____	_____
4)	_____	_____

5)   _____   _____

B. Identify the images on the face of each coin/bill then give the amount in words.

	Face	Amount in words
1)	_____	_____
2)	_____	_____
3)	_____	_____
4)	_____	_____
5)	_____	_____

Answer the following questions on your "Show Me" boards.

How much is your money if you see the picture of:

1) Manuel L. Quezon

2) Apolinario M. Mabini

3) Jose P. Rizal

4) Sergio S. Osmeña

5) Manuel A. Roxas

Read the situations given, then answer the questions that follow.

1) Abbie has three paper bills and 5 coins. The color of one paper bill is purple and the two paper bills are orange. All the coins have the image of Emilio F. Aguinaldo. What are the denominations of her money? How much money does she have in all?

2) Joey collects 25-centavo coins. He has 3 pesos and fifty centavos. How many 25-centavo coins does Joey have?

3) Marlon works as a newspaper boy on weekends. He earns PhP50 in the morning and PhP50 in the afternoon. How much does he earn in a day? He has 3 paper bills and 2 coins. What are the denominations of the 3 paper bills and 2 coins?

Activity 4

Match the items in Column A with those in Column B.
On which paper bill or coin can you find the faces in Column B?

Column A   Column B

____ 1)   A. Teodora Alonzo

____ 2)   B. Emilio Aguinaldo

____ 3)   C. Diosdado Macapagal

____ 4)   D. Jose Abad Santos

____ 5)   E. Manuel A. Roxas

   F. Andres Bonifacio

43

Activity 5

Answer the following in your paper.

What paper bills and coins are used in the following?

1) 2 bills and 2 coins amounting to one hundred fifty-two pesos.
2) 1 bill and 4 coins the amount of which is hundred seventeen pesos.
3) 4 bills and 5 coins amounting to nine hundred twenty-five pesos
4) Paper bills bearing the images of Manuel L. Quezon, Manuel Roxas, and Benigno S. Aquino, Jr. (1 paper bill only per image)
5) Paper bills bearing the images of Josefa Llanes Escoda, Vicente Lim and Jose Abad Santos and Sergio Osmena. (1 paper bill only per image)

DRAFT

April 10, 2014

44

Lesson 10
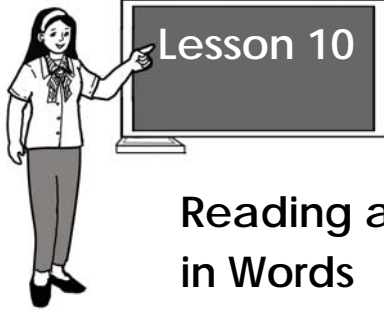
Reading and Writing Money in Symbols and in Words

When you go to store to buy an item, what do you usually check in the item? Are you able to read the indicated price of the item?

Activity 1

Look for the items in the canteen you can buy from the play money given to your group.

Items in the Canteen	Price
1) sandwich	PhP15.50
2) fruit juice	PhP12.00
3) banana cake	PhP18.25
4) pancit	PhP15.00
5) cheesecake	PhP10.20
6) fruit shake	PhP25.00
7) suman	PhP20.00

Write the items you bought and their prices. Then determine your total expenses.

Activity 2

Fill in the blank with the number of paper bills and coins equivalent to each of the amount indicated in each number.

1) PhP1 000
   a. _____ five hundred-peso bill(s) and _____ one hundred peso bill(s)
   b. _____ five hundred-peso bill(s)

2) PhP500
   a. _____ one hundred-peso bill(s)
   b. _____ fifty-peso bill(s)

3) PhP200
   a. _____ two hundred-peso bill(s)
   b. _____ one hundred-peso bill(s)

4) PhP330
   _____ two hundred-peso bill(s), _____ one hundred-peso bill(s) and _____ ten-peso coin(s)

5) PhP990
   _____ five hundred-peso bill(s), _____ two hundred-peso bill(s), _____ fifty-peso bill(s) and _____ ten-peso coin(s)

Activity 3

A. Read the following amounts of money.

1) PhP125.00   4) PhP649.49

2) PhP245.05   5) PhP1 000.00

3) PhP500.00

B. Write the following amounts in figures. Write on your paper.

_____ 1) Four hundred sixteen pesos

_____ 2) Two hundred eighty-five pesos

_____ 3) Seven hundred thirteen pesos and fifteen centavos

_____ 4) Eight hundred thirty-four pesos and eleven centavos

_____ 5) Nine hundred twenty-two pesos and sixteen centavos

Activity 4

A. On your notebooks, write the missing numbers.

1) PhP150.25   means _____ pesos and _____ centavos

2) PhP212.75   means _____ pesos and _____ centavos

3) PhP763.50   means _____ pesos and _____ centavos

4) PhP874.25   means _____ pesos and _____ centavos

5) PhP946.50 means _____ pesos and _____ centavos

B. Complete the table below by writing the amount of money either in words or in figures.

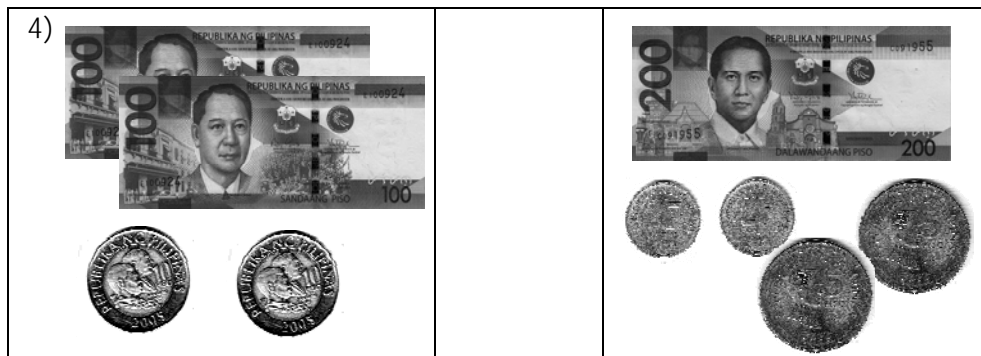| Amount in Words	Amount in Figures
1) Six hundred forty-one pesos and twenty-five centavos	
2)	PhP800.15
3) Three hundred fifty-six pesos and thirteen centavos	
4)	PhP505.05
5) Four hundred twenty-eight pesos and thirty centavos	

DRAFT
April 10, 2014

Lesson 11
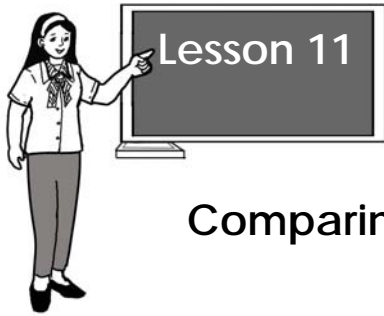
Comparing Money through PhP500

Activity 1

Write > , < or =.

Bills and Coins	>, <, or =	Bills and Coins
1)		
2)		
3)		

4)

Activity 2

Compare the following amounts using >, <, =.

1) PhP45.65   _____   PhP50.90
2) PhP97.35   _____   PhP100
3) PhP67.00   _____   PhP6.75
4) PhP430.30   _____   PhP100.50
5) PhP384.56   _____   PhP390.05

Activity 3

A. Write the combined amount of each set of bills and coins, and put the correct relation symbol.

Bills and Coins	Amount	>, <, or =	Amount	Bills and Coins
1)				

2)				
3)				
4)				

B. Teresa's shop has the following price list of items posted on the wall. Write >, < or = inside the box to make the sentence true.

 PhP350

 PhP199.95

 PhP190.95

 PhP499.00

 PhP280.75

 PhP550.00

 PhP399.95

 PhP95.50

51
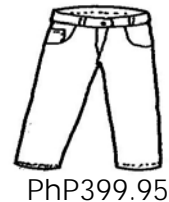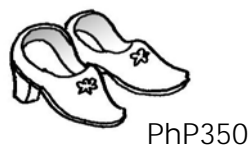
Compare the set of items bought by two customers, Lina and Alicia:

	Lina	**Alicia**

1)

2)

3)

Activity 4

Use >, <, and = to compare the different denominations of bills and coins.

Denominations	>, <, =	Denominations
1) four PhP20.00 bills and three PhP10.00 coins		one PhP100.00 bill and two PhP20.00 bills
2) five PhP50.00 bills and one PhP20.00 bill		one PhP200.00 bill
3) six PhP20.00 and four PhP50.00 bills		two PhP200.00 and two PhP50.00 bills
4) four PhP100.00 bills and seven PhP10.00 coins		two PhP200.00 bills
5) eight PhP50.00 bills and ten PhP5.00 coins		one PhP500.00 bill

Activity 5

Ask for somebody's help for the prices of the items listed below.

Have 2 separate lists of items which can be bought within the PhP500 budget.

1) 1 big can of sardines = _____
2) 1 kilo of white sugar = _____
3) 1 kilo of milk fish = _____
4) 1 kilo of cabbage = _____
5) 1 bottle of peanut butter = _____
6) 1 kilo of rice = _____
7) 1 kilo of onion = _____
8) 1 liter of cooking oil = _____
9) 1can of condensed milk = _____
10) 1 kilo of chicken = _____

Lesson 12
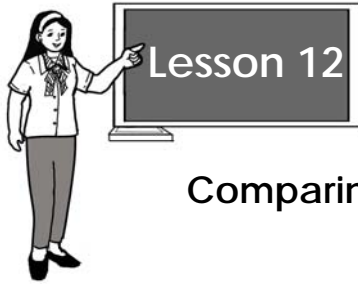
Comparing Money through PhP1 000

Get different denominations of Philippine bills and coins and compare their amounts. Were you able to do it?

Activity 1

Write at least four different combinations of bills amounting to PhP1 000.

1) _____

2) _____

3) _____

4) _____

Activity 2

Work together.

Situation: A customer handed a PhP1 000 bill.

List all possible bills and coins to answer the problems given.

1) Use bills and coins to make change for a customer who buys an umbrella worth PhP589.

2) Use coins and bills to make change for a customer who buys a bag worth PhP728.75.

Activity 3

Write the amount of the given money in your notebook and compare them using <, > or =.

1)

Which amount is lesser? _____

2)
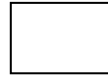
Which amount is more? _____

Activity 4

How many pieces of the following denominations are equal to PhP1 000.00?

1) PhP1.00
2) PhP10.00
3) PhP100.00
4) PhP200.00
5) PhP500.00

Activity 5

Answer the following:

1) Explain how a cashier/seller might make change for your thousand-peso bill, if you buy a pair of slippers worth PhP99.75.

2) Interview a sari-sari store vendor and ask the prices of the following items. Compare the prices using the symbol <, > or = in your notebook.

   a. 25 g powdered juice ☐ 33 g powdered milk

   b. 1 liter vinegar ☐ 1 liter soy sauce

   c. a kilo of rice ☐ a kilo of sugar

DRAFT
April 10, 2014

Lesson 13
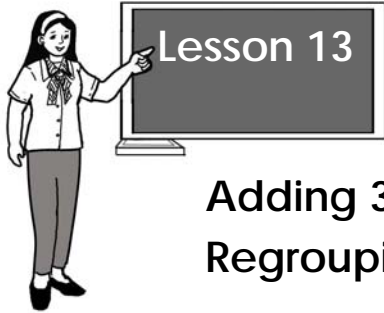
Adding 3- to 4-Digit Numbers without Regrouping

Activity 1

Write your answers on your paper.

1)   8447
       1130
   + 5110

2)   1103
       3210
   + 4030

3)   3010
       1102
   + 5221
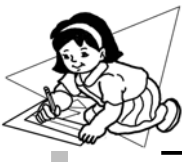
Activity 2

Answer each question below. Use the chart.

Enrolment at Gen. Gregorio del Pilar Elementary School

Grade Level	2010	2011	2012
I	1411	2101	2121
II	1210	1122	1234
III	2034	2221	2333

1) What is the total enrolment of Grade I from 2011 – 2012? _____

2) How many pupils were enrolled in Grade II from 2010 – 2012? _____
3) How many pupils were enrolled in Grade III from 2010 – 2012? _____
4) What is the total enrolment of Grades I, II, III?
   a. in 2010 _____
   b. in 2011 _____
   c. in 2012 _____
5) Which school year has the biggest enrolment? _____

Activity 3

Write in column. Then, find the sum.

1) 3052, 4614, 1231
2) 5143, 1705, 2030
3) 1672, 3104, 4123
4) 6084, 1703, 2112
5) 5416, 1370, 1003

Look at the pictures in the box and then answer the questions that follow on your paper. Use the legend below.

Legend/equivalent:
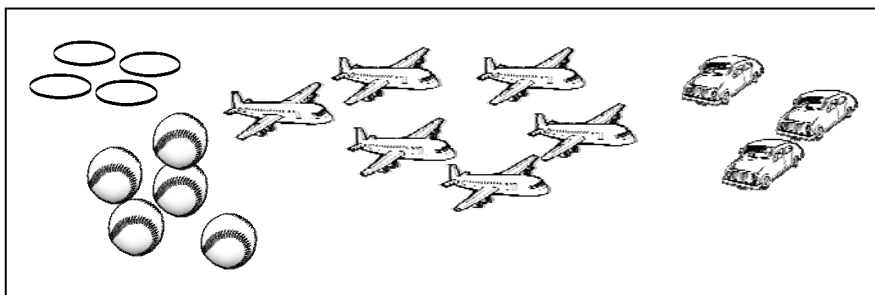
(rubber band)	15
(airplane)	20
(ball)	25
(car)	50

1) How many rubber bands are there in all?
2) How many cars are there?
3) How many airplanes are there?
4) How many balls, rubber bands, cars, and airplanes are there in all?

Lesson 14
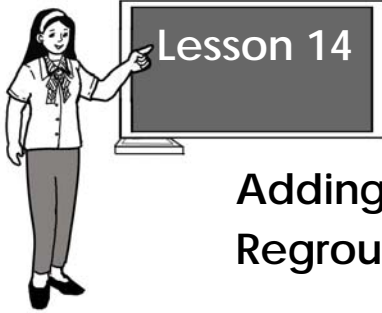
Adding 3- to 4-Digit Numbers with Regrouping

Activity 1

Write the letter of your answer on your paper.

1)   1 447
     + 1 127

a. 2288   b. 2 287   c. 2 297   d. 2 574

2)   3 254
     + 437

a. 3 691   b. 3 681   c. 36 811   d. 4 691

3)   4 453
     + 1 293

a. 5 646   b. 56 146   c. 5 756   d. 5 746

4)   6 487
     + 2 332

a. 8 719   b. 8 819   c. 87 119   d. 8 818

5)   5 768
     + 1 219

a. 6 987   b. 6 977   c. 6 988   d. 69 717

Activity 2

Look at the number chart below. Each letter has an equivalent number of points. Find out the total number or points for a word.

Example:

P = 1 621
E =   234
N =   565
     2 420 points

Letter Number Chart		
A	=	461
B	=	3 045
E	=	234
K	=	1 357
L	=	2 494
N	=	565
O	=	743
P	=	1 621
S	=	406
W	=	1 521

1) Find the number of points for the following words:
   a. low
   b. was
   c. pan
   d. bake
   e. pool

2) Form two words out of the letters in the chart. Find the number of points for each word.

Find the sum.

1)   1 284
      844
 + 3 126

2)   1 426
   3 561
 + 2 729

3)   8 216
   4 768
 + 3 252

4)   3 805
   2 127
 + 2 996

5)   2 743
   1 846
 + 1 032

Activity 4

Read the problems carefully, then solve. Show your solutions.
1) What is the sum of 1 492 and 287?
2) What is 3 827 increased by 138?
3) What is 5 335 more than 2 138?
4) If the addends are 4 563 and 2 154, what is the answer?
5) What is the total of 2 293 and 3 424?
6) A table costs PhP2 540.00. A chair costs PhP1 520.00. If a bed costs PhP500.00 more than the costs of the table and the chair combined, how much does a bed cost?

Activity 5

Use the menu to answer the questions below.

SSES School Canteen

Sopas	- PhP25.00	Milk	- PhP10.00
Pansit	- PhP20.00	Hot Chocolate	- PhP15.00
Puto	- PhP5.00	Orange Juice	- PhP10.00
Sandwich	- PhP15.00	Pineapple Juice	- PhP10.00
Boiled Egg	- PhP8.00		

---

1) How much will Mark pay for sopas, boiled egg and milk?
2) How much will Anna spend for *pansit*, *puto* and hot chocolate?
3) Lita has a 20-peso bill and a 5-peso coin. Can she have a pansit, puto and pineapple juice for snack? Why?
4) What is the biggest amount that Eric can spend for his snacks of 3 food items?

Estimating Sums

Activity 1

Round off the addends to its highest place value then estimate the sum.

1) 8447   2) 7688   3) 4457
   + 466   + 469   + 436

4) 6234   5) 2272
   + 3455   + 6456

Activity 2

Round off the addends then estimate the sum.

1) 1198→ ____   2) 4567→ ____   3) 4210 → ____
   + 981→____   + 735→____   + 3876 →____

4) 2080 → ____   5) 6275 → ____
   + 1750 →____   + 2289 →____

Check your estimate by getting the actual sum. Which of the estimates are good? Why?
Which are not? Why?

Activity 3

Read the given situation below. Then answer the questions that follow.

The photocopy shop near the school recorded the following number of pieces of bond paper it used for five days.

Day	Number of pieces of bond paper used
Monday	2 342
Tuesday	2 422
Wednesday	883
Thursday	1 912
Friday	811

1) About how many pieces of bond paper were used on Monday and Tuesday?
2) What is the estimated number of pieces of bond paper that were used on Wednesday and Thursday?
3) About how many pieces of bond paper were used on Thursday and Friday?
4) What are the estimated sums of pieces of bond paper used on the following days?
   a. Monday and Friday
   b. Tuesday and Thursday
5) a. How many pieces of bond paper were actually used in all from Monday to Friday? b. What is the estimated sum?

Activity 4

Read and solve the problems.

The chain of stores owned by three brothers earns these amounts in a day.

Store A	PhP6 446
Store B	PhP4 567
Store C	PhP8 983

1) About how much do the three stores earn in one day?
2) What is the actual total earnings of Store A and Store B?
3) What is the estimated sum of earnings of store A and store C?
4) What is the estimated total earnings of Store B and Store C?
5) Which store earns more in a day? What is the estimated earning?

Lesson 16
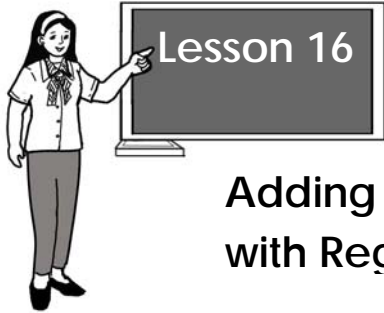
Adding 1-to 2-Digit Numbers without and with Regrouping

Suppose you buy a tetra pack of juice and biscuit from a store, do you ever take time to add mentally how much you will pay the storekeeper?

Activity 1

Give the sum orally.

1)
```
  12
+ 14
```

2)
```
  23
+ 32
```

3)
```
  41
+ 23
```

4)
```
  32
+ 12
```

5)
```
  38
+ 23
```

69

Activity 2

Read and solve the problems without using paper and pencil.

1) 24 blue balls
    16 black balls
    How many balls in all?

2) Elmer has 33 stickers.
    Romy has 27 stickers.
    How many stickers do
    they have in all?

3) 20 ripe mangoes
    18 unripe mangoes
    How many mangoes
    in all?

4) 23 red ballpens
    16 black ballpens
    How many ballpens
    in all?

5) 36 shoulder bags
    14 school bags
    How many bags
    in all?
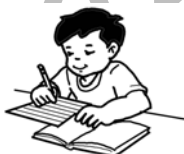
Activity 3

Add the following without using paper and pencil.

1) 22 + 12 =
2) 30 + 22 =
3) 27 + 15 =
4) 28 + 12 =
5) 58 + 24 =

Copy the letter of the answer to the exercises without using of paper and pencil. Connect the number sentences to their sums.

1)
57
+ 32

2)
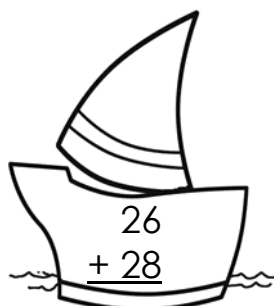18
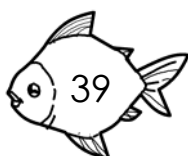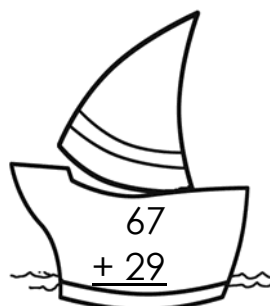+ 21

3)
45
+ 29

4)
26
+ 28

5)
67
+ 29

39   96   54   74   89

A   B   C   D   E

Lesson 17
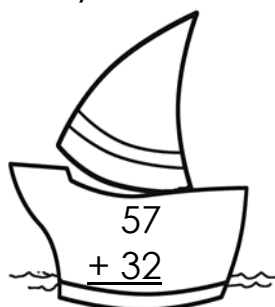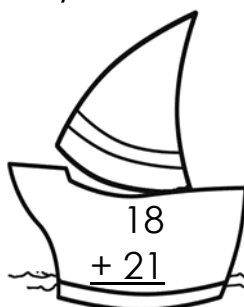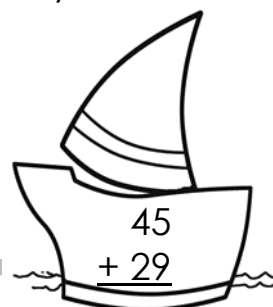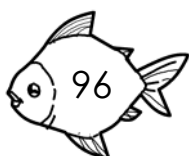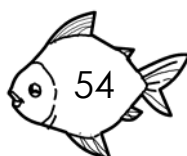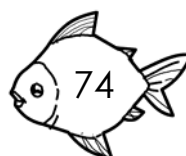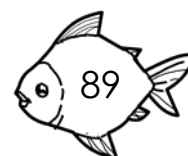
Adding Mentally 2- to 3-Digit Numbers with Multiples of Hundreds

Activity 1

Add the following addends mentally.

1) 400 + 50 = _____
2) 700 + 10 = _____
3) 800 + 90 = _____
4) 300 + 20 = _____
5) 300 + 300 = _____

6) 300 + 70 = _____
7) 600 + 50 = _____
8) 800 + 10 = _____
9) 400 + 40 = _____
10) 500 + 200 = _____

Activity 2

Do the following mentally. Give your answers orally.

1) 80 + 10 = _____
2) 40 + 30 = _____
3) 50 + 40 = _____
4) 60 + 200 = _____
5) 20 + 200 = _____

6) 300 + 30 = _____
7) 500 + 90 = _____
8) 600 + 80 = _____
9) 500 + 400 = _____
10) 600 + 300 = _____

Lesson 18

Solving Routine Problems involving Addition

Every day you experience situations that call for solving problems, no matter how simple they are. You may not know it but these situations help you become creative in solving problems.

Activity 1

Solve the problem on your paper.

1) During the flag ceremony there were 1 224 boys and 822 girls lined up in the school ground. How many pupils joined the flag ceremony?

2) A mango orchard yielded 3 545 mangoes last year and 3 618 this year. How many mangoes did the mango orchard yield in two years?

3) In October, Ramon opened a savings account with an initial deposit of PhP5 000.00. Last month he deposited PhP3 700.00. How much money does he have in his savings account?

Activity 2

Analyze and solve the problems.

1) Mr. Cruz harvested pineapples in two weeks. On the first week, he harvested 2 334 pineapples and 1 248 pineapples on the second week . How many pineapples were harvested in all?

2) Mr. Pura gathered 3 445 coconuts in his farm, while Mr. Flores gathered 2 766. How many coconuts did they gather in all?

Activity 3

Analyze and solve the problems. Write a number sentence for each problem.

1) Nicole and Ana are sisters. Ana saved PhP157 from her allowance in a week and Ana saved PHP 118. How much is their combined savings in a week?

2) A poultry farm owner delivered 3 420 eggs to supermarkets, 3 456 to a public market and had 1 240 eggs left. How many eggs did the farm owner deliver in all?

Activity 4

Analyze and solve the following problems. Draw an illustration for each problem.

1) Ena sold 1 007 tickets for the cultural show last year. She sold 2 009 tickets this year. How many tickets did she sell in two years?
2) A bookstore owner earned PhP3 675.00 from the books she sold yesterday. Today she earned PhP4 399.00 How much did the owner earn from the books sold?

Activity 5

Solve the problems mentally. Write your answer on your paper.
1) What is 200 more than 700?
2) What is 400 increased by 850?
3) Cherry sold 20 sticks of banana cue in the morning and 30 sticks more of banana cue in the afternoon. How many sticks of banana cue did she sell?
4) Clifford has 30 blue marbles and 20 green marbles. His friend gave him 12 green marbles more.
   a. How many marbles does he have now?
   b. Which of the colored marbles does he have more?
   c. During her birthday, Chinchin bought 32 slices of buko pie and 40 slices of egg pie for her classmates. Are the slices of buko and egg pies enough for all her classmates, which are 25 boys and 38 girls? Why?

Activity 6

Solve each problem without the use of paper and pencil.

1) Ms. Ofel gathered 300 straws last week and 200 more this week for her mathematics project.   How many straws did she gather in all?

2) Mer, one of the pupils of Ms. Ofel, was able to collect 500 bottle caps. His classmate gave him 80. How many bottle caps does he have altogether?

DRAFT
April 10, 2014

Lesson 19

Solving Non-routine Problems involving Addition

Activity 1

Find out if the sums of the numbers in any row and column is always the same. Do this on your paper.

1)

12	6	13
5	5	11
4	20	7

2)

33	28	35
34	32	30
29	36	31

3)

15	54	49
51	47	20
52	17	49

Activity 2

Arrange the scrambled digits in the circles to make an addition sentence. Let the given sums guide you. Work on this on your paper.

1)

7	8	5
2	3	4

```
    ◯ ◯ ◯
  + ◯ ◯ ◯
  ─────────
  1 0 8 2
```

2)

3	4	6
8	9	7

```
    ◯ ◯ ◯
  + ◯ ◯ ◯
  ─────────
  1 3 5 1
```

3)

8	9	3
2	7	5

```
    ◯ ◯ ◯
  + ◯ ◯ ◯
  ─────────
  1 2 0 4
```

4)

1	4	7
9	3	5
7	6	

```
  ◯ ◯ ◯ ◯
+ ◯ ◯ ◯
───────────
  9  3  3  0
```

5)

4	6	8
5	9	3
	1	2

```
  ◯ ◯ ◯ ◯
+ ◯ ◯ ◯ ◯
───────────
  8  1  1  1
```

Activity 3

Answer the following questions. Write your answers on your paper.

1) What are 2 consecutive numbers greater than 20 with the sum of 51?
2) What are 3 consecutive numbers greater than 30 with the sum of 96?

Activity 4

Form two 3-digit numbers from the box that will give the least sum and greatest sum in which no numbers are repeated in the addends.

Number 1 is done for you. You may now start with number 2.

1)

2	3	4
5	6	8

2)

1	2	3
6	5	4

3)

5	4	3
7	6	8

Example:

258 + 346 =   604 or 246 + 358 =   604 Least Sum

842 + 653 = 1 495 or 853 + 642 = 1 495 Greatest Sum

Lesson 20
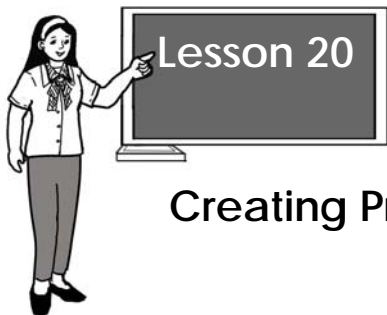
Creating Problems involving Addition

Activity 1

Use the data on the box to complete the problems below.

25 Philippine stamps	doll - PhP150.00	
crayon - PhP35.00	25 boys	112 pages
15 foreign stamps	98 pages	212 words
205 words	30 girls	

1) Cindy read [   ] of a story book in the morning and [   ] in the afternoon. How many pages did she read in all?

2) Kate Anne has [   ] in her collection while Kathleen has [   ] . How many stamps do they have in all?

3) Noemi Mae bought a doll worth [   ] and a crayon worth [   ] . How much did she pay for the items she bought?

4) There are ⬚ and ⬚ in the library. How many pupils are in the library?

5) The grade three pupils listed ⬚ on the first week and ⬚ on the second week in their English class. How many words did they list in two weeks?

Activity 2

Study the story problems given below. Complete the problem by creating a question for what is asked. Then solve the problem.

1) A Peace Parade was held in a school. Three hundred forty-five grade 3 pupils and 412 grade 4 pupils joined the activity.
   Question: _____?
   Solution and Answer: _____

2) Aling Nida sells vegetables in the market. On a weekend, she sold the following: 32 kilograms of potatoes, 25 kilograms of tomatoes, 28 kilograms of onions and 38 kilograms of cabbage.
   Question: _____?
   Solution and Answer: _____

3) Kim Christian has 120 cainitos. His friend Kenneth has 203 caimitos.
   Question: _____?
   Solution and Answer: _____

4) Napoleon read 123 pages of a pocketbook on Monday and 118 pages on Wednesday.
    Question: _____?
    Solution and Answer: _____

Activity 3

Study the data given below. Create a problem using the given data. Then solve the problem.

1) Given: 27 tomato seedlings
            38 eggplant seedlings
    Asked: total number of seedlings
    Problem: _____
    _____?
    Solution and Answer: _____

2) Given: 236 men
            324 women
    Asked: total number of men and women who
            participated in a parade.
    Problem: _____
    _____?
    Solution and Answer: _____

3) Given: Leomar has 48 marbles
            Kim has 36 marbles
    Asked: total number of marbles
    Problem: _____
    _____?
    Solution and Answer: _____

Activity 4

Create a problem using the given data. Then solve the problem.

1) Given: 223 rattan chairs
            247 wooden chairs
   Asked: total number of chairs in the social hall
   Problem: _____
   _____?

   Solution and Answer: _____

2) Given: 70 jackfruit seedlings
            110 camias seedlings
   Asked: total number of seedlings in the nursery
   Problem: _____
   _____?

   Solution and Answer: _____

3) Given: Kenneth painted 24 flower pots
            Ben painted 18 flower pots
   Asked: total number of flower pots painted
   Problem: _____
   _____?

   Solution and Answer: _____

84

Activity 5

Create a problem using the given data. Then solve the problem.

1) Given: 128 tickets sold by Grade 3 pupils
          119 tickets sold by Grade 4 pupils
   Asked: total number of tickets sold for the school fair
   Problem: _____

   _____?

   Solution and Answer: _____

2) Given: 312 plastic bottles collected by Grade 3 pupils
          428 plastic bottles collected by Grade 4 pupils
   Asked: total number of plastic bottles collected for the
          recycling project of Science Club
   Problem: _____

   _____?

   Solution and Answer: _____

3) Come up with your own problem.
   Problem: _____

   _____

   _____?

   Solution and Answer: _____

Lesson 21
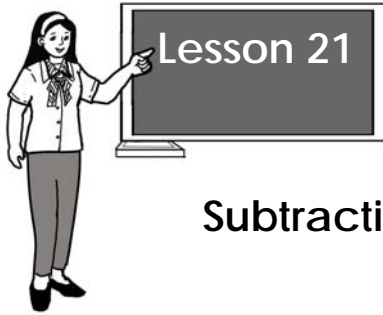
Subtracting Numbers without Regrouping

Activity 1

A. Choose two numbers on the right whose difference is the number in the box on the left. Write the two numbers on your paper.

1)
241	522
	633
	763

2)
368	210
	578
	769

3)
2351	333
	2684
	2794

4)
1405	5132
	2684
	3727

5)
2012	5437
	4465
	3425

B. Find the difference. Check your answer using addition. Write your answer on your paper.

1) 679   2) 978   3) 4 567   4) 7 794   5) 8 967
  – 409   – 642   – 260   – 3 082   – 5 302
  ☐   ☐   ☐   ☐   ☐

Activity 2

Refer to the list given below to find the answers to the following problems.

Sandwiches   –   413 pieces
Biscuits   –   869 pieces
Cupcakes   –   724 pieces

1) How many more biscuits are there than cupcakes?

2) How many more cupcakes are there than sandwiches?

3) If sandwiches will be offered to 565 pupils in a film showing, how many sandwiches are yet to be made?

Activity 3

Do the following.

1. Using the digits 2, 3, 5, 6, 7 and 9, form a subtraction
   sentence that gives a difference of 741.

$$
\begin{array}{ccc}
\ \square & \square & \square \\
- \ \square & \square & \square \\
\hline
7 & 4 & 1
\end{array}
$$

2. How can the digits 1, 2, 3, 5, 6, 7, 8 and 9 be arranged
   in the boxes to form a number sentence that gives a
   difference of 8 641?

$$
\begin{array}{cccc}
\ \square & \square & \square & \square \\
- \ \square & \square & \square & \square \\
\hline
8 & 6 & 4 & 1
\end{array}
$$

3. What is the difference of the greatest 3–digit number
   and the smallest 3–digit number with no repetition of
   the digits?

4. What is the difference of the greatest 4–digit number
   and the smallest 3–digit number with no repetition of
   the digits?

5. What is the difference of the greatest 4–digit number
   and the smallest 4–digit number with no repetition of
   the digits?

Activity 4

Arrange the numbers in a column. Then find the difference. Check your answer using addition.

1) 892 – 570
2) 999 – 536
3) 7 892 – 461
4) 8 994 – 3 980
5) 5 345 – 1 232

Activity 5

Find the difference by subtracting the number in the second column from the number in the uppermost part of the first column.

1)

984	-
	104
	350
	582
	261
	743

2)

3 769	-
	503
	647
	2 032
	1 645
	3 203

Lesson 22
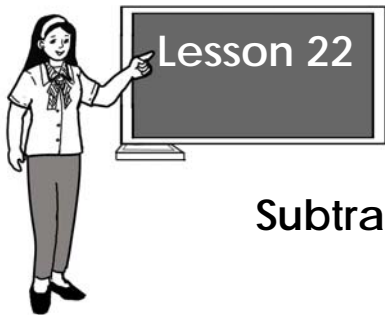
Subtracting Numbers with Regrouping

Activity 1

Complete the table by subtracting the numbers on the left from the numbers on the top row.

—	908	7 195	5 939
294			
675			
843			

DRAFT
April 10, 2014

Activity 2

A. Write the numbers in a column. Then find the difference. Check your answer using addition.

1)   560 – 317
2)   782 – 539
3) 2 807 – 685
4) 4 548 – 1 922
5) 9 050 – 3 728

B. Grade Three Enrolment in Maple School for the last four years

Year	Enrolment
2012	848 pupils
2011	745 pupils
2010	686 pupils
2009	645 pupils

Compare the enrolment of Grade Three for the last four years as specified.
1) How much bigger is the enrolment in year 2012 than year 2011?
2) How many less is the enrolment in year 2009 and year 2010?
3) How many more pupils are enrolled in the SY 2011 than the SY 2009?
4) What is the difference if the smallest enrolment is to be subtracted from the biggest enrolment?
5) If you subtract the enrolment in the year 2010 from 2011, what would be the difference?

Activity 3

Find the missing digit.

1)
```
    5  6  2
 -  3  4  ☐
 ─────────
    2  1  3
```

2)
```
    6  ☐  0
 -  5  3  5
 ─────────
    1  3  5
```

3)
```
    4  3  ☐
 -  1  8  2
 ─────────
    2  ☐  7
```

4)
```
    9  ☐  2  8
 -  6  2  9  ☐
 ────────────
    3  2  3  5
```

5)
```
    8  1  7  ☐
 -  5  4  6  0
 ────────────
    2  ☐  1  4
```

Activity 4

Do as indicated. Show your solution on your paper and encircle your final answer.

1) Subtract 193 from 345.
2) Take away 317 from 652.
3) What is 5 325 minus 810?
4) How much more is 7 658 than 2 385?
5) How much greater is 1 437 than 1 274?

Activity 5

Find the missing minuend, subtrahend or difference.

1)
```
    6  7  2
 - [        ]
 ―――――――――――
    2  3  3
```

2)
```
    9  1  6
 -  7  5  2
 ―――――――――――
 [          ]
```

3)
```
 [             ]
 -      7  3  2
 ―――――――――――――
    2  5  2  7
```

4)
```
    2  5  3  7
 - [            ]
 ―――――――――――――
    1  2  5  5
```

5)
```
    7  2  5  0
 -  2  5  1  9
 ―――――――――――――
 [            ]
```

Lesson 23

Estimating Differences

How fast can you give estimates? Try to estimate the difference between the number of pupils in your section with that of the other.

Activity 1

Estimate the difference by rounding off the numbers to the highest place value. Write your answer in your notebook.

1) 258 → _____
   − 191 → _____
          _____

4) 5 188 → _____
   − 3 252 → _____
           _____

2) 548 → _____
   − 224 → _____
           _____

5) 2 457 → _____
   − 1 219 → _____
           _____

3) 765 → _____
   − 421 → _____
          _____

6) 7 184 → _____
   − 3 263 → _____
           _____

Round each price to the highest place value, then fill in the blanks below.

Musical Instruments on Sale!
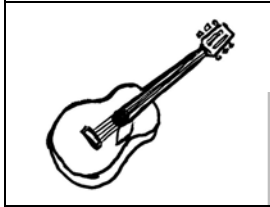
PhP850	PhP3 120
PhP2 470	PhP950
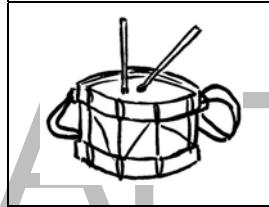
1. The flute costs about PhP2 000 less than the _____.
2. The drum costs about PhP1 000 less than the _____.
3. The flute and the _____ cost about PhP2 000.
4. The guitar and the _____ cost about PhP3 000.
5. Ana had PhP3 000. After she bought the _____ she had about PhP500 left.

Activity 3

Use the table below to answer the questions. Write your answer in your notebook.

Club	Ticket Sales (PhP)
Math	1 0 250
Science	7 925
Filipino	8 175
English	9 100

1. About how much more is the sales of the English Club than that of the Filipino Club?

2. Estimate the difference between the sales of the Math Club and the Science Club.

3. About how much more is the sales of the Math Club than that of the English Club?

4. Estimate the difference between the sales of the English Club and the Science Club.

5. Estimate the difference between the sales of the Math Club and the Filipino Club.

Activity 4

Study the picture below. Then solve the problems.
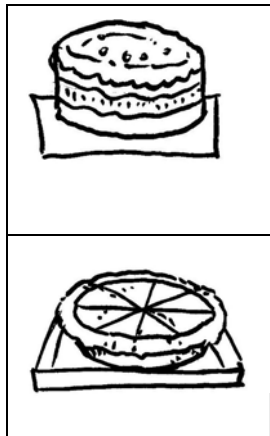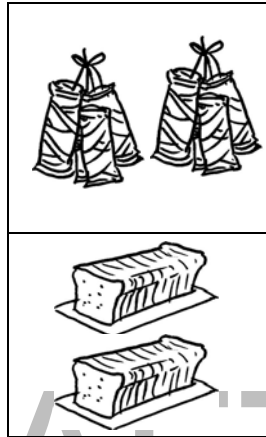
PhP570	PhP100 (2 bundles with 5 pieces each bundle)
PhP175	PhP120 (2 loaves)
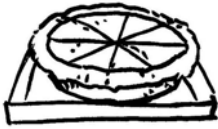
1) Ruby bought 2 loaves of bread. She gave PhP200 to the cashier. About how much change will she get?

2) Marites wanted to buy *suman*. If she had PhP380, about how many bundles of *suman* can she buy?

3) About how much more does the cake cost than the *buko* pie?

4) Mrs. Soriano bought a cake and a *buko* pie. If she gave PhP1 000, about how much change will she get?

5) Carol bought 2 loaves of bread and 2 bundles of *suman*. She gave PhP500 to the cashier. About how much change did she get?

Activity 5

Study the pictures below. Then solve the problems.
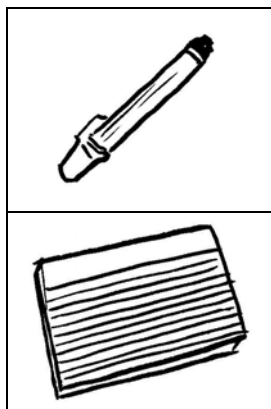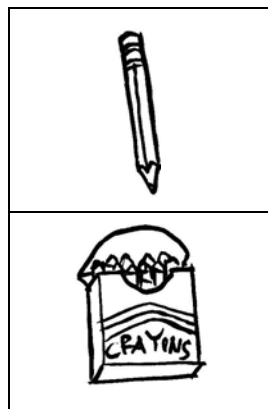
(ballpen)	PhP5.00	(pencil)	PhP3.50
(pad paper)	PhP4.50	(crayons)	PhP20.00

1. If you have PhP50, how many ballpens can you buy?

2. If you have PhP100, can you buy a pad paper, 2 boxes of crayons and 10 pencils?

3. About how many ballpens, pencils, pad papers and crayons can you buy with PhP200?
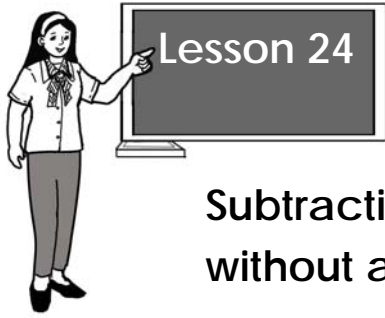
Subtracting Mentally 1- to 2-Digit Numbers without and with Regrouping

Your father brought 15 pieces of oranges and gave each of his five children one each. Can you immediately count the number of oranges left? How?

