



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 use interpersonal communication skills to enhance health and avoid or reduce health risks.
- Demonstrate the ability to advocate for personal, family, and community health.

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

These activities will help students understand why adopting and maintaining heart-healthy habits is so important.

Related KidsHealth Links

Articles for Teens:

Heart and Circulatory System
TeensHealth.org/en/teens/heart.html

Blood
TeensHealth.org/en/teens/blood.html

Hypertension (High Blood Pressure)
TeensHealth.org/en/teens/hypertension.html

Health problems that can affect the heart
TeensHealth.org/en/teens/diseases-conditions/heart

When Being Overweight Is a Health Problem
TeensHealth.org/en/teens/obesity.html

Why Exercise Is Wise
TeensHealth.org/en/teens/exercise-wise.html

MyPlate Food Guide
TeensHealth.org/en/teens/myplate.html

How Much Food Should I Eat?
TeensHealth.org/en/teens/portion-size.html

What Is Cholesterol?
TeensHealth.org/en/teens/cholesterol.html

Resources for Teachers:

Cardiomyopathy Special Needs Factsheet
KidsHealth.org/en/parents/cardiomyopathy-factsheet.html

Congenital Heart Defects Special Needs Factsheet
KidsHealth.org/en/parents/heart-defects-factsheet.html

Hemophilia Special Needs Factsheet
KidsHealth.org/en/parents/hemophilia-factsheet.html

Sickle Cell Disease Special Needs Factsheet
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. What does the heart do? How do its structures help it pump and distribute blood?
2. The heart and circulatory system contain different kinds of blood vessels - mainly arteries, veins, and capillaries. What does each do?
3. Why is it so important to try to keep the heart and circulatory system healthy? What problems can people have? What can you do to maintain good cardiovascular health?



Activities for Students

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

Surgeon General for a Day

Objectives:

Students will:

- Learn the effects that certain behaviors can have on cardiovascular health
- Gain an understanding of the value of public health campaigns
- Advocate for change in their school community

Materials:

- Computer with Internet access
- Pencil or pen and paper, or computer word processing program and printer

Class Time:

60 minutes

Activity:

Here's part of the U.S. surgeon general's job description, according to SurgeonGeneral.gov: "As the nation's doctor, the surgeon general provides Americans with the best scientific information available on how to improve their health and reduce the risk of illness and injury."

Now imagine that you're the surgeon general. First, read through the TeensHealth.org articles related to the cardiovascular system, then write a letter to U.S. high school students explaining why it's so important to eat a healthy diet and be active every day.

Or, if you don't think the surgeon general would be influential among teens, think of a person whose advice teens would take. It could be anyone from an athlete to an actor. Then write a message from this person encouraging high school students to adopt heart-healthy habits.

Make sure to explain how certain healthy behaviors can help prevent specific health problems related to the heart and cardiovascular system. Research and include statistics that you think will make students stop and think - and make positive changes.



Complete Cardio

Objectives:

Students will:

- Learn the basics about the parts and functions of the circulatory system.

Materials:

- "Complete Cardio" handout and pencil or pen
- Computer with Internet access

Class Time:

30 minutes

Activity:

Make sure you know the basics about how the heart and circulatory system work by completing the "Complete Cardio" handout. You can use the TeensHealth.org article, Heart and Circulatory System, as a guide.

Extensions:

List ways to help prevent high blood pressure and high cholesterol levels. Turn your tips into a reminder sheet for the whole family, to put on your fridge at home.



Heart Parts

Objectives:

Students will:

- Learn the basic parts and structure of the heart

Materials:

- "Heart Parts" handout and pencil or pen
- Computer with Internet access

Class Time:

30 minutes

Activity:

Label the parts of the heart in the "Heart Parts" handout. You can use the TeensHealth.org article, Heart and Circulatory System, as a guide.

Extension:

Write an essay explaining how blood travels through the heart and throughout the body. Start in the right atrium where the blood enters the heart and end with the vena cava veins returning blood to the heart - one complete cardiac cycle.

Reproducible Materials

Handout: Heart Parts

KidsHealth.org/classroom/9to12/body/systems/cardiovascular_handout1.pdf

Handout: Heart Parts Answer Key

KidsHealth.org/classroom/9to12/body/systems/cardiovascular_handout2.pdf

Handout: Complete Cardio

KidsHealth.org/classroom/9to12/body/systems/cardiovascular_handout3.pdf

Handout: Complete Cardio Answer Key

KidsHealth.org/classroom/9to12/body/systems/cardiovascular_handout4.pdf



Name: _____

Date: _____

Complete Cardio

Instructions: Complete each fact about the cardiovascular system using terms from the Word Bank

Word Bank

alveoli

capillaries

pulmonary circulation

ventricles

arteries

chambers

systemic circulation

atria

hypertension

veins

1. The heart has four _____ that are enclosed by thick, muscular walls.
2. The upper part of the heart is made up of two chambers, called the right and left _____, which receive the blood entering the heart.
3. The bottom part of the heart is divided into two chambers, called the right and left _____, which pump blood out of the heart.
4. _____ is a short loop from the heart to the lungs and back again.
5. _____ sends blood from the heart to all the other parts of the body and back again.
6. Blood vessels that carry blood away from the heart are called _____.
7. Blood vessels that carry blood back to the heart are called _____.
8. A network of tiny _____ connects the arteries and veins, delivers nutrients and oxygen to the cells, and removes waste products such as carbon dioxide.
9. In the lungs, gases are exchanged between capillary walls and millions of tiny air sacs called _____.
10. High blood pressure is also called _____.



