

Grade 8 Teaching Guide
(Under K to 12 Curriculum)

Learning Area: MAPEH
Physical Education
Quarter 1

Defining the Learning Outcome

Grade Level Standard:

The learner demonstrates understanding of how the family fitness helps in sustaining an active lifestyle.

Content Standard:

The learner demonstrates understanding of the benefits of health – related fitness (HRF) to the family

Performance Standard:

The learner produces a comprehensive and appropriate HRF plan.

Learning Competencies:

Let your students know that at the end of this particular learning materials/module, they are expected to

- undertake fitness tests;
- identify the physical activity habits of the family in terms of health-related fitness components;
- assess the family's strengths and weaknesses in the components of HRF;
- perform exercises to enhance cardiovascular and muscular fitness;
- regularly demonstrate HRF for the family to ensure its promotion of an active lifestyle;
- explain why the seriousness of purpose is critical in ensuring the conduct of activities in the family; and
- design physical activities that promote cardiovascular and muscular fitness activities to family member.

Assessment Plan		
Product/Performance Task: A comprehensive and an appropriate HRF plan for the family	Use formative and summative assessment tools to assess the competencies: • Differentiate the Health-related fitness components and relate their importance to family wellness • Relate HRF to daily physical activities of the family • Assess the strengths and weaknesses of the family in relation to the HRF components • Provide different options/choices for family's HRF activities • Create and perform physical enhancement activities for the family • Assess family's performance in physical activities in relation to their level of wellness	Assess the performance task using the following criteria: Assessment of HRF plan for the family using the following criteria: • Appropriateness of the HRF activities for the family • Relevance to the needs of the family members • Completeness of the plan

Teaching-Learning Plan



This quarter allows the Grade 8 learners to explore and to develop their knowledge and skills that will help them and their family establish a lifelong habit of physical wellness. Initiating these activities and motivating students will be a real challenge for you teachers!

With the advancement of technology today, people are less physically active and don't participate much in fitness-relevant activities. Although we are well aware of the health benefits that can be derived from engaging in physical activities, we still tend to take its significance for granted. Even young people, like your learners, do not anymore engage in worthwhile physical exercises on a daily basis. This may be because they rarely have health problems. It is possible that in the late stage of their adult life they will tend to remember how important diet and exercise are to their health. They need to be reminded that physical well-being is crucial to a long and healthy life and this reduces the risk of hypertension, heart diseases, and other health problems. Being physically fit can help them get through the stresses and demands of life and this improves their self-esteem, develops their confidence, and self-concept.

Health-related fitness plays a vital role in the holistic development of a person. Fitness activities, usually depend on individual's choice, age, and ability. Health-related fitness ensures cardiovascular fitness and thus helps them in the process of aging.

Health-related fitness activities are provided for your students to have a better grasp on the lesson at hand and to help them choose and select the appropriate exercises or activities that will help them and their family achieve a level of physical wellness. Expectations from these activities should be made clear to your learners and questions from them are encouraged to bridge differences of ideas.

Encourage your students to design an HRF (Health-Related Fitness) plan that will cater to the needs of their family. Even after the implementation of the designed HRF plan, your students will still need to evaluate its success or failure and make revisions, if needed, motivate them and their family to continue the HRF activity for

life. There is also a need to emphasize the importance of making the activity fun and enjoyable for your students to make exercise a habit for life.

Objectives

At the end of this module, the students should be able to

- undertake fitness tests
- identify the physical activity habits of the family in terms of health-related fitness components
- assess the family's strengths and weaknesses in the components of HRF
- perform exercises to enhance cardiovascular and muscular fitness
- regularly demonstrate HRF to the family to ensure its promotion of an active lifestyle
- explain the serious of purpose to ensure the conduct of activities in the family
- design physical activities that promote cardiovascular and muscular fitness activities to family members

Pre-Test

- Assess the learner's prior knowledge of Health-Related Fitness.
- Have them identify and classify the pictures shown to them.
- Instruct them to explain how these HRF activities can benefit their family in line with physical wellness.
- Inform them that the pre-test will not be graded but will help the teacher determine their prior knowledge about the lesson-at-hand.

Learning Goals And Targets

- Encourage the learners to reflect on and write their expected learning goals and targets.

Part I. WHAT TO KNOW

In this stage your students will reflect on the effectiveness of doing daily routines. Be aware of their expectations about the topic and encourage them to ask questions for further clarifications. Make them do the following activities to assess their knowledge about health-related fitness exercises. Give them opportunities to identify and clarify any misconceptions they have about the lesson.

Activity 1 Where Am I?

Introduce to your students this brain teasing fun game called “Word Scramble”. Instruct them to find from the untangled letters the components associated with Health-Related Fitness. The words could be in any directions as long as the letters are all inter-connected. Let them write these words below and define each.

S	C	E	N	T	E	R	O	W
B	T	E	N	D	U	R	A	E
O	L	R	V	I	T	A	N	C
D	F	L	E	X	I	B	I	L
Y	C	O	M	N	D	Y	T	I
I	S	O	P	O	G	F	Y	R
T	I	O	N	S	P	T	A	G
M	A	X	I	M	U	M	H	E

My answers: (in any order)

1. Flexibility
2. Body Composition
3. Strength
4. Endurance



If they have found the words and were able to define each of their answers that would mean that they have the basic knowledge of HRF.

Below is a discussion on the components of HRF. Let the students read and answer the questions found below the reading material. Have them use their worksheets for their answer.

Components of Health-Related Fitness

Fitness is defined as a condition in which an individual has enough energy to avoid fatigue and enjoy life. Analyze your day. Do you have lots of energy, or do you get tired easily?

