

Answer the following questions by highlighting the appropriate answer in the text or provide the answer as directed.

### HEALTH

- What are the three components of health?  
1. \_\_\_\_\_  
2. \_\_\_\_\_  
3. \_\_\_\_\_
- To be considered healthy you cannot have \_\_\_\_\_.

### COMPONENTS OF HEALTH-RELATED FITNESS

- Circle the assessments that indicate that you may need to improve your fitness within that component.
- Underline the assessments that you reached the Healthy Fitness Zone.

### MEASURING HEALTH-RELATED FITNESS

- FitnessGram assessments measure \_\_\_\_\_ that is associated with \_\_\_\_\_ lifestyles.
- Highlight the health-related components of fitness.
- Provide an example of a risk factor that is associated with the following health-related components of fitness:  
1. Aerobic Capacity: \_\_\_\_\_  
2. Body Composition: \_\_\_\_\_  
3. Muscular Fitness: \_\_\_\_\_
- For general health, do you need to exceed the Healthy Fitness Zone?  
\_\_\_\_\_
- If you consistently score in the Needs Improvement category, when might you begin to see or feel the results of having low fitness? \_\_\_\_\_
- Which of the following would be an effective method to developing health-related fitness for general health?  
1. Developing abdominal strength by doing curl-ups, upper body strength through push-ups, aerobic capacity by running the mile and stretching your hamstrings when you are done.  
2. Developing strength and flexibility by participating in martial arts, taking the dog for a walk twice a day, doing yard work and playing outside with your friends.

## Physical Education

# HEALTH-RELATED FITNESS

### WHAT IS HEALTH?

Health is often defined as a state of being that involves the physical, mental and emotional well-being of an individual. To be considered to be healthy an individual must have an absence of disease. It is not common to develop diseases as a child or adolescent, but the behaviors and habits that you develop throughout childhood, adolescence and young adulthood can increase or decrease your risk of developing certain diseases during adulthood. Regular physical activity over a lifetime contributes to good health, daily functioning and well-being (mentally and emotionally).

### Components of Health-Related Fitness

#### Aerobic Capacity

- Mile Run
- Pacer

#### Muscular Fitness

1. Strength & Endurance
  - Curl-ups
  - Push-ups
2. Strength & Flexibility
  - Trunk Lift
3. Flexibility
  - Sit & Reach

#### Body Composition

- BMI
- Bio-electrical Impedance

### MEASURING HEALTH-RELATED FITNESS

When participating in the FitnessGram assessments, each assessment is used as a measurement of risk that is associated with sedentary lifestyles. Each assessment addresses the health-related components of fitness: Aerobic Capacity, Body Composition and Muscular Fitness (Strength, Endurance and Flexibility). The risk factors that are associated with the different assessments are: coronary heart disease, stroke, diabetes, increased blood pressure and cholesterol, low back pain, and low levels of functional health (ability to perform daily activities). If you are able to reach or exceed the Healthy Fitness Zone (HFZ) you are considered to be at a lower risk of acquiring/developing diseases that are linked to inactivity.

The range of the HFZ that is closest to the Needs Improvement category represents a minimal level of fitness that is associated with good health. It is common for you to reach the HFZ in one area of health-related fitness, but not another. It is possible for you to exceed the HFZ, but this would not be an appropriate goal for all students to set. If you are striving to achieve a high level of performance (your focus is on performance and not just health) you can set goals outside of the HFZ. If a student is below the HFZ, Needs Improvement (NI), this score is an indicator that the student may need to pay close attention to this area of health-related fitness and should set goals to improve fitness within that component. During childhood or adolescence, a student may not experience any negative effects of low fitness within this area of health-related fitness, but it is possible that these low levels of fitness may result in decreased health throughout adulthood.

It is important to remember that the assessments are only assessing one part of the body. Although it is important to practice the tests to improve your technique or efficiency of your movement, developing muscular balance is important. For example, you should not focus on just developing strength in your abdominals and without developing the musculature that supports the spine. To improve health-related fitness it is most important to focus on being physically active by participating in a variety of activities that will strengthen your muscles and cardio respiratory system through movement.

Answer the following questions by highlighting the appropriate answer in the text or provide the answer as directed.