Activity 1

Perform the indicated operation. Give the answer orally.

1) 26
   - 6

2) 19
   - 8

3) 58
   - 21

4) 89
   - 66

5) 73
   - 46

6) 62
   - 28

7) 31
   - 16

8) 45
   - 17

Activity 2

Choose two numbers from the box. Then determine their difference mentally. Write the number sentence you have formed in your notebook and let your teacher check your answer.

34	9	12	84	45
11	92	7	26	5
6	18	73	15	98
88	32	41	3	62

Activity 3

DRAFT

Subtract mentally the numbers along the line from the number inside the circle. Write your answer on the triangle.

April 10, 2014

43   34

81

22   57

99
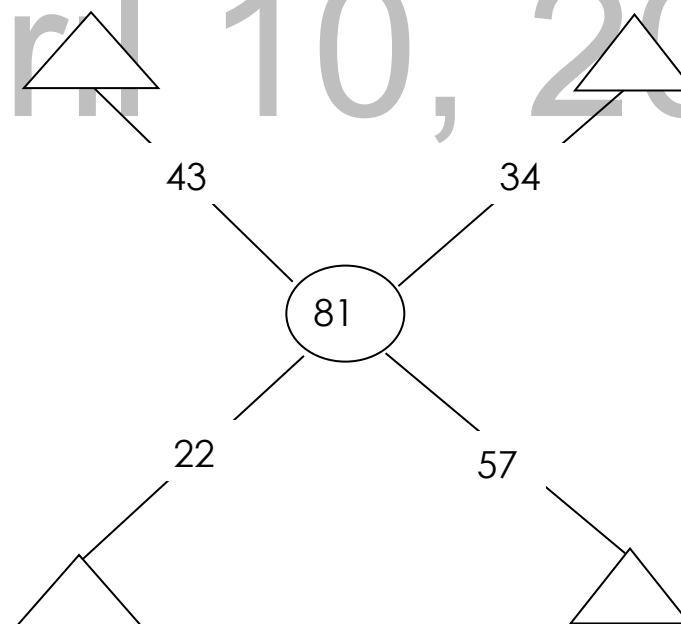
Activity 4

A. Arrange the numbers in column. Then find the difference mentally.

1) 41 – 27 = _____
2) 83 – 58 = _____
3) 64 – 29 = _____
4) 32 – 16 = _____
5) 55 – 38 = _____

B. Find the missing numbers by subtraction.

Start

89

80

65

Final Answer

21
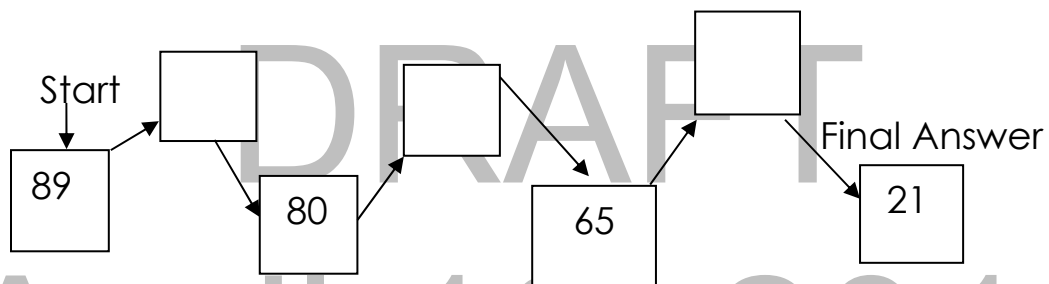
Activity 5

Survey of Favorite Fruits of Grade 3 Pupils

Fruits	Number of Pupils
Mango	59
Lansones	37
Rambutan	42
Guava	78

Solve the following problems. Find the difference mentally.
1) How many more pupils like guava than lansones?
2) How many more pupils like mango than rambutan?
3) How many more pupils like rambutan than lansones?
4) How many more pupils like guava than mango?
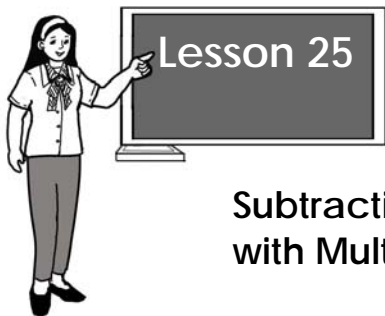
Subtracting Mentally 2- to 3-Digit Numbers with Multiples of Hundreds

You and your friend would want to exchange play cards for marbles. Count mentally how many more cards you will get if you received 100 cards in exchange for only 50 marbles.

Activity 1

DRAFT

April 10, 2014

Perform the indicated subtraction mentally. Write your answer in your notebook.

1) $85 - 35 =$ ☐   6) $700 - 200 =$ ☐

2) $42 - 18 =$ ☐   7) $287 - 100 =$ ☐

3) $753 - 99 =$ ☐   8) $850 - 520 =$ ☐

4) $164 - 98 =$ ☐   9) $644 - 199 =$ ☐

5) $800 - 500 =$ ☐   10) $519 - 299 =$ ☐

Activity 2

Match column A with the answer in column B. Write the letter corresponding to your answer on your paper.

A	B
1) 72 – 50 =	a. 312
2) 63 – 47 =	b. 16
3) 200 – 99 =	c. 22
4) 500 – 240 =	d. 101
5) 712 – 400 =	e. 260

Activity 3

Using the compensation method, tell what number you would add to solve mentally. Then write the answer on your paper.

_____1) 36 – 17 =　　　_____6) 85 – 47 =

_____2) 52 – 18 =　　　_____7) 94 – 39 =

_____3) 73 – 24 =　　　_____8) 124 – 44 =

_____4) 70 – 39 =　　　_____9) 164 – 29 =

_____5) 81 – 36 =　　　_____10) 223 – 98

Activity 4

Subtract mentally. Write the letter of the correct answer.

1) 52 – 30
    a. 18   b. 22   c. 23   d. 32

2) 62 – 49
    a. 33   b. 3   c. 23   d. 13

3) 200 – 54
    a. 136   b. 254   c. 156   d. 146

4) 400 – 120
    a. 280   b. 320   c. 380   d. 520

5) 159 – 57
    a. 108   b. 102   c. 100   d. 112

Activity 5

Read, analyze, and solve the following problems mentally. If the answer is correct, write **yes**. If not, write **no**, then say the correct answer.

1) Leomar bought a notebook and a ballpen worth PhP26.00. He gave the cashier PhP50.00. He calculated that his change is PhP34.00. Is his computation correct?
   Answer: _____

2) Naome Mae plans to give her mother a birthday present worth PhP540.00. She has only PhP350.00. She said that she needs at least PhP210.00 to be able to buy the gift. Is she correct?

Answer: _____

3) Kenneth needs to buy materials for his project worth PhP125.00. He will use his savings of PhP75.00 so that he will only ask PhP50.00 from his mother to be able to buy the materials he needs. Is he correct?

Answer: _____

DRAFT
April 10, 2014
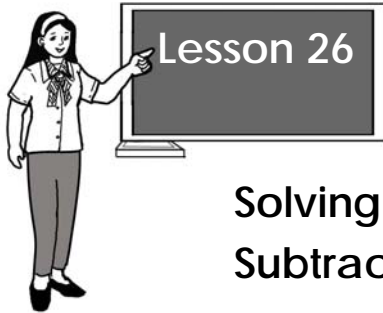
Solving One-Step Problems involving Subtraction

If your mother gave you PhP40.00 for your fare to school and allowance, how much would be left if you paid for a project worth PhP15.00?

Activity 1

Solve the word problems.

1) Ella was able to read 89 pages of her 100-page story book. How many more pages does she still need to read to finish the entire book?

_____

2) Ben has 43 straws. Twenty-five are green and the rest are yellow. How many straws are yellow?

_____

3) Using the digits 2, 6, 4, make the biggest 3-digit number and the smallest 3-digit number. Subtract the smallest number from the biggest number. What is the difference? _____

Activity 2

Solve with a partner.

Measure your height in centimeters.
Find how your heights differ.

Activity 3

Solve the following word problems.

1) Kevin harvested 175 eggplants from their yard. He sold 156 to a vendor. How many eggplants did he not sell?

2) Janice received PhP789.00 from her father. She gave a certain amount to her sister and still has PhP98 left. How much money did she give to her sister?

3) David has two sets of numbers: 123 and 456. If he wants to find how much more is the bigger number than the smaller number, what would be the result?

Activity 4

Solve the following word problems.

1) Ann receives PhP150.00 from her parents as her weekly allowance. She spent PhP75.00 from her allowance during the week. How much was left?

2) Create a word problem from the given picture below using subtraction.

★★★★★★★★★★★★★★★
★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★

DRAFT
April 10, 2014

Lesson 27
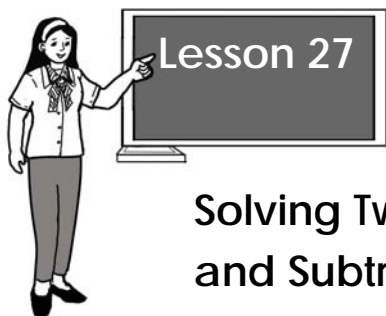
Solving Two-Step Problems involving Addition and Subtraction

Activity 1

Solve the word problems.

1. Maria bought two dozen eggs. If she used 15 eggs for baking a cake, how many eggs were not used?

2. Jon has 224 yellow marbles and 216 red marbles. If 325 marbles filled a box, how many marbles were not contained in box?

3. Mr. Zafra saved PhP3 400.00 from his salary last month. This month he   saved   PhP2 900.00. If he will give P1 800.00 to his son, how much money will be left to him?

4. Given the digits 1, 2, 3 and 4, find the smallest and biggest 2-digit numbers that can be formed with no repetition of the digits. Perform addition and subtraction using the 2-digit numbers formed.

Activity 2

Apply the different strategies in solving the following word problems.

1) Jojo got 673 sheets of bond paper and 75 more. He used 569 sheets. How many sheets of bond paper were not used?

2) Cindy earned PhP1 457.00 from the buko pies she sold. She also earned PhP985.00 from selling mango pies. If she spent PhP895.00 for some ingredients, how much was he profit?

3) Carlo earned PhP1500.00 in his repair shop last month. This month he earned PhP900.00. How much of his earnings were left to him if he bought a car tool set worth P950.00 and a hammer worth PhP295.00?
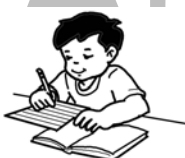
Activity 3

Solve the following word problems using any appropriate strategy.

1) Diana spent PhP125.00 for her project and P36.00 for her transportation. If she had P100.00 in her pocket, how much money did she still need?

2) Garry had 62 red popsicle sticks and 37 green popsicle sticks for his project. He used 45 sticks on the first day. How many popsicle sticks were not used?

_____

3) Dino's parents bought a new TV set for PhP5 500.00 and a gas stove for P2 500.00. If they have only PhP6 500.00, how much money do they still need?

_____

Activity 4

Solve the following word problems.

1) Dave kept 45 marbles in one box and 50 marbles in another box. He gave 35   marbles to John. How many marbles were left?

2) Marta had PhP2 680.00 in her wallet. She paid PhP670 for her groceries and spent PhP56 for her transportation. How much was left?
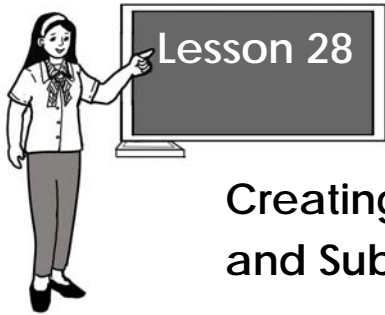
Creating Problems involving Addition and Subtraction

Read the problem.

Ramon picked 16 guavas from one tree and 15 guavas from another tree. How many did he pick in all?

He gave 18 guavas to his friends. How many guavas were left?

What will you do to find the answer?

DRAFT
April 10, 2014

Activity 1

Look at the picture.
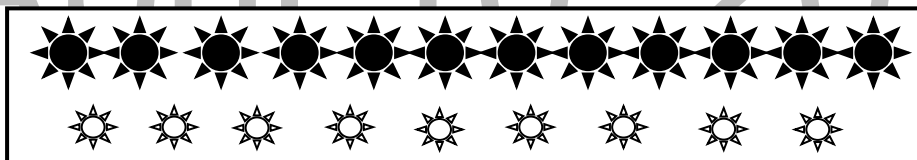
What can you say about the given picture?
How many are big objects?
How many are small objects?
How many in all?
If 8 objects were removed, how many would remain?

Using the picture above, create a simple problem involving addition, subtraction and both operations.

1) Addition

2) Subtraction

3) Two-step procedure

Activity 2

Compose a simple problem using the data in the box.

Esmer	books	50 pages	morning
45 in all	afternoon	150 pages	

1) Addition

2) Subtraction

3) Two-step procedure

Activity 3

Create addition and subtraction word problems using the given data.

1)

| colored pencils | Nene collected 12 |
| Sara collected 15 | many more |

Addition: _____

Subtraction: _____

2)
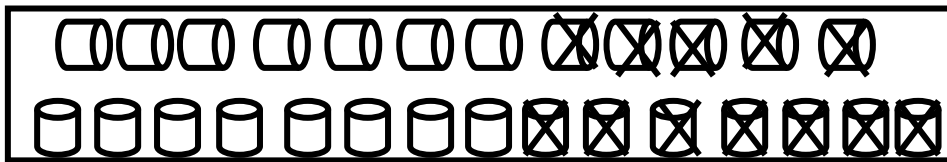
Subtraction: _____
Addition: _____
Two-step procedure: _____

Compose word problems using the given data involving addition and subtraction processes.

1)

Addition:

_____

Subtraction:

_____

Two-step procedure:

_____

2)

Addition:

_____

Subtraction:

_____
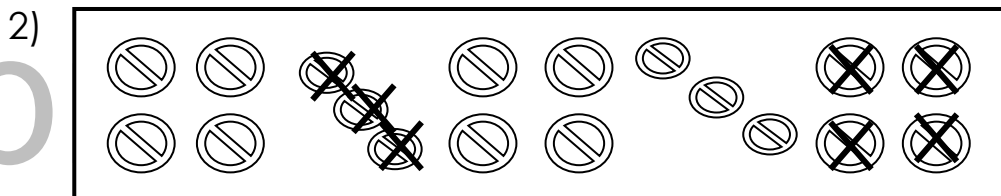
Two-step procedure:

_____

Activity 5

Create word problems using the given data involving addition,   subtraction and two-step procedure.

Mavee	PhP500.00 in the pocket
PhP95.00 for a meal	spent
PhP50.00 for jeepney fare	left

Addition: _____

Subtraction: _____

Two-step procedure: _____

Activity 6

Create word problems using your daily allowance involving addition, subtraction and two-step procedure.

Addition: _____

Subtraction: _____

Two-step procedure: _____
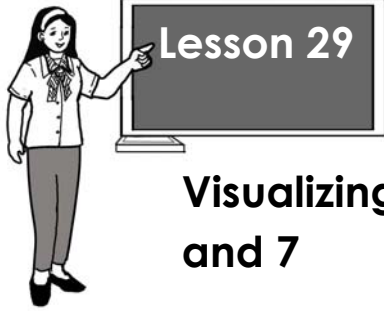
Visualizing Multiplication of the Numbers 6 and 7

Read the story problem below.

Carla has crayons: 2 red, 2 yellow, 2 blue, 2 green, 2 violet, and 2 orange crayons. How many crayons does Carla have?

Count the crayons.
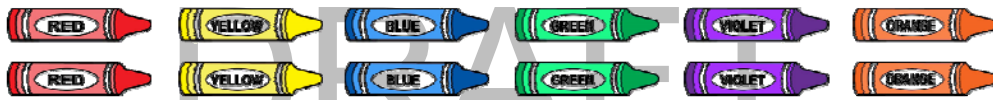
red   yellow   blue   green   violet   orange

How many groups of crayons are there?
_____

How many crayons are there in each group?
_____

How many crayons are there altogether?
_____

Repeated addition sentence: _____
Multiplication sentence: _____

Activity 1

Complete the multiplication table of 6.

6 x 1 =	6 x 6 =
6 x 2 =	6 x 7 =
6 x 3 =	6 x 8 =
6 x 4 =	6 x 9 =
6 x 5 =	6 x 10 =

Complete the multiplication table of 7.

7 x 1 =	7 x 6 =
7 x 2 =	7 x 7 =
7 x 3 =	7 x 8 =
7 x 4 =	7 x 9 =
7 x 5 =	7 x 10 =

Complete the following multiplication sentences.

6 x

Start here:

3

= _____

9

= _____

4

= _____

5

= _____

7

= _____

DRAFT

7 x

Start here:

1

= _____

10

= _____

7

= _____

6

= _____

2

= _____

April 10, 2014
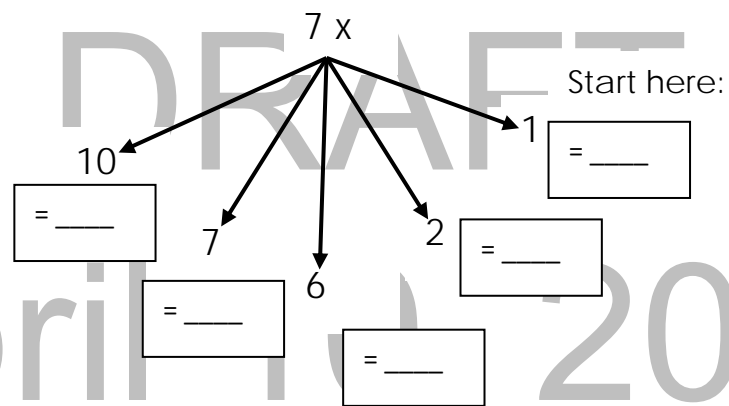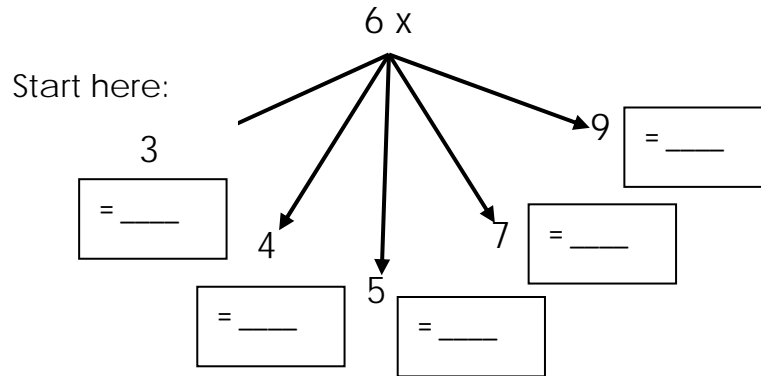
Activity 3

Multiply. Write the product in your notebook.

1) 6
    x 3

2) 7
    x 8

3) 6
    x 9

4) 7
    x 8

5) 7
    x 9

Activity 4

A. Find the product.

1) 7	2) 6	3) 6	4) 7	5) 7
x 3	x 6	x 8	x 7	x 6

B. Get the product of the following numbers.

1) 6 x 7 =   6) 7 x 3 =
2) 7 x 5 =   7) 6 x 10 =
3) 6 x 9 =   8) 6 x 9 =
4) 6 x 4 =   9) 7 x 6 =
5) 7 x 4 =   10) 6 x 9 =

Activity 5

Write the multiplication sentence. Then, find the product.

1) If you multiply 6 by 3, what is the product?
2) Multiply 6 by 7.
3) Find a number to be multiplied by 7 to get 56?
4) What number should be multiplied by 7 to obtain 63 as a product?
5) The product of 6 and 9 is ____.

Lesson 30
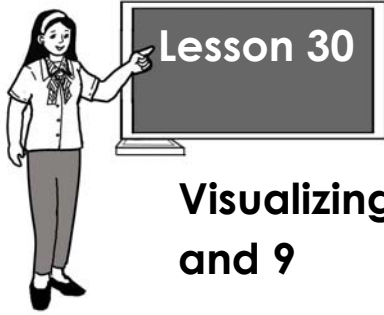
Visualizing Multiplication of the Numbers 8 and 9

Mary Ann's mother bought 8 boxes of donuts for Maryann's birthday. If there were 6 donuts in a box, how many doughnuts were there in all?

How are you going to solve the problem?

Activity 1

Complete the Multiplication Table of 8.

8 x 1 =   8 x 6 =

8 x 2 =   8 x 7 =

8 x 3 =   8 x 8 =

8 x 4 =   8 x 9 =

8 x 5 =   8 x 10 =

Complete the multiplication table of 9.

9 x 1 =	9 x 6 =
9 x 2 =	9 x 7 =
9 x 3 =	9 x 8 =
9 x 4 =	9 x 9 =
9 x 5 =	9 x 10 =

Activity 2

DRAFT

Multiply the number 8 by the number that is indicated by the arrow.

April 10, 2014
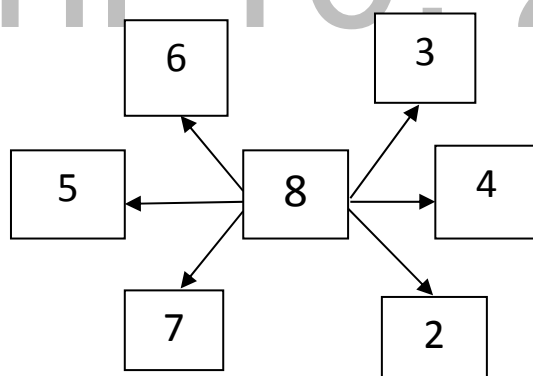
Activity 3

Fill in the blanks. Write your answer in your notebook.

1)

@@@	@@@	@@@	@@@	@@@	@@@	@@@	@@@	@@@

Repeated addition: _____

Multiplication sentence: _____

2)

### ##	### ##	### ##	### ##	### ##	### ##	### ##	### ##

Repeated addition: _____

Multiplication sentence: _____

3)

00 00 00	00 00 00	00 00 00	00 00 00	00 00 00	00 00 00	00 00 00	00 00 00	00 00 00

Repeated addition: _____

Multiplication sentence: _____

Activity 4

Find the value of *n*.

1)   8 x 9 = *n*
2)   8 x 5 = *n*
3)   9 x 4 = *n*
4)   9 x 5 = *n*
5)   9 x 7 = *n*

Choose the letter of the correct answer.

1) 8 x 3 = ___   a. 34   b. 24   c. 21   d. 14
2) 8 x 7 = ___   a. 26   b. 36   c. 46   d. 56
3) 9 x 5 = ___   a. 15   b. 35   c. 55   d. 45
4) 9 x 8 = ___   a. 72   b. 27   c. 62   d. 26
5) 4 + 4 + 4 + 4 + 4 + 4 + 4 + 4 = ___
          a. 24   b. 28   c. 32   d. 36

Find the product. Copy and write your answer on the chart.

1)

x	8	Product
2		
4		
6		
7		
8		
9		

2)

x	9	Product
1		
3		
5		
7		
8		
9		

Lesson 31
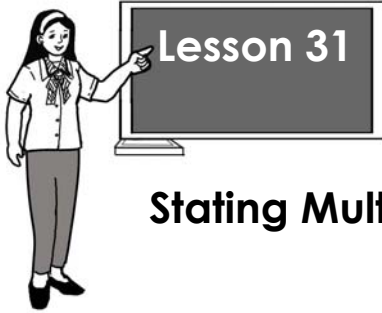
Stating Multiplication Facts for Numbers 1 to 10

Activity 1

Study the table below and write the missing numbers.

Work with your group.

x	1	2	3	4	5	6	7	8	9	10
1	1		3		5			8	9	10
2	2			8	10			16	18	
3	3		9		15			24		30
4		8		16	20		28			
5	5			20	25		35			50
6		12	18			36	42	48		
7		14		28		42	49			70
8	8					48	56	56	72	
9	9		27	36		54			81	90
10		20	30			60			90	

Activity 2

Give the product.

1)	1 x 5 =	6)	6 x 1 =	11)	3 x 6 =
2)	2 x 9 =	7)	7 x 3 =	12)	8 x 4 =
3)	3 x 7 =	8)	8 x 8 =	13)	6 x 9 =
4)	4 x 4 =	9)	9 x 10 =	14)	10 x 8 =
5)	5 x 6 =	10)	10 x 2 =	15)	4 x 7 =

Activity 3

A. Using the numbers 2, 5, 6, 7, and 9, choose two numbers and find their product. Make 5 number sentences and arrange their products from least to greatest.

1) _____
2) _____
3) _____
4) _____
5) _____

B. Using the numbers 3, 4, 5, 6, and 8, choose two numbers and find their product. Make 5 number sentences and arrange their products from greatest to least.

1) _____
2) _____
3) _____
4) _____
5) _____

Activity 4

Give the product of each of the following pairs of numbers.

1)	6 x 2 =		11)	8 x 5 =	
2)	7 x 8 =		12)	9 x 9 =	
3)	10 x 6 =		13)	2 x 7 =	
4)	4 x 4 =		14)	8 x 3 =	
5)	7 x 9 =		15)	6 x 6 =	
6)	3 x 7 =		16)	1 x 3 =	
7)	6 x 5 =		17)	9 x 3 =	
8)	7 x 5 =		18)	3 x 8 =	
9)	9 x 4 =		19)	6 x 8 =	
10)	5 x 8 =		20)	6 x 2 =	

Activity 5

Write the missing number in your notebook.

1) 5 x _____ = 50	6) 8 x _____ = 64
2) 3 x 9 = _____	7) 8 x 3 = _____
3) 6 x _____ = 30	8) 3 x _____ = 6
4) 7 x 5 = _____	9) 10 x 8 = _____
5) 4 x _____ = 40	10) 5 x _____ = 30

Commutative Property of Multiplication

Study the picture. Write the multiplication sentence for each set of objects.
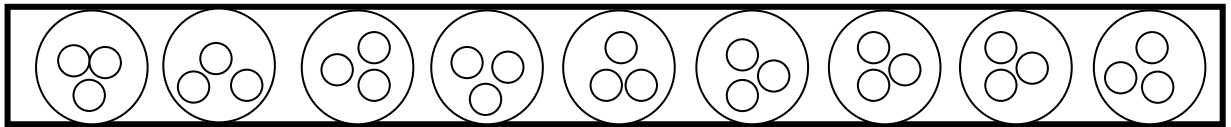
Multiplication sentence: _____
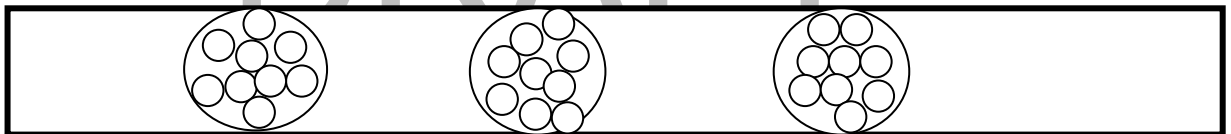
Multiplication sentence: _____

If you were to write a relation symbol (>, < or =) between the two number sentences, what symbol would it be? Why?

Activity 1

Find a partner. Perform the given exercise.

Express the commutative property of multiplication by matching column A with column B. Write the letters of the correct answer.

	A		**B**
____ 1)	3 x 4	a.	3 x 8
____ 2)	5 x 6	b.	2 x 6
____ 3)	6 x 2	c.	4 x 5
____ 4)	8 x 3	d.	7 x 9
____ 5)	9 x 7	e.	4 x 3
		f.	6 x 5

Activity 2

Write the missing factor in your notebook.

1) 7 x 4 = ___ x 7
2) 2 x ___ = 5 x 2
3) 6 x 3 = 3 x ___
4) 8 x ___ = 4 x 8
5) ___ x 9 = 9 x 7

132

Activity 3

Read and solve. Illustrate the problem then show your solution and number sentence.

Lilibeth draws 6 circles with 3 stars inside each circle. How many stars are there?

Illustration and solution:
Number sentence:

Ana draws 3 circles with 6 stars inside each circle. How many stars are there?

Illustration and solution:
Number sentence:

Compare Lilibeth's stars with Ana's stars: Write the relation symbol in the box.

_____   ☐   _____
Lilibeth's stars   Ana's stars

Are they equal? Why? _____

Find the product. Write letter of the correct answer on your paper.

1) 2 x 4 = ____

2) 5 x 9 = ____

3) 6 x 7 = ____

4) 8 x 6 = ____

5) 9 x 8 = ____

a.	7	x	6
b.	6	x	8
c.	8	x	9
d.	4	x	2
e.	9	x	5
f.	7	x	3

Activity 5

Complete the multiplication sentences by applying the commutative property of multiplication. Find the product.

1) 5 x 8 = ☐ x ☐ = _____

2) 6 x 7 = ☐ x 6 = _____

3) 7 x 9 = 9 x ☐ = _____

4) ☐ x 6 = 6 x 4 = _____

5) 3 x ☐ = 9 x 3 = _____

6) ☐ x ☐ = 7 x 2 = _____

Lesson 33

Distributive Property of Multiplication over Addition

Activity 1
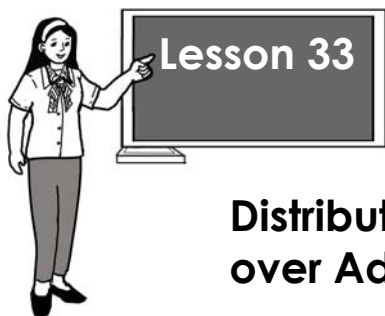
Rewrite the two-digit numbers in expanded form. Find the product.

1) 12
    x 4

2) 25
    x 2

3) 39
    x 5

4) 41
    x 8

5) 57
    x 3

6)   6
    x 54

7)   7
    x 93

8)   9
    x 82

9)   2
    x 79

10)   3
    x 68

Rewrite the multiplicand in expanded form.
Multiply the multiplier in the ones and tens part of the multiplicand. Add the partial products to get the final product.

1)   14
     x 2

2)   25
     x 5

3)   52
     x 2

4)   19
     x 3

5)   27
     x 4

6)   33
     x 2

7)   43
     x 2

8)   36
     x 5

9)   43
     x 6

10)   54
     x 7

DRAFT
April 10, 2014

Activity 3

Match the product in column A with the number sentence in column B.

A	B
1) 57	a. (30 x 2) + (6 x 2) = n
2) 72	b. (4 x 70) + (4 x 3) = n
3) 270	c. (10 x 3) + (9 x 3) = n
4) 292	d. (20 x 6) + (8 x 6) = n
5) 435	e. (40 x 6) + (5 x 6) = n
	f. (5 x 80) + (5 x 7) = n

Activity 4

Rewrite the multiplicand in expanded form. Find the product using the distributive property of multiplication over addition.

1)   15
     x 9

2)   29
     x 2

3)   38
     x 7

4)   63
     x 3

5)   82
     x 4

Lesson 34
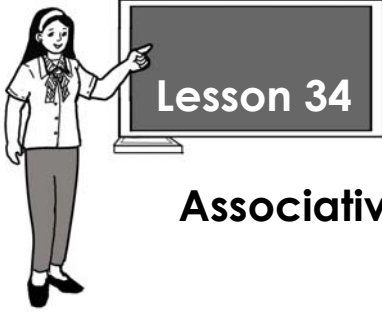
Associative Property of Multiplication

Activity 1

There are three factors in each multiplication sentence. Use parentheses to group any two factors. How many ways can you do it? Write all the possible ways. Find the value of G.

1) 3 x 4 x 2 = G
2) 1 x 6 x 6 = G
3) 4 x 5 x 6 = G
4) 6 x 2 x 3 = G
5) 9 x 8 x 5 = G

Activity 2

Group two factors that would make multiplication easy, then give the product.

1)   2 x 3 x 5   = _____
2)   4 x 7 x 2   = _____
3)   6 x 1 x 4   = _____
4)   8 x 5 x 3   = _____
5)   9 x 4 x 5   = _____

Activity 3

Complete the puzzle by writing the products in the boxes.

		1				
		2	3		4	
			5	6		
		7				
8					9	

Down
1)   9 x 1 x 6
3)   7 x 3 x 1
4)   4 x 5 x 2
6)   3 x 1 x 8
7)   5 x 2 x 9

Across
2)   3 x 7 x 2
4)   7 x 1 x 7
5)   6 x 5 x 4
8)   5 x 4 x 8
9)   3 x 4 x 6

Activity 4

A. Draw a ☐ if the number sentence is correct and a Δ if it is wrong.

_____ 1) (3 x 4) x 2 = 3 x (4 x 2)
_____ 2) 2 x (8 x 3) = (3 x 7) x 2
_____ 3) 4 x (5 x 2) = 4 x (7 x 3)
_____ 4) 8 x (6 x 2) = (8 x 6) x 2
_____ 5) 10 x (2 x 3) = (10 x 2) x 4

B. Find the missing numbers

1) 2 x (3 x 9) = (2 x ___) x 9 = ____
2) (5 x 4) x ___ = 5 x (4 x 8) = ____
3) (7 x 8) x 3 = ___ x (8 x 3) = ____
4) (6 x 2) x 9 = 6 x (___ x 9) = ____
5) 8 x (3 x 1) = (___ x 3) x 1 = ____

Activity 5

Find the missing factor then get the product. Write your answer in your notebook.

1)   (2 x 8) x ____ = 2 x (8 x 3)   = ____
2)   (7 x ____) x 6 = (7 x 4) x 6   = ____
3)   5 x (9 x 2)   = (____ x 9) x 2 = ____
4)   (4 x ____) x 7 = 4 x (8 x ____) = ____
5)   ____ x (6 x 3) = (6 x ____) x 3 = ____

140

Lesson 35
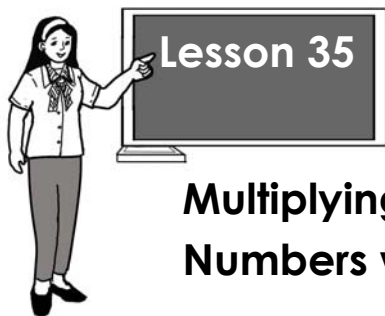
Multiplying 2- to 3-Digit Numbers by 1-Digit Numbers without Regrouping

Activity 1

Find the product. Use your flats, longs and ones to get the answer.

1) 42	2) 33	3) 23	4) 122	5) 242
x 2	x 3	x 3	x 4	x 2

Activity 2

Find the product. Use the place value method/long method.

1)	ones
1	2
x	4

2)	tens	ones
	4	3
x		2

3)	ens	ones
	5	3
x		3

141

4)

hundreds	tens	ones
4	1	2
x		4

5)

hundreds	tens	ones
3	1	4
x		2

Activity 3

Find the missing numbers in the sectors of the outer circle by multiplying the number in the middle circle by 3.
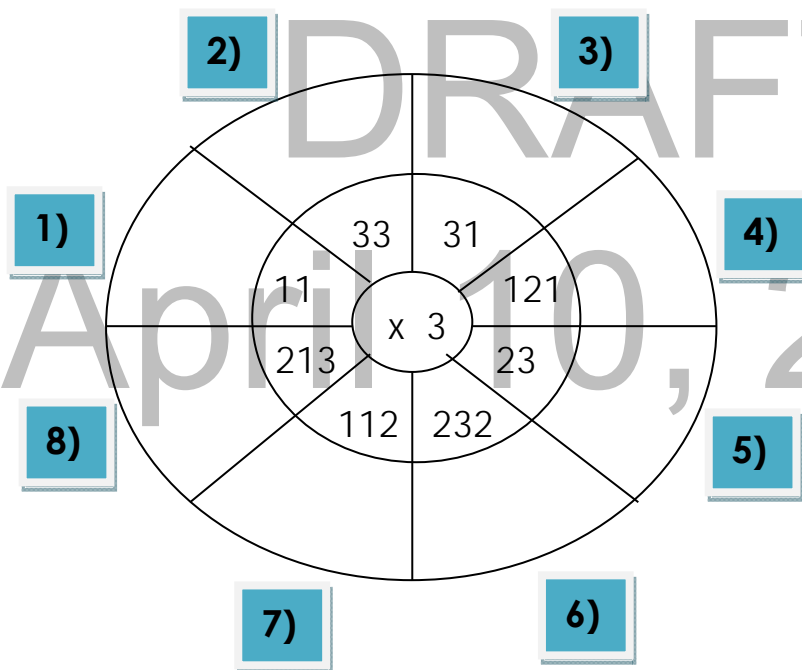
1) 2) 3) 4) 5) 6) 7) 8)

x 3

33 31
11 121
213 23
112 232

Activity 4

Do as indicated. Show your solution in your notebook and encircle your final answer.

1) What is 32 times 4?
2) Multiply 312 by 2.
3) Find the product of 112 and 4.
4) What is the product of 103 and 3?
5) How many items are there in 2 groups of 42 items?

Activity 5

Find the product. Write your answer in your notebook.

1) 32	2) 43	3) 12	4) 211	5) 212
x 3	x 2	x 4	x 3	x 4

Lesson 36
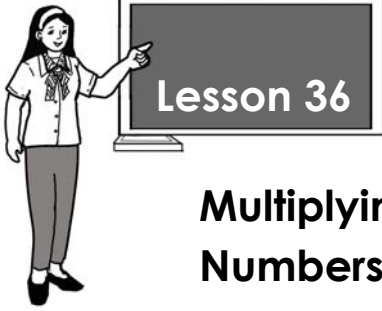
Multiplying 2- to 3-Digit Numbers by 1-Digit Numbers with Regrouping

Read and solve.

| **What is the product of 28 and 4?** |

Which of the two numbers is the multiplicand? multiplier?
How will you solve this problem?

DRAFT
April 10, 2014

Activity 1

Find the product. Use your flats, longs and squares to get the answer.

1) 63
    x 6
    _____

2) 45
    x 7
    _____

3) 38
    x 8
    _____

4) 327
    x 4
    _____

5) 163
    x 5
    _____

Find the product. Use the place value method/long method.

1)
tens	ones
8	5
x	7

2)
tens	ones
6	4
x	5

3)
tens	ones
7	3
x	8

4)
hundreds	tens	ones
7	1	6
x		4

5)
hundreds	tens	ones
4	2	3
x		6

DRAFT
April 10, 2014

Activity 3

Find the missing numbers in the sectors of the outer circle by multiplying the number in the middle circle by 8.
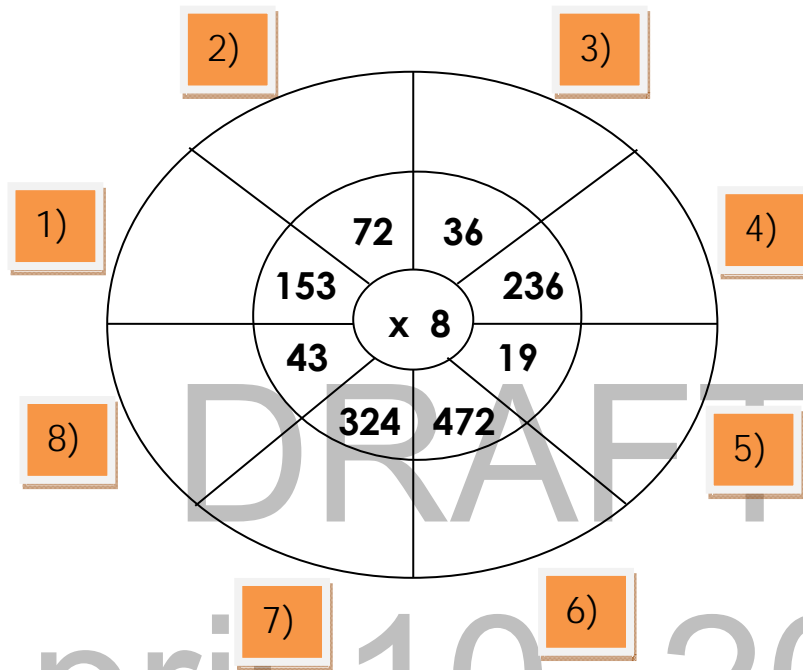
Activity 4

Do as indicated. Show your solution in your notebook and encircle your final answer.

1) How many objects are there in 7 groups of 53 objects?
2) What is 83 times 6?
3) Multiply 253 by 5.
4) Find the product of 351 and 8.
5) What is the product of 509 and 8?

Activity 5

Find the product. Write your answer on your notebook.

1) 64	2) 73	3) 48	4) 732	5) 212
x 9	x 6	x 7	x 4	x 8

147

Lesson 37
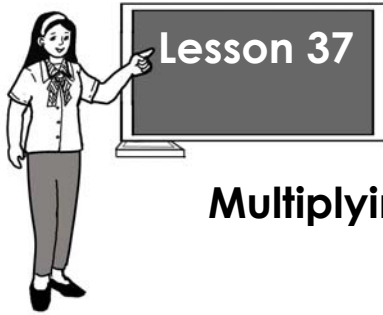
Multiplying 2-Digit Numbers

Read the problem.

> The school librarian has bundled the books to be distributed to different grade levels and sections. There are 36 books in a bundle. How many books are there in 17 bundles?

What is asked for in the problem?
What are the given?
How can you solve the problem?

