



[KidsHealth.org/classroom](http://KidsHealth.org/classroom)

## Teacher's Guide

This guide includes:

- Standards
- Related Links
- Discussion Questions
- Activities for Students
- Reproducible Materials

## Standards

This guide correlates with the following National Health Education Standards:

Students will:

- Comprehend concepts related to health promotion and disease prevention to enhance health.
- Demonstrate the ability to access valid information and products and services to enhance health.
- Demonstrate the ability to use interpersonal communication skills to enhance health and avoid or reduce health risks.
- Demonstrate the ability to use decision-making skills to enhance health.
- Demonstrate the ability to use goal-setting skills to enhance health.
- Demonstrate the ability to practice health-enhancing behaviors and avoid or reduce health risks.

National Health Education Standards:  
<http://www.cdc.gov/healthyschools/sher/standards/index.htm>

These activities will help your students learn about the heart and cardiovascular system.

## Related KidsHealth Links

### Articles for Kids:

#### Your Heart & Circulatory System

[KidsHealth.org/en/kids/heart.html](http://KidsHealth.org/en/kids/heart.html)

#### What's Blood?

[KidsHealth.org/en/kids/blood.html](http://KidsHealth.org/en/kids/blood.html)

#### Heart Disease

[KidsHealth.org/en/kids/heart-disease.html](http://KidsHealth.org/en/kids/heart-disease.html)

#### I Had Heart Surgery: Noah's Story

[KidsHealth.org/en/kids/story-noah.html](http://KidsHealth.org/en/kids/story-noah.html)

#### Video: Heart & Circulatory System

[KidsHealth.org/kid/stay\\_healthy/fit/work\\_it\\_out.html](http://KidsHealth.org/kid/stay_healthy/fit/work_it_out.html)

#### Quiz: Heart & Circulatory System

[KidsHealth.org/en/kids/csquiz.html](http://KidsHealth.org/en/kids/csquiz.html)

#### Activity: Heart & Circulatory System

[KidsHealth.org/en/kids/bfs-csactivity.html](http://KidsHealth.org/en/kids/bfs-csactivity.html)

#### Word Find: Heart & Circulatory System

[KidsHealth.org/en/kids/bfs-cswordsearch.html](http://KidsHealth.org/en/kids/bfs-cswordsearch.html)

#### Words to Know (Heart Glossary)

[KidsHealth.org/en/kids/heart-glossary.html](http://KidsHealth.org/en/kids/heart-glossary.html)

#### Why Exercise Is Cool

[KidsHealth.org/en/kids/work-it-out.html](http://KidsHealth.org/en/kids/work-it-out.html)

### Resources for Teachers:

#### Classroom Exercise Breaks for Elementary Students

[KidsHealth.org/en/parents/elementary-exercises.html](http://KidsHealth.org/en/parents/elementary-exercises.html)

#### Cardiomyopathy Special Needs Factsheet

[KidsHealth.org/en/parents/cardiomyopathy-factsheet.html](http://KidsHealth.org/en/parents/cardiomyopathy-factsheet.html)

#### Congenital Heart Defects Special Needs Factsheet

[KidsHealth.org/en/parents/heart-defects-factsheet.html](http://KidsHealth.org/en/parents/heart-defects-factsheet.html)

#### Hemophilia Special Needs Factsheet

[KidsHealth.org/en/parents/hemophilia-factsheet.html](http://KidsHealth.org/en/parents/hemophilia-factsheet.html)

#### Sickle Cell Disease Special Needs Factsheet

[KidsHealth.org/en/parents/sickle-cell-factsheet.html](http://KidsHealth.org/en/parents/sickle-cell-factsheet.html)

## Discussion Questions

*Note: The following questions are written in language appropriate for sharing with your students.*

1. The heart is an important part of the cardiovascular system. What can you do to keep your heart healthy? What should you avoid doing?
2. What can happen if the cardiovascular system becomes unhealthy?
3. Your heart is a muscle about the size of your fist. Compare it to other muscles. Can you control it like you do the muscles in your arms or legs? Can you exercise it like you do other muscles?



## Activities for Students

*Note: The following activities are written in language appropriate for sharing with your students.*

### Pump It Up!

#### Objectives:

Students will:

- Conduct several experiments to determine how the heart rate is affected by physical activity and record their results on a data table
- Answer questions regarding their experiments
- Create a weekly exercise plan

#### Materials:

- Stop watch
- Jump ropes
- Stairs
- Space to run, walk, and jump rope
- Computers
- "Heart Rate Data Table" handout

#### Class Time:

1 hour

#### Activity:

In the first part of this activity, you'll conduct several experiments to learn how your heart rate changes when you're doing something. Record your findings on the "Heart Rate Data Table" and then answer a few questions. The handout contains five activities, each of which you'll do for 30 seconds, 1 minute, and 3 minutes. After each time period, take your pulse and record that number in the chart.

Now it's time to create a weekly exercise plan! You'll have to do some research to find out how much as well as what kind of exercise is recommended to keep the cardiovascular system healthy. Also, use what you learned from your experiments to help create an exercise plan that you'll be able to stick with. Plan what you will do for each day of the week and how long you will perform each activity.

#### Extensions:

1. Create a bar or line graph using the information in the "Heart Rate Data Table."
2. Create an exercise journal and write in it every day for a month.