Physical fitness is divided into four health- and six skill-related components.

Skill-related fitness enhances one's performance in athletic or sports events.

Health-related fitness is the ability to become and stay physically healthy.

Health Components	Skill Components
Cardio-respiratory fitness	Agility
Muscular strength and endurance	Balance
Flexibility	Power
Body composition	Speed
	Coordination
	Reaction time

Health-related components focus on factors that promote optimum health and prevent the onset of disease and problems associated with inactivity.

Four Components of Health-Related Fitness

- **Cardiovascular fitness** is the ability of the heart (cardio) and circulatory system (vascular) to supply oxygen to muscles for an extended period of time.

Cardiovascular is also called cardio-respiratory (lungs) fitness. Usually the 1km run or some other type of continuous fitness activity (12-minute run, cycling, step-test, etc.) is used to assess cardiovascular fitness.

- **Muscular strength and endurance** is the muscle's ability to produce effort or perform work.

- **Muscular endurance** refers to the ability of the muscles to work over an extended period of time without fatigue. Performing pushups and sit-ups or crunches for one minute is commonly used in fitness testing of muscular endurance.

- **Muscular strength** refers to the maximum amount of force a muscle can exert against an opposing force. Fitness testing usually consists of a one-time maximum lift using weights (bench press, leg press, etc.).

- **Flexibility** is the ability to move a body part through a full range of motion (ROM) at a joint. The sit-and-reach is commonly used to determine flexibility.

- **Body composition** is the ratio of body fat to lean body mass (including water, bones, muscles, and connective tissues). Having too much fat tissues is a risk factor for cardiovascular diseases, diabetes, cancer, and arthritis.

In addition to improving quality of life, health-related fitness

- increases muscle tone and strength;
- decreases susceptibility to injuries and illness;
- improves bone mineral density;
- reduces risk of osteoporosis;
- improves posture;
- increases efficiency of the respiratory and circulatory systems;
- decreases risk of cardiovascular disease and stroke;
- improves blood pressure;
- decreases risk of diabetes and some cancers;
- improves self-esteem and self-confidence;
- decreases body fat and improves metabolism; and
- increases energy level and academic achievement.

After the students finish reading, let them answer the following questions. Tell them to use their worksheet for their answers:

1. In your own words, define fitness.

2. Describe the difference between health-related and skill-related fitness components.

Activity 2 Quest for Fitness

In this activity, let your students reflect on their daily activities and write them down on the table below. Remind them to give special attention to activities that will help improve their HRF and maximize their body potentials. After a few minutes, group them into 5 or 8 and let them discuss their answers with the group. Give them time to present their output in class.



What are my daily routine or tasks associated with health-related fitness?

My daily routines/tasks	HRF components
1.	
2.	
3.	
4.	

Motivate students by telling them that doing household chores helps a lot in maintaining physical fitness. Tell them that they have been sitting the greater part of the day, which reduced their regular physical workload, so encourage them to make time doing household chores as part of their daily routines.



Activity on the next page is a reinforcement of what they have learned in part 1.

Activity 3 Picture Parade

In this activity, your students are required to bring pictures showing different activities of a person. Allow them to display their pictures and let them describe the actions and how the person in the picture might be feeling. Instruct them to list down benefits associated with each activity.

Examples of pictures might include the following:

- A running smiling child (feeling free and happy)
- A group of people engaged in a game or sport (having fun)
- A performing figure skater, dancer, or gymnast (graceful, powerful)

After displaying their picture parade, ask one of their classmates to report his/her list of benefits associated with each activity in class. Allow each of them to explain his/her answer.

Variation: Create a collage or bulletin board display from the cut-out pictures of newspapers or magazines that will illustrate the benefits of being active.



Congratulate them for doing a great job and for presenting a beautiful work of art. Based on their work, it is now very clear that they have understood their lesson well.

Activity 4 Family Connection

In this activity, tell your students to identify the physical activity habits of their family in terms of health-related fitness components. A table is provided for them to list down important details that are helpful for the when they design their family HRF activity plan.

Family Members	Age	Occupation/ Work/Job	Activities involved in relation to the Occupation/Work/Job	HRF component involved	Household Chores	HRF component involved
Example: Father	54	PUJ Diver	Drives and sits for 8 hours		Feeds the chicken repair damages in the house . . .	
Mother	48	Housewife				
Sister	25	None				
Brother 1	22	Laborer				
Brother 2	18	Student				
Me	14	Student				

(If they are living with relatives or a working student just indicate those people they are living with)



Tell your students that they have done a great job! Your students are now ready to level up. The next activities that await them will be more interesting and fun-filled. So let them enjoy the experience!

Part II. WHAT TO PROCESS

For the students to have a deeper understanding on the importance of exercise in building total fitness and family wellness, provide them with activities that will allow them to develop, reflect, rethink, validate, and revise their understanding of fitness HRF.

Once again the students must undertake the fitness test for comparative purposes in determining general fitness. This is a test given to them every year. So this would not be hard for them to perform. Tell the students to make sure they follow the instructions to avoid accidents.



Activity 1 Physical Fitness Test (HRF)

1. Tell your students to prepare for the test:
 - Review the procedures in conducting the Physical Fitness Test.
 - Wear appropriate attire.
 - Do the warm-up exercises on their own or with their partner.
 - Orient them on the proper execution of the tests and recording of test results.
 - Go through with the test without exerting maximum effort.
 - Observe safety.
2. Let them perform the test with a partner.
3. Record their test results.