Multiply by ones	Multiply by tens

```
              4
   36         36          36
 x 17        x 7        x 10
 ___        [  ] ←     [  ]
 ___  ←─────────────────
```

Add the two partial products

```
    36
  x 17
  ___  ] partial products
+ ___
  ___    product
```

Use the given digits only once to make 2-digit factors that when multiplied will give the largest product. Copy the boxes in your notebook and write the factors that will give the largest product.

1)   0, 2, 3, 5

☐☐
x ☐☐

Product: _____

2)   2, 3, 6, 7

☐☐
x ☐☐

Product: _____

3)   0, 5, 8, 9

☐☐
x ☐☐

Product: _____

Activity 2

Pick a number from Box X. Multiply it by a number from Box Y to find the given answers. Show your solution in your notebook. Number 1 is already done for you.

Box X			Box Y		
40	22	28	41	15	32
19	76	63	24	25	92

1) 608

X = __**19**__

Y = __**32**__

2) 1 000

X = _____

Y = _____

3) 1 140

X = _____

Y = _____

4) 902

X = _____

Y = _____

5) 1 512

X = _____

Y = _____

6) 2 576

X = _____

Y = _____

Activity 3

Find the missing digits.

1)
```
      3□
    x 12
      □4
     32
     □8□
```

2)
```
      60
    x □5
     30□
    1□0
    150□
```

3)
```
      □8
    x 36
     22□
    1□4
    1□6□
```

4)
```
      □5
    x 19
     22□
     25
     5□□
```

5)
```
      43
    x 3□
     □72
    12□
    14□2
```

151

Activity 4

Obtain the indicated products and compare the two products using >, < or =.

1)   19 x 22 _____ 23 x 15

2)   64 x 14 _____ 16 x 56

3)   37 x 16 _____ 28 x 24

4)   29 x 32 _____ 45 x 13

5)   72 x 86 _____ 82 x 76

Activity 5

Find the missing numbers using the indicated operations.
1) 73 x ____ = 365; 365 - ____ = 305; 305 x 9 = ____

2) ____ x 8 = 200; 200 + ____ = 449; 449 x 6 = ____

3) 39 x ____ + 78; (78 + 294) x 7 = ____

4) ____ x 4 = 256; (256 – 178) x 5 = ____

The sum of the four final products is _____.

152

Lesson 38
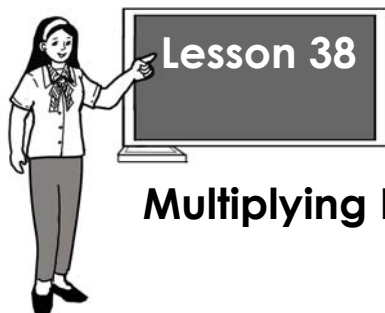
Multiplying Numbers by Multiples of 10 and 100

You know repeated addition by tens. How do you do this in multiplication?

Activity 1

Find the product. Write your answer in your notebook.

1) 45 x 10 = _____   6) 46 x 50 = _____
2) 37 x 20 = _____   7) 361 x 20   = _____
3) 68 x 80 = _____   8) 44 x 40   = _____
4) 219 x 10 = _____   9) 7   x 700 = _____
5) 350 x 10 = _____   10) 27 x 300 = _____

Activity 2

Find the product. Write your answers in your notebook.

1)   2 x 5 = _____; 20 x 5 = _____;   200 x 5 = _____
2)   3 x 6 = _____; 30 x 6 = _____;   300 x 6 = _____
3)   4 x 7 = _____ ; 40 x 7 = _____;   400 x 7 = _____
4)   5 x 8 = _____; 50 x 8 = _____;   500 x 8 = _____
5)   6 x 9 = _____; 60 x 9 = _____;   600 x 9 = _____

Activity 3

Write the missing numbers in your notebook.

1) 30   x   _____   =   300
2) 150 x   5   =   _____
3) _____ x   6   =   60
4) 76   x   100   =   _____
5) 90   x   _____   =   9 000

Activity 4

Read each problem carefully then find the product.

1) Rita has 23 sets of *pechay* seedlings. Each set has 50 *pechay* seedlings. How many *pechay* seedlings are there in all?

2) A craftsman finishes 200 table lamps in a month. How many table lamps can he finish in 3 months?

Activity 5

Complete the table below. Multiply the numbers on the first column by the numbers on the top row. An example is given for you to follow.

x	100	10	20	50	500
24	2 400				
53					
67					

Activity 6

Find the product. Write your solutions in your notebook.

1) 415 x 20 = _____
2) 98 x 60 = _____
3) 65 x 70 = _____
4) 77 x 100 = _____
5) 215 x 30 = _____

Lesson 39
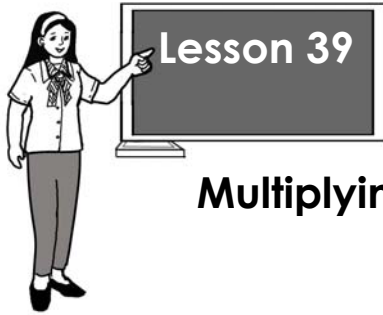
Multiplying 1- to 2-Digit Numbers by 1 000

Activity 1

Find the product. Write the answer in your notebook.

1) 4 x 1 000 = _____
2) 3 x 1 000 = _____
3) 5 x 1 000 = _____
4) 7 x 1 000 = _____
5) 2 x 1 000 = _____

6) 6 x 1 000 = _____
7) 8 x 1 000 = _____
8) 12 x 1 000 = _____
9) 39 x 1 000 = _____
10) 46 x 1 000 = _____

Activity 2

Read, analyze and solve the given problems. Write your solution on your paper.

1) Mr. Bryan collected about 1 000 eggs from his poultry farm last month. If this continued for 5 months, how many eggs would Mr. Bryan get?

2) The price of an item was PhP1 000. It was twice the price of another item that was on sale. How much was the price of the item that was on sale?

Activity 3

Find the product.
1) Mang Badong, the baker, bakes 1 000 *pandesals* in 1 hour. How many *pandesasl* can he bake in 5 hours?

2) A basket of *calamansi* contains 1 000 *calamansi*. How many *calamansi* are there in 8 baskets?

Activity 4

Find the product. Write the correct answer on your paper.

1) 3 x 1 000	300	3 000	30 000	300 000
2) 6 x 1 000	600	6 000	60 000	600 000
3) 7 x 1 000	700	7 000	70 000	700 000
4) 5 x 1 000	50	500	5 000	50 000
5) 9 x 1 000	900 000	90 000	9 000	900
6) 10 x 1 000	100 000	10 000	1 000	100
7) 46 x 1 000	4 600	46 000	460	460 000
8) 30 x 1 000	30 000	300 000	3 000	3 000 000
9) 28 x 1 000	2 800	280	280 000	28 000
10) 78 x 1 000	780	7 800	78 000	780 000

Where did the Genie come from? To find out, solve the following and write the matching letter below each answer. Do this on your paper.

1) 1 000
x 8

2) 1 000
x 17

3) 1 000
x 5

4) 1 000
x 43

5) 1 000
x 55

6) 1 000
x 7

7) 1 000
x 17

8) 1 000
x 8

9) 1 000
x 12

	1)	2)	3)	4)	5)	6)	7)	8)	9)
Answer									
Letter									

He came out of the M __ __ __ __   __ A __ __!

A – 17 000   C – 55 000   G – 5 000
I – 43 000   L – 7 000   M – 8 000
P – 12 000

158

Lesson 40
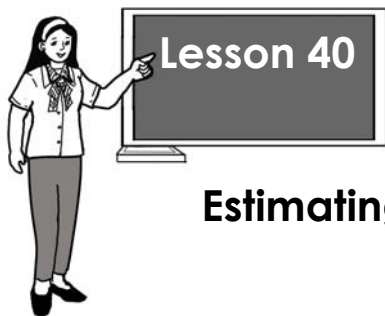
Estimating Products

Activity 1

Estimate each product.

1) 73	2) 87	3) 74	4) 473	5) 664
x 5	x 6	x 4	x 6	x 8

6) 38	7) 76	8) 52	9) 89	10) 179
x 23	x 44	x 48	x 23	x 29

Activity 2

Round off the multiplicand and multiplier then estimate the product.

1) 331 → ___
   X 29 → ___
   ___

2) 241 → ___
   x 46 → ___
   ___

3) 284 → ___
   x 21 → ___
   ___

4) 145 → ___
   X 35 → ___
   ___

5) 782 → ___
   x 12 → ___
   ___

Activity 3

Estimate and solve each problem.

1) There are 12 ball pens in each box. About how many ball pens are there in 38 boxes?

2) Jeff's marbles are about three times as many as John's. John's marbles are as many as Nathaniel's marbles. Nathaniel has 126 marbles. About how many marbles does Jeff have?

Activity 4

Find the estimated product.

1) About 125 passenger jeepneys pass by a particular house in one hour. About how many passenger jeepneys would have passed by in 12 hours?

2) In an aviary, there are about 33 birdhouses, each having about 17 birds. About how many birds are there in all?

Estimate the product.

1) 83	2) 67	3) 165
x 9	x 41	x 37

4) 122	5) 76
x 56	x 52

Activity 6

Find the factors that when multiplied will give each estimated product on the left.

1)	60	6 x 14	5 x 18	5 x 13
2)	150	4 x 34	4 x 36	5 x 28
3)	270	9 x 24	9 x 26	8 x 31
4)	360	6 x 53	7 x 47	6 x 58
5)	4 500	8 x 542	7 x 684	9 x 487

Lesson 41

Multiplying Mentally 2-Digit by 1-Digit Numbers with Products up to 100

Activity 1

Treasure Hunting

Trace the path by finding the product of the multiplication facts written on the trees starting from START. Follow the arrows until you reach the finish line.
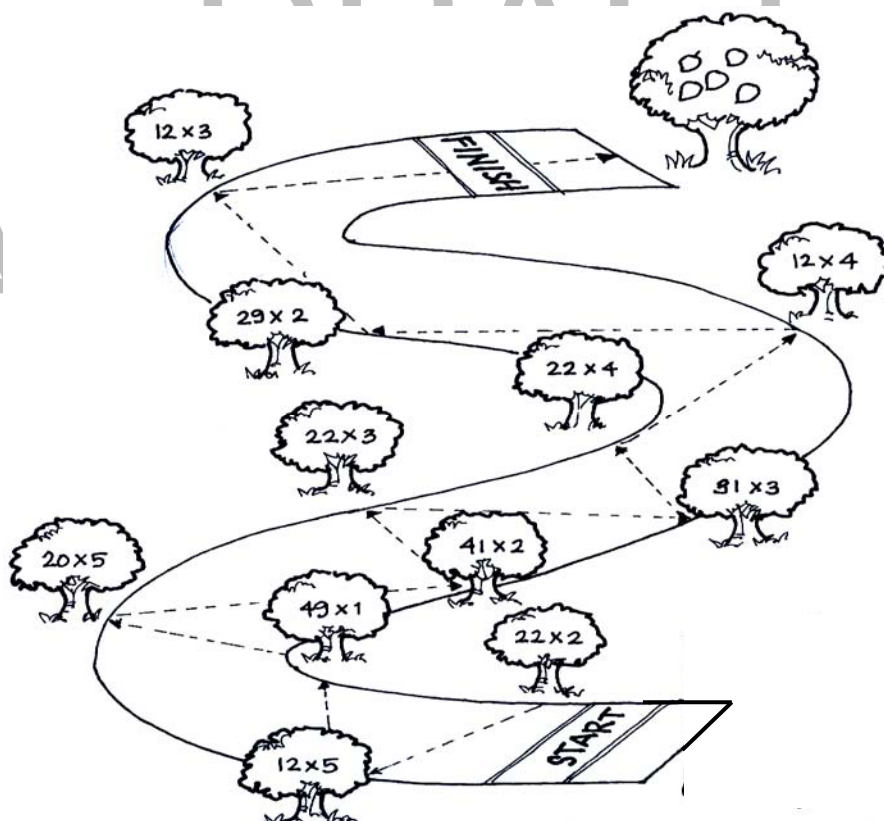
Activity 2

What did the boy say when he met his teacher? Look at the hidden message by determining the indicated products.
Find the corresponding letter in the code that matches each answer. Write your answer in your notebook.

A – 36	F – 66	K – 61	P – 38	U – 72
B – 28	G – 53	L – 30	Q – 41	V – 94
C – 59	H – 39	M – 44	R – 42	W – 76
D – 54	I – 60	N – 48	S – 46	X – 89
E – 69	J – 77	O – 34	T – 26	Y – 57
				Z – 16

```
  12    13    23         11    12    13    13          26    20    22    23
 x 5   x 2   x 2        x 4   x 3   x 2   x 3         x 1   x 3   x 2   x 3
```

◯ ◯'◯   ◯ ◯ ◯ ◯   ◯ ◯ ◯ ◯

Activity 3

Read each problem carefully. Write only the product on your paper.

1) Elvie planted 3 rows of sampaguita. Each row had 12 sampaguita plants. How many sampaguita plants did she plant in all?
2) Francis planted 11 plots with eggplant seedlings. Each plot has 8 eggplant seedlings. How many eggplant seedlings did he plant?
3) The fare of each passenger is PhP20. How much will the jeepney driver receive if there are 5 passengers?
4) A farmer prepares 4 plots for vegetables. How many seedlings will be needed if each plot is planted with 12 seedlings?
5) You need 2 oranges to make a glass of orange juice. How many oranges do you need to make 13 glasses of orange juice?

Activity 4

Solve mentally.

1) 11	2) 12	3) 23	4) 24	5) 13
x 7	x 2	x 3	x 2	x 3

Problems involving Multiplication
...e Numbers

Read the problem.
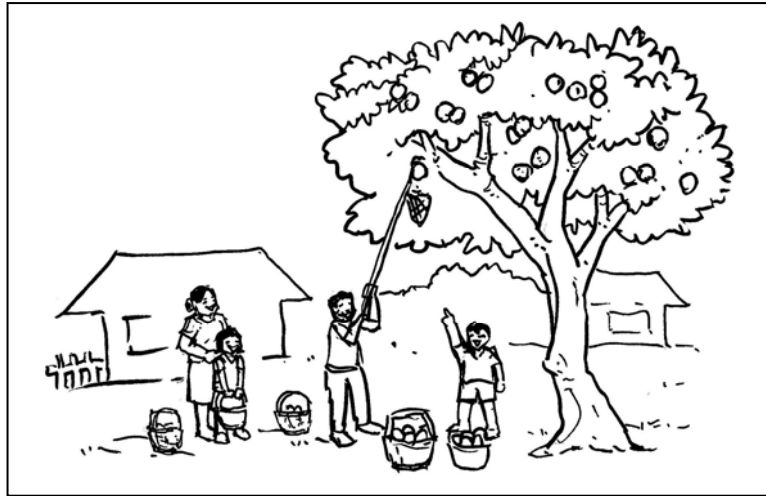
The family of Mr. Ruiz enjoys harvesting star apples in their backyard. They placed them in 9 baskets. Each basket contains 15 star apples. How many star apples did they harvest in all?

Activity 1

Solve each problem on your paper. You can also show your answer by illustration.

1) Mang Hayden gathered 25 baskets of atis. If each basket contained 45 atis, how many atis were there in all?

2) If each basket of atis costs PhP120, how much will Mang Hayden receive for 25 baskets of atis?

3) Mr. Santos sells school supplies. He has 15 boxes of pencils. If there are 12 pencils in each box, how many pencils does he have?

4) Ofel saves PhP25 a day in her piggy bank. How much money will she save in twelve days?

5) Ador could read 25 pages of his favorite book in a day. If he read the book for 11 days, how many pages does the book have?

Activity 2

Study the illustrations below then answer the questions that follow.
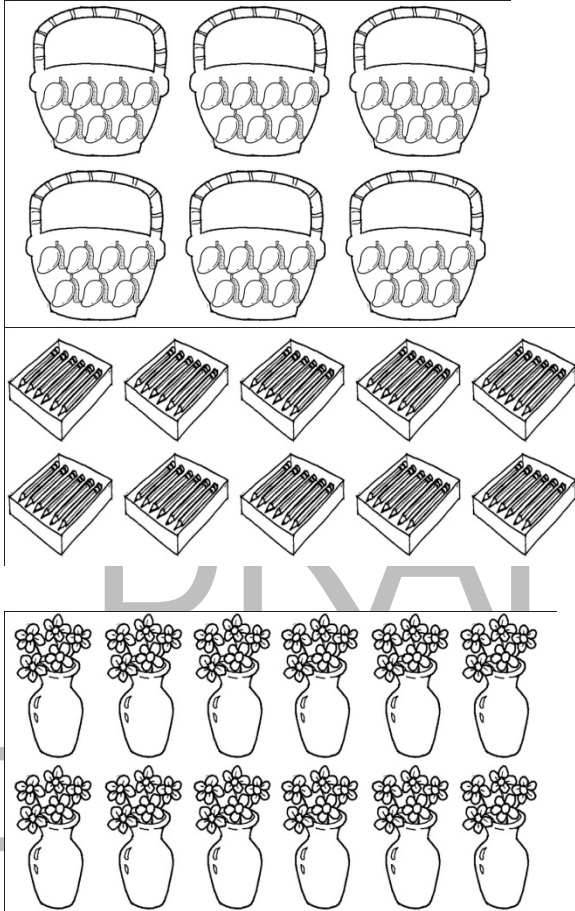
1)   How many mangoes are there in all?_____
2)   How many pencils are there in all?_____
3)   How many flowers are there in all?_____

Read, analyze and solve the following problems. Write the number sentence for each problem.

1) If the product is 45, what are the possible factors?
2) One of my factors is 23 and my product is 345. What is the other factor?
3) Ryan's mother saves PhP650 every month. How much will be her savings in 8 months?
4) A one-way promo plane ticket from Manila to Cebu costs PhP1 540. If there were 10 passengers with one-way promo tickets, how much did all their tickets cost?
5) If one week is equivalent to 7 days and there are 52 weeks in a year, how many days would there be in one year?

DRAFT

April 10, 2014

Read and solve.

1) A bus can accommodate 60 passengers. How many passengers can be accommodated in 15 buses?
2) Three vendors sold small flags at PhP5 at the Luneta Park during the Independence Day celebration. These vendors were able to sell 320 flags. How much was the total sale of the three vendors?
3) The Grade III class of 47 pupils used bottle caps for their project. Each child used 25 pieces of bottle caps. How many bottle caps did the children use?
4) Roger spends PhP645 for his transportation per month. How much is his total transportation expenses for 9 months?
5) Joana can type 32 words per minute. How many words can she type in 40 minutes?

Solving Problems involving Multiplication with Addition and/or Subtraction of Whole Numbers

Activity 1

Read and solve each problem carefully. Write your answer on your paper.

1) The class of Miss Santos went to the audio visual room to watch an educational film. In the room are 8 long tables with 6 chairs at each table. She has 55 students. Would all her students be able to sit? If not, how many chairs do they still need?

2) A film is 45 minutes long. It was shown to grade three to six pupils. Because the viewing room is not big enough, only one grade level was allowed to watch at a time. There is a 10-minute interval between the viewing for each grade level. How many minutes was the viewing room used?

3) Ofelia had a PhP1 000 bill. She bought 2 kilograms of meat at PhP160 a kilo, vegetables for PhP85 and 4 kilos of fish which cost PhP130 a kilo. How much money did she have after all her purchases?

Activity 2

Solve the problems carefully. Write your answer in your notebook.

1) Ordin bought 4 pineapples at PhP20 each. How much change will he get if he gave PhP100 to the seller?

2) The choir members made *pastillas* for their fund raising project. They made 8 packs of *pastillas* with 25 pieces in each pack. Miss Hilario ordered 4 more packs. How many pieces of *pastillas* did the choir members prepare?

3) Mrs. Mendoza and her class went to Tagaytay for an educational trip. Before going home, she bought 45 *pasalubong* items for her co-teachers. If each item costs PhP25 and she gave the seller PhP1 500, how much was her change?

Activity 3

Read, analyze and solve the following problem. Write your answer in your activity sheet.

1) Analiza bought 4 kilos of *lanzones* at PhP60 a kilo. How much change did she get from a PhP500 bill?
2) Edmond has four PhP200 bills, four PhP100 bills, ten PhP50 bills and twelve PhP20 bills. How much money does Edmond have?

171

3) Mang Lester gathered 128 mangoes from one tree and twice as many mangoes from a bigger tree. How many mangoes did he gather in all?

4) Dolly has 12 stamps. Mila has twice as many stamps. If Dolly's friend gives her 12 more, how many stamps will Dolly and Mila have?

5) For their fund raising activity, the Math Club sold 50 kilos of used pieces of paper and 205 bottles. If one kilo of paper could be sold at PhP7 and each bottle costs PhP1, how much will the club raise?

Activity 4

Read, analyze and solve the following problems. Write your answers in your notebook.

1) Mel has five PhP1 coins, two PhP5 coins and seven PhP10 coins. How much money does she have in all?

2) Cliff has 25 one-peso coins. Nicolette has 3 times more one-peso coins than Cliff. How many one-peso coins do they have in all?

3) Chrisse has 12 sheets of art paper. Cherry has twice as many as Chrisse. Ena has 14 pieces more than Cherry. Armina has as many pieces of art paper as Chrisse and Cherry. How many pieces of art paper do the four girls have?
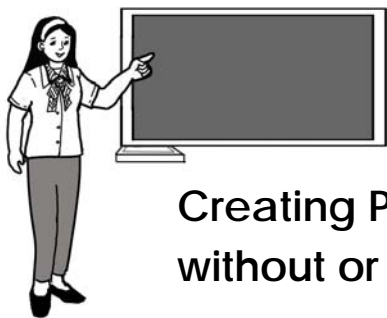
Creating Problems involving Multiplication without or with Addition or Subtraction

Activity 1

Make a word problem given these situations.

1)

How will I make a problem with these data?
2 boxes of donuts with 12 donuts in each box, Hmm!

2)

16 cups
PhP5.00 price of each cup
4 cups not bought

Activity 2

Create a word problem given these situations.

1)

Problem again! Ok, no problem!
  3 trays of eggs
 12 eggs per tray
 5 eggs not placed in any of the trays

2)

9 balloons
3 sisters
PhP15 per balloon
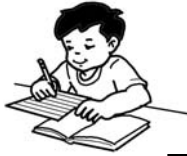
Activity 3

A. Make problems involving money and show your solutions in your notebook.

1) Using multiplication and addition
2) Using multiplication and subtraction

B. Complete the problems below then solve.

1) John has ____ pencil cases. There are 12 pencils of different color in each case. How many pencils does he have?

2) There are ____ dozens of eggs in a box. One dozen was sold. How many eggs are left in the box? (Hint: one dozen = 12)

3) In a mathematics class, fourteen pupils are seated in a row and ___ of the pupils were absent. If there are 4 rows in the classroom, how many pupils are present in the Math class?
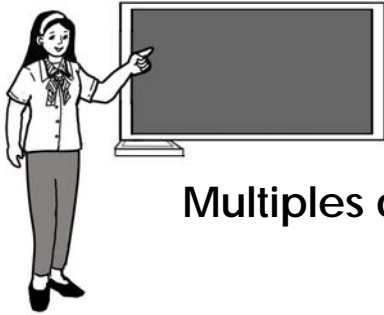
Multiples of 1- to 2-Digit Numbers

Activity 1

Find the next six multiples of each of the numbers given below. Write your answers in your answer sheet.

1) 3						
2) 5						
3) 7						
4) 8						
5) 9						
6) 11						
7) 13						
8) 15						
9) 24						
10) 33						

Activity 2

1) Fill in each train couch with the appropriate number by adding the common difference to get the next multiple of a number in the train box.

| 18 | → | 24 | → | 30 | → | ___ | → | ___ | → | ___ |
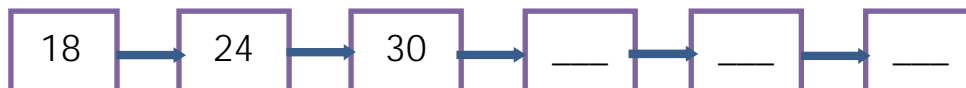
2) Fill in each train couch with the appropriate number by multiplying the first number by 2, then 3, then 4, and so forth, to get the next multiple of a number in the train box.

| 19 | → | ___ | → | 57 | → | 76 | → | ___ | → | ___ |

Activity 3

Match the series of numbers in column A with the correct multiples in column B.

	A		B
1)	300, 303, 306, 309 312	a.	multiples of 2
2)	90, 80, 70, 60, 50, 40	b.	multiples of 3
3)	147, 140, 133, 126, 119	c.	multiples of 6
4)	150, 144, 138, 132, 126	d.	multiples of 7
		e.	multiples of 10

177

Activity 4

Write the next 3 numbers which are multiples of the same number as the two numbers given in the box.

1) | 15, 18, ___, ___, ___

2) | 27, 36, ___, ___, ___

3) | 96, 104, ___, ___, ___

4) | 105, 120, ___, ___, ___

5) | 51, 68, ___, ___, ___

Activity 5

Multiply the numbers along the first column by 12, 23, and 37.

x	12	23	37
1) 19			
2) 26			
3) 37			
4) 43			

178
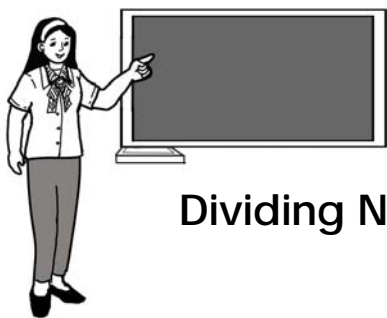
Dividing Numbers up to 100 by 6, 7, 8, and 9

Activity 1

Read and solve.

1) Mr. Door arranged his 72 books on shelves. He placed 9 books on each shelf. How many shelves did he use?

2) Coach Eric bought 64 basketball balls to be used by the players in the inter-year level competitions. There are 8 teams in all. How many balls will be given to each team?

Activity 2

Solve the problems and show your solutions.

1) If there are 56 trees to be planted in a 7-row farm, how many trees will be on each row?

2) If there are 48 pomelos that will be placed in 6 boxes, how many pomelos will be contained in each box?

Activity 3

Read, analyze and solve the following problems.

1) Boknoy bought pens in 3 different colors: 2 red, 2 blue, and 2 black. If he paid PhP96 to the cashier, how much is the price of each pen?

2) There are 72 *dalandan* in a box to be distributed to 8 pupils. How many *dalandan* will be given to each pupil?

Activity 4

Analyze and solve the problems below.

1) There are 30 pupils in a class. If the teacher will divide them equally into 3 groups, how many pupils will be in each group?

2) 18 star apples will be distributed to 6 children. How many star apples will be given to each child?
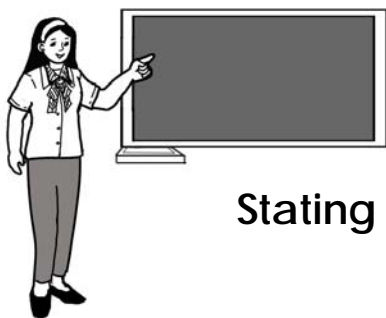
Stating Division Facts of Numbers up to 10

Activity 1

From the given multiplication (×) or division (÷) fact, build a whole family of facts. Find the first answer and then write 3 related number sentences.

Example: 6 x 2 = 12; 2 x 6 = 12; 12 ÷ 2 = 6; 12 ÷ 6 = 2

8 x 7 = _____		
72 ÷ 9 = _____		
48 ÷ 6 = _____		
10 x 7 = _____		
35 ÷ 5 = _____		

Activity 2

Find the product then write the division facts for each multiplication sentence.

1) 5 x 7 = _____, _____ ÷ _____ = _____ or _____ ÷ _____ = _____
2) 3 x 9 = _____, _____ ÷ _____ = _____ or _____ ÷ _____ = _____
3) 8 x 6 = _____, _____ ÷ _____ = _____ or _____ ÷ _____ = _____
4) 10 x 2 = _____, _____ ÷ _____ = _____ or _____ ÷ _____ = _____
5) 4 x 8 = _____, _____ ÷ _____ = _____ or _____ ÷ _____ = _____

Activity 3

Write the missing division fact.

1) $10 \div \underline{\hphantom{xx}} = 5$

6) $10\overline{)60}$

2) $5\overline{)15}$

7) $81 \div 9 = \underline{\hphantom{xx}}$

3) $42 \div 7 = \underline{\hphantom{xx}}$

8) $\underline{\hphantom{xx}}\overline{)24}\ ^{12}$

4) $9\overline{)\underline{\hphantom{xx}}}\ ^{3}$

9) $\underline{\hphantom{xx}} \div 7 = 9$

5) $48 \div \underline{\hphantom{xx}} = 8$

10) $64 \div \underline{\hphantom{xx}} = 16$

Activity 4

Copy the puzzle and complete it by writing the appropriate number.

	36	÷	___	=	6
			÷		
	___	x	3	=	27
8	x	7	=	___	
	2		___		
	=				
	___	÷	2	=	___

Activity 5

Answer the following on your paper.
1) Write the division facts for the given illustration below.

_____

183
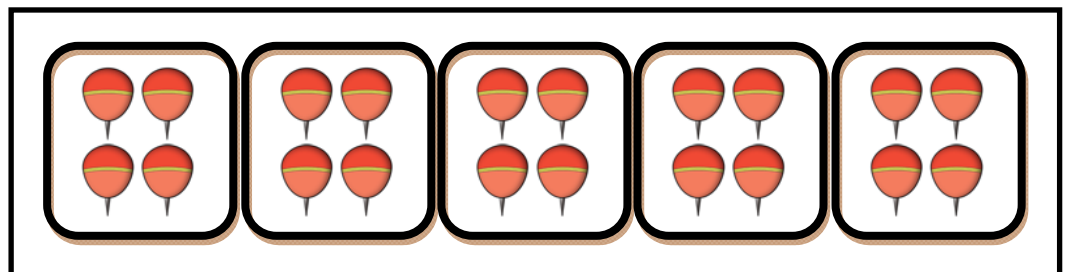
2)   Give one division fact/sentence for 6 x 3 = 18.

       _____

3)   Given 5, 4 and 20, write one multiplication and
       one division sentence.

       _____

4)   Write the missing number in this division sentence.

       36 ÷ ___ = 12

5)   Write a division sentence for this problem.

       ┌───┐
       │ There are 40 balloons and 8 tables in a room. Five │
       │ balloons are in each table.   │
       └───┘

       _____

Activity 6

Complete the multiplication sentences then write the
division sentences.

Multiplication Sentence	Division Sentence	Division Sentence
1) 2 x 9 = ____		
2) 3 x ___ = 21		
3) 9 x 7 = ___		
4) ___ x 6 = 36		
5) 8 x ___ = 72		
6) 12 x 4 = ___		

Activity 7

Solve for the quotient in two ways:
a. using visualization
b. by division process

1) Lolo Ben has 48 hectares of land. If he is to divide it equally among his 11 children, how many hectares will be given to each? How many hectares will be left?

2) A bookstore has 80 copies of a bestseller book. The books are arranged in stacks of 10, how many stacks will there be?

DRAFT
April 10, 2014
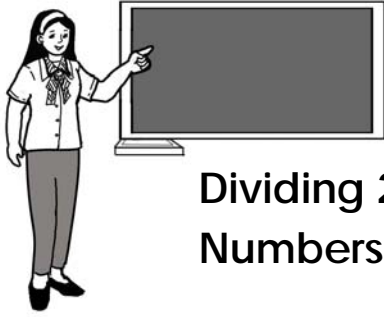
Dividing 2- to 3-Digit Numbers by 1-Digit Numbers

Activity 1

Answer the following.

1) What is 72 ÷ 3?
2) What is the remainder if you divide 651 by 8?
3) The teachers prepared 63 garlands for visitors. If the garlands were to be divided equally in 5 trays, how many will be in each tray? How many will be left?
4) Bitoy harvested 136 mangoes. If he is going to divide the mangoes into 4 big baskets, how many mangoes were there in each basket?

Activity 2

Tell whether there is a remainder or not. If there is, then write what it is. Show all your solutions in your notebook.

1)   54 ÷ 8 = _____

2)   76 ÷ 4 = _____

3)   331 ÷ 7 = _____

4)   502 ÷ 5 = _____

5)   912 ÷ 3 = _____

6)   935 ÷ 9 = _____
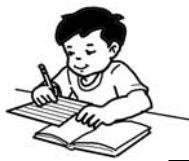
Activity 3

Fill each box with the correct number to complete the number puzzle.

1)   56 ÷ → ___ = → 7 X → 4 = → ___

2)   12 X → 8 = → ___ ÷ → 2 = → ___

3)   200 ÷ → 4 = → ___ X → 18 = → ___

4)   350 ÷ → ___ = → 5 X → ___ = → 245

Activity 4

Fill in the blanks. Write the answer on your paper.

1) When 83 is divided by 5, the quotient is _____ and the remainder is _____.

2) When 133 is divided by 4, the quotient is _____ and the remainder is _____.

3) When 670 is divided by 9, the quotient is _____ and the remainder is _____ .

Activity 5

Answer the following:

1) Divide: $4\overline{)92}$
2) Is there any remainder if 96 is divided by 7? What is the remainder?
3) 258 ÷ 6 = 43, is the number sentence correct? Why? Justify your answer.
4) Find the quotient: 708 ÷ 8.
5) Eight hundred sixty-three divided by nine is equal to _____.

188

Activity 6

Use any of the digits: 0, 3, 6, or 7 to come up with two 2-digit numbers and two 3-digit numbers. Divide the number using the given divisor.

2- or 3-digit Number	Divisor	Quotient
1)	4	
2)	6	
3)	7	
4)	9	

DRAFT
April 10, 2014

Activity 7

Solve the division expressions. Follow the direction in every station in order to reach the finish line. Write your answer in your notebook.

Add 91 to the sum of the three remainders.

SCHOOL

Finish line

STATION 3

STATION 2

Add the three remainders.

_____ ÷ 3

Start

(319 + ____) ÷ 5 STATION 1

423 ÷ 4

Add the remainder in Start to the dividend in Station 1 before answering Station 1.

Use the quotient in Station 1 as dividend in Station 2.
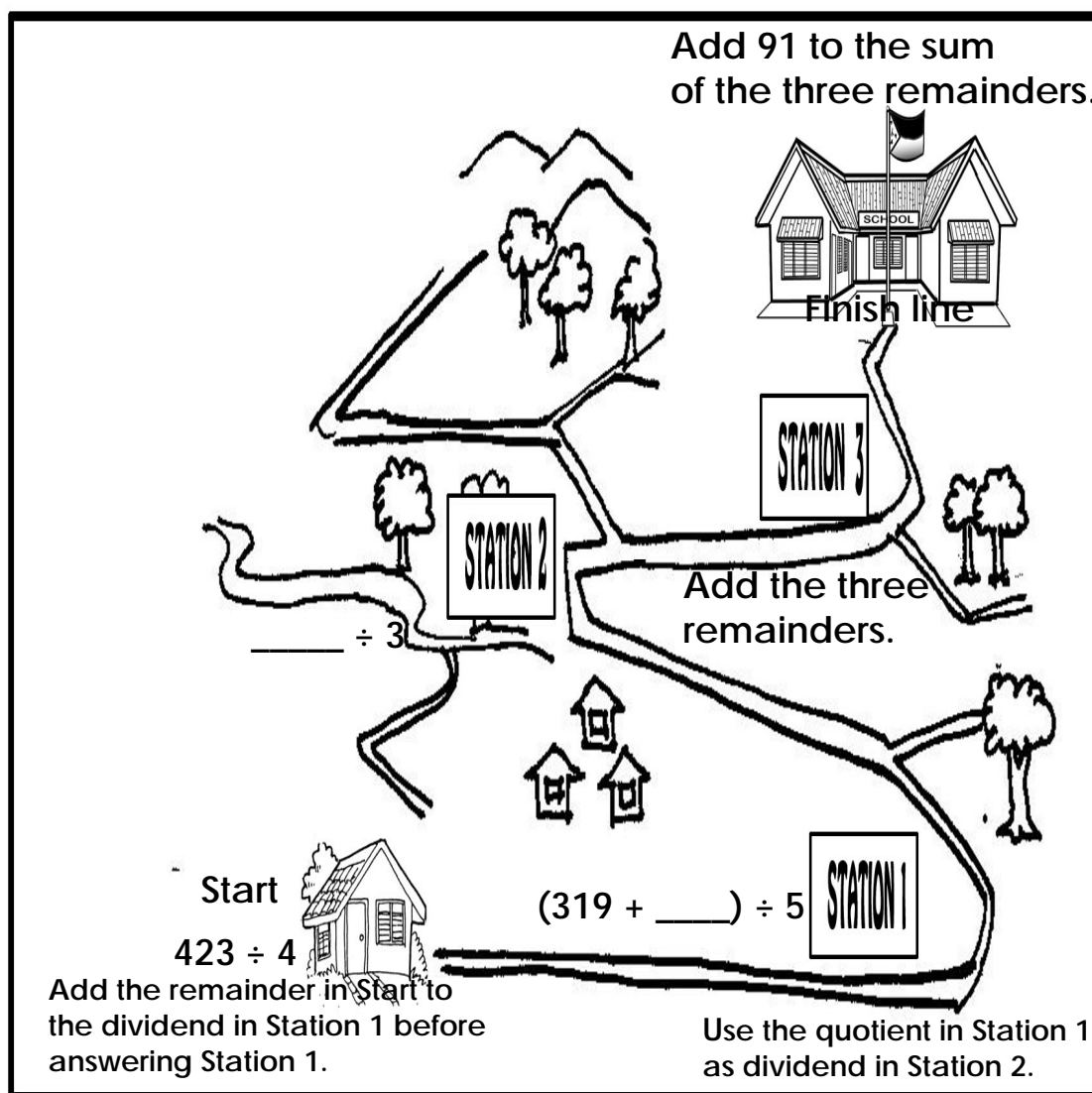
What is the final answer? _____

Lesson 49
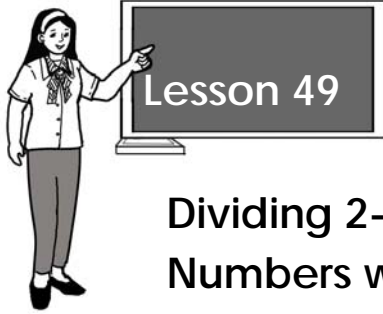
Dividing 2- to 3-Digit Numbers by 2-Digit Numbers without and with Remainder

Activity 1

Find the quotient. Solve on your own paper.

1) 131 ÷ 12 = _____

2) 77 ÷ 11 = _____

3) 484 ÷ 24 = _____

4) 84 ÷ 14 = _____

5) 448 ÷ 12 = _____

6) 541 ÷ 18 = _____

7) 216 ÷ 18 = _____

Activity 2

Find the quotient. Write the solutions on your paper.

1) 96 ÷ 12
2) 45 ÷ 15
3) 68 ÷ 16
4) 188 ÷ 22
5) 475 ÷ 25
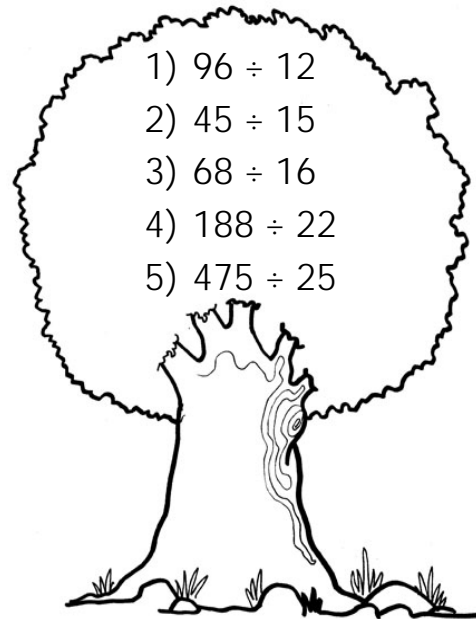
Activity 3

Fill in the blanks. Choose your answers from the numbers in the box. Write your answers on your paper.

1	11	23
6	20	7

1. The divisor is 12. The dividend is 84. What is the quotient?
2. The remainder in 295 ÷ 14 is _____
3. If the quotient is 30 and the dividend is 600, what is the divisor?
4. 322 ÷ 14 is _____
5. The divisor is 80. The dividend is 880. What is the quotient?

Activity 4

Determine the quotient and the remainder (if there is any) to complete the table below. Write your answer in your notebook.

Dividend	Divisor	Quotient	Remainder
1) 54	21		
2) 108	27		
3) 380	76		
4) 633	57		
5) 648	32		

DRAFT
April 10, 2014
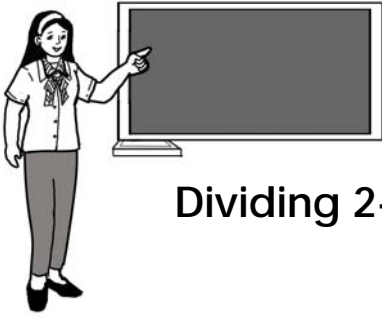
Dividing 2- to 3-Digit Numbers by 10 and 100

Activity 1

A. Give the missing number and write your answers on your paper.

1) 650 ÷ 10 = _____   4) 486 ÷ 10
2) 780 ÷ _____ = 78   5) 903 ÷ 100
3) 180 ÷ _____ = 18

B. Analyze and solve. Write your answers on your paper.

1) How many 100's are there in 600?
2) Two-thousand and five hundred has how many hundreds?
3) 5 000 is how many hundreds?
4) 400 is equal to how many tens?
5) 780 has how many tens?