## Vascular Verse

### Objective:

Students will:

- Compose original haikus about the cardiovascular system

### Materials:

- Computer with Internet access
- Pencils or colored pencils
- "Heart Haiku" handout

### Class Time:

30 minutes

### Activity:

A haiku is a type of Japanese poem. It contains 17 syllables in all: five in the first line, seven in the middle line, and five in the last line. Write a haiku about the cardiovascular system that describes something about how this system works.

Before you begin, you'll have to do some research at KidsHealth.org to find out about how the cardiovascular system works, the different parts that comprise this system, and what each does. After you have completed your haiku, you can illustrate it.

### Extension:

Haikus and accompanying illustrations can be collected and made into a class book titled Cardiovascular Verse.

## Reproducible Materials

### Handout: Heart Rate Data Table

[KidsHealth.org/classroom/3to5/body/systems/cardiovascular\\_handout1.pdf](http://KidsHealth.org/classroom/3to5/body/systems/cardiovascular_handout1.pdf)

### Handout: Heart Haiku

[KidsHealth.org/classroom/3to5/body/systems/cardiovascular\\_handout2.pdf](http://KidsHealth.org/classroom/3to5/body/systems/cardiovascular_handout2.pdf)



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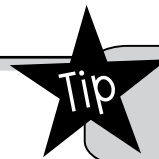
Date: \_\_\_\_\_

Instructions: Perform each activity for 30 seconds, 1 minute, and 3 minutes. Rest a minute or two between each activity and time periods. After each time period, take your pulse and record that number in the chart below. Then, answer the questions.



**Heart Rate Data Table**

| Activity           | 30 Seconds | 1 Minute | 3 Minutes |
|--------------------|------------|----------|-----------|
| Using the Computer |            |          |           |
| Climbing Stairs    |            |          |           |
| Jumping Rope       |            |          |           |
| Running            |            |          |           |
| Walking            |            |          |           |



**Tip** To take your pulse, count your heartbeats for 30 seconds and multiply that number by 2.

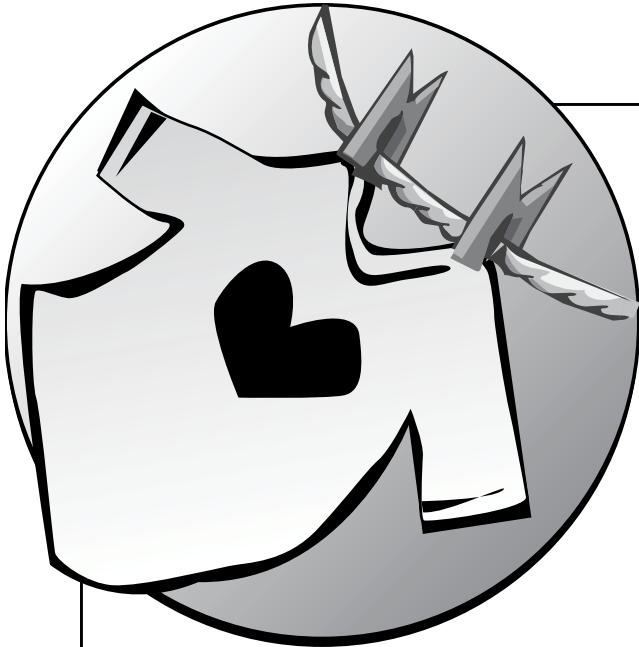
1. Which activity made your heart beat the fastest?
2. Which activity made your heart beat the slowest?
3. What's the difference in your pulse between 3 minutes of running and 3 minutes of using the computer?
4. Which activities do you think provided the greatest health benefits?  
Do you think you could do these activities for 30 minutes? Why?
5. Which activity did you enjoy the most? The least?
6. Estimate how much time per day you spend doing things while sitting.
7. Estimate how much time per day you spend doing things that involve moving around.



Name: \_\_\_\_\_

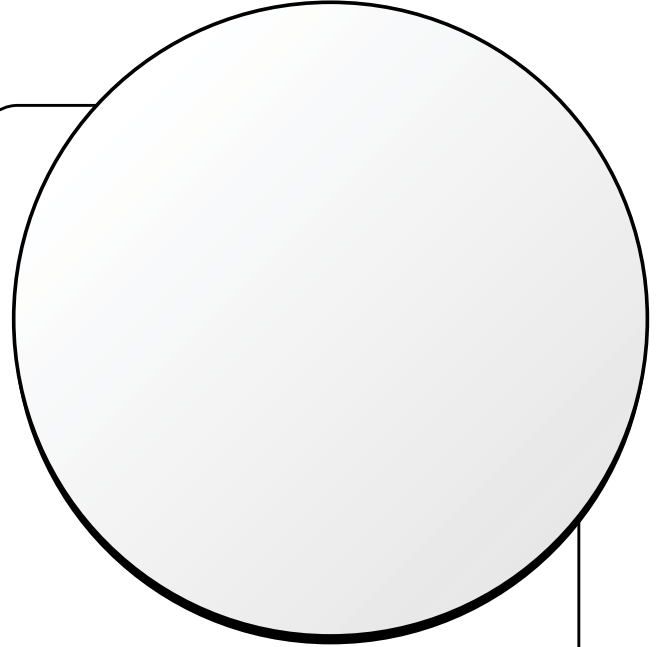
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Instructions: Compose a haiku about the cardiovascular system that describes something about how this system works. Remember, a haiku has five syllables on the first line, seven on the middle line, and five on the last line. After you've completed your haiku, illustrate it.



Example:

Carbon dioxide,  
dirty laundry of the cells,  
washed away by blood.



**Heart Haiku**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_