Physical Fitness Test

Health Related Fitness

BODY COMPOSITION – is the body's relative amount of fat to fat-free mass.

A. Body Mass Index (BMI)

$$\frac{\text{WEIGHT [in Kilograms]}}{\text{HEIGHT [in Meters]}^2}$$

Example: $\frac{30}{(1.20)^2} = \frac{30}{1.44} = 20.83 \text{ (NORMAL)}$

CLASSIFICATION:

BELOW 18.5	Underweight
18.5 – 24.9	Normal
25 – 29.9	Overweight
30.0 – ABOVE	Obese

A.1 Weight – the heaviness or lightness of a person.

Equipment:

Weighing Scale

Procedure:**For the test taker:**

- a. Wear light clothing.
- b. On bare feet, stand erect and still with weight evenly distributed on the center of the scale.

For the partner:

- a. Before the start of weighing, adjust the scale to zero point.
- b. Record the score in kilograms.

Scoring – record body mass to the nearest 0.5 kilograms

A.2 Height – it is the distance between the floor to the top of the head in standing position.

Equipment:

1. An even and firm floor and flat wall.
2. L – square
3. Tape measure laid flat to a concrete wall. The zero point starts at the bottom of the floor.

Procedure:**For the student:**

- a. Stand erect on bare feet with heels, buttocks and shoulders pressed against the wall with tape measure.

For the partner:

- a. Place the L-square against the wall with the base at the top of the head of the person being tested.
- b. Record the score in meters.

Scoring – record standing height.

* 1 meter = 100 centimeters

B. Waist Circumference

– waist circumference is a good predictor of visceral fat which contributes more risk of cardiovascular disease and diabetes than fat located in other areas of the body.

Equipment:

Tape Measure

Procedure:**For the student:**

- Wear light clothing before taking waist circumference.
- On bare waist, stand erect and wrap tape measure around waist.

For the partner:

- Record the score in centimeters.

Standard

	Men		Women	
Risk	Centimeter	Inches	Centimeter	Inches
Very High	>120	>47	>110	>43.5
High	100 – 120	39.5 – 47	90 – 109	35.5 – 43
Normal	102	40	88	34.6
Low	80 – 99	31.5 – 39	70 – 89	28.3 – 35
Very Low	<80	<31.5	<70	<28.5

STRENGTH – refers to the muscle’s ability to generate force against physical objects. In the fitness world, this typically refers to how much weight you can lift for different strength training exercises.

1. 90 – Degree Push-up

Purpose – to measure strength of upper extremities

Equipment

Exercise mats or any clean mats

Procedure**For the student:**

- Lie down on the mat; face down in standard push-up position: palms on the mat under the shoulders, fingers pointing forward, and legs straight, parallel, and slightly apart, with the toes supporting the feet.
- FOR BOYS:** Straighten the arms, keeping the back and knees straight, then lower the arms until there is a 90-degree angle at the elbows (upper arms are parallel to the floor).



FOR GIRLS: With knees in contact with the floor, straighten the arms, keeping the back straight, then lower the arms until there is a 90-degree angle at the elbows (upper arms are parallel to the floor).

- c. Perform as many repetitions as possible, maintaining a cadence of 20 push-ups per minute (2 seconds going down and 1 second going up).



For the tester:

- a. As the student assumes the position of push-up, start counting as the student lowers his body on the ground until he reaches 90-degree angle at the elbow.
- b. Make sure that the student performs the push-ups in the correct form.
- c. The test is terminated when the subject can no longer perform the push-ups in the correct form (three corrections are allowed), is in pain, voluntarily stops, or breaks his/her cadence.

Scoring – record the number of push-ups made.

2. Curl-ups

Purpose – to measure strength of abdominal muscles

Equipment

Exercise mats or any clean mats

Procedure

For the student

- a. Lie on back with the knees flexed and the feet 12 inches from the buttocks.
- b. Feet cannot be held or rested against an object. The arms are extended and are resting on the thighs.
- c. Complete a slow, controlled curl-up, until the student's shoulders come off the mat two inches, then back down again.
- d. The curl-up should be performed at a rate of one every 3 seconds or 20 curl-ups per minute (2 seconds going up and 1 second going down).
- e. There should be no rest at the bottom position, and students should perform as many curl-ups as possible without stopping.

For the tester

- a. One curl-up is counted each time the student's shoulder blade touches the floor.
- b. Make sure that the student performs the curl-ups in the correct form.
- c. The test is terminated when the subject can no longer perform the curl-ups in the correct form (three corrections are allowed), is in pain, voluntarily stops, or breaks his/her cadence.

Scoring – record the number of curl-ups made.



FLEXIBILITY – refers to the ability of the joints to move through a full range of motion.

1. **Sit and Reach** – a test of flexibility for the lower extremities particularly the hamstring.

Purpose – to be able to reach as far as possible without bending the hamstring.

Equipment:

Tape Measure

Procedure**For the student:**

- a. Sit on the floor with back flat on the wall, with feet approximately 12 inches apart.
- b. Without bending your back, knees, and elbows, place one hand on top of the other and position the hands on the floor.
- c. After the tester has positioned the zero point of the tape measure, start the test by slowly reaching the farthest point possible without bending the knees.

For the partner:

- a. As the student assumes position (b) procedure, position the zero point of the tape measure at the tip of the finger farthest from the body.
- b. See to it that the knees are not bent as the test taker reaches the farthest that he/she could.
- c. Measure the farthest distance reached.
- d. Record the score in centimeter.

Scoring - record *sit and reach* to the nearest 0.1 centimeter.