Activity 2

Look at the cards below. Write the letter of the correct answer in your answer sheet.

1) I'm 6. My number sentence is:
   a. 600 ÷ 100 = n
   b. 600 ÷ 10 = n
   c. 60 ÷ 5 = n
   d. 116 ÷ 10 = n

2) I'm 80. My number sentence is:
   a. 8 000 ÷ 10
   b. 8 000 ÷ 100
   c. 800 ÷ 100
   d. 800 ÷ 100

3) I'm 53. My number sentence is:
   a. 53 ÷ 1
   b. 530 ÷ 100
   c. 530 ÷ 1 000
   d. 5 300 ÷ 10

4) I'm 27. My number sentence is:
   a. 2 700 ÷ 100
   b. 2 700 ÷ 10
   c. 270 ÷ 100
   d. 270 ÷ 1

5) I'm a quotient 22 with a remainder of 4. My number sentence is:
   a. 2 240 ÷ 10
   b. 2 204 ÷ 10
   c. 2 240 ÷ 100
   d. 2 204 ÷ 100

Activity 3

Find the quotient. Write your answers on your answer sheets.

1) 560 ÷ 10   5) 620 ÷ 10
2) 800 ÷ 100   6) 810 ÷ 10
3) 430 ÷ 10   7) 900 ÷ 10
4) 750 ÷ 10   8) 1 000 ÷ 100

Activity 4

Copy the number box in your notebook. Find the quotient then encircle the answer in the box. To find the answer, you may move down, across or diagonally.

1) 560 ÷ 10

2) 800 ÷ 100

3) 430 ÷ 10

9	6	1	5	4
0	3	2	6	3
5	4	0	2	7
8	6	6	1	7
7	1	3	0	5

10) 90 ÷ 10

9) 120 ÷ 10

8) 100 ÷ 10

4) 750 ÷ 10

5) 620 ÷ 10

6) 810 ÷ 10

7) 400 ÷ 10

196

Activity 5

Complete the table. Write a number sentence on the appropriate column. Write your answers on your answer sheets.

Quotient	Number sentence	
	Divisor: 10	Divisor: 100
Example: 4	40 ÷ 10	400 ÷ 100
1) 9		
2) 7		
3) 36		
4) 60		
5) 78		

Activity 6

Find the quotient using any method. Write your answers on your answer sheets.

1) 480 ÷ 10
2) 560 ÷ 10
3) 610 ÷ 10
4) 820 ÷ 10
5) 950 ÷ 10

6) 400 ÷ 100
7) 500 ÷ 100
8) 600 ÷ 100
9) 800 ÷ 100
10) 900 ÷ 100

11) 49 ÷ 10
12) 75 ÷ 10
13) 125 ÷ 100
14) 366 ÷ 100
15) 950 ÷ 10
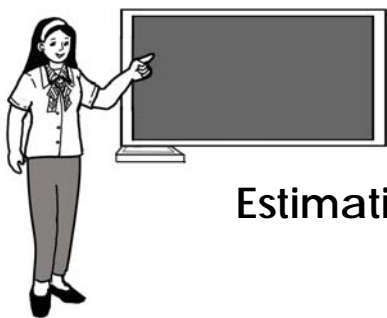
Estimating Quotients

Activity 1

Estimate the quotients. Write the answers on your paper.

Given	Round off the divisor	Think of compatible numbers	Estimate
1) 184 ÷ 11			
2) 338 ÷ 48			
3) 508 ÷ 21			
4) 677 ÷ 56			
5) 889 ÷ 78			

Activity 2

A. Write the closest number to 38 that can be evenly divided by the following:
   1)   4   _____
   2)   6   _____
   3)   8   _____
   4)   5   _____
   5)   9   _____

B. Estimate each quotient.
1) $19 \div 6$
2) $29 \div 4$
3) $35 \div 4$
4) $68 \div 8$
5) $93 \div 5$

C. Estimate the quotient.
1) $119 \div 23$
2) $321 \div 80$
3) $431 \div 61$
4) $753 \div 90$
5) $821 \div 89$

Activity 3

Solve the problems in two minutes. After 2 minutes, solve on the board.

1) There are 65 pupils visiting a museum. If they are divided into eight groups, about how many pupils are in each group?

2) Your class is studying the properties of matter. The 47 pupils in your class will be divided into groups. Each group will research one of the 3 properties of matter. About how many pupils will be in each group?

3) There are 736 Grade I pupils in Gregorio Elementary School. If pupils will be distributed into 12 sections, about how many pupils will be in each section?

Activity 4

Every day at the baseball field, a different number of baseball players show up. Estimate how many teams can be formed each day. (Hint: There are 9 players in a baseball team.)

Read and complete the table.

Day	Number of Players	Number of Teams
1) Monday	73	
2) Tuesday	37	
3) Wednesday	82	
4) Thursday	55	
5) Friday	46	

A. Estimate each quotient and explain your answer whether it is greater than or less than the exact quotient. Write your answer in your answer sheet.

	Estimate	> or <	Exact Quotient
1) 64 ÷ 7			
2) 83 ÷ 9			
3) 130 ÷ 8			
4) 396 ÷ 4			
5) 850 ÷ 9			
6) 244 ÷ 37			
7) 300 ÷ 59			
8) 397 ÷ 4			
9) 230 ÷ 73			
10) 545 ÷ 50			

B. In which of these situations would an estimate be acceptable alternative to an exact. Write **estimate** if estimate is acceptable and **exact** if it is necessary to obtain the actual quotient.

_____ 1) Finding your average grade for each learning area.

_____ 2) Finding the number of pupils in your class.

_____ 3) Finding the number of hours you watch TV in a week.

A. Estimate the quotient. Write the answer on your paper.
1) $253 \div 50$ = _____
2) $360 \div 7$ = _____
3) $554 \div 6$ = _____
4) $270 \div 32$ = _____
5) $432 \div 18$ = _____

B. Write a real life problem in your notebook in which you estimate the quotient of two numbers.

DRAFT
April 10, 2014
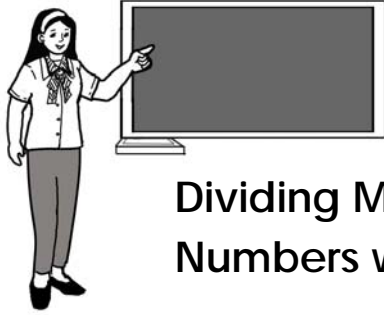
Dividing Mentally 2-Digit Numbers by 1-Digit Numbers without Remainder

Activity 1

Find the quotient mentally. Write the method used in finding the quotient.

Number Sentence	Method Used
1) 45 ÷ 3 = _____	
2) 57 ÷ 3 = _____	
3) 76 ÷ 2 = _____	
4) 85 ÷ 5 = _____	
5) 96 ÷ 6 = _____	

Complete each table by finding the quotient mentally.

Divide by 5.

Given	Answer
1) 35	
2) 45	
3) 50	
4) 60	
5) 75	

Divide by 6.

Given	Answer
1) 18	
2) 24	
3) 36	
4) 48	
5) 54	

Divide by 9.

Given	Answer
1) 27	
2) 45	
3) 63	
4) 72	
5) 81	

Activity 3

Give a division sentence that can be answered mentally using the given number as dividend.

1)	18	6)	72
2)	26	7)	80
3)	40	8)	86
4)	55	9)	90
5)	63	10)	96

Activity 4

Read and give your answer mentally. Explain the   method used.

Suppose you are given PhP75.00 and you are asked to spend the entire amount, what items will you buy from the list below? Why?

Item	Available Number of Items	Price per Item
A. pencil	12 pieces	PhP6.00 each
B. pad paper	5 pads	PhP15.00 per pad
C. crayons	4 boxes	PhP25.00 per box
D. notebook	5 pieces	PhP17.00 each

Activity 5

Construct a division sentence with each of the following as dividend.

1) 18
2) 24
3) 39
4) 45
5) 48

6) 63
7) 76
8) 81
9) 90
10) 98

DRAFT
April 10, 2014

Lesson 53
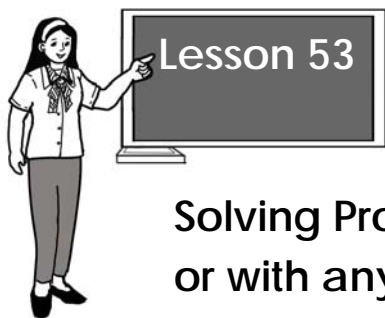
Solving Problems involving Division without or with any Other Operations of Whole Numbers

Activity 1
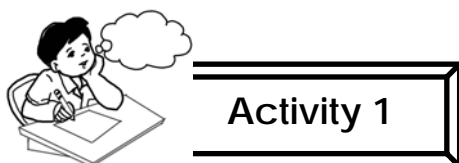
Read and answer. Use different strategies in finding the answer. Explain your answer. Write your answer in your answer sheet.

1) Mother packs 60 sandwiches for the party. If there are 7 tables in the party with 7 guests, do you think mother has enough sandwiches for them?

2) Ana has PhP850 to spend for food. If she spends PhP120 a day for food, how long will the money last?

3) Mr. Santos harvested 2 161 mangoes. How many baskets will have 200 mangoes each? How many remaining mangoes will be put in one basket?

Activity 2

Read and solve the problems below.
Use any methods in solving the problems such as through illustrations, groupings, and the like.

1) If 32 pieces of cupcakes will be given to 8 pupils, how many pieces of cupcakes will each receive?
2) If Mrs. Ramos has PhP750, is it possible for her to allot PhP90 each to her 5 children and 2 nieces as their school allowance for 3 days? Why?
3) If you have 15 packs of noodles, 20 kilos of rice and 5 bars of laundry soap, how will you distribute this to 5 households? Make your own list.
4) Is it possible to have 35 pieces of PhP50 in   PhP6 000? Why?
5) Look at the list of objects that you can buy with your PhP500.00.

Item	Unit Selling Price
	PhP235
	PhP125
	PhP200
	PhP20

208

	PhP5
	PhP25
	PhP3

Activity 3

Illustrate   or show different ways of grouping and solving the given problems. Write your answer on your answer sheet.

1) Group 76 into 12.
2) How many twenty-pesos are there in PhP920?
3) How many 50s are there in PhP750?
4) How many groups of 5s are there in125?
5) Group 600 by 100s.

Activity 4

If you are given PhP200, how will you spend it? Make your own table about what items you are going to buy and how much each costs. Write your answer in your notebook.

Amount Given: PhP200	
Item/s to be bought	Price/Cost

DRAFT
April 10, 2014
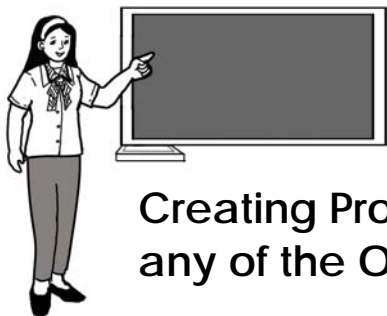
Read the story.

> Six children were playing in the backyard. Two more children came to join. Then they picked 24 guavas.
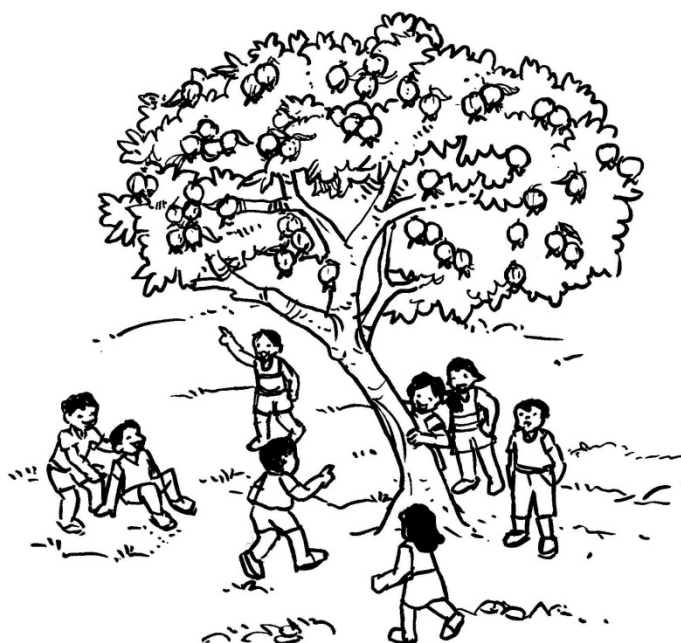
Using the story above, make questions that can be answered using division or with other operations.

Activity 1

Make a problem with corresponding reasonable answer based on the given situation. Write your answer on your answer sheet.

1) A class of 45 pupils received a donation of 100 packs of powdered milk.

> Problem:
>
>
> Answer:

2) Teresa told her brother that she was able to count 100 feet of chicken and goat in their farm.

> Problem:
>
>
> Answer:

Activity 2

Develop number riddles such as:

Mr. Santos has 4 daughters. Each of his daughters has a brother. How many children does Mr. Santos have?

Exchange your riddle with a classmate and solve each other's riddles.

Activity 3

Do the following exercises with your group members. Make a word problem using the given data. Write your answer on your answer sheet.

1) a shirt costs PhP75; PhP200

2) 1 000 eggs; 24 trays

3) PhP500 in coins

4) 3 canned goods per pupil; 384 canned goods

5) 835 kilograms of rice; 5 kilograms each employee

Activity 4

Answer the following on your paper.

1) Make a division problem whose quotient will have no remainder.

2) Write a division word problem in which the remainder is
   a. 3   b. 5   c. 4   d. 0   e. 1

Activity 5

1) Draw a picture and write a word problem about 3 friends who planted a total of 84 *pechay* and each of their garden plots have the same number of *pechay*.

2) Write a number sentence and illustrate to solve this problem.

> Willy says, "If I want to learn 15 words in 6 days, I can learn 2 words each day." Do you agree or disagree? Explain.

3) Talk about this:

> Leila has 13 glasses of pineapple juice to sell to 6 people.

Will each person get more or less than 2 glasses?
How do you know?

DRAFT
April 10, 2014

Lesson 55

Odd and Even Numbers

Mrs. Ching's class is going to join the school program, so the pupils are lining up in pairs. Today she has 24 pupils in class. Does each pupil have a partner? Why? What if there were only 23 pupils, will all the pupils have a partner? Why?

What are the given numbers?
Which number is even?
Which number is odd?

Activity 1

Copy the following numbers on your paper. Write whether it is odd or even.

_____	1)	26	_____	6)	101	_____	11)	1 457
_____	2)	18	_____	7)	238	_____	12)	2 536
_____	3)	79	_____	8)	454	_____	13)	3 210
_____	4)	15	_____	9)	500	_____	14)	5 012
_____	5)	89	_____	10)	873	_____	15)	9 113

Activity 2

What number am I? Write your answer on your paper.

1) I am an odd number less than 80 but greater than 77.
2) I am an odd number greater than 122 but less than 125.
3) I am the largest odd number less than 600.
4) I am an even number greater than 1 396 but less than 1 400.
5) I am an even number greater than 2 202 but less than 2 205.

Activity 3

Copy the puzzle on your paper. Color the odd numbers red. Then color the even numbers green.

6	12	50	43	20	53	4	17
140	69	5 628	812	435	5 012	7 985	21
3 431	2 296	247	3 981	3 348	113	34	1 238
82	133	9	3	141	25	8	97

Activity 4

Guessing Game

Answer the questions in your notebook.

1. I am an even number more than 15 but less than 17.
2. I am an odd number between 4 191 and 4 195.
3. I am the sum of the greatest odd one digit number and the greatest even one digit number.
4. What is the sum of even numbers less than 30?
5. What kind of number is the sum of two even numbers?
6. What kind of number is the sum of two odd numbers?
7. What kind of number is the sum of an odd number and an even number?
8. I am an odd number between 1 008 and 1 013.
9. The sum of 2 consecutive even numbers is 26. What are the numbers?
10. I am the greatest 3-digit number that has all of the following characteristics: I am an odd number. The sum of my digits is 21. Each digit is different.
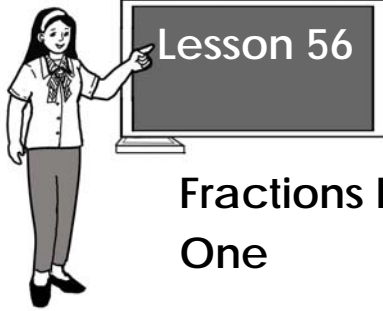
Fractions Equal to One and Greater than One

Study the shapes below.
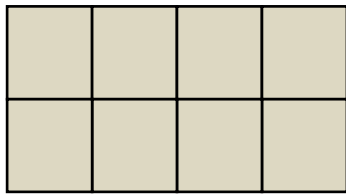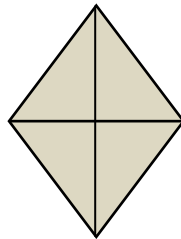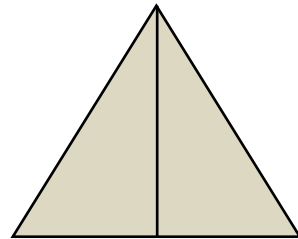
A   B   C

Into how many equal parts is Figure A divided? Figure B? Figure C?

What fractional parts are shaded?

What do you call the fractions $\frac{2}{2}$, $\frac{4}{4}$ and $\frac{8}{8}$?

Activity 1

Copy the set of fractions on your paper.
Encircle the fraction that is equal to one in each set of
fractions. Box the fractions that are more than one.

1)
$$\frac{3}{5} \quad \frac{6}{5} \quad \frac{4}{5} \quad \frac{5}{5}$$

4)
$$\frac{11}{13} \quad \frac{13}{13} \quad \frac{10}{13} \quad \frac{15}{13}$$

2)
$$\frac{9}{7} \quad \frac{4}{7} \quad \frac{7}{7} \quad \frac{3}{7}$$

5)
$$\frac{12}{14} \quad \frac{10}{14} \quad \frac{14}{14} \quad \frac{15}{14}$$

3)
$$\frac{10}{10} \quad \frac{9}{10} \quad \frac{11}{10} \quad \frac{5}{10}$$
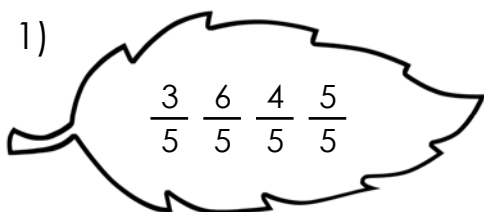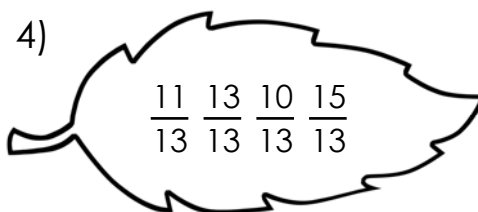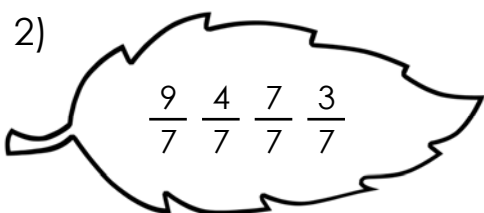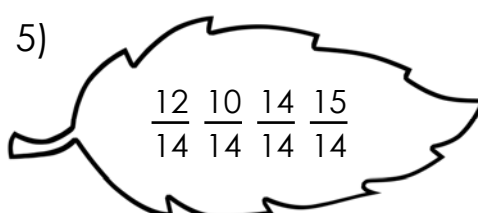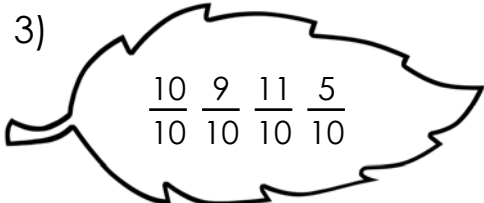
Write FE = 1 before fractions equal to one and FM > 1
before fractions more than one.

____ 1) $\dfrac{2}{2}$ ____ 6) $\dfrac{8}{8}$

____ 2) $\dfrac{9}{3}$ ____ 7) $\dfrac{9}{7}$

____ 3) $\dfrac{12}{10}$ ____ 8) $\dfrac{10}{10}$

____ 4) $\dfrac{5}{4}$ ____ 9) $\dfrac{6}{3}$

____ 5) $\dfrac{6}{6}$ ____ 10) $\dfrac{11}{11}$
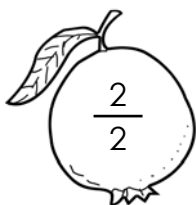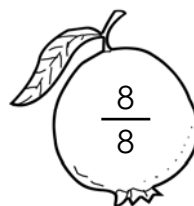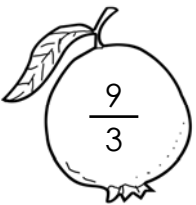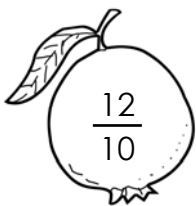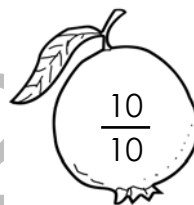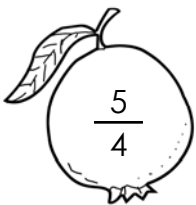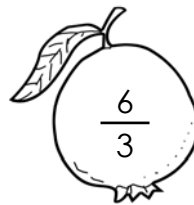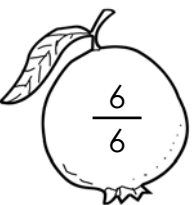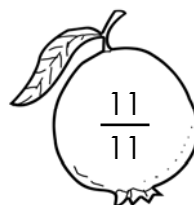
Who am I? Draw the shaded regions on your paper then write the fraction.

1) I am a fraction equal to one. My denominator is 5.
2) I am a fraction that shows 9 of 8 equal parts.
3) I am a fraction whose denominator is 4 and whose numerator is 9.
4) I am a fraction which is neither less than 1 nor greater than 1.
5) I am a fraction equal to one and my numerator is 10,

DRAFT
April 10, 2014

Activity 4

Copy the table in your notebook.
Fill up the table with the given fractions in the cart.

Fraction Less than One	Fraction Equal to One	Fraction More than One

DRAFT

$$\frac{3}{2} \quad \frac{5}{6} \quad \frac{10}{10} \quad \frac{5}{11} \quad \frac{8}{6} \quad \frac{3}{3} \quad \frac{5}{12} \quad \frac{9}{4}$$

$$\frac{9}{9} \quad \frac{5}{10} \quad \frac{11}{11} \quad \frac{8}{15} \quad \frac{9}{2} \quad \frac{7}{7} \quad \frac{5}{5} \quad \frac{8}{4}$$

Lesson 57
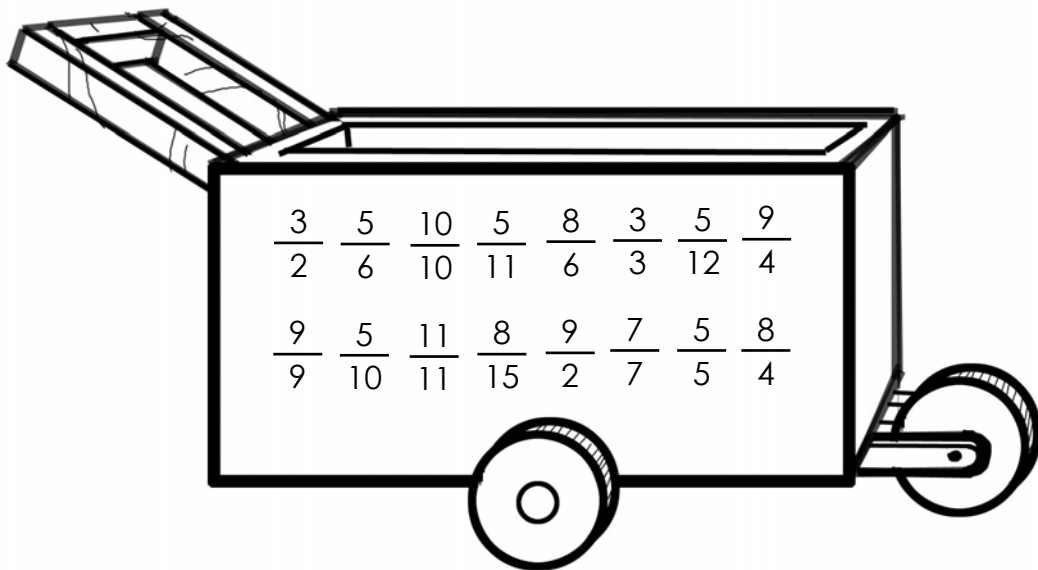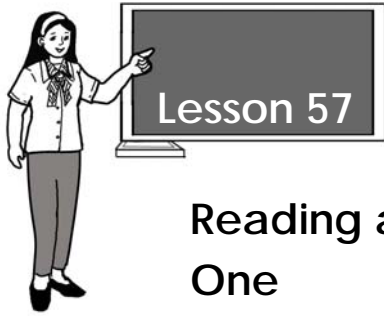
Reading and Writing Fractions Greater than One

Study the problem.

Jojo cut a whole *bibingka* into 8 equal parts. He gave 2 pieces to each of his 3 brothers and ate the rest. What part did each one get?

Into how many parts did Jojo cut the *bibingka*? What do you call each part?

226

Activity 1

Copy the fraction written in words and write its corresponding numerical symbol on your paper. Then, write the letter of its correct figure.

1) five-fourths
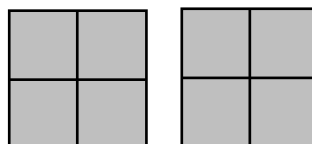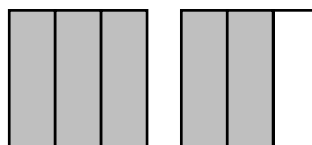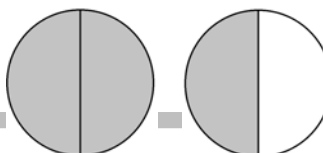
2) eight-sixths

3) three-halves

4) five-thirds

5) nine sixths

6) seven-fifths

7) eight-fourths

8) twelve-ninths

a.

b.

c.

d.

e.

f.

g.

h.

227
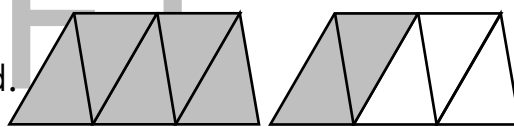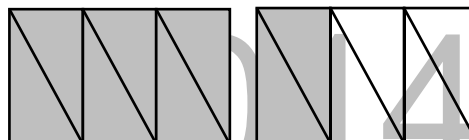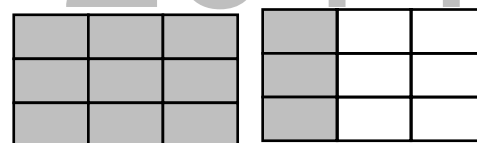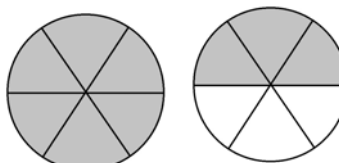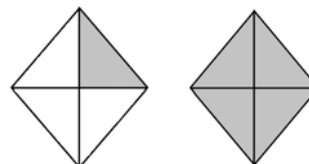
Activity 2

On your paper, write the following fractions in symbols.

1) four-thirds _____   6) six-fifths _____
2) ten-eighths _____   7) twelve-ninths _____
3) eight-sevenths _____   8) thirteen-tenths _____
4) nine-sixths _____   9) twelve-elevenths _____
5) eleven-sevenths _____   10) fifteen-thirds _____

Activity 3

On your paper, write the following fractions in words.

1) $\dfrac{8}{7}$ _____   6) $\dfrac{5}{2}$ _____

2) $\dfrac{4}{3}$ _____   7) $\dfrac{9}{8}$ _____

3) $\dfrac{10}{8}$ _____   8) $\dfrac{12}{10}$ _____

4) $\dfrac{6}{4}$ _____   9) $\dfrac{6}{2}$ _____

5) $\dfrac{9}{6}$ _____   10) $\dfrac{7}{5}$ _____

Activity 4

Make a model of a fraction more than one using these figures. Write the fraction in symbols and in words in your notebook.

1) ▢   2) ▭

3) △   4) ○

DRAFT
April 10, 2014

Lesson 58
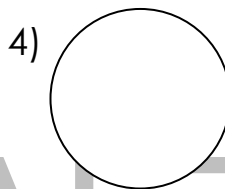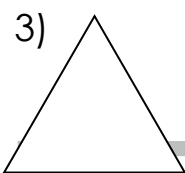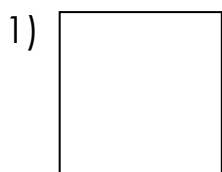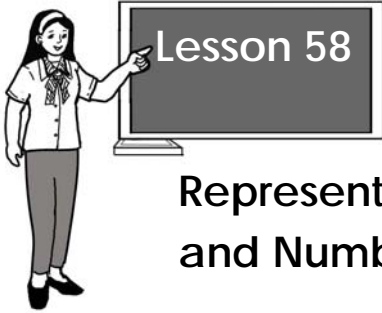
Representing Fractions using Regions, Sets and Number Lines

Look at the figures below.

Figure A

Figure B

0
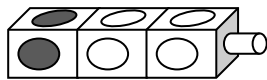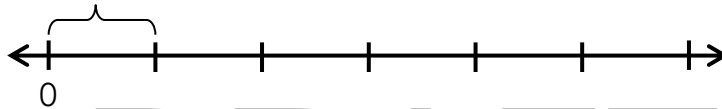
Figure C
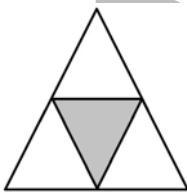
What part of the connecting cubes is shaded?

Into how many parts is the segment of the number line divided, what do you call one part?

What part of the triangle is unshaded?

Activity 1

Name the fractional part of the shaded portion in each of the following. Write your answers on your paper.

1)

2)

3)

4)

5)

_____   _____   _____   _____   _____

Activity 2

DRAFT

April 10, 2014
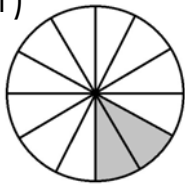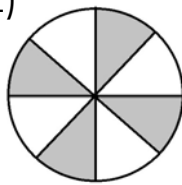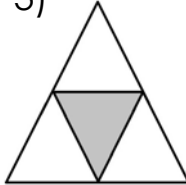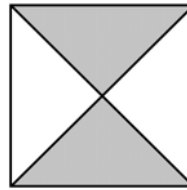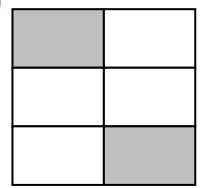
What part of each group is shaded? Write the fraction on your paper.

1)

2)

3)

_____   _____   _____

4)

5)

_____

231

_____
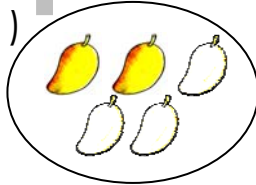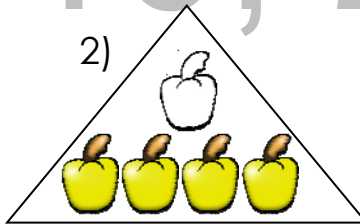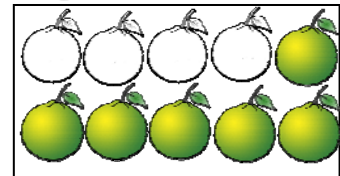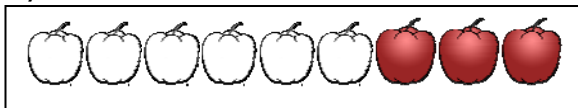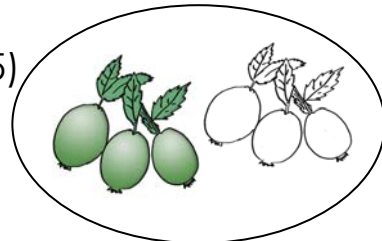
Activity 3

Write the fraction that names the part of the group described.

1) peeled bananas

2) empty glasses

3) vase with flowers
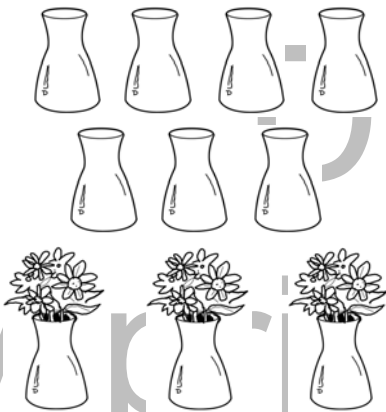
4) busted balloons
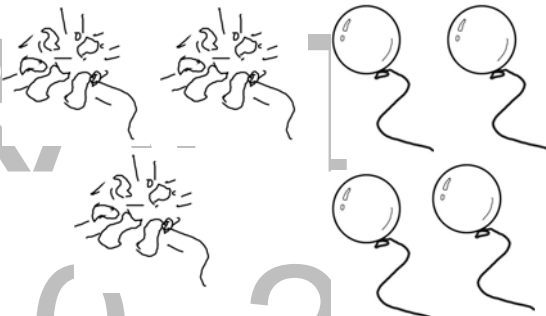
5) closed books

Work on these in your notebook.

A. Color portions of the figure to show the fraction then write the fraction in symbol.

1) three-eighths

$\dfrac{\square}{\square}$
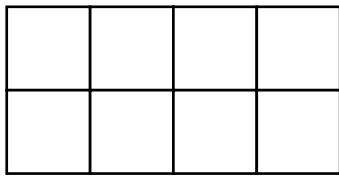
3) seven-tenths

$\dfrac{\square}{\square}$
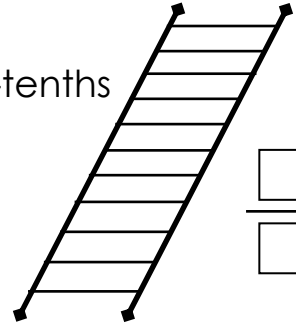
2) five-sixths

$\dfrac{\square}{\square}$
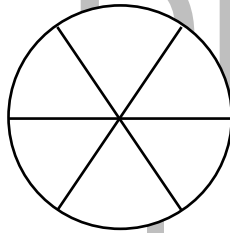
4) three-fifths

$\dfrac{\square}{\square}$
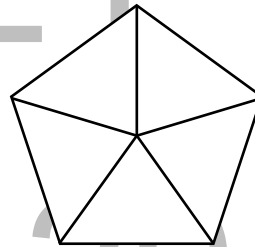
B. Write the fraction shown on the number line segments.

1) $\dfrac{\square}{\square}$

2) $\dfrac{\square}{\square}$

233

3)
$$\frac{\square}{\square}$$

4)
$$\frac{\square}{\square}$$

5)
$$\frac{\square}{\square}$$
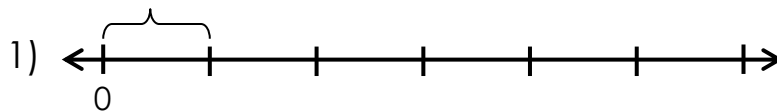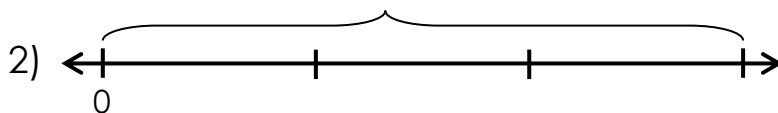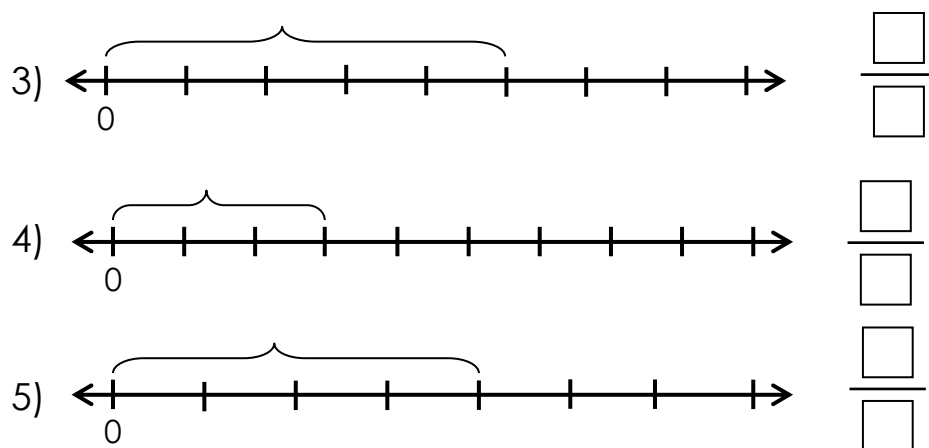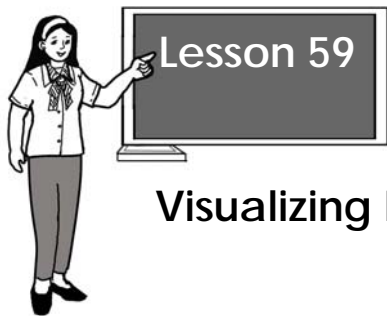
Visualizing Dissimilar Fractions

Study the figures.
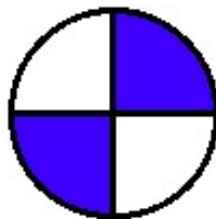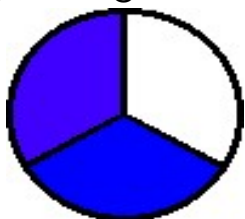
What can you say about the figures?
What is the fractional name of the shaded part in each figure? Compare.

Activity 1

Look at the following illustrations. Put a checkmark (√) on your answer sheet if the given pair of fraction is dissimilar and mark (x) if not.

1)

2)

3)

4)

5)
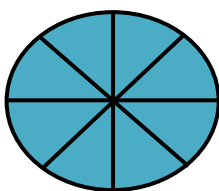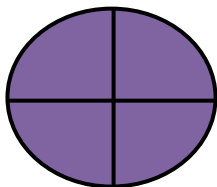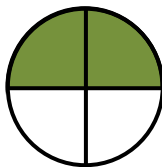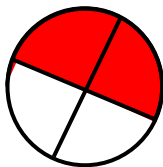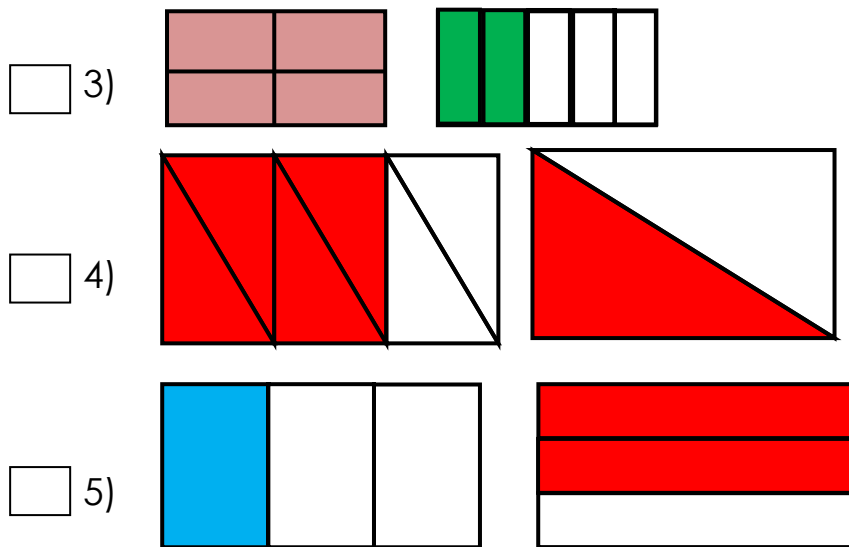
Activity 2

Illustrate the following sets of dissimilar fractions on the given shapes below.

1)

$\dfrac{1}{2}$ $\dfrac{5}{6}$

2)

$\dfrac{3}{4}$ $\dfrac{1}{6}$

3)

$\dfrac{3}{5}$ $\dfrac{2}{3}$

4)
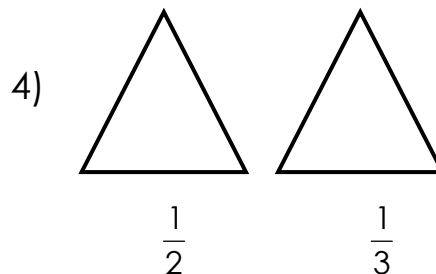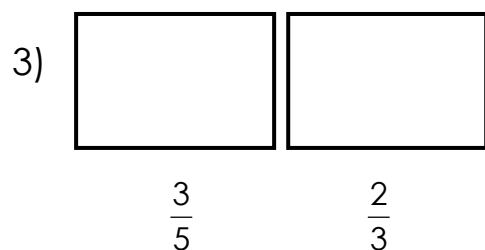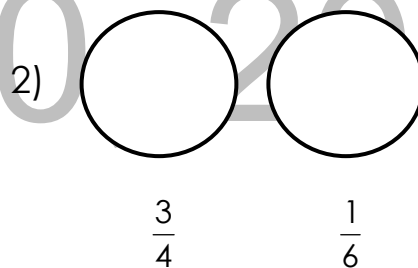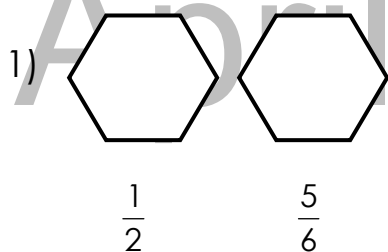
$\dfrac{1}{2}$ $\dfrac{1}{3}$

Read and answer the following problems. Write/Draw your answer on your paper.