### MAKING PHYSICAL ACTIVITY A DAILY HABIT

- How many days per week are **YOU** physically active? \_\_\_\_\_
- How many total minutes are you physically active in one day? \_\_\_\_\_
- Provide two examples of activities that you participate in.
  1. \_\_\_\_\_
  2. \_\_\_\_\_

### FACTORS INFLUENCING YOUR PERFORMANCE

- For each of the factors that influence your performance on the fitness assessments, identify something that positively supports your performance:
  1. Environment: \_\_\_\_\_
  2. Physical Activity: \_\_\_\_\_
  3. Growth/Maturation: \_\_\_\_\_
  4. Heredity: \_\_\_\_\_
- For each of the factors that influence your performance on the fitness assessments, identify something that may negatively influence your performance:
  1. Environment: \_\_\_\_\_
  2. Physical Activity: \_\_\_\_\_
  3. Growth/Maturation: \_\_\_\_\_
  4. Heredity: \_\_\_\_\_
- Why do the requirements for physical activity decrease as you get older?
 

\_\_\_\_\_

\_\_\_\_\_
- Circle what grows first:  
Bones or Muscles
- Testosterone increases (circle):  
Lean Body Mass or Fat Mass
- If your father was an Olympic Marathon runner, what assessment would your family heredity positively influence?  
\_\_\_\_\_

Days Per Week	Minimum Length of Each Exercise Bout	Total Number of Minutes Per Day	Intensity Level	Steps Per Day	Types of Activities
<b>CHILDHOOD (5-12)</b>					
7	15	60	Vigorous	12,000-15,000	Tagging Games, Activities that allow for bursts of activity with periods of rest, etc. (During day-time hours children should not be sedentary for more than 2 hours).
<b>ADOLESCENCE (13-18)</b>					
7	20	60	Moderate to Vigorous	11,000-13,000	Games, Sports, Walking as a Form of Transportation, Physical Education, etc.
<b>ADULTHOOD (19+)</b>					
5-7	15	30-60	Moderate to Vigorous	10,000	Aerobic and Anaerobic Activities, Muscular Fitness (Balance/Stability, Agility, Coordination, Core Strength, Flexibility)

### IT MAKES A DIFFERENCE...

The differences in performance on the tests are influenced by many different factors. When looking at your performance on the different assessments, it is important to realize that there are many factors that will influence how well you perform on each assessment.

- Environment
- Physical Activity Levels
- Growth and Maturation
- Heredity

Within the daily environment that you live in, there are many different factors that will influence your participation in physical activity and ultimately influence your performance on the individual assessments:

- Personal and Family Nutritional Habits
- Family Activity Patterns
- Air Quality and Weather Patterns
- Opportunities for Physical Activity in the Community and/or Number of Fast Food Restaurants in the Community

Recommendations for the amount of physical activity are different as you go through the different stages of life. The reason for the different recommendations is due to the differences in abilities, interests, and daily responsibilities. Most importantly, you must remember to be active on a daily basis (make it a habit like brushing your teeth on a daily basis) and that you may add up periods of activity throughout the day to reach your overall goal. It is important to remember that you are not a miniature adult and do not have to exercise like an adult to improve your health and fitness levels. Adults would benefit from moving more throughout the day rather than just once a day; however, they are often limited by the responsibilities that they have.

Everyone physically matures at different times. Your physical growth and current stage of maturation may help you perform better on some tests and not as well on others. Due to changes in hormone production during puberty boys will have an increase in testosterone that increases lean body mass (muscle), and girls have an increase in estrogen that increases fat mass and increases flexibility. However, these physiological changes (changes in the body) do not mean that a girl will not be able to perform better on muscular strength and endurance assessments in comparison to a boy her age. This is also true of boys performance on flexibility assessments. Growth spurts will also affect your performance because the lengthening of the bones occurs before the lengthening of the muscles. Rapid growth can lead to decreased flexibility and ability to produce force in muscles.

Another factor that influences your performance on the different assessments is related to your heredity (the traits that are passed along to you by your parents). Just as your hair color is influenced by your heredity, your muscle fiber types and capacity/ability for your heart and lungs to do work are also influenced by your heredity.