2. Zipper Test – a test of upper arm and shoulder girdle flexibility intended to parallel the strength / endurance assessment of the region.

Purpose – to touch the fingertips together behind the back by reaching over the shoulder and under the elbow

Equipment:

Ruler

Procedure:

For the student:

- a. Stand erect.
- b. To test the right shoulder, raise your right arm, bend your elbow, and reach down across your back as far as possible.
- c. At the same time, extend your left arm down and behind your back, bend your elbow up across your back, and try to cross your fingers over those of your right hand.
- d. Reach with the right hand over the right shoulder and down the back as if to pull a zipper or scratch between the shoulder blades.
- e. To test the left shoulder, repeat procedures a – d with the left hand over the left shoulder.

For the partner:

- a. Observe whether the fingers touched or overlapped each other.
- b. Measure the distance in which the fingers overlapped.
- c. Record the score in centimeters.

Scoring – record zipper test to the nearest 0.1 centimeter.

Standard

- 0 – fingers did not touch
- 1 – fingers just touched
- 2 – fingers overlapped by 1-2 cms.
- 3 – fingers overlapped by 3-4 cms.
- 4 – fingers overlapped by 5-7 cms.
- 5 – fingers overlapped by 8 cms. or more.



CARDIOVASCULAR ENDURANCE – is the ability of the heart, lungs, and blood vessels to deliver oxygen to working muscles and tissues, as well as the ability of those muscles and tissues to utilize that oxygen. Endurance may also refer to the ability of the muscle to do repeated work without fatigue.

1. 3 – Minute Step Test

Purpose - to measure cardiovascular endurance

Equipment

- 1. Step with a height of 12 inches
- 2. Stopwatch

Procedure

For the student:

- a. Position in front of the step.
- b. At the signal go, step up and down on a bench for 3 minutes at a rate of 24 steps per minute. One step consists of 4 beats – that is, “up with the left foot, up with the right foot, down with the left foot, down with the right foot.”
- c. Immediately after the exercise, stand and relax. Don't talk.

- d. Right after the activity, locate your pulse. (the first beat is zero.)
- e. Count the pulse for 10 seconds. Multiply by 6.

For the partner:

- a. As the student assumes the position in front of the step, signal, “Ready” and “Go”, start the stopwatch for the 3-minute step test.
- b. After the test, let the student count his pulse for 10 seconds and multiply it by 6.



Scoring – record the 60-second heart rate for the activity.

PERFORMANCE TARGETS FOR BOYS

AGE	STRENGTH		FLEXIBILITY		ENDURANCE	
	Partial Curl-Ups	90 degree Push-Ups	Sit and Reach (cm.)	Zipper Test	3 min. Step Test	1 Km. Walk/Run
9	23	15	37		122	4:57
10	25	16	39		121	4:40
11	26	17	41		119	4:27
12	28	18	43		117	4:25
13	32	19	45		115	4:19
14	36	20	50		110	4:18
15	38	21	55		107	4:14
16	42	22	56		105	4:10
17	45	23	64		102	4:00
18	47	24	69		99	3:55
19	49	25	70		98	3:45
20	51	26	72		96	3:35
21	55	27	72		95	3:30

PERFORMANCE TARGETS FOR GIRLS

AGE	STRENGTH		FLEXIBILITY		ENDURANCE	
	Partial Curl-Ups	90 Degree Push-Ups	Sit and Reach (cm.)	Zipper Test	3 min. Step Test	1 Km. Walk/Run
9	20	7	43		119	5:30
10	21	7	45		117	5:00
11	21	8	47		115	4:55
12	22	9	49		113	4:50
13	22	10	52		111	4:47
14	23	11	54		108	4:38
15	23	12	58		103	4:30
16	24	13	63		101	4:25
17	25	14	68		100	4:17
18	26	14	72		98	4:10
19	27	15	74		96	4:05
20	30	15	75		95	3:37
21	30	16	75		93	3:35

Pictures: Sherwin S. Simangan, Justin Roi V. Dulin, Kim Cepeda, Zhanne Kisner Collado



They've done it teacher! So now, they can have a comparison of their previous fitness test results with their current test results. Have they improved? Well, that would mean they are doing well physically.

The succeeding activities on the next page will assess your students' skills on HRF. A variety of activities like sports and fitness exercises are prepared for them to keenly select among these activities what will suit the needs of their family.



Activity 2 Tough Nut to Crack

Provide your students with sports equipment available in your school. Give them freedom to select among these sports equipment what they like. Let them think of different ways to play or manipulate the equipment in such a way that the body will be involved. Let them play for 10-15 minutes with their friends. Instruct them to jot down notes on the different movements they have executed during the game. Let them relate these movements to the health-related fitness. Tell them to write their observations on the activity sheet/notebook.



Tell your students what to observe by asking the questions below:

- What are the different movements you executed? (e.g. running, swinging the bat, throwing the ball . . .)
 1. Identify the parts of the body involved while playing with the sports equipment.
 2. While performing the sports, what specific skills/movements do you think will help you build the 4 components of HRF?
 3. Reflect how this sports activity can help enhance health related fitness and achieve a balanced and total fitness.
 4. Among these activities, what would suit the needs of your family in terms of HRF?

Alternative Activity: Target Zone

On their activity notebook, tell them to copy the table as shown below and let them identify what activity is represented by each sports material. Let them reflect on the health benefits derived from engaging in these activities. Tell your student to select the best and most appropriate activity for their family since they will design an HRF plan.



Whew! That was quite fun for them, right?

Activity 3 below can also be done with their family at home. This would be an excellent opportunity for the family to get involved - promoting closer bonds with each other and most importantly designing an HRF plan for them.