1) Kim Christian spent $\frac{1}{2}$ of the day in school and $\frac{1}{4}$ of the $\frac{1}{2}$ day remaining doing his assignment. What kind of fractions are $\frac{1}{2}$ and $\frac{1}{4}$?

Answer: _____

2) Ben has a cut-out rectangle. He folded it into 4 equal parts and shaded 3 parts. Draw the rectangle made by Ben and give the fraction representing these shaded parts. Then, draw another fraction beside the illustration you made to make a pair of dissimilar fractions.

Answer: _____

3) Camille has 2 circles of the same size. She folded the first circle into 4 equal parts while the second one was divided into 8 equal parts. If she shaded 3 parts in the first circle and 3 parts in the second circle, are the resulting fractions representing these shaded parts similar?

Answer:_____

Activity 4

Write **D** on your paper if the given sets of fractions are dissimilar.

_____ 1)

_____ 2)

_____ 3)

_____ 4)

_____ 5)
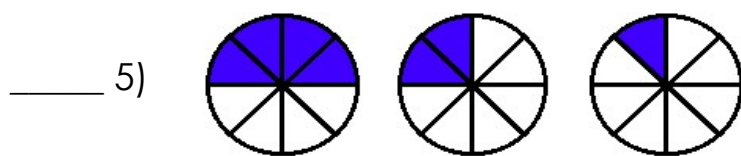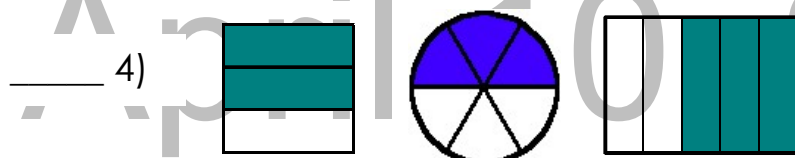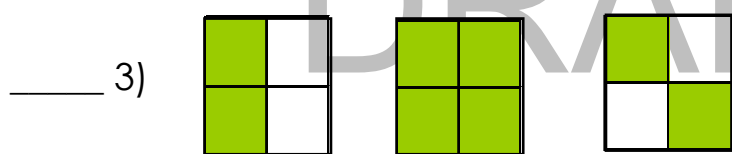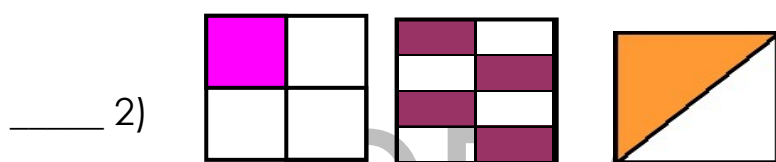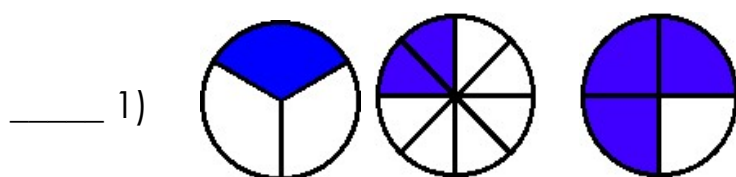
Activity 5

Put a checkmark (√) on your paper if the fractions are dissimilar and mark (x) if not.

_____1) $\dfrac{2}{5}$, $\dfrac{1}{5}$

_____2) $\dfrac{3}{9}$, $\dfrac{3}{7}$

_____3) $\dfrac{6}{5}$, $\dfrac{5}{6}$

_____4) $\dfrac{4}{8}$, $\dfrac{6}{9}$

_____5) $\dfrac{1}{3}$, $\dfrac{3}{4}$

_____6) $\dfrac{3}{8}$, $\dfrac{5}{8}$

_____7) $\dfrac{7}{3}$, $\dfrac{4}{3}$

_____8) $\dfrac{2}{3}$, $\dfrac{3}{5}$

_____9) $\dfrac{8}{10}$, $\dfrac{7}{10}$

_____10) $\dfrac{3}{6}$, $\dfrac{3}{9}$
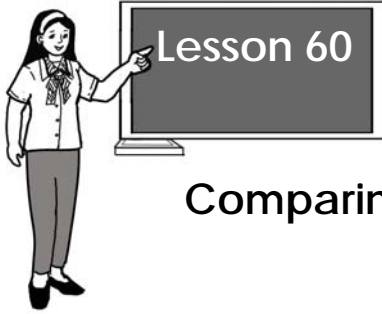
Comparing Dissimilar Fractions

Look at the figures. Name the shaded parts.

1)

2)

3)

4)
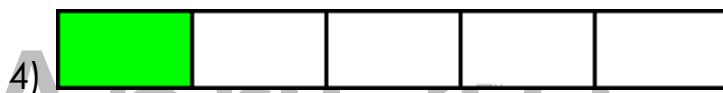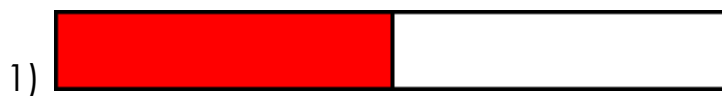
What are the numerators of the fractional parts that are shaded? What are their denominators?

Compare the fractions. Which is the greatest? least?

Activity 1

Compare each pair of fractions given below.
Write >, < or = on your paper.

1)
$\dfrac{1}{4}$ ☐ $\dfrac{1}{3}$

2)
$\dfrac{3}{4}$ ☐ $\dfrac{4}{6}$

3)
$\dfrac{2}{3}$ ☐ $\dfrac{1}{2}$

4)
$\dfrac{4}{5}$ ☐ $\dfrac{2}{3}$
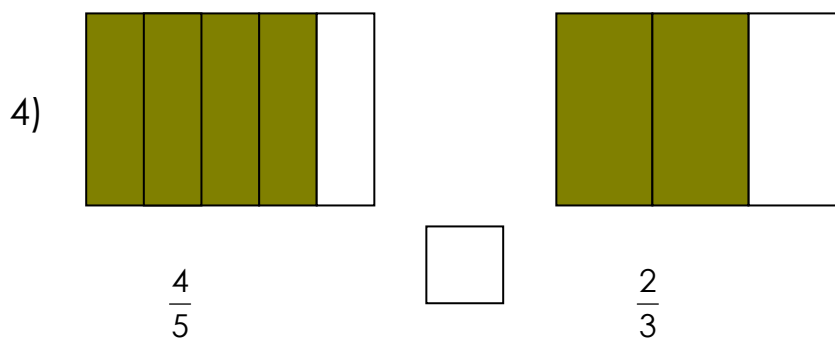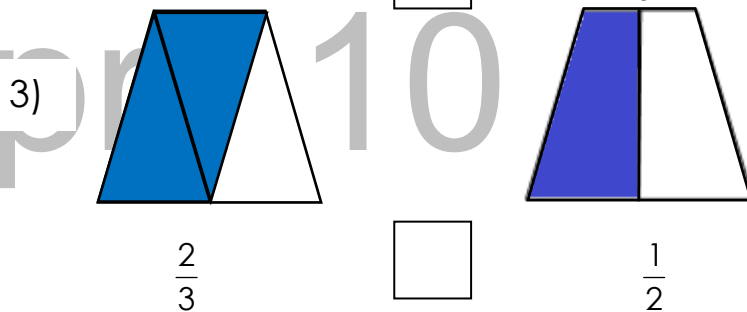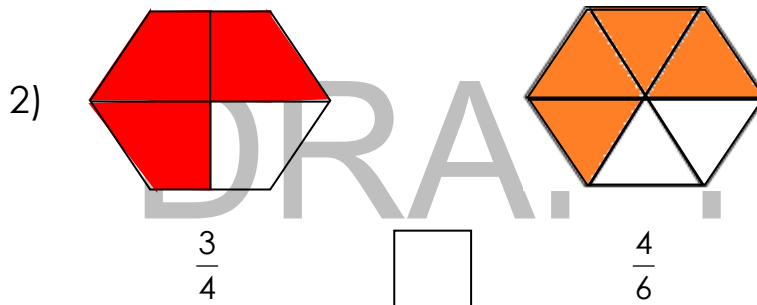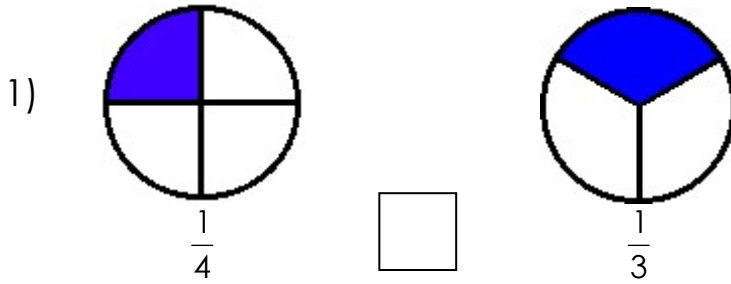
Activity 2

Give the fractions corresponding to the shaded parts. Then compare them by writing >, < or = on your paper.

1)

____   ◯   ____

2)

____   ◯   ____

3)

____   ◯   ____

4)

____   ◯   ____
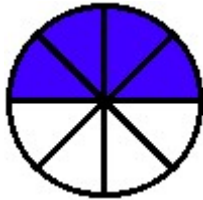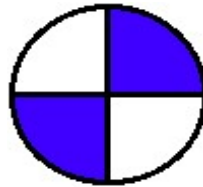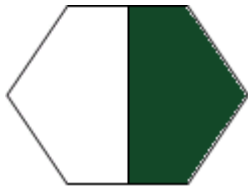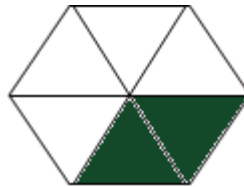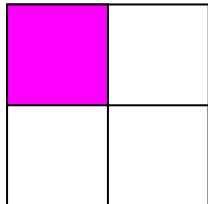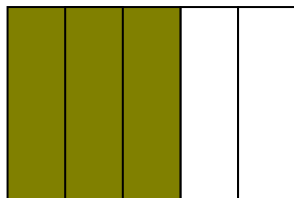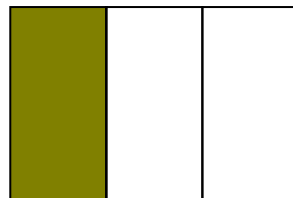
Copy the figure on your paper. Color all the shapes with fractions that are greater than $\frac{2}{3}$ **blue**, and color all the shapes with fractions that are less than $\frac{2}{3}$ **red.**

$\frac{4}{5}$

$\frac{1}{4}$

$\frac{7}{8}$

$\frac{3}{8}$

$\frac{3}{7}$ $\frac{6}{10}$

$\frac{5}{6}$

$\frac{6}{7}$
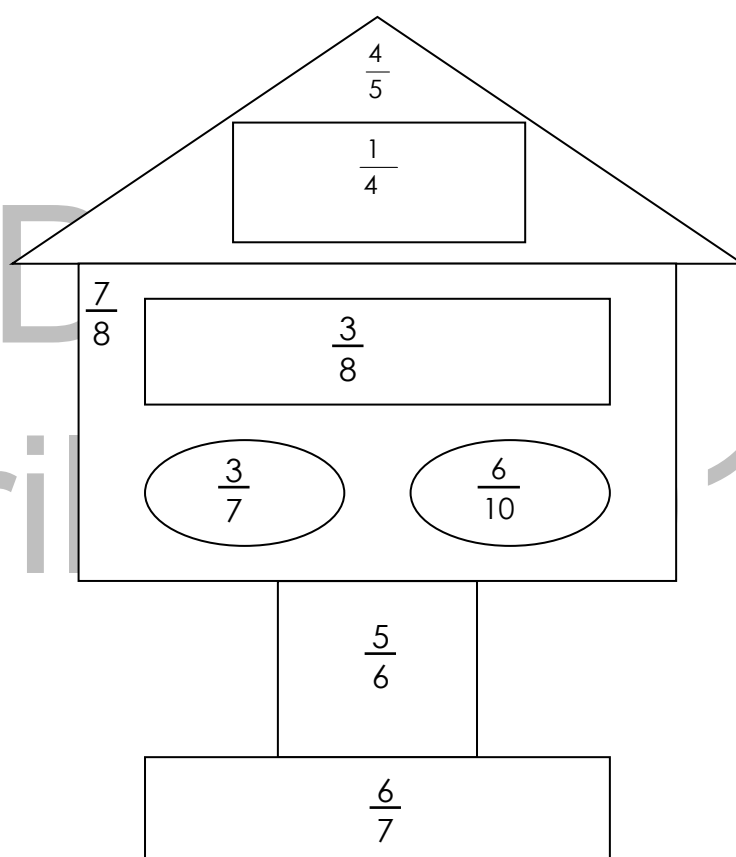
A. Use cross product method to compare the following fractions.

1) $\dfrac{5}{6}$ _____ $\dfrac{6}{7}$

2) $\dfrac{7}{9}$ _____ $\dfrac{5}{7}$

3) $\dfrac{3}{4}$ _____ $\dfrac{6}{8}$

4) $\dfrac{2}{3}$ _____ $\dfrac{6}{9}$

5) $\dfrac{7}{8}$ _____ $\dfrac{8}{9}$

B. Write **True** if the statement is correct and **False** if it is not true. Support your answer with an explanation.

_____ 1) $\dfrac{6}{9} = \dfrac{4}{9}$

_____ 2) $\dfrac{8}{10} < \dfrac{3}{5}$

_____ 3) $\dfrac{1}{2} = \dfrac{4}{8}$

_____ 4) $\dfrac{5}{8} > \dfrac{6}{7}$

_____ 5) $\dfrac{1}{8} < \dfrac{1}{5}$

Compare these fractions. Write >, < or = on your paper.

1) $\dfrac{4}{3}$ ____ $\dfrac{4}{9}$

6) $\dfrac{3}{4}$ ____ $\dfrac{2}{5}$

2) $\dfrac{6}{8}$ ____ $\dfrac{9}{8}$

7) $\dfrac{1}{8}$ ____ $\dfrac{3}{6}$

3) $\dfrac{1}{7}$ ____ $\dfrac{3}{4}$

8) $\dfrac{2}{5}$ ____ $\dfrac{4}{5}$

4) $\dfrac{2}{6}$ ____ $\dfrac{3}{5}$

9) $\dfrac{4}{5}$ ____ $\dfrac{1}{6}$

5) $\dfrac{3}{6}$ ____ $\dfrac{3}{4}$

10) $\dfrac{3}{5}$ ____ $\dfrac{1}{7}$

DRAFT
April 10, 2014

Lesson 61
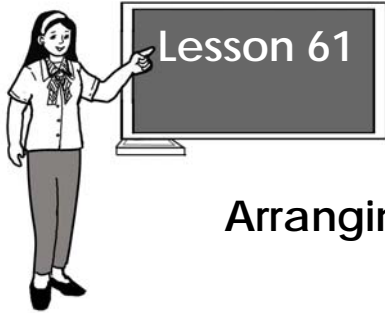
Arranging Dissimilar Fractions

Read the problem.

Kathleen and her mother went to the market. She helped her in buying the following ingredients:

$\frac{3}{4}$ kilogram of chicken $\frac{1}{2}$ kilogram of sayote

$\frac{1}{8}$ kilogram of ginger $\frac{1}{4}$ kilogram of onions

If we are going to arrange the weight of the ingredients bought from lightest to heaviest, which should come first? second? third? fourth? Why?

Activity 1

Arrange the following fractions in increasing order.

1) $\dfrac{1}{2}$, $\dfrac{1}{5}$, $\dfrac{1}{3}$, $\dfrac{1}{6}$ _____

2) $\dfrac{1}{2}$, $\dfrac{4}{5}$, $\dfrac{3}{4}$, $\dfrac{2}{3}$ _____

3) $\dfrac{7}{2}$, $\dfrac{7}{5}$, $\dfrac{7}{4}$, $\dfrac{7}{3}$ _____

4) $\dfrac{2}{3}$, $\dfrac{3}{4}$, $\dfrac{5}{8}$, $\dfrac{1}{2}$ _____

5) $\dfrac{7}{8}$, $\dfrac{2}{3}$, $\dfrac{1}{4}$, $\dfrac{1}{6}$ _____

Activity 2

Arrange the following fractions in decreasing order.

1) $\dfrac{2}{5}$, $\dfrac{1}{2}$, $\dfrac{1}{8}$ _____

2) $\dfrac{3}{4}$, $\dfrac{5}{6}$, $\dfrac{4}{8}$ _____

3) $\frac{5}{6}$, $\frac{5}{3}$, $\frac{5}{12}$ _____

4) $\frac{1}{2}$, $\frac{2}{3}$, $\frac{7}{9}$ _____

5) $\frac{7}{4}$, $\frac{7}{2}$, $\frac{7}{3}$ _____

Activity 3

Give any fraction whose value is between the given fractions.

1) $\frac{7}{8}$, _____ , $\frac{4}{5}$

2) $\frac{3}{5}$, _____ , $\frac{6}{7}$

3) $\frac{1}{4}$, _____ , $\frac{2}{3}$

4) $\frac{2}{5}$, _____ , $\frac{7}{10}$

5) $\frac{1}{3}$, _____ , $\frac{5}{9}$

Activity 4

Given: $\dfrac{2}{5}$, $\dfrac{3}{4}$, $\dfrac{1}{6}$, $\dfrac{3}{9}$

1) If you arrange the fractions in increasing order, which fraction will be:
   a) first? _____
   b) last? _____
2) If you arrange the fractions in decreasing order, which fraction will be:
   a) first? _____
   b) third? _____
3) Arrange the set of fractions in:
   a) ascending order   _____
   b) descending order   _____

Aling Rosa, a market vendor, had five customers who bought items from her very early in the morning.

Customers	Tomato	Onion	Garlic	Potato
Vicky	$\frac{1}{2}$ kg	$\frac{4}{5}$ kg	$\frac{1}{4}$ kg	
Letty	$\frac{1}{8}$ kg	$\frac{2}{3}$ kg		$\frac{2}{5}$ kg
Beth	$\frac{3}{4}$ kg	$\frac{4}{6}$ kg	$\frac{1}{3}$ kg	$\frac{1}{2}$ kg
Maria	$\frac{1}{2}$ kg	$\frac{1}{8}$ kg	$\frac{1}{4}$ kg	$\frac{1}{3}$ kg
Anne	$\frac{3}{4}$ kg	$\frac{3}{8}$ kg	$\frac{1}{4}$ kg	$\frac{1}{2}$ kg

1) Arrange the weight of the items bought by Vicky in increasing order.
2) Arrange the weight of the items bought by Letty in decreasing order.
3) Among the items bought by Beth, which item is the heaviest? lightest?
4) What is the lightest item bought by Maria? Which item is the heaviest?
5) If you arrange the weight of the items bought by Anne in increasing order, which fraction will be the third in the arrangement?

Lesson 62
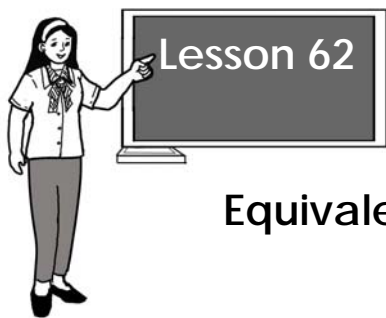
Equivalent Fractions

Read the problem.

Carol and Tess are working together on their art project. Carol colored 1/2 of the square while Tess colored 4/8 of another square of the same size. Tess told Carol that she colored more parts and has a bigger fraction. Carol said that they just have equal parts. Who is right?
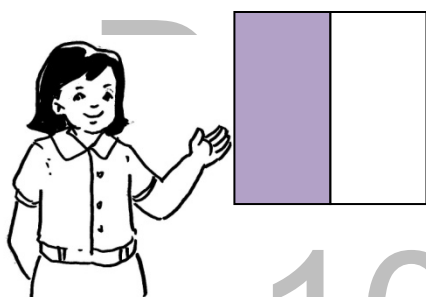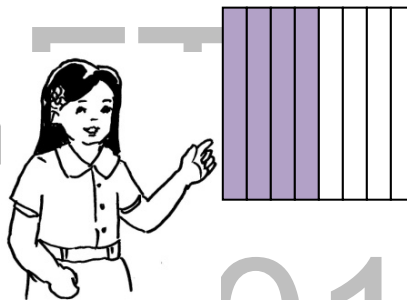
Carol's project   Tess' project

How many parts were colored by Carol?
What about Tess? Who do you think is right? Carol or Tess?

Activity 1

Use the figures to find the equivalent fractions. Write your answer in the box.

1)

$$\frac{2}{8} = \boxed{}$$

2)

$$\frac{3}{5} = \boxed{}$$

3)

$$\frac{4}{8} = \boxed{}$$

4)

$$\frac{1}{3} = \boxed{}$$

5)

$$\frac{3}{3} = \boxed{}$$

6)

$$\frac{1}{2} = \boxed{}$$
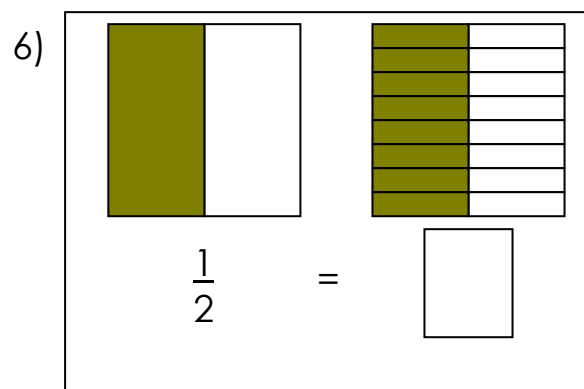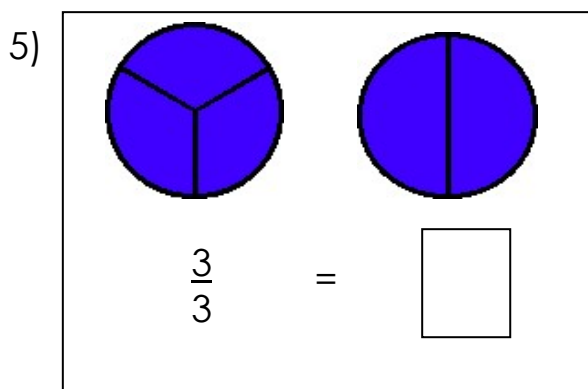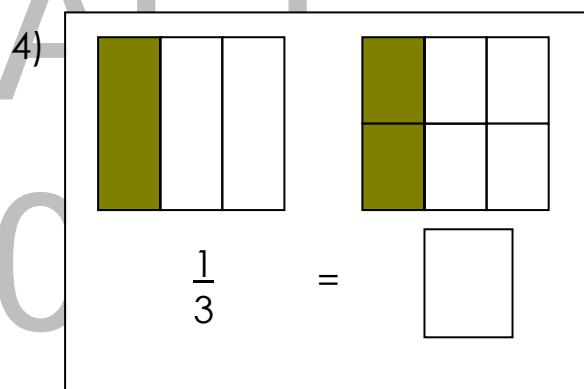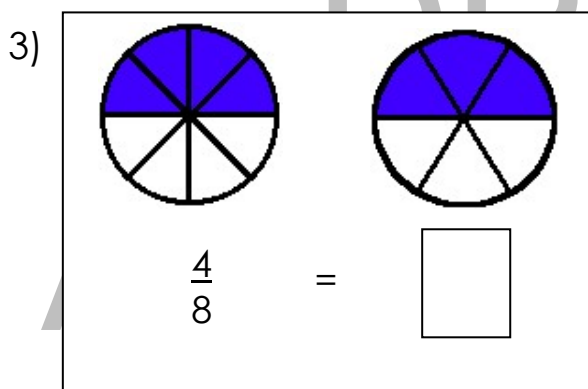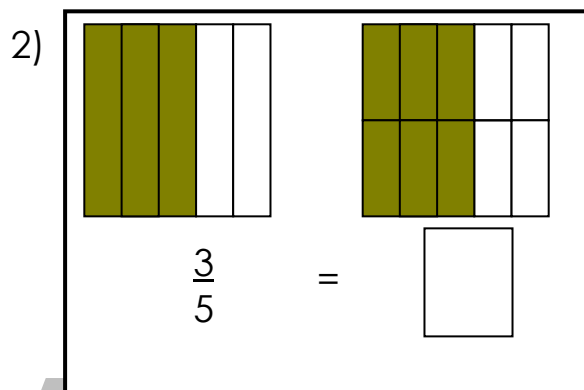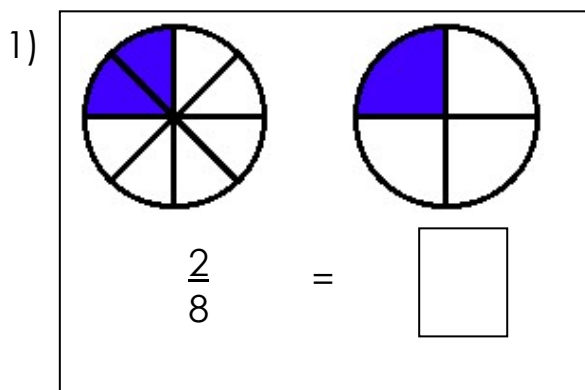
Activity 2

Complete the pair of equivalent fractions. Use cross multiplication to find the missing numerator or denominator.

1) $\dfrac{3}{\square} = \dfrac{9}{27}$

2) $\dfrac{2}{5} = \dfrac{\square}{45}$

3) $\dfrac{45}{81} = \dfrac{5}{\square}$

4) $\dfrac{\square}{15} = \dfrac{2}{3}$

5) $\dfrac{2}{4} = \dfrac{4}{\square}$

6) $\dfrac{5}{25} = \dfrac{\square}{5}$

Activity 3

Give three fractions equivalent to each given fraction.

1) $\dfrac{5}{6}$

2) $\dfrac{26}{52}$

3) $\dfrac{2}{11}$

4) $\dfrac{5}{4}$

5) $\dfrac{42}{56}$

253

Activity 4

Which of these pairs are equivalent fractions? Copy the pairs in your notebook.

1) $\dfrac{1}{4}$, $\dfrac{1}{8}$
2) $\dfrac{3}{5}$, $\dfrac{6}{10}$
3) $\dfrac{15}{20}$, $\dfrac{3}{4}$
4) $\dfrac{1}{5}$, $\dfrac{5}{25}$
5) $\dfrac{4}{5}$, $\dfrac{8}{15}$

Activity 5

A. Copy the fractions that are equivalent in your notebook.

1) $\dfrac{4}{5}$, $\dfrac{6}{8}$, $\dfrac{8}{10}$
2) $\dfrac{6}{14}$, $\dfrac{4}{8}$, $\dfrac{3}{7}$
3) $\dfrac{1}{3}$, $\dfrac{3}{9}$, $\dfrac{6}{8}$

4) $\dfrac{5}{6}$, $\dfrac{15}{18}$, $\dfrac{10}{18}$
5) $\dfrac{4}{16}$, $\dfrac{6}{27}$, $\dfrac{8}{36}$
6) $\dfrac{2}{3}$, $\dfrac{6}{9}$, $\dfrac{4}{10}$

B. Look for a pattern. Complete each set of equivalent fractions. Write your answer in your notebook.

1) $\dfrac{1}{2}$, $\dfrac{2}{4}$, $\dfrac{3}{6}$, —— , —— , ——

2) $\dfrac{1}{3}$, $\dfrac{2}{6}$, $\dfrac{3}{9}$, —— , —— , ——

3) $\dfrac{1}{4}$, $\dfrac{2}{8}$, $\dfrac{3}{12}$, —— , —— , ——

4) $\dfrac{1}{5}$, $\dfrac{2}{10}$, $\dfrac{3}{15}$, —— , —— , ——

5) $\dfrac{1}{10}$, $\dfrac{2}{20}$, $\dfrac{3}{30}$, —— , —— , ——

DRAFT
April 10, 2014
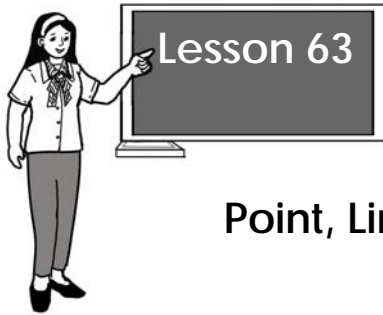
Point, Line, Line Segment and Ray

Study the picture.

David and Vince are playing darts. Look at where their darts landed.
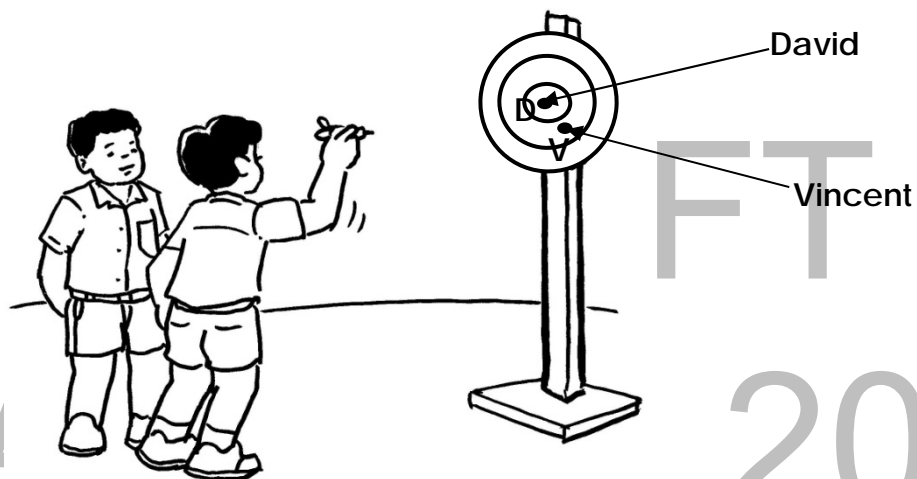
How will you describe the figure where David's and Vince's darts landed?

What did they use to name the figure where their darts landed?

Activity 1

Complete the puzzle.

2)↓

1)→

3)→

4)→
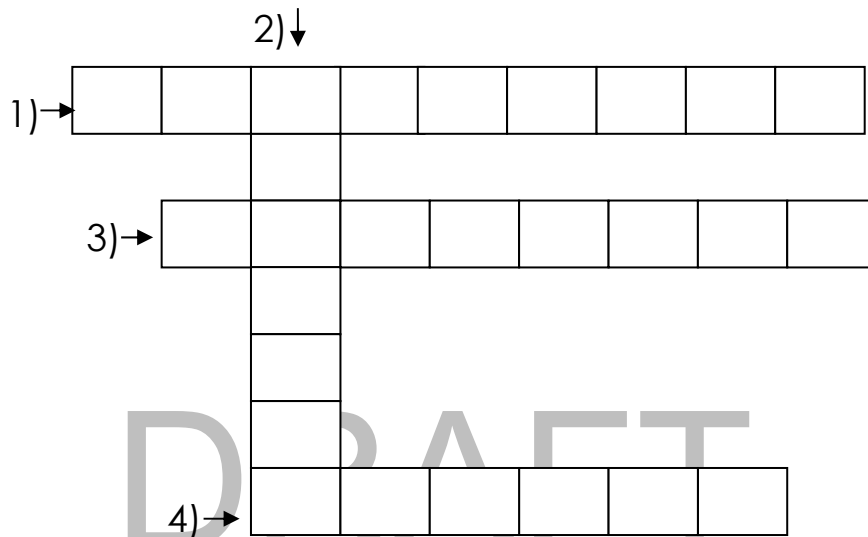
1) A shape with two opposite sides equal.
2) Closed figures with no sides.
3) A figure with three sides.
4) A shape with four equal sides.

1) Name the different rays in this figure.

G

H

I

J
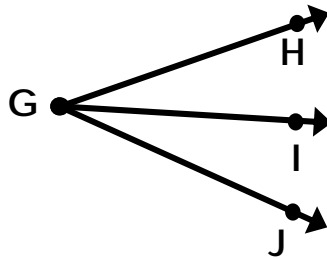
2) Name the different line segments.

R   E

M   Y

DRAFT
April 10, 2014

3) Name the lines.

N

Q

P

O
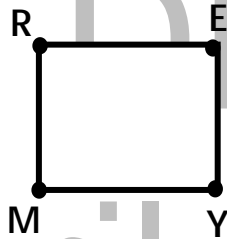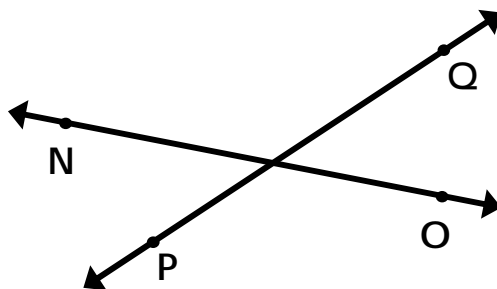
Activity 3

Fill in the blanks.
1) A _____ has two arrow heads.
2) The geometric figure with one endpoint and an arrowhead is called a _____.
3) A _____ has two endpoints.
4) _____ can be denoted by letters.

Activity 4

Answer the following:
1) Name the points.
2) Identify the given line.
3) Name the line segments.
4) Identify the given rays.

M   N   O   P

Activity 5

Choose the letter of the correct answer.

1) A dot is a representation of a _____.
        a. line
        b. ray
        c. point
        d. line segment

2) _____ extend without end in opposite directions.
        a. Points
        b. Lines
        c. Segments
        d. Dots

3) A ray is a part of the line composed of endpoint and _____.
        a. an arrowhead
        b. endpoints
        c. a line
        d. dots

4) A line segment is also a part of a line defined by _____ endpoints.
        a. 1
        b. 2
        c. 3
        d. 4

5) This symbol ⟷ represents a _____.
        a. segment
        b. ray
        c. line
        d. point

Answer the following in your notebook.

1) Name and draw line segments to form a Christmas star.
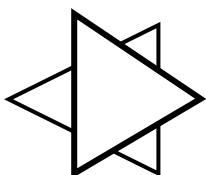
2) Use letters to name the points, line and rays.

Lesson 64
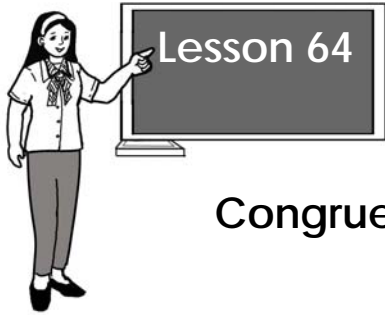
Congruent Line Segments

Study the pairs of line segments.

A ●————————————● B
C ●————————————● D

E ●————————————————● F
G ●————————————● H

DRAFT
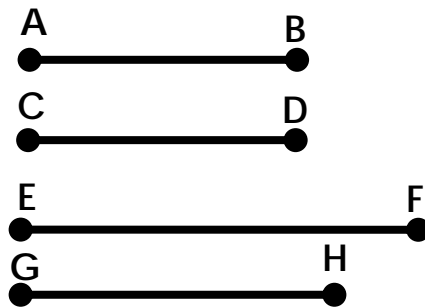
Which line segments are congruent? Why?

Activity 1

April 10, 2014

Copy the pair of line segments that are congruent in your notebook.

1) T ●—● U   V ●—● W

2) E ●—● F
   G ●—● H

3) K
   ●
   L
   N ●   ● M

4) A ●————————————● B
   C ●————————————● D

5) O ●   ● P
   R ●   ● Q
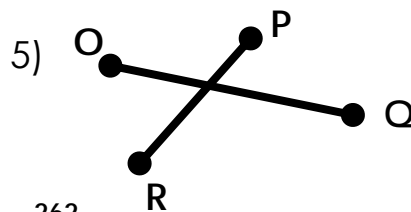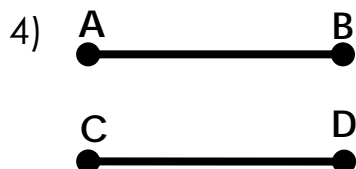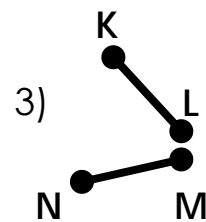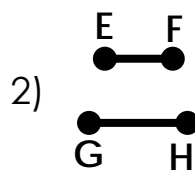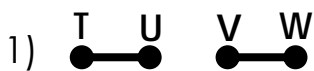
262

Look at the two rectangles. Determine if the lengths of the sides are equal. Use a ruler to measure the sides.

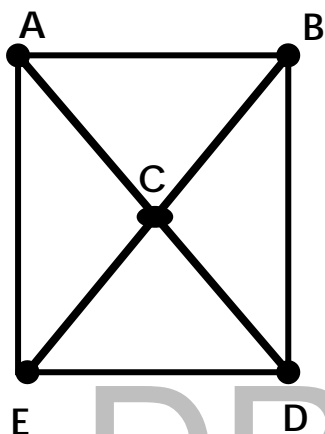Then, make a list of congruent line segments. Write your answer on your paper.

X Y T U
Z W S R

DRAFT

April 10, 2014
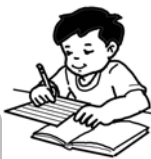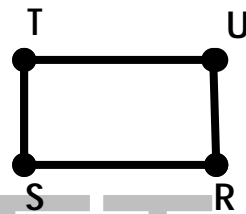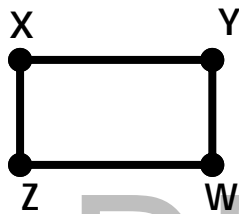
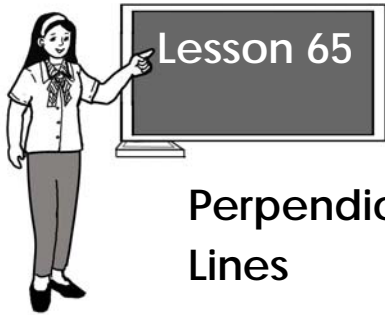Which pairs of segments are congruent? Measure and compare. Write your answer in your notebook.

H I K L C D M N
P
Y X O R S V W F G
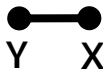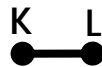
Study the figure. Identify the congruent line segments.

List down objects that you have seen in your house or community which represent congruent line segments. Write your answer in your notebook.

Perpendicular, Parallel and Intersecting Lines
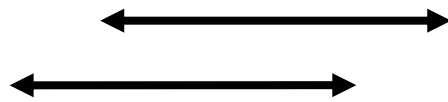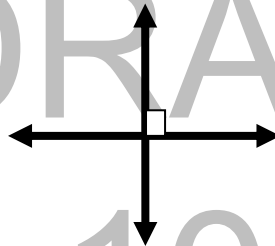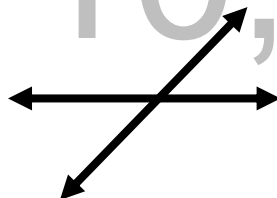
Study the figures below.

Figure A

Figure B

Figure C
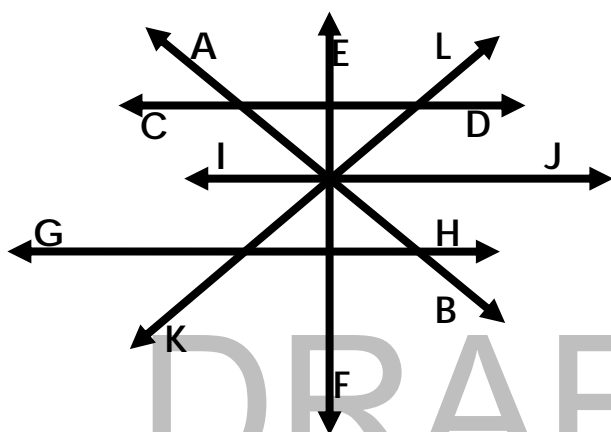
1) Describe the lines in Figure A. What do we call these lines?
2) Describe the lines in Figure B. What do we call these lines?
3) Describe the lines in Figure C. What do we call these lines?

Activity 1

Identify the lines in the figure that fall under the given classifications.

1) Parallel Lines

_____

_____

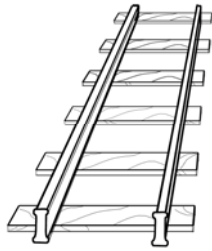2) Perpendicular Lines

_____

_____

3) Intersecting Lines

_____

_____
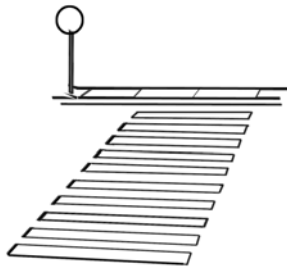
Identify parallel, perpendicular and intersecting lines in the given pictures.