Complete Cardio Answer Key

Word Bank

alveoli

capillaries

pulmonary circulation

ventricles

arteries

chambers

systemic circulation

atria

hypertension

veins

1. The heart has four chambers that are enclosed by thick, muscular walls.
2. The upper part of the heart is made up of two chambers, called the right and left atria, which receive the blood entering the heart.
3. The bottom part of the heart is divided into two chambers, called the right and left ventricles, which pump blood out of the heart.
4. Pulmonary circulation is a short loop from the heart to the lungs and back again.
5. Systemic circulation sends blood from the heart to all the other parts of the body and back again.
6. Blood vessels that carry blood away from the heart are called arteries.
7. Blood vessels that carry blood back to the heart are called veins.
8. A network of tiny capillaries connects the arteries and veins, delivers nutrients and oxygen to the cells, and removes waste products such as carbon dioxide.
9. In the lungs, gases are exchanged between capillary walls and millions of tiny air sacs called alveoli.
10. High blood pressure is also called hypertension.

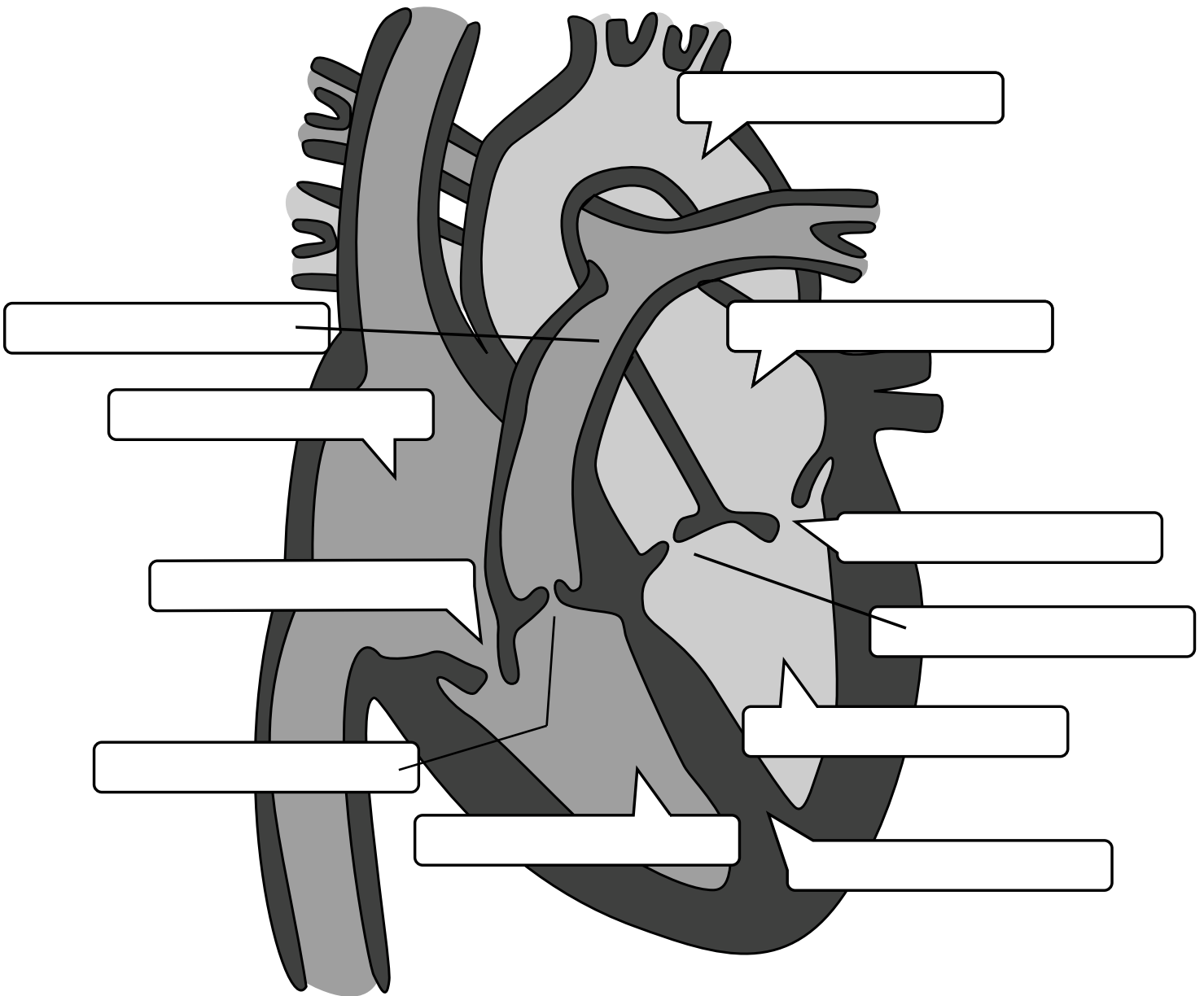


Name: _____

Date: _____

Heart Parts

Instructions: Label the parts of the heart.





Heart Parts Answer Key