Activity 3 Listen to your Heart

Tell your students to do the following:

1. Look for a partner (a friend, a relative, a neighbor) for this activity.
2. Review their knowledge on how to check the pulse rate before and after a physical activity.
3. Execute the exercises or activities for each component of the HRF. Choose from the suggested exercises below.
4. Observe carefully what exercises are mild/easy, average, and intense/difficult.
5. Chart their pulse rate before and after the activity.

Pulse Rate	Before:	After:
Exercise A	Example: mild	
Exercise B		
Exercise C		

6. Answer the following questions on their activity sheet after performing the exercises:
 - a. Assess the physical activity or exercises given to them.
 - b. Do they think that these exercises or physical activity are appropriate for their family?
 - c. If they are to design a fitness plan for the members of the family, what are the things they need to consider?
 - d. What are the possible activities they would they? Cite examples.
 - e. Would these activities fit each member of their family?

Suggested Exercises:

FLEXIBILITY EXERCISES

Stretch #1: Shoulder & Chest

This can be performed kneeling or standing. Clasp your hands behind your back and straighten your arms. Raise your hands as high as possible and bend your body/trunk forward from the waist and hold the position for ten seconds.



Stretch #2: Arm Across Chest

Place one of your arms straight across your chest. Place your other hand on your elbow and pull your arm towards chest and hold. Repeat with your other arm.



Stretch #3: Triceps Stretch

Place one hand behind your back with elbow in air. Place your other hand on elbow and gently pull towards your head. Hold and repeat with your other arm.



Stretch #4: Gluteus Stretch

Sitting on the floor with your right leg bent, place your right foot over your stretched left leg. Place your left arm over your right leg so your elbow can be used to push your right knee. Hold and repeat with the other side.



Stretch #5: Adductor Stretch

Stand with your feet as wide apart as is comfortable. Shift weight to one side as your knee bends. Reach towards your extended foot and hold. Repeat for other side.



Stretch #6: Single Leg Hamstring

Place your leg out straight and bend the other so your foot is flat into your thigh. Bend forward from your waist keeping your back flat. Hold and repeat with the other leg.



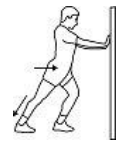
Stretch #7: Standing Quadriceps

Standing on one leg grab the bottom of your other leg (just above the ankle). Pull your heel into your buttocks and push your hips out. Your thigh should be perpendicular to the ground. Hold and repeat with the other leg.



Stretch #8: Standing Calf

Place your feet in front of each other about 18 inches apart. Keep your back leg straight and your heels on the floor. Push against a wall to increase the stretch. Hold and repeat with your other leg.



STRENGTH EXERCISES

Strength Training: Lower Body Exercises



Squat



Strength training lunge



Calf raise



Leg curl



Leg extension



Crunch

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Strength Training: Upper Body Exercises



Bench press



Lat pull-down



Pull-up



Triceps extension



Dip



Curl

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CARDIOVASCULAR ENDURANCE EXERCISES

These exercises would consist of jogging, cycling, stair climbing, and running.

Activity 4 Because I Care

Tell your students to review and assess their output in “Family Connection” activity, focus on the strengths and weaknesses of each family member with regard to health-related fitness. Tell them to take special attention with regard to age and physical capacity of their family members. Let them copy the following table and do their own assessment:

Family Health Assessment

Family Members	Age	Body Composition (BMI)	Medical history	HRF components	
				Weaknesses	Strengths
Father					
Mother					
Sister					
Brother 1					
Brother 2					
Me					

By now your students should have gathered the necessary information and data of each family member. Well these are the important things they have to remember when planning for the HRF activity of their family. So let them keep that in mind!



Now that they have identified the weaknesses and strengths of each family member, the next activity below will help them plan exercises for the family.

Activity 5 Work it Out

Tell the students to propose exercises for flexibility, strength, and cardio-respiratory endurance (at least 5 exercises for each component). Their output will be presented to the class. Instruct them to provide their own music.

When they are performing their exercises tell them criteria below:

1. Exercises chosen fit well with the HRF goal; Timing and coordination blends well with the music; There is unified effort of the group members (if done in groups) and exercises are excellently executed.



Congratulate your students, they have hurdled another challenge in this quarter. This proves they are doing fine and going on the right track. Now that they have tackled Part II of this quarter, it is understood that they have now fully grasped the essence of these activities.

Part III. WHAT TO REFLECT AND UNDERSTAND

In this stage, the students are given opportunities to reinforce and deepen their understanding on the importance of HRF activities and exercises. Your students are provided with activities that will assess the mastery of their understanding.

Activities 1-3 are provided for them to have a deeper understanding on the importance of exercise in building total fitness and family wellness. The activities will also allow them to develop, reflect, rethink, validate and revise, their understanding of fitness exercises.

Activity 1 Health and Fitness Updates

Tell your students to read the article on the next page. Instruct them to read it carefully and make a reaction paper based on their readings. Their thoughts and opinion about this article will help them reflect on their understanding of fitness exercise. Instruct them to write their reaction paper on their worksheet.

- For additional reading materials browse on this address:
<http://www.webmd.com/fitness-exercise/features/exercise-and-music>

Active Video Games Help Some Kids Get Active

By Jennifer Warner

WebMD Health News Reviewed by Louise Chang, MD

Oct. 1, 2012 -- One type of TV time may actually play a valuable role in the battle against childhood obesity.

A new study suggests active video games may help children, especially girls, raise physical activity levels.

The results show most teens who play active video games play at moderate or vigorous intensity levels that would help them meet the recommended 60 minutes of physical activity on most days.