1)

2)
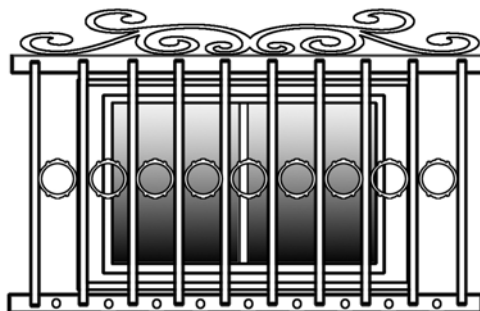
3)

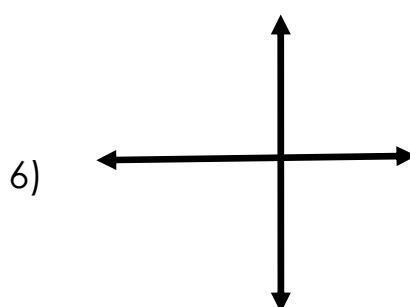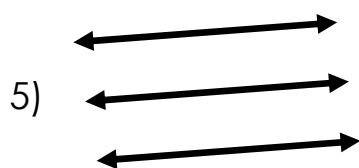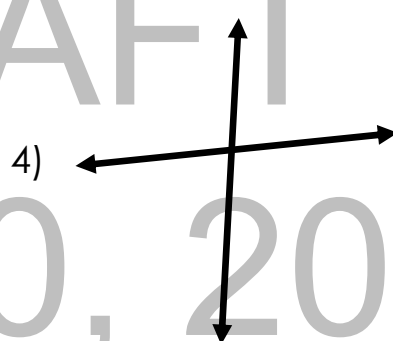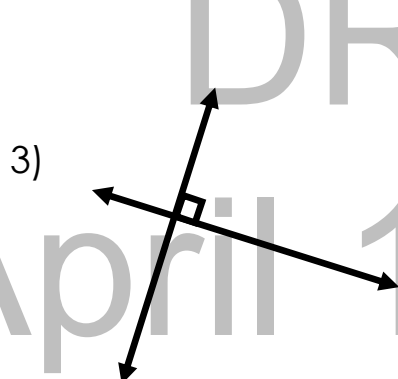Determine whether the given lines are parallel, intersecting or perpendicular.

1)

2)

DRAFT

3)

4)

April 10, 2014

5)

6)

268
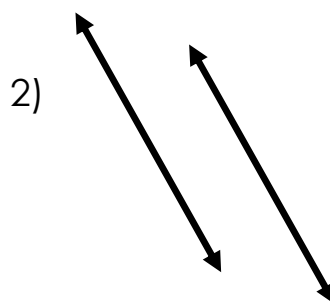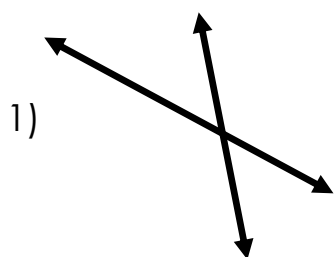
Activity 4

Name the objects that show parallel lines, intersecting lines and perpendicular lines.
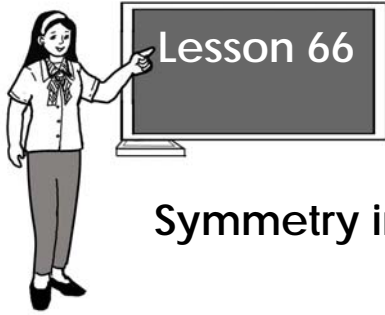
Symmetry in the Environment and in Design

What do you see?

How will you describe this butterfly?

Activity 1

Work with your partner and do the following.
You need: paper, pencil, crayons, scissors

1) Fold a sheet of paper in half.
2) Draw half of a face on the paper, using the fold as the line of symmetry.
3) With the paper folded, cut holes for the eyes, nose, and mouth. Cut out the shape of the face.
4) Unfold the paper. Color your mask the same on each side of the fold.
5) Discuss with your partner: Where is the line of symmetry in the mask?

Activity 2

Work with your partner and do the following.
You need: paper, pencil, crayons

1) Fold the paper in half length-wise.

2) Then write your name with a dark marker or crayons in large cursive letters on the fold.

3) Then turn the paper over so that you can trace your name on the other side of the paper.

4) When you unfold the paper, your name should make a symmetrical design, with the fold line being the line of symmetry.

5) After you have your names drawn, look at the design and try to make some kind of creature out of it by coloring it and adding other lines.

Activity 3

Draw your own picture showing symmetry in your notebook.
You need: paper, pencil, crayons

Activity 4

Which of the following images of animals below **does not show** symmetry? Name the animals.

DRAFT

Activity 5

Draw the following on your paper:

1. A symmetrical alien. Be creative and include lots of details. Draw the line of symmetry.

2. A symmetrical object found in your classroom or school grounds. Color your drawing. Draw the line of symmetry.
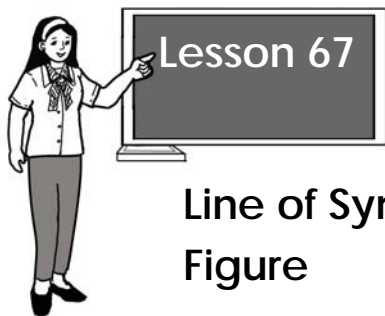
Line of Symmetry in a Given Symmetrical Figure

Look at the picture.
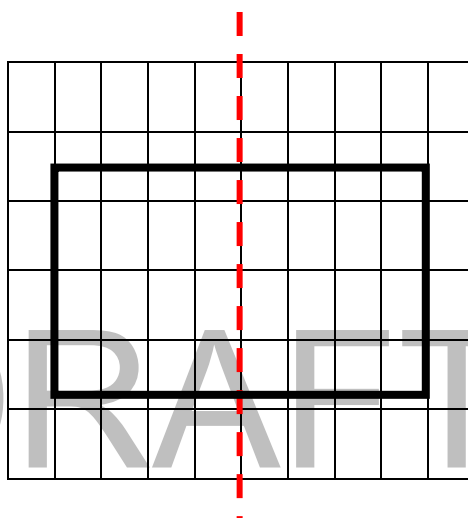
What can you say about the picture?
What does the broken line tell?

Name the figure and show the line of symmetry.

1)
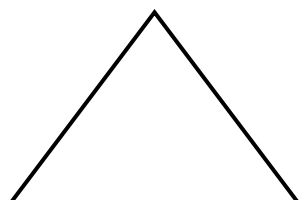
2)

3)
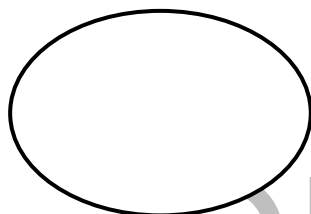
4)

5)

6)

7)
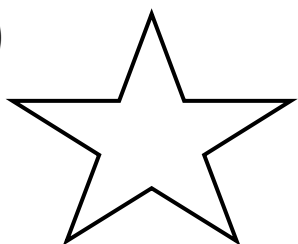
8)

Activity 2

A. Tell whether the dotted line show a line of symmetry.
   Write <u>yes</u> or <u>no</u> on your paper.

1)   2)   3)   4)
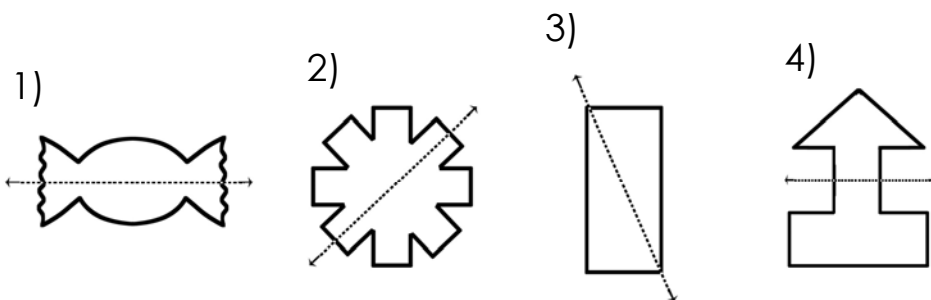
B. Draw a line of symmetry for each figure.

1)   2)   3)   4)

Activity 3

Does each figure appear to have a line of symmetry? If yes, trace the line of symmetry.

1)

2)

3)

W

4)

5)
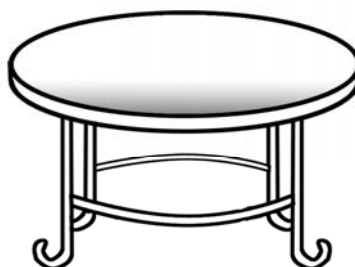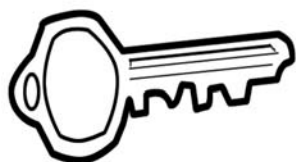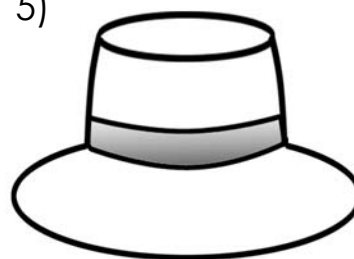
Which of these numbers have no lines of symmetry? Explain.
Draw the line of symmetry for the symmetrical figures.

0 1 2

3 4 5

6 7 8

9

Completing a Symmetric Figure

Look at the picture.
Can you draw the other half? What figure will you form?

DRAFT

Activity 1

April 10, 2014
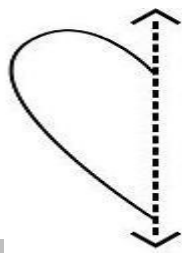
Draw the second half of each symmetrical shape. What shape did you form?

1)　　　　2)　　　3)　　　　4)
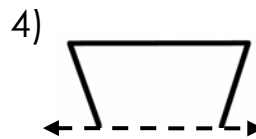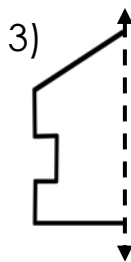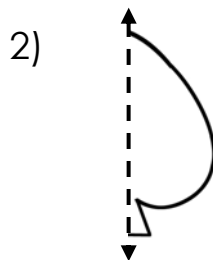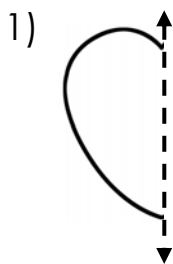
Draw the other half of the following figures with respect to their lines of symmetry.

1) 2) 3) 4)

DRAFT
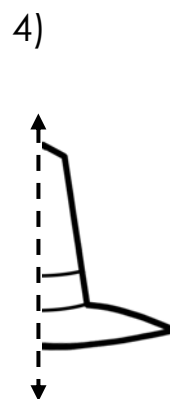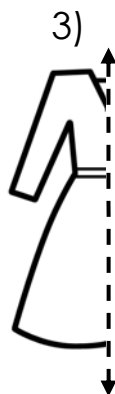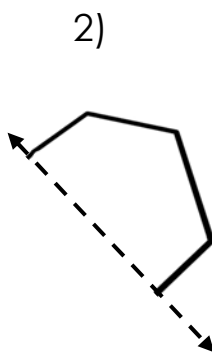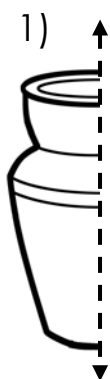
April 10, 2014

Draw the other half of the shape to make it symmetrical.
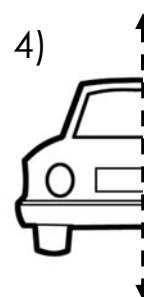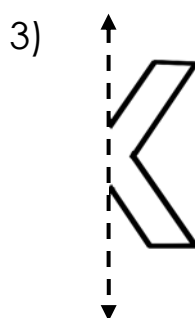
1) 2) 3) 4)

Sketch the other half. Identify the resulting objects.

1)

2)

3)

4)

5)

Lesson 69
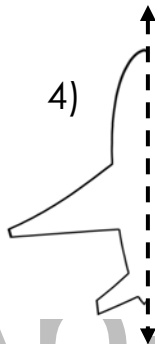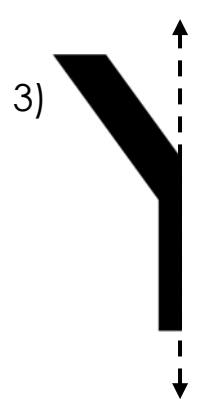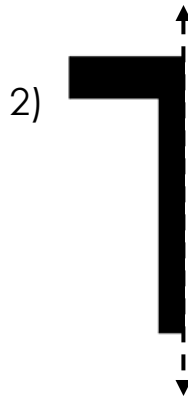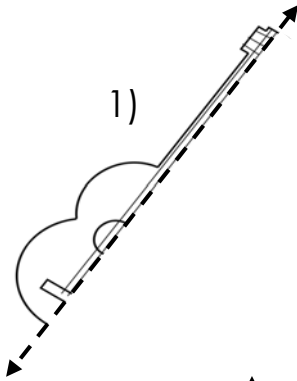
Tessellating a Plane Figure
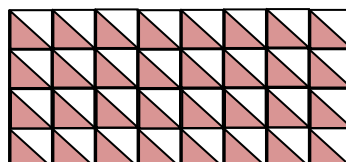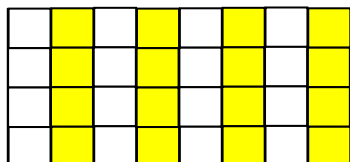
What can you say about the pictures above?
How will you describe each picture?

DRAFT

Activity 1

April 10, 2014

Show that these shapes tessellate by tiling the "floor". We already started it for you.

1)
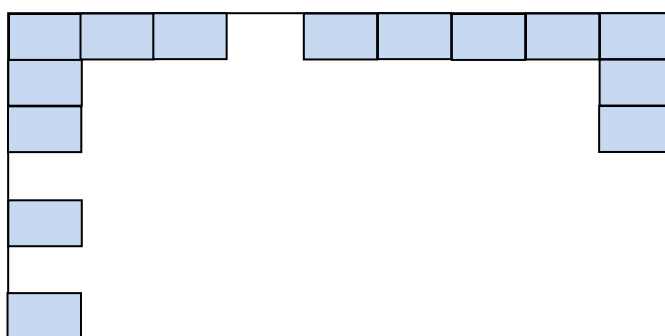
2)
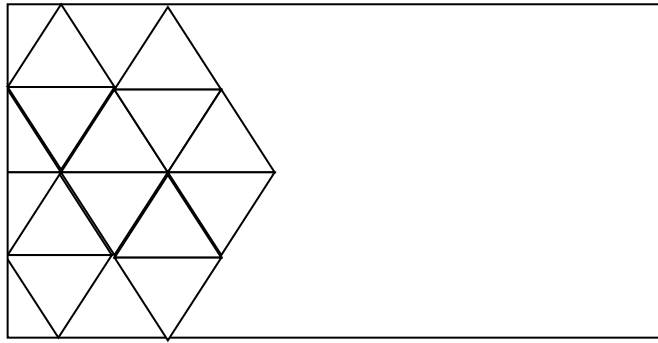
Activity 2

Write the number of triangles that covers the surfaces below.

1)
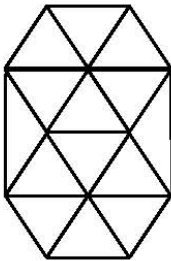
2)
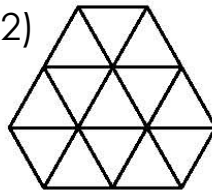
3)
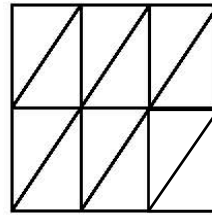
4)
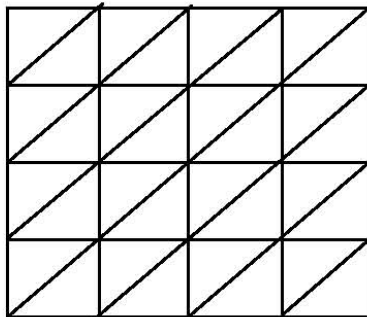
5)
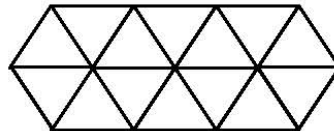
Activity 3

Tell whether the given design shows tessellation. Explain.

1)

2)

3)
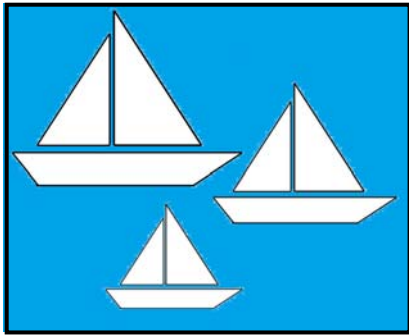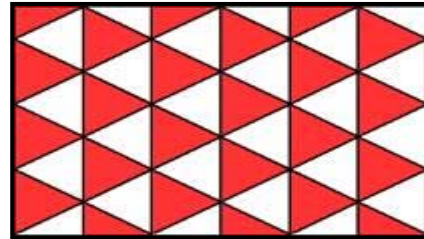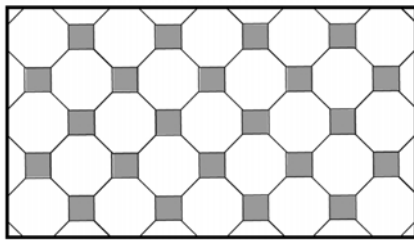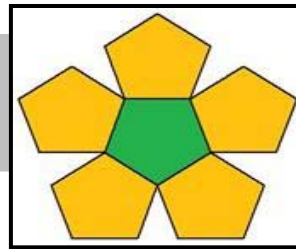
4)

Activity 4

Choose the figure which can tessellate. Make a cut-out of that figure using a colored paper and make a design showing tessellation.
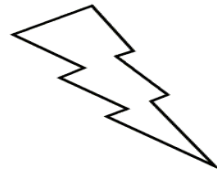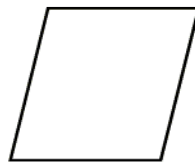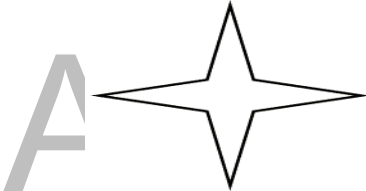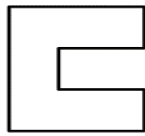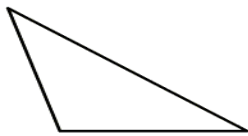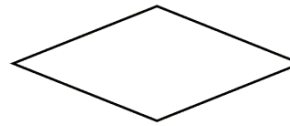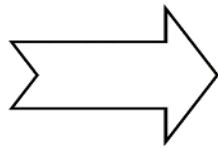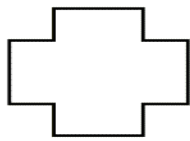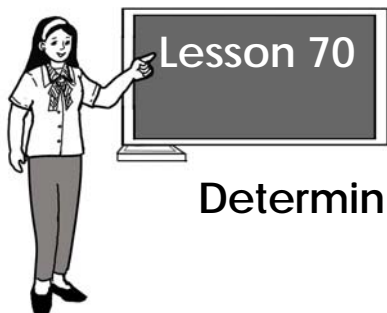
Determining the Missing Term in a Pattern

Look at the pattern.
What shape comes next? What comes before the first shape?

♡ ◯ ♡ ◯ ◯ ♡ ◯ ♡ ◯ _____

Look at the next set of figures. What figure should be put on the line?

Now, look at these numbers. What is the next number in the pattern? Why?

     3   5   7   9   ___
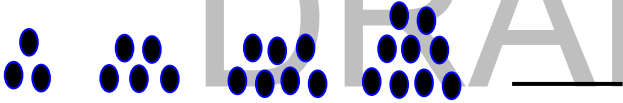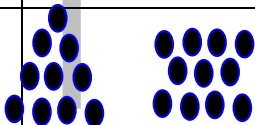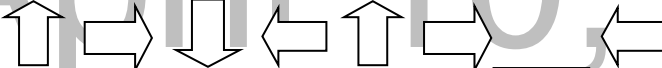
What numbers should be put on the blanks? Why?

     1Z   2Y   3X   ____   ____   6U

Activity 1

Look at the pattern under Column A in each row. Copy the picture in Column B that will complete the pattern in your notebook.

	Column A	Column B
1)	○ △ ○ ___ ○ △	△ ○
2)	□ □ ☆ ☆ □ ___ ☆ ☆	□ ☆
3)	(dots pattern) ___	(dot triangle) (dot square)
4)	48 ____ 56 60 64 68	52 54
5)	⬆ ➡ ⬇ ⬅ ⬆ ➡ ___ ⬅	⬆ ⬇

Activity 2

Find the missing terms in the following pattern.

1) 173   170   167   164   ____   ____

2) ♫ ♫ ♫ ♪ ♪ ♫ ♫ ____ ____ ♪

3) A   B   D   E   G   ____   ____   K   M

4) ▲ ▲ ▶ ▼ ◀ ▲ ____ ____ ▼ ◀

5) ⇐ ⇔ ⇒ ____ ⇔ ⇒ ⇐ ____

Activity 3

Draw a *repeating pattern* using

1) ☐ and ◺

2) ⬡ and ⬠

3) and

4) **M , N** and **P**

5) **7 , 8** and **9**

DRAFT
April 10, 2014

Activity 4

Copy the given pattern on your paper. Fill in the missing numbers to complete the given pattern.

1) _____ , **19** , **22** , _____ , **28, 31, 34**

2) **24,** _____ , **34** , **39** , **44** , **49,** _____

3) **36, 33, 30,** _____ , _____ , **21** , **18**

4) **525, 500,** _____, _____, _____, **400, 375**

Read and analyze the problem. Show your solution in your notebook.

Joan receives PhP5.00 on Monday, PhP8.00 on Tuesday, PhP11.00 on Wednesday and PhP14.00 on Thursday. Following the same pattern, how much will she receive on Friday, Saturday and Sunday? How much money will she receive in one week?

DRAFT
April 10, 2014
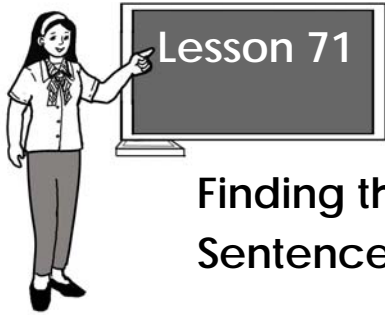
Finding the Missing Value in a Number Sentence

Paul, Sam, and James each borrowed a paintbrush, a jar of paint, a sheet of paper, and a pencil from the art room.

How many pupils are there?
How many items did they borrow?
How many items did they borrow in all?

Activity 1

Show or illustrate. Then write the number sentence and solve.

1. The 24 pupils in Ms. Tan's class work in groups of 3. How many groups of 3 are in Ms. Tan's class?

2. Harry puts 3 tapes in each box. How many boxes does he need for 21 tapes?

3. A fire truck carries 8 fire fighters. How many fire fighters will there be in 4 trucks?

Activity 2

A. Find the missing number.

1) $18 \div 3 = $ ___
2) $15 \div 5 = $ ___
3) $9 \div 3 = 15 \div $ ___

4) $12 \div $ ___ $ = 36 \div 6$
5) ___ $\div 4 = $ ___ $\div 10$
6) $8 \div 2 = $ ___ $\div $ ___

B. Find the value of <u>n</u> to make the equation correct.

1) $7 \times 4 = \underline{n}$
2) $6 \times 3 = \underline{n}$
3) $2 \times \underline{n} = 3 \times 6$

4) $9 \times 5 = \underline{n} \times 3$
5) $8 \times 3 = 6 \times \underline{n}$
6) $\underline{n} \times 7 = 3 \times 14$

Activity 3

A.   Find the missing numbers.
1) $5 \times 3 = $ ____ $\div 3$
2) $120 \div 10 = $ ____ $\times$ ____
3) $18 \times 6 = $ ____ $\times$ ____
4) $25 \times 4 = $ ____ $\div$ ____
5) $48 \div 6 = $ ____ $\div$ ____

B. Write the number sentence then solve.
   1) There are 18 baskets of roses. Each basket contains 12 stems of roses. How many roses are there?
   2) Paolo has 108 marbles. He put them in sets of 12. How many 12s are there? How many extra marbles are there?

Activity 4

A. Find the missing value in the following number sentence.
1) 5 x <u>n</u> = 70
2) <u>n</u> x 8 = 96
3) 70 ÷ 2 = <u>n</u>
4) 84 ÷ <u>n</u> = 7
5) 13 x 8 = ___ x ___
6) 72 ÷ ___ = ___ ÷ 2

B. Write the number sentence then solve the following problems.

1) If there are 12 cupcakes in a box, how many cupcakes are there in 25 boxes?
2) Twenty reference books can fit in one shelf in the school library. How many shelves are needed to hold 2 400 reference books?

Activity 5

A. Find the missing value in each of the following number.
1) 91 ÷ 7 = ___
2) ___ x 4 = 72
3) 36 ÷ 6 = ___ ÷ ___
4) 5 x ___ = ___ ÷ 3

B. Solve the following problems.
1) 54 pupils were seated around 3 tables. Each table has the same number of pupils. How many pupils were at each table?
2) 34 pupils signed up for a relay race. If each team had 4 players on it, how many teams joined the race? How many pupils were not part of the team?
3) Gigi found 64 seashells. She divided them equally among her 4 sisters. How many seashells did each of her sisters get?

DRAFT
April 10, 2014

Converting Time Measure involving Seconds, Minutes, Hours and Days

Here's a clock.
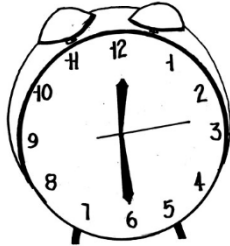
What time does it tell us?
How many hands does a clock have?
What is equal to one complete round of the minute hand?

Activity 1

A. Convert the following:

1) 600 seconds   = _____ minutes
2) 5 minutes   = _____ seconds
3) 360 minutes   = _____ hours
4) 1,200 seconds = _____ minutes
5) 5 hours   = _____ minutes
6) 2 hours   = _____ seconds

B. Convert the following:

1) 9 minutes   = _____ seconds
2) 240 seconds   = _____ minutes

3) 7 days = _____ hours
4) 96 hours = _____ days
5) 4 days = _____ hours
6) 48 hours = _____ days

Activity 2

A. Convert the given measurement to the indicated unit of time.

1) 840 seconds = _____ minutes
2) 960 minutes = _____ hours
3) 19 minutes = _____ seconds
4) 5 hours = _____ minutes
5) 1 260 minutes = _____ hours

B. Answer the following.

1) How many seconds are there in 18 minutes?

2) How many minutes are there in 720 seconds?
3) How many days are there in 72 hours?
4) How many hours are there in 5 days?
5) How many hours are there in 12 days?

C. Answer the following problems.

1) Your classmate walked to school for 900 seconds. How many minutes did it take your classmate to reach the school?
2) During the program, Sandra sang the school hymn in 3 minutes. How many seconds did it take her to sing the school hymn?

Activity 3

Answer the following.

1) On Saturdays, Aaron and Jimmy work at a video store in the mall. Aaron reports to work at 10:00 a.m. Jimmy reports to work at 2:30 p.m.
   a. Who reports to work at a later time?
   b. What is the difference between their time in hours?
   c. in minutes?

2) Ana works for 40 hours a week. If she works for 5 days in a week, how many hours a day does she work?

Activity 4

A. Convert to the indicated unit.

1) 9 hours   = ____ minutes
2) 3 days   = ____ hours
3) 780 seconds   = ____ minutes
4) 540 minutes   = ____ hours
5) 264 hours   = ____ days
6) 7 days   = ____ hours
7) 336 hours   = ____ days
8) 960 minutes   = ____ hours
9) 1 080 seconds = ____ minutes
10) 288 hours   = ____ days

B. Find the equivalent time measures from the ones inside the box.

960 hours	1560 seconds	2 days
2100 seconds	480 seconds	240 minutes

1) 8 minutes
2) 48 hours
3) 40 days
4) 35 minutes
5) 4 hours

Activity 5

Convert to the indicated unit.

1) 420 seconds = _____ minutes
2) 660 minutes = _____ hours
3) 1200 seconds = _____ minutes
4) 60 minutes = _____ seconds
5) 240 hours = _____ days
6) 11 minutes = _____ seconds
7) 420 seconds = _____ minutes
8) 17 days = _____ hours
9) 216 hours = _____ days
10) 480 minutes = _____ hours

Lesson 73

Converting Time Measure involving Days, Weeks, Months and Years

Here's a calendar.

SEPTEMBER

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

What month is it?
How many days are there?

Activity 1

Convert to the indicated units. Show your solution on your paper.

1) 6 weeks   =   ____ days
2) 42 days   =   ____ weeks
3) 600 days   =   ____ months
4) 6 months =   ____ days
5) 3 years (with no leap year)   =   _____ days
6) 4015 days =   _____ years
7) 4 weeks and 48 hours   =   ____ days
8) 27 days and 24 hours   =   ____ weeks
9) 3 months and 2 weeks   =   ____ days
10) 5 years, 2 months and 3 weeks (with 2 leap years)
    =   _____ days

300

Activity 2

Answer the following. Show your solution in your notebook.

1. The Santos family went on a vacation for 42 days. How many weeks were they on a holiday?
2. Carlo has been staying in Cebu for 120 days. How many months has Carlo been staying in Cebu?
3. Nina's father is 45 years old. About, how many days has he lived?
4. John read a book for 1 week, 2 days and 5 hours. How many hours did he read the book?
5. Mang Lino and his friend painted the house for 268 hours. How many weeks, days, and hours did they work?

Activity 3

Convert to the indicated units.

1) 8 weeks = _____ days
2) 3 months = _____ days
3) 180 days = _____ months
4) 244 days = _____ weeks and _____ days
5) 2 months and 20 weeks = _____ days

301

Activity 4

Convert to the indicated units. Write your answer on your answer sheets.

1) 28 days   =   _____ weeks
2) 330 days   =   _____ months
3) 8 weeks   =   _____ days
4) 14 months   =   _____ days
5) 49 days   =   _____ weeks
6) 4 years   =   _____ days
7) 365 days   =   _____ year
8) 6 months   =   _____ days
9) 5 years and 7 months (with 2 leap years)
   =   _____ days
10) 4 weeks and 90 days   =   _____ months

April 10, 2014

Lesson 74
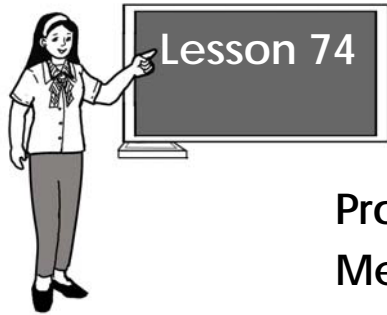
Problems involving Conversion of Time Measure

Last Saturday, Nina helped her mother wash their clothes. They started washing at 7:30 A.M. and finished at 10:30 A.M. How many hours did they wash the clothes? How many minutes?

Activity 1

A. Solve the problems and show your solutions in your answer sheet.

1. Mr. Guevara wrote his lesson plan for 120 minutes. How many hours did he write his lesson plan?
2. Malou joined a track and field contest last Friday. She finished in 360 seconds. How many minutes did it take her to run the race?

3. Mr. Cruz worked abroad for 3 years. How many months did he work abroad? How many weeks? How many days?
4. Roy practiced swimming for two hours everyday for 20 days. How many days and hours did he practice swimming?

Activity 2

Read, analyze and solve.

1. Merian walks to school for 10 minutes. How long does she walk in seconds?
2. The De Jesus family stayed in their province for 5 weeks. How many months and weeks did they stay there?
3. Nathan ran a 10-kilometer marathon in 5 hours. How many minutes did he run?
4. Jonathan has been painting for 4 years and 3 months. About how many weeks has he been painting? How many days?
5. Ayieh started to study her lesson at 7:45 P.M. and finished it at 8:50 P.M. About how many hours did she study her lessons? How many minutes?

304

Activity 3

Solve the following problems.

1) John is 9 years old. How old is he in months? in weeks?
2) The ship has been travelling for 60 hours. How many days has it been travelling?
3) Tita Yoly and her children watch local news on television. They watch from 6:30 P.M. to 7:45 P.M. For how many hours do they watch TV? How many minutes?
4) A program lasted for 1 hour and 30 minutes. How long is the program in seconds?

Activity 4

Read carefully and solve the following problems.

1) Marvi and Leo have to wait 3 more months before vacation time. About how many more weeks do they have to wait?
2) Vic sleeps for 7 hours while Vince sleeps for 9 hours. Who sleeps more and by how many minutes?
3) The ship travelled around the world in eighty days. About how many weeks did it travel?

4) Malou baked a cake for 30 minutes while Lena did it for 40 minutes. How many minutes more did Lena spend in baking than Malou? How many seconds?

Activity 5

Solve the following problems.

1) Trisha cleaned her room in 20 minutes. How long did she clean her room in seconds?
2) There are five more weeks before the start of the school year. How many days should Elmer wait for school opening?
3) Julie has been living in her grandparents' place for 7 years now. How many months has she been living in her grandparents place? About how many weeks?
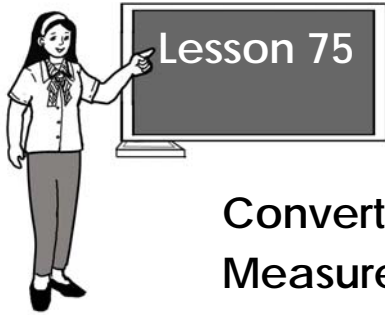
Converting Common Units of Linear Measure

Mark and Rizza measured the length of the teacher's table. Mark found it to be 1 meter long, while Rizza claimed that it is 100 cm long. Whose measurement is correct? Why?
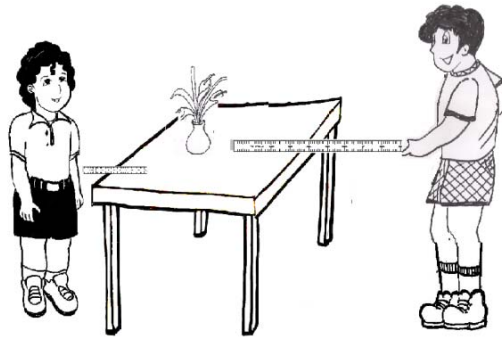
Activity 1

Convert the following to the indicated unit of measure.

1) 5 meters = _____ centimeters

2) 300 centimeters = _____ meters

3) $\frac{1}{2}$ of a meter = _____ centimeters

4) $\frac{1}{4}$ of a meter = _____ centimeters

Activity 2

A. Write >, <, = inside ☐ to make the statement true.

1) 7m ☐ 300 cm + 400 cm

2) 600 cm – 200 cm ☐ 10 m

3) 5 m + 6 m ☐ 20,000 cm

4) 1100 cm – 900 cm ☐ 2m

B. Solve the following problems.
   1. The fence surrounding our school is 5 meters high. How high is the fence in centimeters?
   2. Our school gate is 3 meters wide. How wide is it in centimeters?
   3. Martin has a 2-meter long wire. Will he be able to cut 5 small pieces of wire 25 centimeters long from it? Why?

Activity 3

Answer this set of questions.

1. Choose the correct answer: 1 m + 2 m   is (less than, greater than, equal to) 30 cm
2. How many meters is 23 000 centimeters?
3. The flag pole is 600 centimeters tall. How tall is the flag pole in meters?

4. Roxy walks 8 000 cm while Suzanne walks 90 m in going to school.   Who walks farther in going to school? By how far?
5. Refer to the picture below.
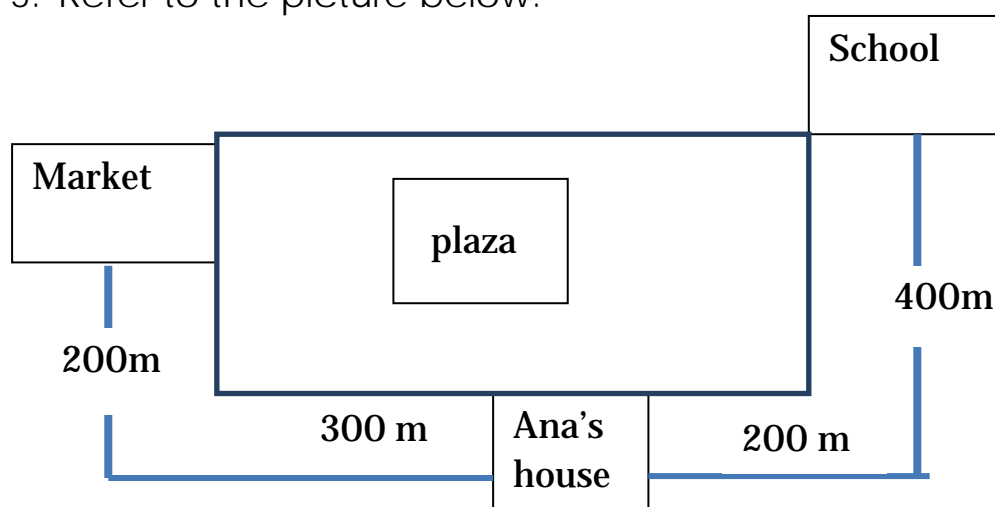
a. Which is farther from Ana's house in the picture – the school or the market?
b. What is the difference between their distances in centimeters?

Activity 4

Measure the length of the following objects found in your home. Record the length in meters and in centimeters. Put your answer in your notebook.

Object	Measure in meter	Measure in centimeter
1) height of the door		
2) length of the living room		
3) width of the dining table		

Lesson 76
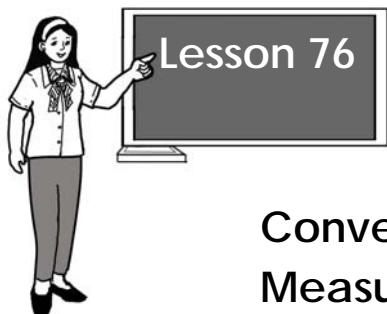
Converting Common Units of Mass Measure

Which is heavier, a kilo of guavas or 1 000 grams of eggplant? Why?

Activity 1

Fill in the blank to make 1 kilogram or 1000 grams.

1) 125 g + 250 g + 250 g + _____ g = 1 000 g (1 kg)
2) 50 g + 30 g + 240 g + 70 g + 150 g + _____ = 1 000 g 1 kg
3) 68 g + 246 g + 232 g + 134 g + _____ = 1 000 g (1 kg)
4) 60 g + 80 g + 360 g + _____ = 1 000 g (1 kg)
5) 31 g + 328 g + _____ + 159 g = 1 000 g (1 kg)

310

Activity 2

How much do they weigh?

Draw where the arrow on the scale must go. Then write its equivalent mass in grams.
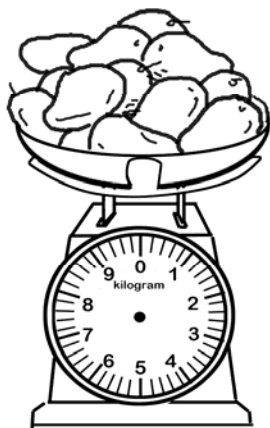
1) 5 kg = _____
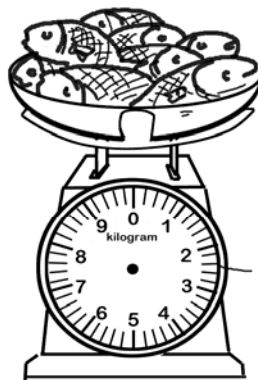
2) 3 kg = _____
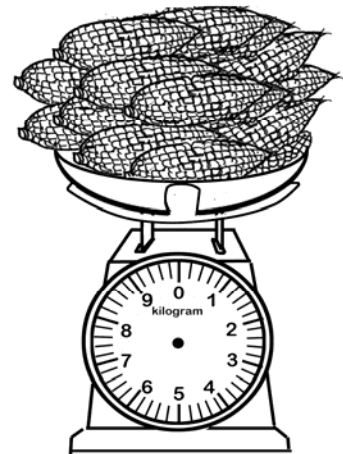
3) 4 kg = _____

Activity 3

Convert to the indicated unit of measure. Show the process.

A.   From kilogram to gram:

1) 44 kilograms = _____ grams
2) 23 kilograms = _____ grams
3) 85 kilograms = _____ grams

311

B.   From gram to kilogram:

1) 24 000 grams = _____ kilograms
2) 54 000 grams = _____ kilograms
3) 8 000 grams = _____ kilograms

Activity 4

A. Convert to the indicated unit of measure. Show the process.
1)   19 000 grams = _____ kilograms
2)   32 000 grams = _____ kilograms
3)   28 kilograms = _____ grams

B. Answer the following in your notebook. Show all your solutions.
1)   Aling Tinay is weighing a bag of sugar. Its mass is 2 150 grams, what would it be when rounded off in the nearest kilograms?
2)   She decided that it was not enough, and she added another 950 grams, about how many kilograms would it be now?
3)   Now she takes 600 grams off the weighing scale, what would be the resulting weight in kilograms?
4)   How much more sugar would she need to have a 10-kg bag of sugar?
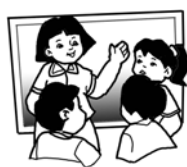
Activity 5

Answer the following.
1) 3 000 g = _____ kg
2) 11 kilograms = _____ grams
3) How many grams are there in 100 kg?
4) I weigh 33 kilograms. How many more grams would I need to make it 35 kilograms?
5) There are 500 grams of chicken, 1 250 grams of beef and 750 grams of fish inside the refrigerator. How many kilograms of meat and fish are there?

Activity 6

Answer the following problems. Show your solutions and answers in your notebook.

1. Mother bought $\frac{3}{4}$ kg of onion. How many grams of onion did she buy?
2. Nora needs 2 kg of *malagkit* in making *puto bumbong*. The store sells malagkit in 250-gram packages. How many packages of *malagkit* should she buy? If 250 g of *malagkit* costs PhP 22.00 how much is the total cost of 2 kg?
3. The limit of the baggage that Elsa can bring in the airplane is 10 kilograms. Her baggage weighs 11 500 grams. How much is the excess baggage?

