The following is an optional Physical Education Assignment for students to do over Spring Break. It should take several days to complete the assignment.

Objectives: Measure your heart rate at rest and after performing 15 minutes of exercise for five different activities. Create a bar graph showing your results and develop a personal exercise plan for one week.

Purpose: To notice the effects different types of exercise have on your heart rate. It is important that you learn how to monitor yourself while exercising and know what heart rate to expect from different activities. Developing your own exercise plan will make sure you get the exercise you need by doing things you like to do.

Assignment: Record your resting heart rate*.
Choose five of the activity types from the table below. If you choose 'floor exercises' or 'other' write in the specific activity you do.

Start one activity and do it for at least fifteen minutes.

After fifteen minutes, check your heart rate.
Record it on the chart.

Continue your activity or begin a cool-down.
Repeat with the other four activities.
If you choose to do more then one activity on the same day, allow thirty minutes in between activities for your heart rate to return to resting.

When you are finished with all of your activities, use the table to complete the bar graph on page 3.

Heart Rate Table

| Resting | Walking | Jogging/ <br> Speed <br> Walking | Jumping <br> Rope | Floor <br> Exercises <br> (yoga, push- <br> ups, squats, <br> etc.) | Cycling | Other <br> (martial arts, <br> zUMBA, vaulting, <br> swimming, etc.) |  |
| :---: | :--- | :--- | :---: | :---: | :---: | :--- | :--- |
| Heart <br> Rate <br> (bpm) |  |  |  |  |  |  |  |

[^0]*Finding your heart rate:

To check your pulse you have to put two or three fingers over an artery in your neck and count how many times it bulges. To find the artery, place your first three fingers on your neck under your jaw. Use gentle pressure and slide your fingers forward a little bit. You are feeling for a spot that keeps bulging and relaxing. Each bulge represents one heartbeat.

Find your pulse. Watch a clock, set a timer, or have someone watch the time for you. Count the number of bulges you feel in one minute. That is your heart rate.
Your heart rate is measured in beats per minute (bmp). For example, my resting heart rate is 70bpm.

You can count your beats for one minute or you can use one of the following equations:

| Count beats for ___ seconds | Multiply by ___ to get bpm |
| :---: | :---: |
| 30 | 2 |
| 20 | 3 |
| 15 | 4 |
| 10 | 6 |

What causes the bulging and relaxing?
Your heart is like a pump that collects blood and pushes it through your body by squeezing and relaxing. A heartbeat is one cycle of squeeze and relax. When the heart relaxes it fills up with blood. When it squeezes it pushes the blood out of the heart and into arteries. Arteries are tubes that blood travels through to get to the rest of your body. The bulging in the artery is caused by blood passing through after it was pushed out of the heart. The artery relaxes while the heart collects more blood. The bulging and relaxing cycle never stops, but can get faster or slower.

Create a bar graph using the information from your Heart Rate Table on page 1.

Label the y-axis. Start with the label 'resting' in the bottom left.
Add the labels for the five activities you did to the right of 'resting.'

Use a ruler to make a bar showing the resting heart rate and the heart rate for each of the activities. Use a different color for each bar.

Heart Rate by Activity


Use the bar graph to answer the following questions.

1. Which activity increased your heart rate the most?
2. What is the difference, in beats per minute, between your highest heart rate and your resting heart rate?
3. List the activities in order from lowest heart rate to highest heart rate.
4. Which of these activities did you enjoy?

Getting the right amount of exercise is important for your brain and body functions. Experts recommend that people from ages 6-17 need 60 minutes of exercise every day. The exercise does not have to be all at one time. All different types of exercise count (climbing, yoga, martial arts, walking, running, kickball, etc.). Make a plan for getting 60 minutes of exercise per day for the next week. Use the table or write your plan in the space below.

Weekly Exercise Plan

|  | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Activity 1 <br>  <br> time spent |  |  |  |  |  |  |  |
| Activity 2 <br>  <br> time spent |  |  |  |  |  |  |  |
| Activity 3 <br>  <br> time spent |  |  |  |  |  |  |  |
| Activity 4 <br>  <br> time spent |  |  |  |  |  |  |  |
| Activity 5 <br>  <br> time spent |  |  |  |  |  |  |  |
| Total Time <br> Exercising |  |  |  |  |  |  |  |


[^0]:    *See page 2 for information on finding your heart rate.