Researchers say so-called exergames may also help at-risk young people get moving.

"Because exergames can be played in a variety of settings, including unsafe neighborhoods, they can increase opportunities for youth to engage in [physical activity] and decrease sedentary behavior," researcher Erin O'Loughlin of the University of Montreal, Canada, and colleagues write in Pediatrics.

Exergames are screen-based active video games in which individual players or groups interact in a physically active way. They include rhythmic dancing games, virtual bicycles, balance board simulators, and virtual sport simulators.

They require a screen, like a TV or computer, and a gaming console, such as the Nintendo Wii. The video games track the players' movements onscreen as they attempt to reach a goal.

Active Video Games Count as Exercise

In the study, researchers surveyed more than 1,200 10th- and 11th-grade students in the Montreal area about their use of active video games.

The results show nearly one-quarter of the children said they played active video games. Gamers played an average of two days per week for about 50 minutes at each session.

Nearly three-fourths (73%) said they played at a moderate or vigorous level of physical intensity that would count toward meeting the recommended physical activity guidelines.

Researchers also found that exercise video games like "Wii Fit" and "Dance Dance Revolution," which require high amounts of energy, were among the most popular active video games.

New Role for Active Video Games?

Researchers say the results suggest that active video games may have a unique role in the battle against rising childhood obesity rates.

The study shows that boys are more likely to play non-active video games, and girls were more likely to play active video games.

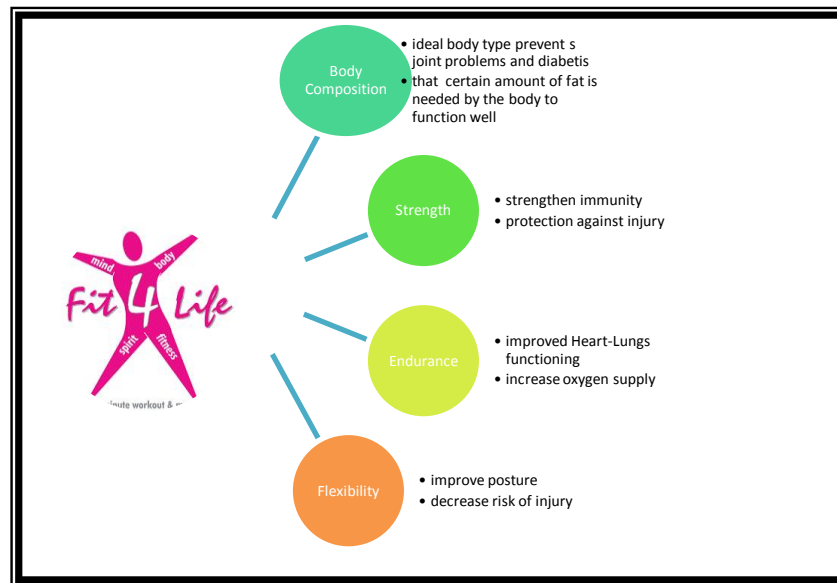
Researchers also found that most children who played active video games played at home, but many also played at friends' homes.

"It is possible that some girls may be uncomfortable exercising at school or in community settings because they feel scrutinized or judged and therefore prefer exercising at home alone or with friends," the researchers write.

"Lack of school-based exergaming may represent a 'missed opportunity' to introduce young people to another form of [physical activity]," they write. "The feasibility of exergaming in community centers or at school needs to be tested, and research on the sustainability of exergaming is warranted."



In order for the students to successfully design and implement a HRF (Health Related Fitness) plan for their family they need to make additional research. Inform them to make a report or a power point presentation on the health benefits derived from involving oneself in the HRF activity. Let them tackle on the four (4) components: strength, flexibility, endurance, and body composition. Below is a sample:



Tell your students that after the presentation they are expected to make a generalization on the importance of engaging in exercise and the drawbacks or disadvantages of lack of exercise.

Reflection / Realization: Let your students complete the sentences below.

1. Cardio-respiratory endurance can help me
2. _____ can help me achieve an ideal BMI.
3. Bending and stretching allow me to
4. _____ strengthen my body.
5. Therefore I have learned that

Present to the students the guides for the oral presentation below: (Criteria)