Converting Common Units of Capacity

We usually drink about 8 glasses of water on ordinary days. But we tend to drink more glasses of water during summer to avoid dehydration.

How many liters of water do you drink everyday? How much is that in millimeters?

Activity 1

A. Convert the following in milliliters.

1)   3 L
2)   12 L
3)   2 L + $\frac{1}{2}$ L
4)   5 L
5)   8L

B. Do the indicated operation. Convert the result in liters.

1) 10 000mL – 7 000 mL
2) 2 000 mL + 9 000 mL
3) 6 000 mL – 5 000 mL
4) 7 000 mL + 3 000 mL
5) 5 000 mL + 8 000 mL

Activity 2

Solve the problems and show your solutions and answers.

1) It takes 4 liters of water to fill a container. How many milliliters of water does it hold?
2) Which holds more, container A or container B? By how much?

Container A

1 800 mL

Container B
2 L
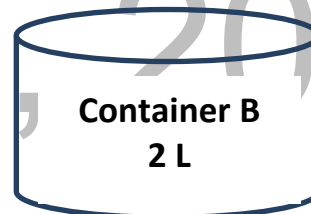
3) A family consumes 15 L of water in a day. How many liters do they consume in a week? What is the total amount in milliliters? If a liter costs PhP5.00, how much do they consume in a week?

4) It takes 2 000 milliliters of juice to fill mother's pitcher. How many liters does the pitcher hold?

Activity 3

Answer the following.

1) Decide on which you will buy to save money. How much will be saved? Is it important to save money? Why?

PhP150.00

MILK

1 Liter

3 for PhP240.00

MILK MILK MILK

500 mL 500 mL 500 mL
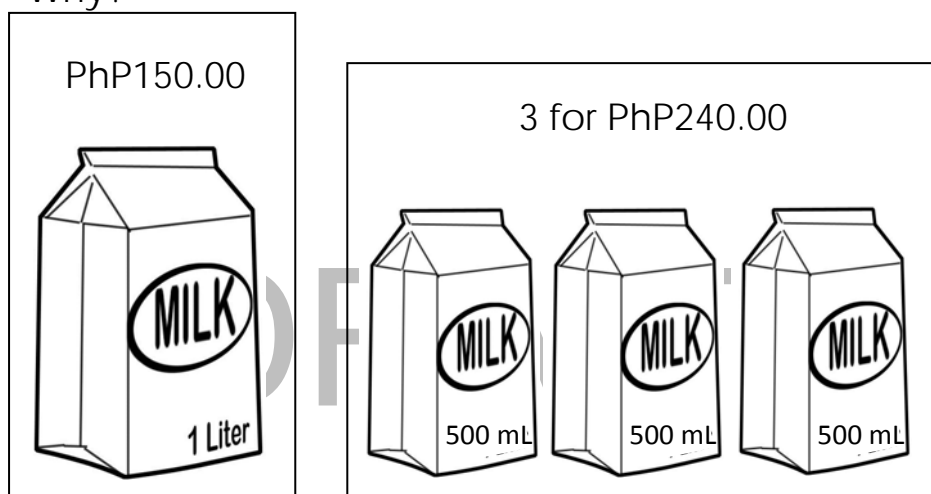
2) Mother asks you to buy 3 liters of milk in a grocery store. Only milk in bottles of 500 mL is available in the grocery. What will you do? How many bottles will you buy?

3) If a bottle costs PhP80.00, how much will be the cost of 6 bottles?
How much change will you receive if you pay the cashier with a 500-peso bill?

Activity 4

Do the following.

1) How many 200 mL water is equivalent to 8L of water?
2) Mother told you to buy 3 liters of mango juice. In the grocery store you saw mango juice in cans of different capacity and price as shown below. Which will you buy and how many? Explain.
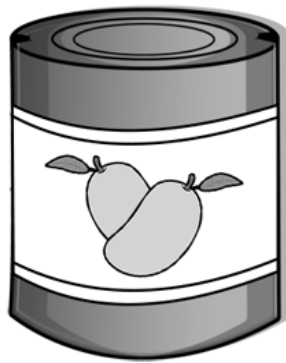
1 Liter
PhP88.00
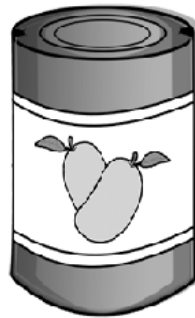
750 mL
PhP70.00

250 mL
PhP25.00

Lesson 78
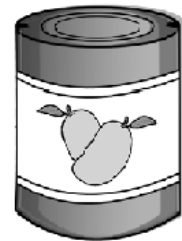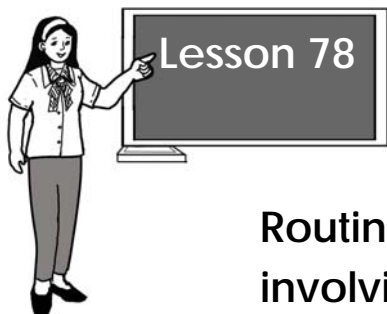
Routine and Non-Routine Problems involving Conversions of Common Units of Measure

SCIENCE LABORATORY

A laboratory room is 18 ½ meters long. How many centimeters is that?

Activity 1

Read, analyze then solve.

1. The perimeter of a house lot is 68 meters. How many centimeters is that?

2. What is the height of the school gate in meters if it is 1 500 centimeters?

3. Marites bought ½ kilo of beef and ½ kilo of pork. How many grams of meat did Marites buy in all?

4. Aling Perla bought 7 ¼ kg of buko to make a buko pie. How many grams of buko did she buy?

5. Laura can consume 2 ½ liters of water, 500 mL of lemon juice and 250 mL of malunggay juice in one day. How many milliliters of liquid drinks can she consume in one day?

Activity 2

Answer the following problems.

1. Carlo plays basketball in the school team. He is 1 ¾ meters tall. How tall is Carlo in centimeters?

2. The height of a tree is 1 500 cm. How many meters is that?

3. Liza needs 600 cm of lace as her edging for her table cloth. How many meters of lace must she buy?

4. How many centimeters of ribbon are there in a 12-m ribbon roll?

5. An adult person weighs about 57 kg, how much is that in grams?

6. A kitten weighs about 500 g, how much is that in kilograms?

7. A computer monitor weighs 5 kg, how much is that in grams?
8. Rommel bought 30 000 grams of potatoes. How many kilograms of potatoes did he buy?
9. Ellen bought 2 ½ kg of watermelons and 1 ½ kg of bananas. How many grams of fruit did she buy in all?
10. Rogel drinks 2 ½ L of water in a day. How many milliliters of water does he drink in a day?
11. A bathtub holds 75 000 mL of water. How many liters of water does the bathtub hold?

Activity 3

Read and analyze then solve.

1. The distance from our home to the barangay hall is 450 meters. From the barangay hall to school is 350 meters. If we pass through the barangay hall then go straight to school, how far do we travel?
2. Mang Ador bought 80 kilos of sweet potatoes at 25 pesos per kilo. If he sold the potatoes at 32 pesos per kilo, how much did he gain?
3. If a kilo of fish is enough for 5 persons, how many grams of fish are needed for 20 visitors? At PhP130 a kilo, how much will be spent on fish?

4. A car travelled 3500 meters in the morning and 4500 meters in the afternoon. What was the total distance travelled in kilometers?

5. Mang Jose buys 15 000 mL of gasoline a day for his school bus. How many liters of gasoline does he need in one day? If a liter of gasoline costs PhP 56.00, how much does he spend on gasoline each day?

Activity 4

Read and analyze then solve.

1. I am baking a cake and I put ¼ kg of flour in a bowl and ½ kg of sugar in another bowl. How many grams do the dry ingredients weigh altogether?
2. A baby is born 1 ½ kg. He gains 100 g every week for 5 weeks. What is the weight of the baby in 5 weeks?
3. You have collected some rain water in a bucket. The bucket holds 6 500 mL of water. I used 3 250 mL for watering the plants. How much liters of water is left?
4. I bought 850 mL of jam. I consumed 325 mL, how much is left?
5. Nica jogs 4 500 meters each day. How many kilometers does she jog each day?

Activity 5

Read and analyze then solve.

1. My mom sent 2 packages of Philippine products to my uncle in Australia. One package weighed 1 kg and 450 g and the other weighed 1 kg and 275 g. How much did the 2 packages weigh in grams?

2. I was sent two presents for my birthday. One present weighed 5 kg and 175 g and the other weighed 3 kg and 350 g. What was the difference of the weights of the two presents in grams?

3. I consumed 25 liters of water taking a bath and 65 liters of water watering the plants. How many milliliters of water would be left if my water tank initially contained 250 L of water?

4. I drink 1 265 ml of my 2 liters calamansi juice. How much is left in milliliters?

5. Look at the illustration. How many more centimeters does Ronnie have to walk in going to school?

425 m

500 m

Lesson 79
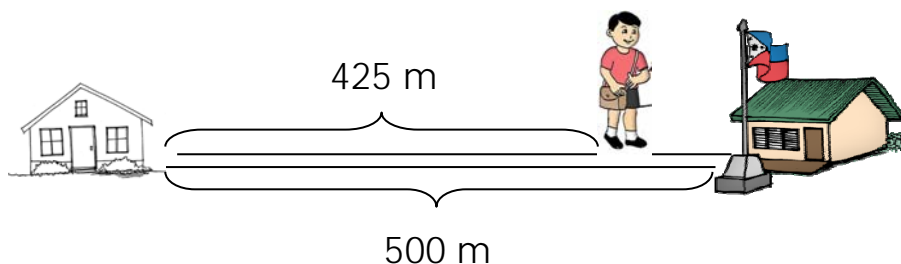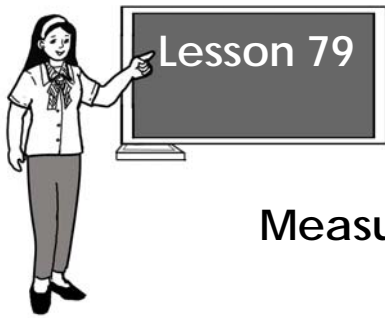
Measuring Area using Appropriate Units

Diana and Jean bought notebooks at the mall. They also bought plastic cover for their notebooks. What is the area of the top of the notebook to be covered? What is the appropriate unit of area measure to be used? Why?

Activity 1

Choose the most appropriate unit of measure, <u>square centimeter (sq cm)</u> or <u>square meter (sq m)</u> to get the area of the following:

1. room _____
2. garden _____

3. pad paper _____
4. floor tile _____
5. Manila paper _____
6. stage floor _____
7. book cover _____
8. cartolina _____
9. top of the teacher's table _____

Activity 2

Give the appropriate unit of measure for the following:

1. Brian wanted to measure the area of their dining table, what appropriate unit will he use?
2. To measure the area of the plaza, what appropriate unit of measure should Maria use?
3. The appropriate unit of measure to get the area of a rectangular lake is _____.
4. The appropriate unit of measure to get the area of a handkerchief is _____.
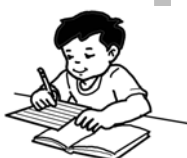
Activity 3

Measure the area using the appropriate unit of measure.

1. garden plot at the back of your school
2. bathroom floor
3. living room
4. long envelope
5. Christmas card

Lesson 80
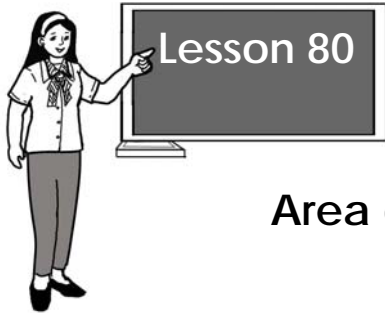
Area of a Rectangle and a Square

1 cm
1 cm
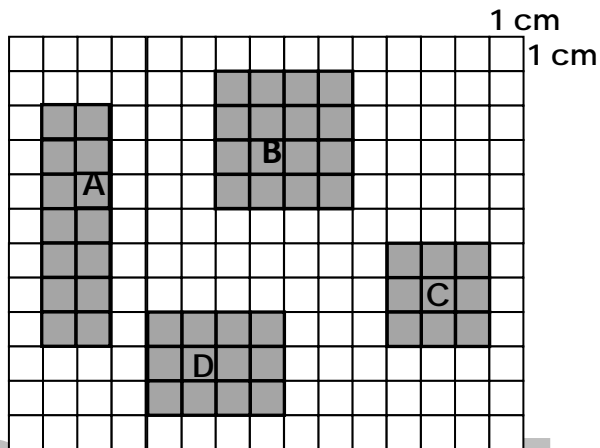
What is the shape of Figure A? What is its area?
What is the shape of Figure B? What is its area?
What is the shape of Figure C? What is its area?
What is the shape of Figure D? What is its area?

Activity 1

A. Find the area of each rectangle/square.

1) 7 m
2m

2) 6m
6m

3) 20 cm
80 cm

4) 50 cm
50 cm

5) 8 m
3 m
325
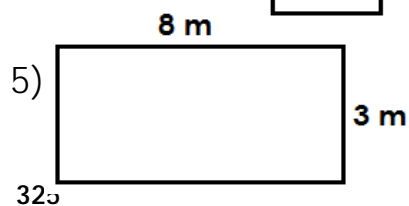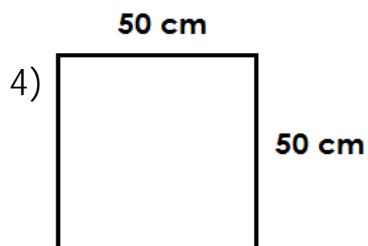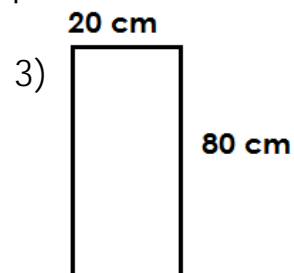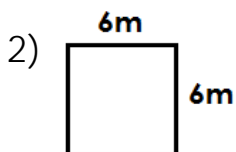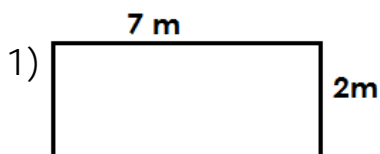
B. Complete the chart.

Figure	length	width	Area
1) Rectangle A	6 m		18 sq. m
2) Rectangle B			30 sq. cm

Figure	side	Area
3) Square A	16 cm	
4) Square B		49 sq. m

Activity 2

Analyze and find the answer.

1) What is the area of the figure?

2 cm
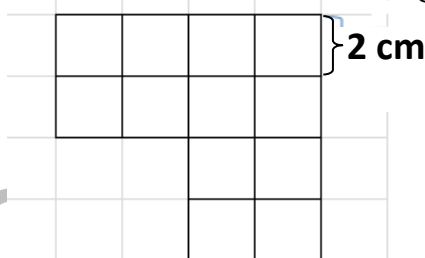
2) The area of a rectangle is 180 sq cm. If the length is 15 centimeters, what is its width?

3) Which has a greater area, a rectangle whose length is 24 m and width 6 m or a square whose side is 12 m? Why?

4) The length of the bathroom is 8 m and the width is 4 m. What is the area of the bathroom that is covered by black tiles?

1m

1m

1m   **326**   **1m**
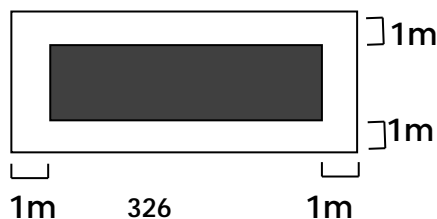
Activity 3

Shade the rectangle/ square with the given area on the square grid. A ☐ is 1 square centimeter. Use crayons in shading.

1) 25 sq. cm   2) 30 sq. cm   3) 15 sq. cm
4) 16 sq. cm   5) 10 sq. cm

Activity 4

Answer the following. Solve and show your solution.

1) Find the area of a rectangle having these dimensions:
   Length = 12 cm, Width = 7 cm

2) The area of the room is 108 sq. meters. If the length is 12 meters, what is its width?
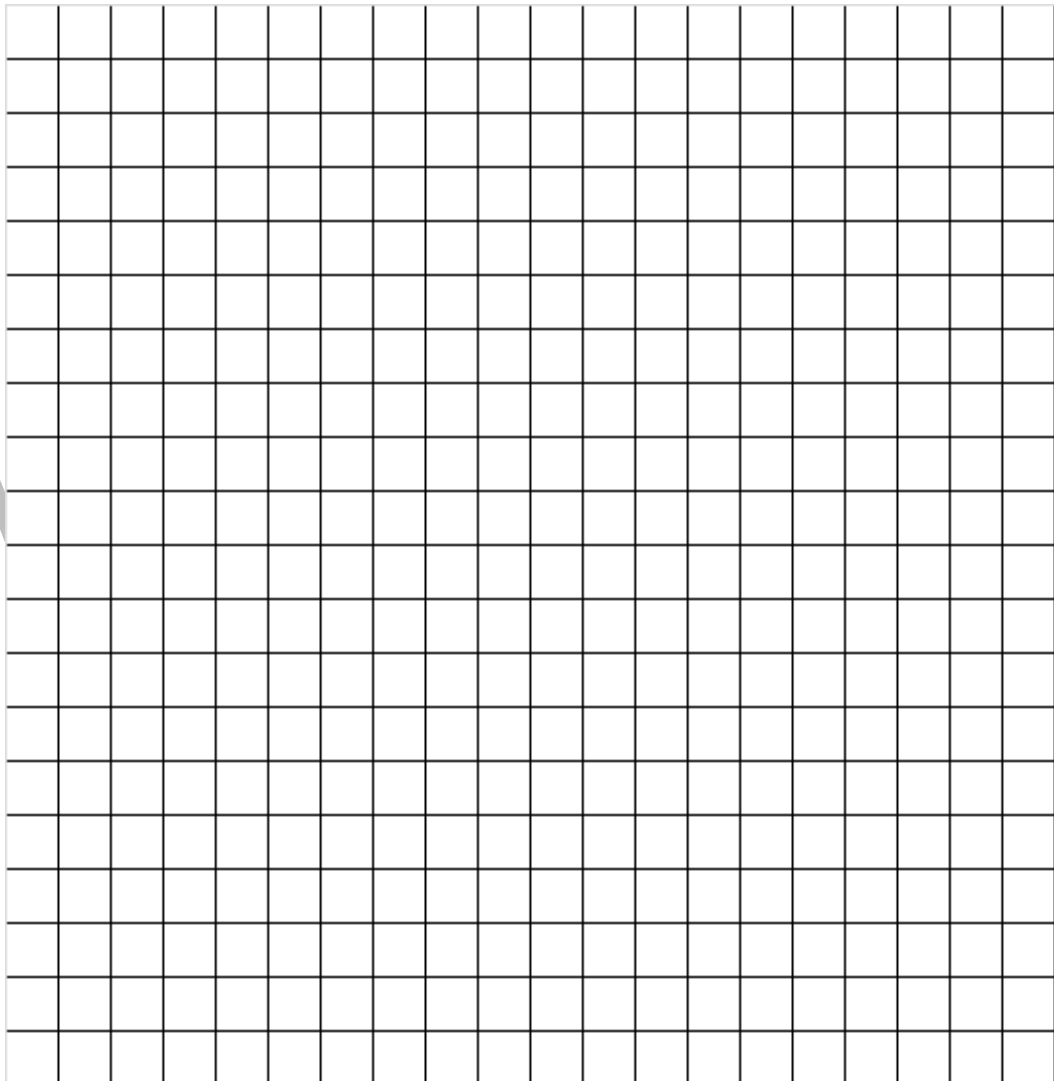
3) Find the area of the illustration below.

4 cm

4) What is the area of the unshaded region?

6 m

1 m   1 m

Activity 5
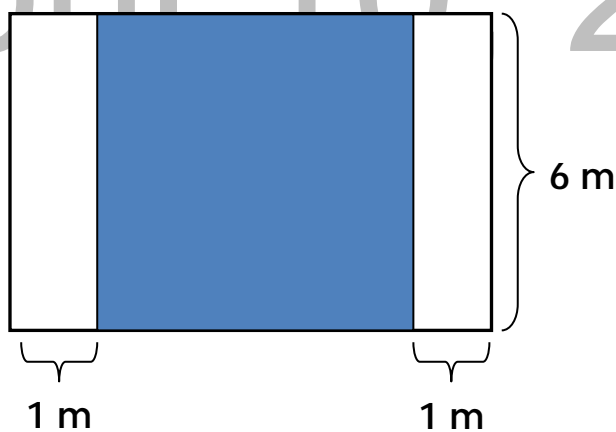
Study the floor plan below. Find the floor area of the following:

1) Kitchen
2) Dining Room
3) Ana's Bedroom
4) Master's Bedroom
5) Toilet
6) Living Room
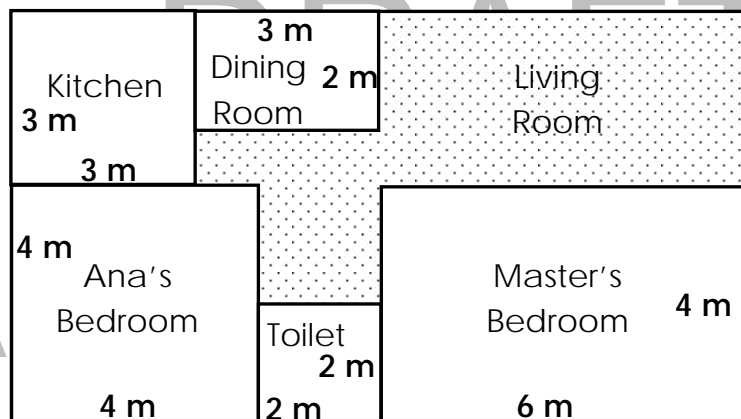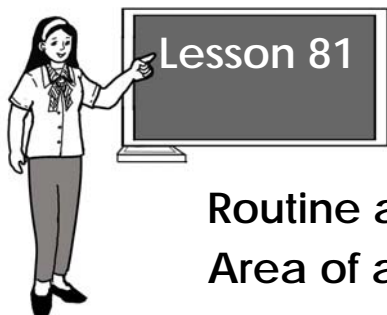
Routine and Non-Routine Problems involving Area of a Square and a Rectangle

A room measures 8 meters long and 7 meters wide. What is the area of the room?

Activity 1

Read, analyze and solve. Draw a figure to help you.

1) Mommy Cathy bought a square cardboard for the project of her daughter Rose. If the cardboard measures 50 centimeters on each side, what is the area of the cardboard?
2) A table runner measures 48 cm on all sides. What area of the table does it cover?
3) Find the area of the shaded portion:

a.
11 m
8 m
16 m
22 m

b.
76 cm
76 cm
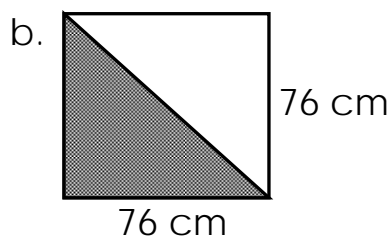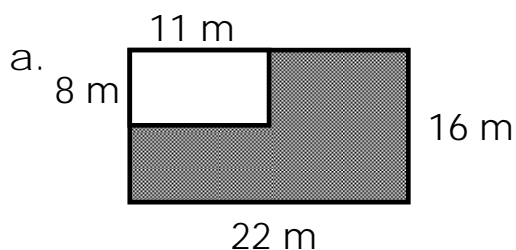
4) The area of a room is 108 sq. meters. If the width is 9 meters, what is the length?
5) What is the side of a square lot with an area of 400 sq. m?

Activity 2

Solve the following questions. Draw a figure to help you.

1) What is the width of an auditorium whose area is 1 120 sq. meters and length of 35 meters?
2) My uncle has 36 sq. m square vegetable garden. What is the side of the garden?
3) The area of a rectangular lot is 576 sq. m. If the width is 18 meters, what is the length?
4) What is the area of a sheet of paper with dimensions 10 cm by 5 cm?
5) The area of a square room is 9 sq. m. What is the side of the room?

Activity 3

Square and Rectangle Mania

Find the missing length, width and side to solve for the area of a square and a rectangle.

1) Area of figure 1 = _____
2) Area of figure 2 = _____
3) Area of figure 3 = _____
4) Area of figure 4 = _____
5) Which has the greater area if two
6) figures will be combined?

_____

7) What is the total area of the figure? _____

8) If the area of figures 2, 3, and 4 are combined, is it equal to the area of figure 1? Why?

_____

332
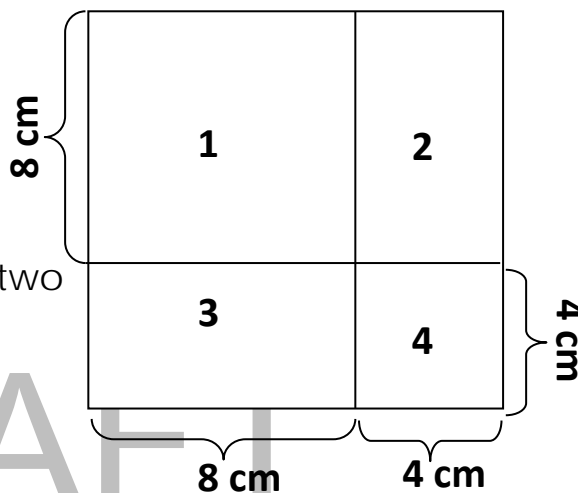
Activity 4

Create your own word problem using the given figure. Use words like plot, farm, garden, floor, lawn, lot, plaza, park and others in creating your word problems.

Example 1:

l=6 m

w=3 m
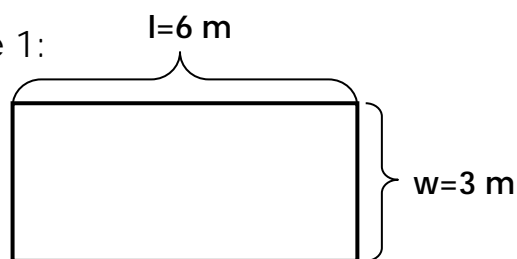
A <u>rectangular</u> lot is 6 meters <u>long</u> and 3 meters <u>wide</u>. What is the area?

Example 2:

S = 5 m

S = 5 m
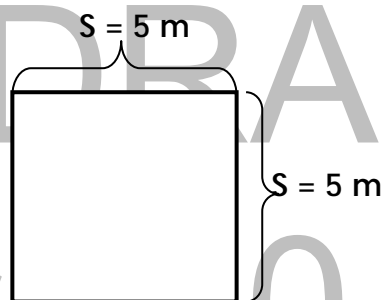
A <u>square lawn</u> is 5 meters <u>each on all sides</u>. What is the area?

1)

S = 4 m

_____
_____
_____

2)

l=8 m

w=4 m

_____
_____
_____

3)

l=4 m

w=6 m

4)

s=6m

5)

l=12 m

w=4m

_____
_____
_____
_____
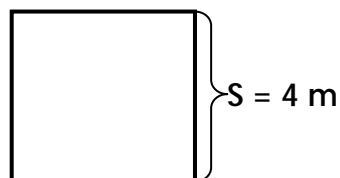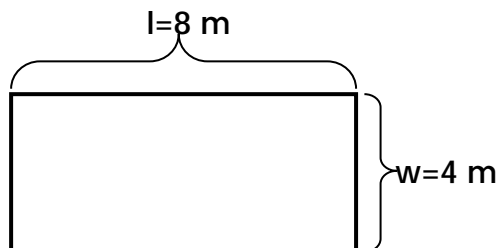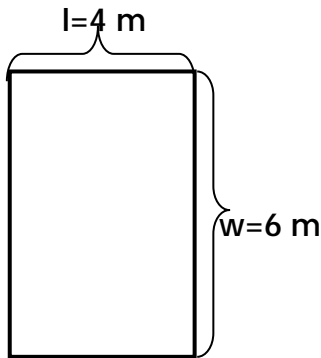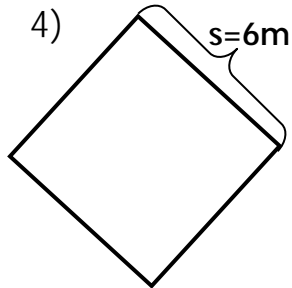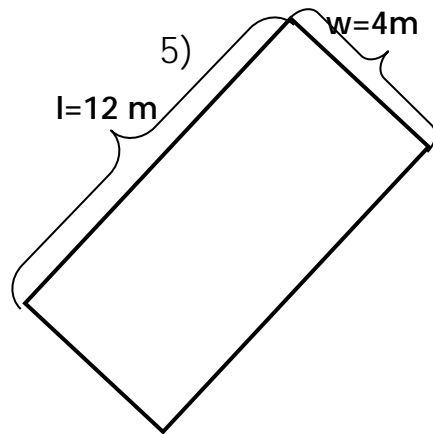
Activity 5

Read, analyze then solve.

1) What is the area of the auditorium whose length is 45 meters and whose width is 35 meters?

2) The guest room in Mr. Gozo's house is square-shaped. One side is 8 meters long. Find the area of the room.

3) The playing field is 75 meters long and 34 meters wide. What is its area?

4) If the area of a handkerchief is 225 sq. cm, what is the length of the side?

Activity 6

Read, analyze then solve.

1) Mrs. Angeles, a subdivision owner in Cebu, donated a lot for a chapel measuring 24 meters by 30 meters. What is the area of the site for the chapel?

2) Ken made a banner for the school program. The banner is 32 cm long and 25 cm wide. What is the area of the banner?

3) The area of Mr. Devanadera's lot is 180 square meters. Mr. Gesmundo's lot is twice as big as Mr. Devanadera. What is the area of Mr. Gesmundo's lot?

4) What is the area of a handkerchief which has 48 cm on all sides? What will happen to the area if you double the side?

5) Mr. Santiago has a square vegetable garden with each side measuring 8 meters. If you add 4 more meters to any two opposite sides, what will be the new area of the garden?

Lesson 82
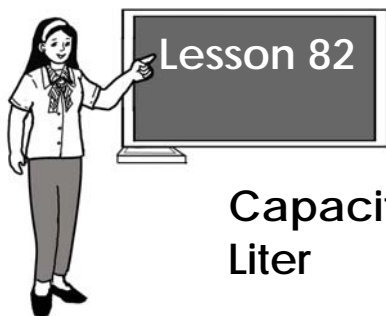
Capacity of a Container using Milliliter or Liter

How many liters of water does a pail hold?

How many milliliters of water does a glass hold?

Activity 1

Which estimate is better for the capacity of each?
1) Spoonful of medicine – 50 mL or 5L
2) Glass of *buko* juice – 2L or 200 mL
3) Bottle of cough syrup – 1L or 200 mL
4) A pail of water – 500 mL or 5L
5) Large can of pineapple juice – 150 mL or 1L
6) A drop of medicine – 5 mL or 5L
7) Bottle of *calamansi* juice – 500 mL or 2L
8) Pot of soup – 5L or 50 mL
9) Large container of milk – 4 L or 10 mL
10) A bottle of liquid detergent – 3L or 50 mL

336

Activity 2

Below are containers with their corresponding capacity. Determine which container will be able to hold the given amount of liquid.
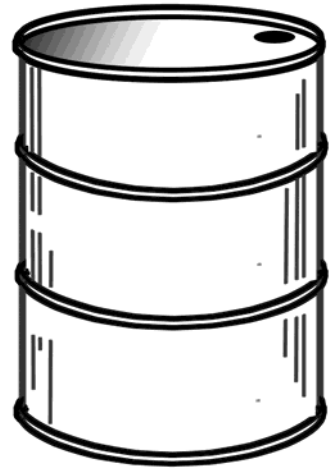
500 mL   500 L   5 L   15 L

1)   2L water and 1.5L mango juice
2)   250 mL melon juice, 250 mL water
3)   12 L water
4)   850 mL pineapple juice and 850 mL orange juice
5)   100 mL grapefruit juice, 250 mL water and 50 mL honey syrup.

 Activity 3

Give the total weight. Express your answer in mL.

1) 250 mL soy sauce and 275 mL vinegar
   _____

2) 400 mL honey and 650 mL orange juice
   _____

3) 350 mL mango juice and 1 L of water
   _____

4) 350 mL beef broth and 500 mL water
   _____

5) 500 mL water and 250 mL mango juice
   _____

6) 750 mL chicken broth and 500 mL water
   _____

7) 200 mL fish sauce and 850 mL water
   _____

8) 1.5 L milk tea and 150 mL honey syrup
   _____

9) ½ L water and ½ L coconut milk
   _____

10) 850 mL of water and 350 mL pineapple juice
    _____

Activity 4

Choose milliliters or liters to complete the sentence.

1) Kristine uses 500 _____ of water in preparing pineapple juice.

2) The squeaky door needs about 2 _____ of oil.

3) The can holds about 750 _____ of mango juice.

4) The swimming pool holds about 90 _____ of water.

5) Henry put 10 _____ of water in his aquarium.

6) There are about 100 000 _____ of water in the pond.

7) Gerlie takes 50 _____ of cough syrup.

8) Everyday Vicky's daughter takes 250 _____ glass of milk.

9) Ellen uses about 100 _____ of glue in her project.

10) Remy uses 25 _____ of shampoo.

A. Milliliter or Liter: Which unit is appropriate to use to measure the capacity of the following items?

1) Glue in a bottle
2) Water in a bathtub
3) Orange juice in a punch bowl
4) Shampoo in a small bottle

5) Buko juice in a tetra pack

6) Water in a well
7) Cup of red tea
8) Soup in a bowl
9) Gasoline in a drum

10) A tablespoon of honey

B. Convert to L or ml.
1) 2 000 mL = _____ L
2) 5 L = _____ mL
3) 43 000 mL = _____ L
4) 3 ½ L = _____ mL
5) 8 750 mL = _____ L

340

Activity 6

A. Choose the appropriate measurement.
1) A can can hold about (4 mL, 4 L) of paint.
2) Drinking glass holds about (250 mL, 250 L) of milk.
3) A pail holds about (10 mL, 10 L) of water.
4) Pitcher holds about (200 mL, 2 L) of juice.
5) Cup holds about (200 mL, 2 L) of coffee.

B. Give 3 examples for each case.
1) Name containers that holds about 1 liter.
2) Name containers that hold more than 1 L.
3) Name containers that hold more than 1 mL.

DRAFT
April 10, 2014

Lesson 83
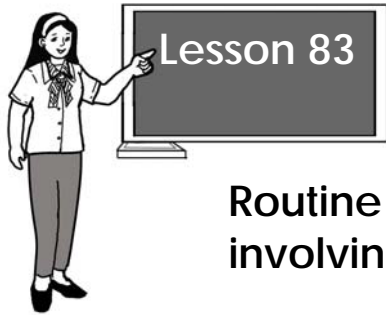
Routine and Non-routine Problems involving Capacity Measure

Look at the following containers.

A   B   C   D
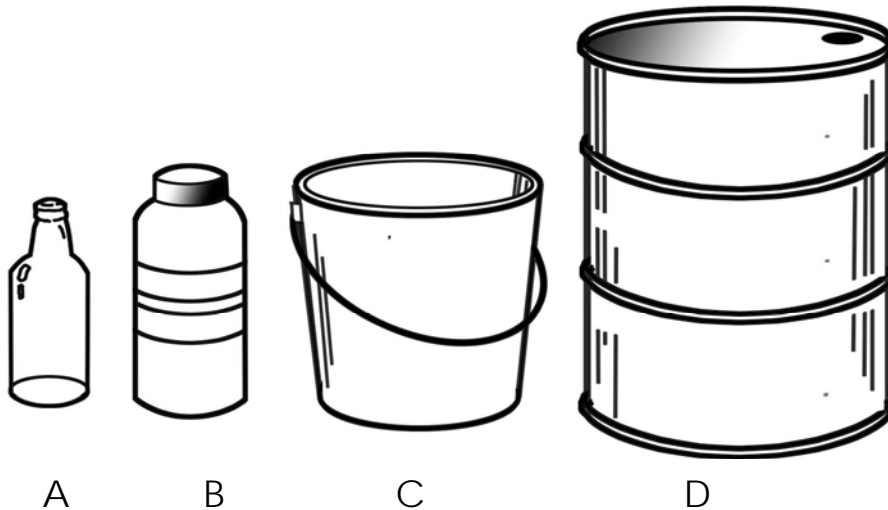
Which container holds more liquid, C or D? Why?
Which holds lesser amount of liquid, A or B? Why?

Activity 1

Read and solve. Show your solutions on your answer sheet.

1) Mark drinks 4 000 milliliters of water in one day. How many liters does he drink?

2) A bottle of orange juice is labelled 2 L. How many ml is this?

3) Rolly brought 10 liters of water. How many ml is that?
4) A water container holds 6 000 ml. How many liters is this?
5) Roda buys juice in 1 L bottles. There are 6 bottles in one box. How many milliliters of bottles of juice are there in one box?

Activity 2

Study the table below and answer the following questions.

Container	Capacity
water jug	5 000 ml
pitcher	2 L
glass	250 ml
large plastic bottle	750 ml
bucket	7 L

1) What is the capacity of:
   a. water jug in liters? b. pitcher in milliliters? c. bucket in milliliters?
2) What is the total capacity of the glass and large plastic bottle in liters?
3) What is the total capacity of the water jug and large plastic bottle in milliliters?
4) What is the total capacity of the water jug, pitcher and bucket in liters?
5) What is the total capacity of the pitcher, glass and large plastic bottle in liters?
6) Which holds more liquid? bucket, large plastic bottle and glass? Or water jug and pitcher?

Activity 3

Read each problem then solve.

Carlo, Nilo, Luis and Jeric were in-charge of the refreshment booth during the School Foundation Day. Each of them brought different kinds of juice to sell: orange, mango, pineapple and *buko*, each in a 20-L container. They also used three kinds of cups: regular cup=150 ml; medium cup = 200 ml and large cup =350 ml.
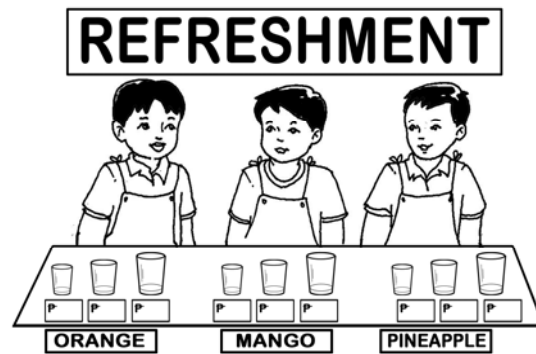
1) Carlo, who was selling orange juice, sold four large cups and 20 medium cups. How much orange juice was left in the container?

2) Nilo, who was selling mango juice, sold 10 medium cups and 10 large cups. How much mango juice was left in the container?

3) Luis, who was selling pineapple juice, sold 8 large, 15 medium and 10 regular cups. How much pineapple juice was left in the container?

4) Jeric, who was selling *buko* juice, sold 20 regular cups, 15 medium cups and 10 large cups. How much *buko* juice was left in the container?

5) How much juice did they sell altogether? How much was left?

Activity 4

Make 3 word problems using the capacity unit of measures inside the box.

1 L of water	500 mL of iced tea	350 mL of calamansi juice
750 mL of oil	2 L of gasoline	1 L of bleach
250 mL liquid wax	500 mL soy sauce	500 mL vinegar
500 mL fish sauce	250 mL honey syrup	450 mL chocolate syrup
5 L of diesel	750 mL of soap detergent	500 mL orange juice
500 mL cough syrup	500 mL mango juice	500 mL Buko juice

Example:

Lito used 500 mL of soy sauce and 500 mL of vinegar in cooking pork and chicken adobo. How much condiment did he use?

1) _____
_____
_____

2) _____
_____
_____

3) _____
_____
_____

Activity 5

Read carefully and solve the problems.

1) A bus' gas tank holds 35 L of gasoline. On Tuesday 8 L were used. How much gasoline was left in the tank?

2) Teacher Karen went hiking with her 12 pupils. Each of them carried 500 mL water bottle. How many liters of water did they bring in all?

3) A water dispenser holds about 5 L of water. How much water does it hold in milliliters?

4) Yesterday it was raining hard. Jenny and Jane put basins outside to collect rainwater. When the rain stopped Jenny's basin was filled with 4 L of rainwater while Jane's basin had 3 000 mL. How many liters of rainwater were they able to collect?

5) A caterer put 15 small vases on the table. Each vase holds 200 mL of water. How much water is needed for all the vases?

Activity 6

Solve the following problems. You may draw a picture to help you solve them.

1) In a seminar, one hundred fifty participants consumed 20 liters of drinking water every meal. How many milliliters of drinking water did they consume?

2) Jonas bought twelve 250 mL cans of orange juice. How many liters is that?

3) Ethel mixed 750 mL of water and 125 mL of concentrated juice in a pitcher. How many milliliters of juice does the pitcher hold?

4) A water company delivers 650 liters of water to an evacuation camp every week. How many milliliters of water does it deliver weekly?

5) Teacher Liza went hiking with 10 pupils. Each of them carried an 850 mL of mineral water bottle. How many liters of water did they bring in all?
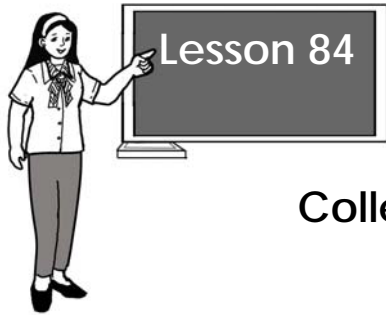
Collecting Data on One Variable

Study the table below.

Scores in Achievement Test in Mathematics

Score	Tally	Total
20	IIII	
19	IIII	
18	INN	
17	IIII	
16	I	
15	1	
Total		

What is the highest score? the lowest score?
Which score occurs most frequently?
How many pupils took the test?

Activity 1

Complete the table. Write your answer on your paper.

Enrolment of Grade III pupils in Tapaz Central School

Section	Tally	Total
Rose	|||| |||| |||| ||||			
Sampaguita		39
Tulip	|||| |||| |||| |||| |||| ||||			
Anthurium		59
Rosal		51
Camia	|||| |||| |||| ||||			
Gumamela	|||| |||| |||| |||| |||| ||||			
Total Number of Pupils		

349

Identify and count the animals that you can see in the picture. Organize your data in a table.
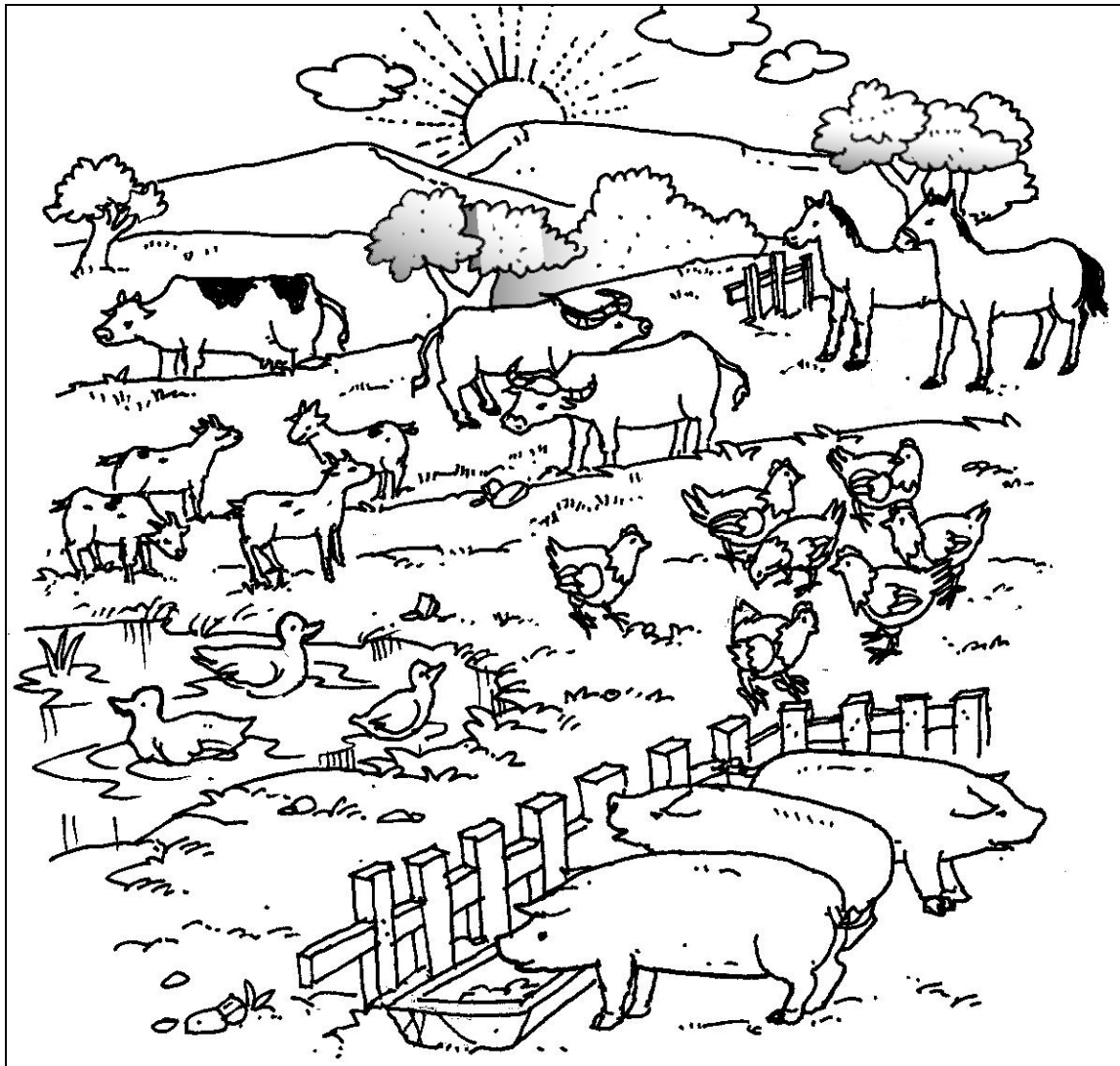
Activity 3

Complete the table based on the data given below. Write your answer in your paper.

Favorite Color of Grade 3 – Ilang-ilang

Blue	White	White	Red	Red
Red	Pink	Blue	Yellow	White
Blue	Red	Pink	Red	Yellow
Pink	Yellow	Blue	Pink	Blue
Red	Pink	Red	Blue	Blue
Yellow	Pink	Blue	Blue	Red

Color	Tally	Total
Blue		
Red		
Pink		
Yellow		
White		
Total		

Write two questions using the data/information from your table.
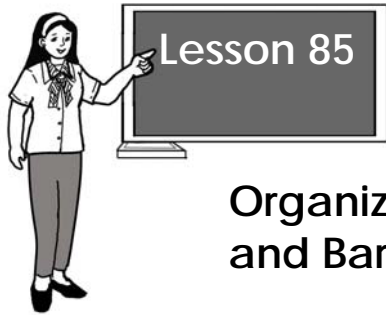
Organizing and Presenting Data in Tables and Bar Graphs

What kind of sports do you like best?

Look at the table.

Sports	Number of Pupils
Basketball	15
Badminton	10
Volleyball	6
Baseball	5
Table tennis	4
Total	40

Which sport is the most preferred by the pupils?
Which is the least preferred by the pupils?

Construct a horizontal and a vertical bar graph using the following data. Create three questions using the information on the graph.

San Rafael School Library
Books Borrowed on Tuesday

Type of Books	Number of Books
Cartoons	15
Sports	12
Science	8
History	6
Fantasy	8

Activity 2

Use your provincial map to complete the table below. Construct a horizontal or vertical bar graph on your paper using the data.

Municipalities by Congressional District

Congressional District	Number of Municipalities
District 1	
District 2	
District 3	
District 4	

Activity 3

Use the information below to organize the data in a table and bar graph. Then write three questions that can be answered using the graph you made.

The Grade 3 pupils are grouped into 3. Each group is composed of 7 members. The members were tasked to collect empty plastic bottles for their fund raising project. Here is the list of bottles collected by each group for 5 days.
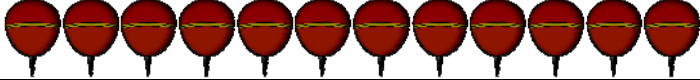
Number of Bottles Collected

	Monday	Tuesday	Wednesday	Thursday	Friday
Group 1	11	5	6	10	15
Group 2	9	3	5	11	10
Group 3	3	10	8	10	11

Group	Total Number of Bottles Collected

Activity 4

Mr. Reyes, a toy shop owner sold the following toys one Saturday. Make a table and a horizontal bar graph on the data given.

Toy	Number of Toys Sold
Top	
Ball	
Car	
Yoyo	
Marble	
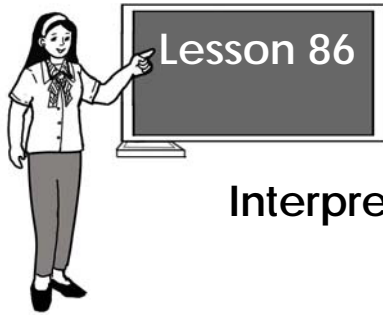
Interpreting Data in a Bar Graph

Study the bar graph.

Ways of Coming to School

Ways of coming to school

- Bus
- Jeepney
- Tricycle
- Walking
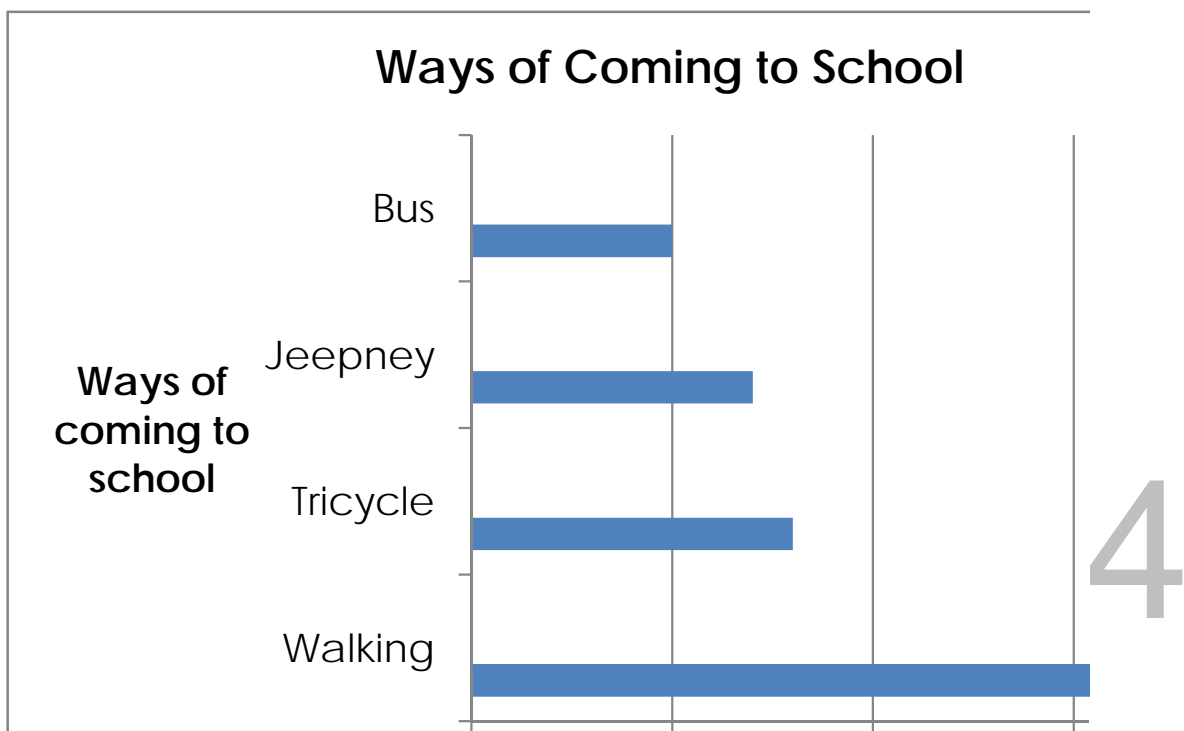
Which way of coming to school is used by most pupils?
What about the least means of coming to school?
Why do you think most pupils walk in coming to school?

Use this bar graph to answer the questions. Write number sentences to solve problems.

Our Pets
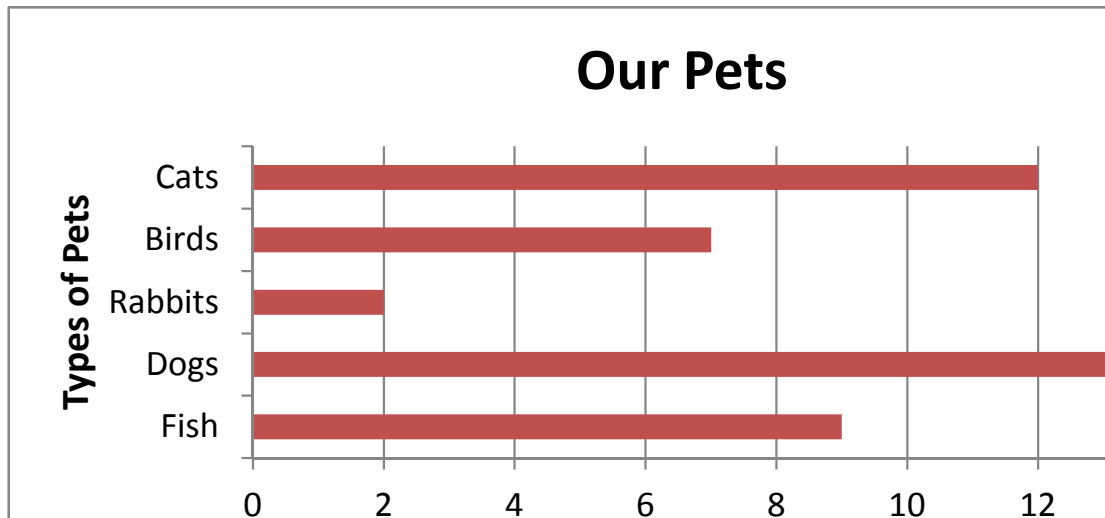
1) Which pet was the least common?
2) Which pet was the most common?
3) How many   like dogs   as their pet?
4) How many like   fish?
5) How many more cats are there than birds?
6) Which pet is more popular, a dog or cat?
7) How many pets are there altogether?
8) Why are there only even numbers on the vertical axis?
9) Why do you think Filipinos like to have a dog at home?
10)   If there will be additional persons to be interviewed about their favorite pets, who will you choose? Explain your answer.

Activity 2

Use this graph to answer the questions. Write your anwer on your anwer sheet.

Favorite Subject of Grade 3 Pupils
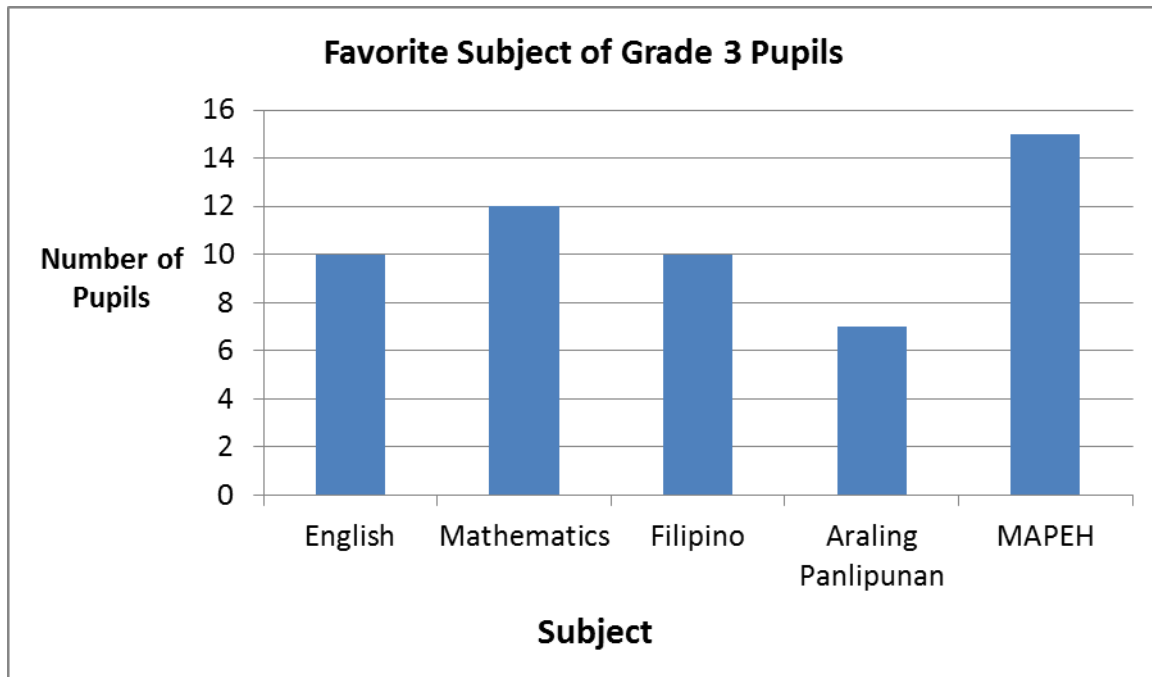
1) What does this graph show?
2) What is the least favorite subject?
3) How many pupils chose English as their favorite?
4) What is the favorite subject of Grade 3 pupils?
5) How many pupils chose Araling Panlipunan as their favorite?
6) How many more pupils chose Mathematics than English?
7) Which subject was more popular, Filipino or English? Why?
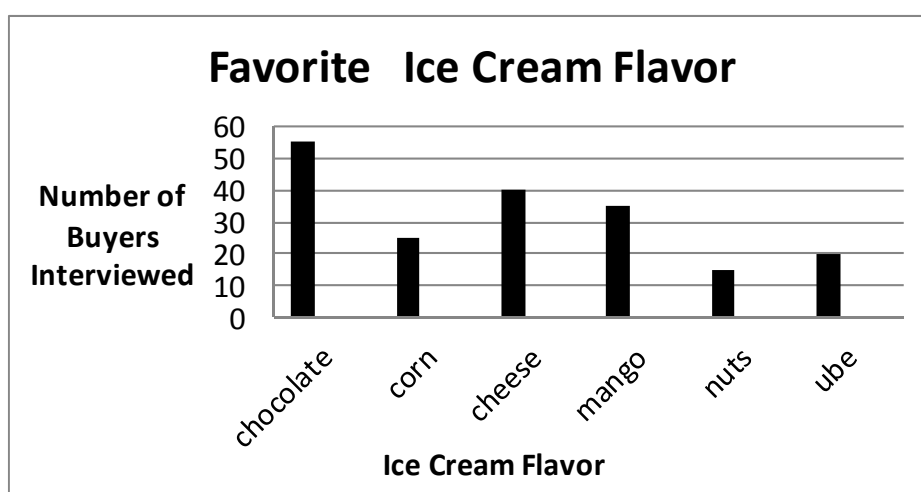
8) How many more students chose Mathematics than Araling Panlipunan?
9) About how many pupils are in Grade 3?
10) Why do you think Araling Panlipunan is the least liked subject?

Activity 3

Use this bar graph to answer the questions below.

Favorite Ice Cream Flavor

1) How many people said chocolate is their favorite flavor?
2) Which flavor is liked exactly by 25 people?
3) Which flavor is liked by most people?
4) How many people said cheese is their favorite flavor?
5) Which flavor is the least liked by people?
6) What is the difference in the number of people who like chocolate and the number of people who like cheese?
7) Do more people like mango than ube?
8) How many more people like mango than nuts?

9) If you combined the number of people who like cheese and the number of people who like chocolate, how many people are they?

10) Which flavor is liked exactly by 35 people?

Activity 4

Maan interviewed her classmate Ana as to how she uses her 10 hours.

Study her friend's data using the bar graph below. Write 5 sentences about her graph.

Ana's 10-Hour Activities

Activity	Number of Hours
Doing Homework	1.5
Playing	1
School	6
Watching TV	1
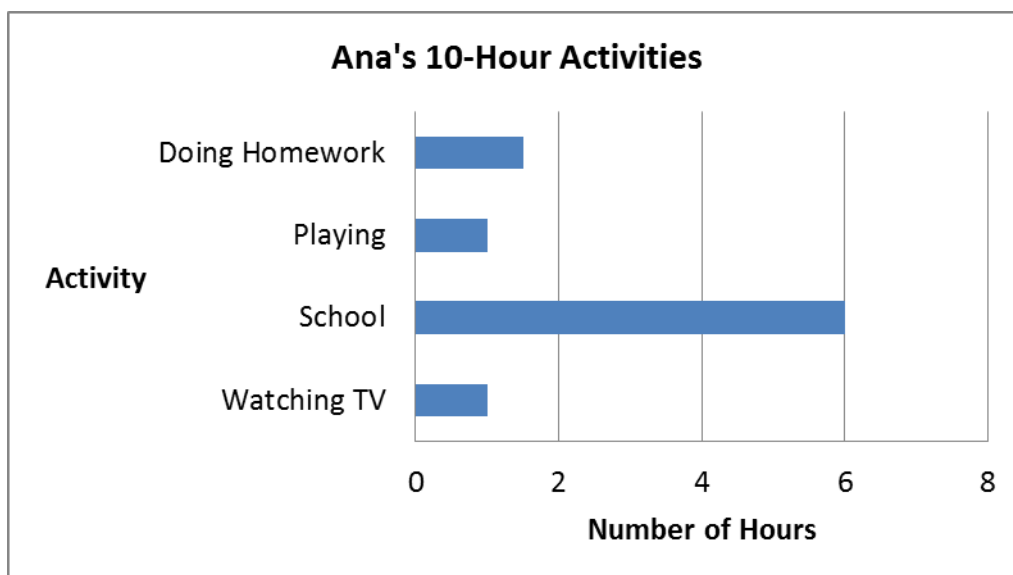
Example:
1) Ana spends 1 hour watching TV.
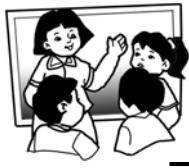
Activity 5

Write your answer on your paper.

A pizza chain decided to know how many pizzas are sold in 6 days. They presented their results in the bar graph below. Write 'Yes' if you could answer the questions using ONLY the information in the bar graph and "No" if not. Explain your answer.
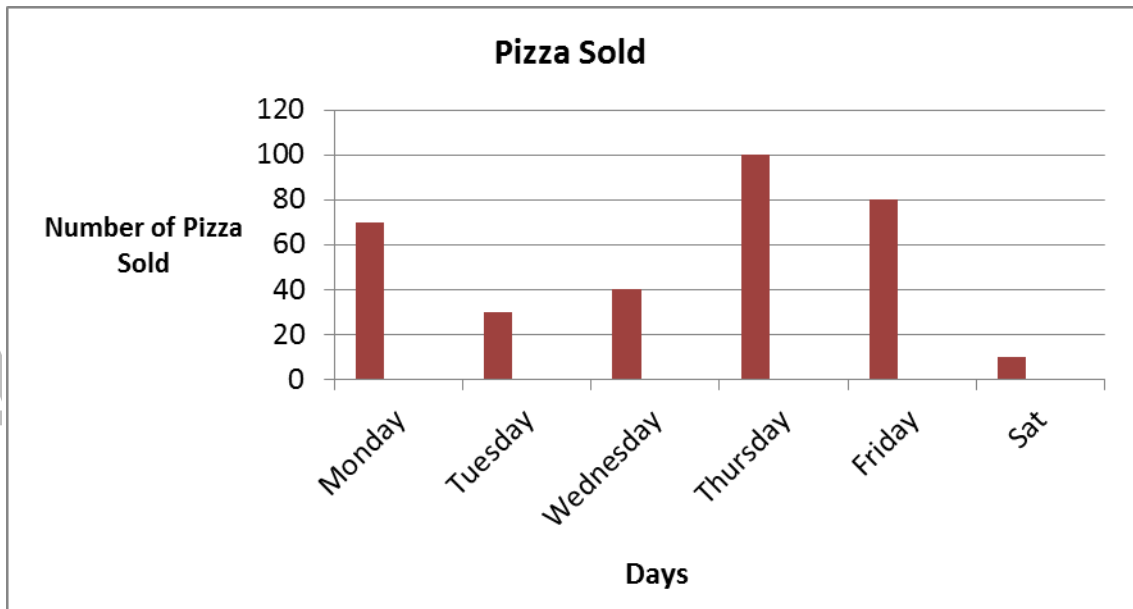
1) Which type of pizza was sold the most?
2) Which day recorded 80 pizzas sold?
3) How much money did they make as total sale in 6 days?
4) How much less was sold on Monday than on Thursday?
5) How many pizzas were sold for the entire month?

6) Which type of pizza was sold the least?
7) What time of day when most pizzas were sold?
8) How much did each pizza cost?
9) How many pizzas were sold on Sunday?
10) How many more did they sell this Monday than they sold last Monday?
11) How many pizzas did they sell on Wednesday and Thursday combined?
12) How many pizzas were sold on Friday?
13) How many more was sold on Tuesday than on Saturday?
14) How many pizzas were sold on Tuesday?
15) Which employee sold the most pizzas?
16) If the owner included Sunday, do you think more boxes of pizza will be sold compared to the sales on Saturday? If yes, how many boxes of pizza will be sold?

DRAFT
April 10, 2014

Activity 6
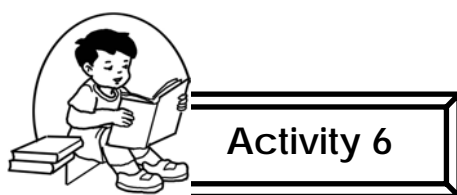
A toy shop owner was holding a survey to see which cartoon character is most popular. They displayed their results in the bar graph below. Use the graph to answer the questions.

Popular Action Figures

Character Name

Panday
Darna
Kristala
Juan de la Cruz
Pedro Penduko

Number of Children
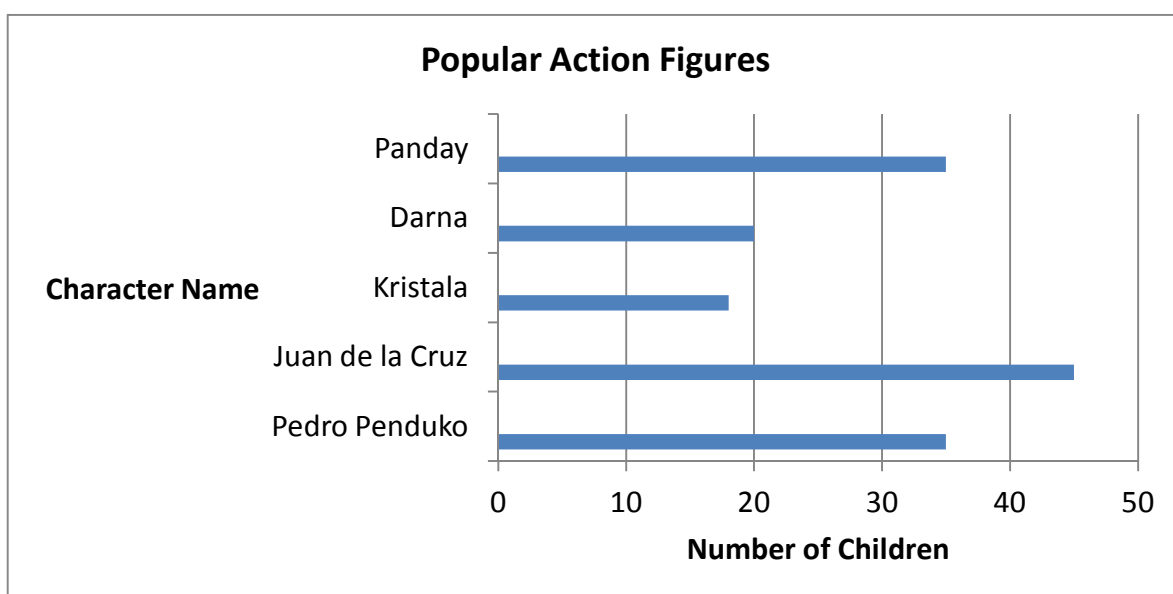
1) If you combine the number of people who liked Darna and the number of people who liked Pedro Penduko how many people would you have?
2) Which character is the least liked?
3) How many people said Pedro Penduko is their favorite character?
4) How many people said Darna is their favorite character?
5) Which character is the favorite of 45 people?

6) Did more people like Pedro Penduko? or Juan de la Cruz?
7) What is the difference in the number of people who liked Panday and those who liked Darna?
8) Which character did exactly 35 people say was their favorite?
9) Which character is most liked by the people?
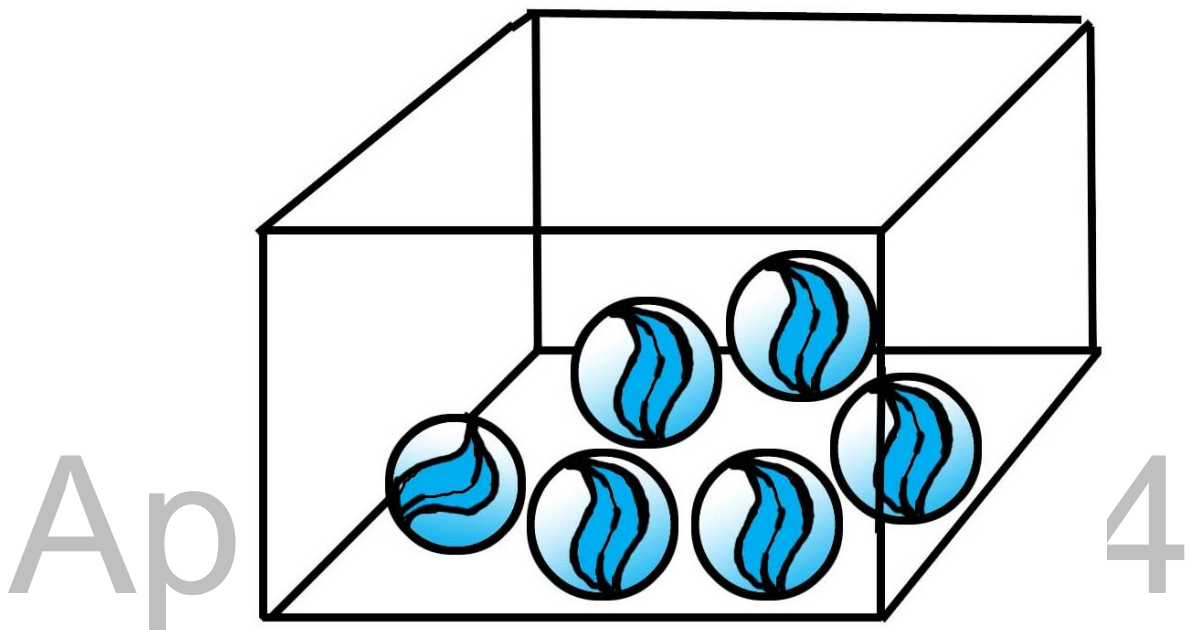10) How many more people liked Darna than Kristala?

DRAFT
April 10, 2014

Likelihood of an Event

Study the box with 6 marbles inside it.

What object will I pick from the box?
Will I be sure that every time I pick an object it will be a marble? Why?

Activity 1

What are the chances of each event occurring for you today? Place a check mark under the correct category for each event.

What are the Chances?

|	Impossible	Unlikely	Equally Likely	Most Likely	Certain
1) The sun rising					
2) Riding a bike					
3) Climbing Mt. Pinatubo					
4) Losing a tooth					
5) Eating ice cream					
6) Reading a book					
7) Playing a game					
8) Seeing a rainbow					
9) Going to school					
10) Calling a friend					
11) Flying to the moon					
12) Playing in the rain					
13) Seeing a clown					
14) Drinking milk					
15) Saying "I love you" to your mother					
16) Behaving well in the classroom					

Activity 2

Write **impossible, unlikely, equally likely, most likely** or **sure**.

1) How likely is it that the spinner will land on "R"?
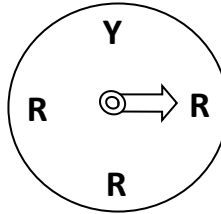
2) If you select a marble without looking, how likely is that you will pick a blue one?
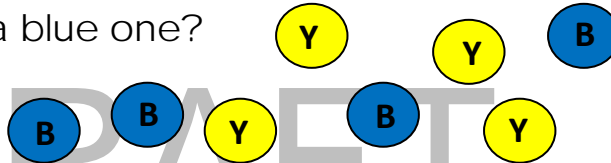
3) How likely is it that the spinner will land on a "G"?

4) If you select a marble without looking, how likely is that you will pick a red one?

5) How likely is it that the spinner will land on a "Y"?

6) If you select a marble without looking, how likely is that you will pick a red one?

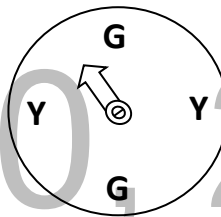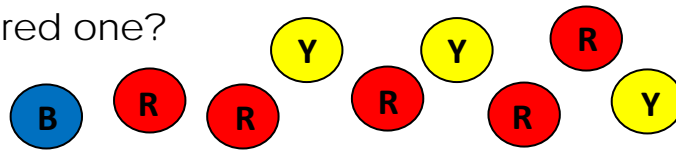7) How likely is it that the spinner will land on "R"?

8) If you select a marble without looking, how likely is that you will pick a blue one?

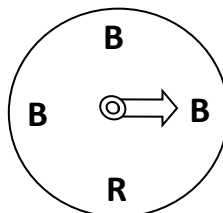9) How likely is it that the spinner will land on a "Y"?
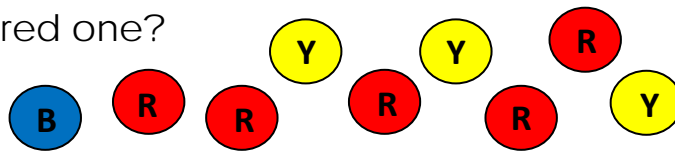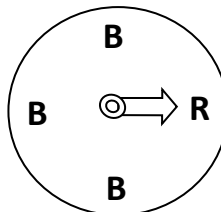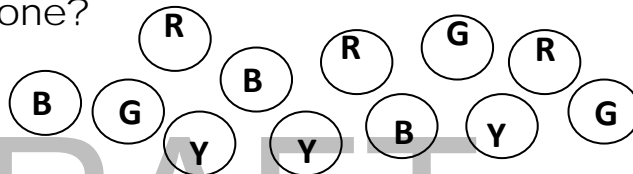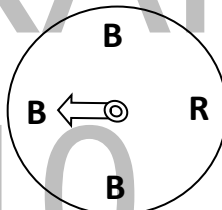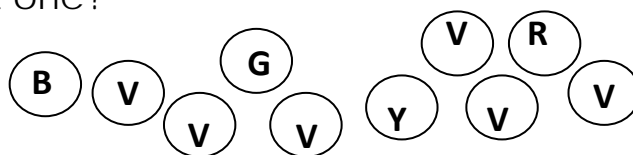

10) If you select a marble without looking, how likely is that you will pick a violet one?

Activity 3

Study a segment of the number line. The number line tells us that an event is likely to happen or not through representation of numbers from 0 to 1. Are the events below impossible, unlikely, equally likely, most likely or sure to happen?

0	1/4	1/2	3/4	1
Impossible	Unlikely	Equally Likely	Most Likely	Sure
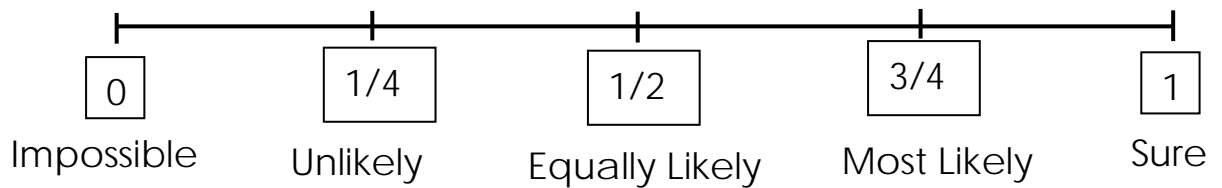
1) Ms. Banasihan said the chances of having homework tonight is ¾.
2) Anna said the likelihood of her mother's having a baby boy was ½.
3) Since Karen has been grounded this week, she said the chance of her watching TV tonight was ¼
4) The likelihood of your mathematics book talking to you today is 0.
5) The chance that all pupils will join the fieldtrip is 1.
6) My friend told me that the chances he will be included in the honor roll is 50/50.
7) The likelihood of seeing a flying elephant is zero.
8) My dad always brings home a *pasalubong*, this afternoon the chances of bringing ice cream is ¾ .
9) The likelihood of winning a gold medal in the competition is less than ½ but not equal to zero.
10) The chances of riding a bus today is greater than ½ but not equal to 1.

Activity 4

A. Describe the event as <u>impossible</u>, <u>unlikely,</u> <u>equally likely</u>, <u>most</u> <u>likely</u> and <u>sure</u> to happen.

1) If my mom will give birth, it is a girl.

Chances:

_____

Why:

_____

2) We will have rain next month.

Chances:

_____

Why:

_____

3) The stars will be seen at the sky tonight.

Chances:

_____

Why:

_____

4) The cats and dogs will talk.

Chances:

_____

Why:

_____

5) I will not watch TV the whole year.

Chances:

_____

Why:

_____

6)   I will see a falling star tonight.
Chances:

_____

Why:

_____

7)   The fish will jump out of the lake and walk.
Chances:

_____

Why:

_____

8)   Santa Claus will visit our house on Christmas Eve.
Chances:

_____

Why:

_____

9)   There will be fireworks on New Year's Eve.
Chances:

_____
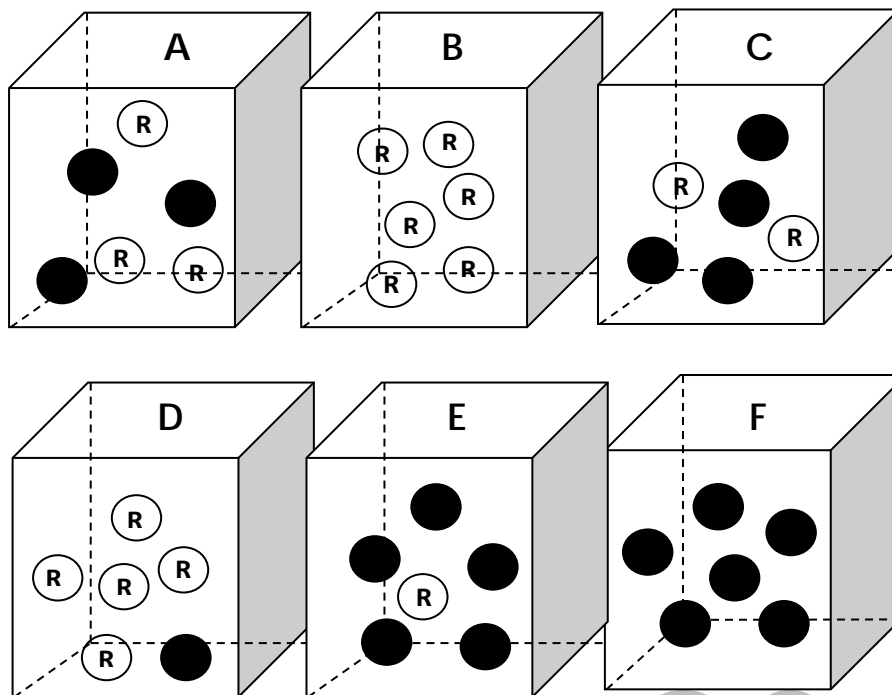
Why:

_____

10)   I will see a rainbow today.
Chances:

_____

Why:

_____

B. Henry has some boxes containing red and black counters. He is going to take a counter from each box without looking.
Match boxes using the letters A – F to the statements given below. Explain your answer.


1) It is **impossible** that Henry will get black counters from box _____ because _____ .

2) It is **unlikely** that Henry will get black counters from box _____ because _____ .

3) It is **equally likely** that Henry will get a black and or red counters from box _____ because

_____ .

4) It is **most likely** that Henry will get black counters from box _____ because

_____ .

5) It is **sure** that Henry will get black counters from box
_____ because _____ .

Activity 5

Use the following words to describe how likely it is the spinner
to land on the given number(s): sure, most likely, equally
likely, unlikely and impossible.

1) Even numbers   _____
2) Odd numbers   _____
3) Factors of 8   _____
4) Multiple of 2 _____
5) Number 10   _____
6) Multiple of 3 _____
7) Factors of 6   _____
8) Zero   _____
9) Multiple of 4 _____
10) Factors of 24 _____
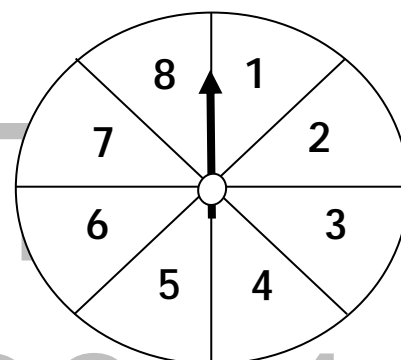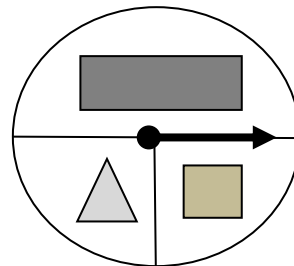
Activity 6

A. Is it <u>sure</u>, <u>most likely</u>, <u>equally likely</u>, <u>unlikely</u> or <u>impossible</u>
   that:

   1)   Our principal will visit our class today.

        _____

   2)   You will have milk for lunch today.   _____

   3)   You will fall down and cut open your knees.

        _____

   4)   You will complete this lesson.

        _____

   5)   Henry will be picking a *rambutan* from a basket
        containing a bunch of *lanzones*.

        _____

B.   Use the following words to describe how likely it is the
     spinner to land on the given shape(s): sure, most likely,
     equally likely, unlikely and impossible.

   1)   Polygon: _____
   2)   Square: _____
   3)   Circle: _____
   4)   Triangle: _____
   5)   Rectangle: _____

Activity 7

What are the chances of each event occurring for you today or happening to you today? Place a check mark under the correct category for each event.

What are the Chances?

	Impossible	Unlikely	Equally Likely	Most Likely	Certain
1) Meeting a TV personality					
2) Going to school					
3) Attending flag ceremony					
4) Playing a computer game					
5) Drinking milk					
6) Reading a book					
7) Flying to the moon					
8) Sleeping under a tree					
9) Washing clothes					
10) Eating candy					