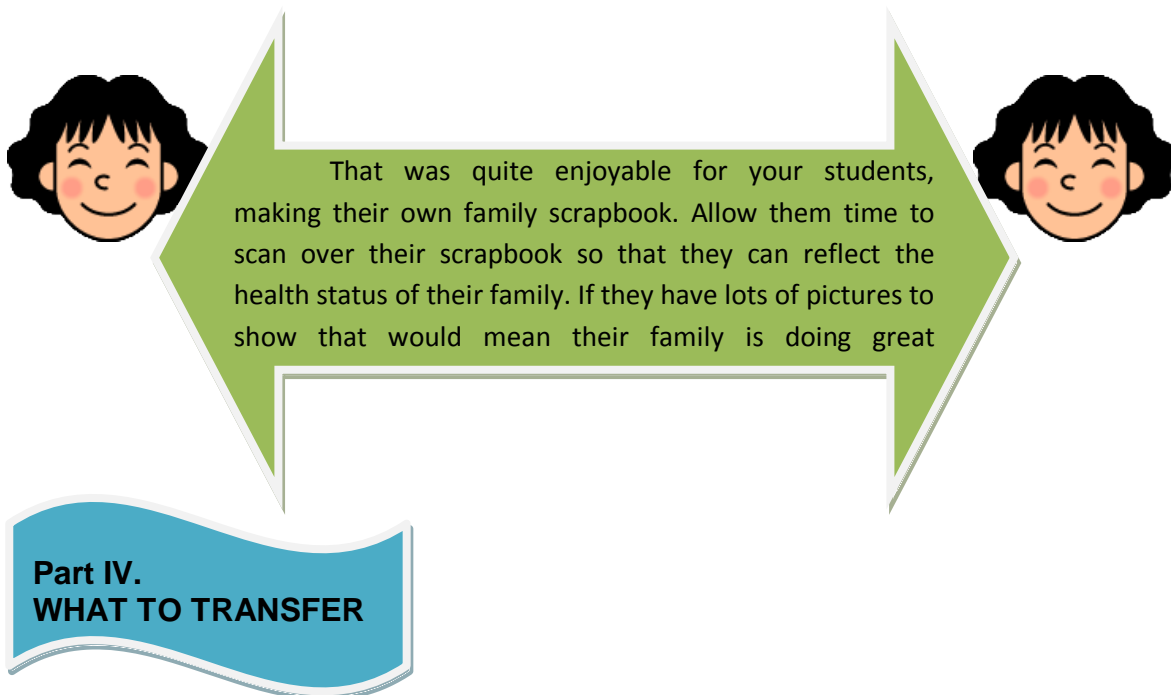
1. Presentation of the HRF health benefits should be addressed clearly.
2. Visual and audio presentation should be well-organized and well-explained.
3. Effective communication skills should be evident.

That wasn't tough for your students, right? This is going to be easy for them once they have answered all the questions. Let them try the next activity below, this has something to do with the lifestyle check of their family in terms of the HRF issues. This will help them understand and evaluate how far or how slow is their family's involvement in fitness.



Activity 3 Together in Fitness

Ask the students to make a scrapbook with pictures of their family showing the progress or regress of the family's state of health. Included in the scrapbook are pictures of their family's past HRF activities (sports, exercises and recreational activities). The scrapbook should tell a story about family wellness. This activity will help them assess and understand the state of health of their family.



At this stage your students will plan physical activities for their family which can be considered as their lifetime engagement to achieve family wellness.

Activity 1 Goal Setting

By this time, it is affirmed that Health-Related Fitness plays a very important role in family wellness. Tell your students to design an HRF plan for their family.

1. Let your students review and assess the output in “Because I Care” by identifying what particular exercises or physical activities are needed by their family members to achieve family wellness and enjoy a lifelong good health. Let them focus on the HRF activities and exercises. They may choose exercises from the suggested exercises in “*Listen to your Heart*”.

Now is the time for your students to work on their HRF Plan. Setting of their goals here is crucial to the development of their HRF plan. Remind them to look into the very needs of their family referring to the outputs they have on the previous activities as their bases for their plan.



Activity 2 Hit the Target

Inform them that in designing their HRF Plan it must be simple, enjoyable and suited to the needs of their family in order to attain maximum level of physical wellness.

Tell the students to use the following chart to plan their activities. Make sure they include activities for the whole family. Their log should show complete thought and effort and be as detailed as possible.

Below is an example of a fitness plan for their basis.

FITT Table				
	Frequency	Intensity	Type	Time
Cardiovascular Endurance	<i>3-6 times per week</i>	<i>Moderate to Vigorous</i>	<i>Running, walking, swimming, dancing, cycling, aerobics classes, circuit training, cycling etc.</i>	<i>20 – 60 minutes</i>
Muscular Strength and Endurance	<i>2-3 times per week</i>	<i>Progressive Moderate Resistance</i>	<i>Weights, resistance bands, circuits, push-ups, curl-ups, etc...</i>	<i>20-60 minute sessions</i>
Flexibility	<i>3-7 times per week</i>	<i>Moderate Stretch</i>	<i>Stretching, yoga, dynamic stretching, etc...</i>	<i>3-5 minutes during warm up and cool down</i>

Suggested plan: Join community Fun Runs, ballroom dancing, assign household chores and others.

Supplementary activity: **Family Day**

Tell your students to submit a narrative report about the actual implementation of the HRF Plan they have designed. They will also provide proof to support the narrative report like pictures, videos, signatures or through other media technologies. It is expected that this implementation will take a while, so allow the students enough time to submit this narrative report and evidences before the end of the first quarter period.

Assess the HRF plan for the family using the following criteria:

- Appropriateness of the HRF activities for the family
- Relevance to the needs of the family member
- Completeness of the plan

Bravo, your students made it! Things did turn out well. Don't forget to tell your students that working on this activity brings them closer to their family. Remember, family bonding creates harmony and understanding at home. So, this is a great opportunity for them to experience. Maybe at some point they have encountered difficulties but let them keep in mind that "The more difficulties one has to encounter, within and without, the more significant and the higher in inspiration his life will be."

- Horace Bushnell



SUMMATIVE TEST

I. Modified True or False.

Direction: Write T if the statement is true and if the statement is false change the underlined word or phrase to make it true on the space provided.

- _____ 1. Physical movement is a condition in which an individual has enough energy to avoid fatigue and enjoy life.
- _____ 2. Health-related fitness is the ability of the heart and circulatory system to supply oxygen to muscles for an extended period of time.
- _____ 3. Jogging and swimming are good forms of exercise for people with asthma.
- _____ 4. Weight training is a good example of cardio-vascular endurance.
- _____ 5. 90⁰ push-up is a test for muscular strength of upper extremities.

II. Multiple Choice:

Direction: Encircle the letter of the correct answer.

1. Defined as the ability to become and stay physically healthy.
A. aerobics B. dancing C. health-related fitness D. skill-related fitness
2. The ratio of body fat to lean body mass
A. body composition B. fitness C. force D. wellness
3. Refers to the maximum amount of force a muscle exerts against an opposing force
A. agility B. balance C. speed D. strength
4. The following are health-related fitness except one:
A. body composition B. flexibility C. speed D. strength
5. Heaviness and lightness of a person
A. age B. height C. waist circumference D. weight
6. The distance between the floor to the top of the head in standing position
A. arms span B. height C. leg length D. sitting height
7. Flexibility exercise-
A. bicycle exercises B. cardio work out C. gluteus stretch D. Pilates routine
8. The following are strength exercises except
A. Ab crunch B. Alternate hammer curl C. dumbbell press D. shoulder stretch
9. Exercises for cardio-respiratory endurance
A. basketball pass B. jogging C. shuttle run D. zipper test
10. A test of upper arm and shoulder girdle flexibility intended to parallel the strength/endurance assessment of the region.



11. Interpret the HRF battery test based on the procedure given below and identify the test.
 - 11a. Sit on the floor with back flat on the wall with feet are approximately 12 inches apart.
 - 11b. Without bending your back, knees and elbows, place one hand on top of the other and position the hands on the floor.

11c. After the tester has positioned the zero point of the tape measure, start the test by slowly reaching the farthest point possible without bending the knees.

Choices:

A. Arms span B. Basketball pass C. Flex arm hang D. Sit and Reach

III. Matching Type:

Direction: Match the appropriate activity for each of the family members. Select the best choice by connecting a line from column A to B.

A	B
1. Toddler age 3	a. ballroom dancing
2. Father age 57	b. soccer
3. Sister age 14	c. drag racing
4. Brother age 16	d. ballet
5. Mother age 55	e. jogging
	f. playing catch ball

IV. Problem Solving:

Direction: Show your solution

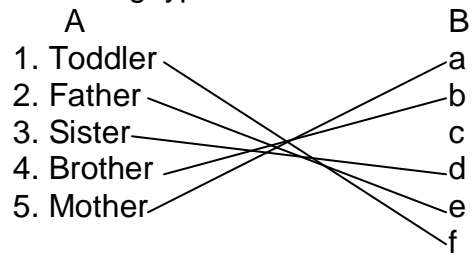
1. Chloe's weight is 50 kilos and 1.52 meters. Aedre has a weight of 40 kilos and a height of 1.60 meters while Gianna weighs 67 kilos and 1.62 meters tall. Solve for the BMI of each girl and identify which among the girls are classified under obese, overweight, normal, and underweight.

V. Create at least 5 physical exercises for a family of 5 with ages ranging from 6-50.

Key Answer

- I. Modified True or False
 1. Fitness
 2. Cardio-respiratory endurance
 3. T
 4. Strength exercise
 5. T
- II. Multiple Choice
 1. C
 2. A
 3. D
 4. C
 5. D
 6. B
 7. C
 8. D
 9. B
 10. C
 11. D

III. Matching type



IV. Problem Solving

$$\text{BMI Formula} = \frac{\text{weight}}{\text{Height}^2}$$

Solution:

$$\text{Chloe} = \frac{50}{(1.52)^2} = \frac{50}{2.31} = 21.64 \text{ Normal}$$

$$\text{Aedre} = \frac{40}{(1.60)^2} = \frac{40}{2.56} = 15.62 \text{ Underweight}$$

$$\text{Gianna} = \frac{67}{(1.62)^2} = \frac{67}{2.62} = 25.53 \text{ Overweight}$$



SUMMARY

It is expected that by this time the learners have already understood the essentials of health-related fitness and its relation to family wellness. This quarter provides them discussions on the importance of HRF and supplies them with different activities to help them assess themselves and their family in terms of health-related fitness and thereby guides them to design an appropriate HRF plan for their family that will sustain for life. Furthermore, this module focuses on a wide range of activities that will help the learners develop appropriate skills, enables them to understand fitness concepts and their application, as well as, fosters confidence and appreciation of physical activity as a means to wellness.

Part I gives the learners a brief recall on the HRF components. It also provides them with activities to help strengthen their knowledge on the lesson at hand. A brief assessment of their family's daily physical activity habits is also asked for them to plan out later the appropriate activities and exercises that will suit each of the family member.

Part II enables the learners to perform and demonstrate the HRF test. The result of the fitness test is their basis for self-assessment. A table is also provided for them to list down and assess their family's health status that is crucial in designing their family HRF plan.

Part III provides the learners with different activities and discussions that helps them reflect and think deeper on the essentials of health-related fitness. It also talks about the health benefits of engaging in physical activities and exercises. The activities, exercises and sports introduced in Part III were carefully selected for the learners to choose and decide the appropriate HRF activities for them and their family.

Part IV is the final phase of Quarter 1. The learners are expected to design an appropriate HRF plan for their family that will sustain a lifelong active lifestyle. Taking into consideration what they have learned in this chapter, the activities provided in Parts I-III will help and guide the learners in their proposed HRF plan.

GLOSSARY OF TERMS

Fitness – the condition of being physically fit and healthy, especially as a result of exercise and proper nutrition.

HRF (Health-Related Fitness) - ability to become and stay physically healthy.

SRL (Skill-Related Fitness) - focuses on the performance in a sport.

Perks – benefits; privileges; bonuses

Regress - returning to a former state; get worse or fall back to a previous condition.

Wellness – the quality or state of being healthy in body and mind, especially as the result of deliberate effort.

Collage - form of art in which various materials such as photographs and pieces of paper or fabric are arranged and stuck to a backing.

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