

BLOOD, HEART, AND CIRCULATION

Grade Levels: 4-8 21 minutes NEW DIMENSION MEDIA 1999

DESCRIPTION

The heart is a pump, moving blood throughout the body via arteries and veins. Uses graphics to clarify the circulatory system and its functions. Notes the effects of exercise, nutrition, smoking, and infections on this system, and briefly illustrates coagulation, nosebleeds, and vaccinations.

ACADEMIC STANDARDS

Subject Area: Life Sciences

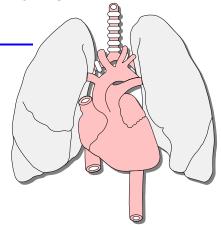
- Standard: Understands the structure and function of cells and organisms
 - Benchmark: Knows that multicellular organisms have a variety of specialized cells, tissues, organs, and organ systems that perform specialized functions (e.g., digestion, respiration, reproduction, circulation, excretion, movement, control and coordination, protection from disease)

Subject Area: Physical Education

- Standard: Understands the benefits and costs associated with participation in physical activity
 - Benchmark: Knows factors that inhibit physical activity (e.g., substance abuse)

INSTRUCTIONAL GOALS

- 1. To study the construction and function of the blood-vessel (circulatory) system.
- 2. To illustrate which health problems can arise within the circulatory system and how to care for them.
- 3. To describe how the heart works as a pump.



VOCABULARY

- 1. arteries
- 2. atrium
- 3. capillaries
- 4. coagulates
- 5. contagious
- 6. electrocardiograph
- 7. heart attack
- 8. immune
- 9. injection
- 10. intestines
- 11. lungs' alveoli

- 12. O, A, and B
- 13. puberty
- 14. resistant
- 15. resting heart rate
- 16. stroke
- 17. ultrasonography
- 18. vaccination
- 19. valves
- 20. veins
- 21. ventricle
- 22. white blood corpuscles

AFTER SHOWING

Discussion Items and Questions

- 1. Where is your heart? What do you feel there?
- 2. How large do you think your heart is?
- 3. What do you actually need your heart for?
- 4. Describe how blood circulates through the atriums and ventricles and then through the body.

Applications and Activities

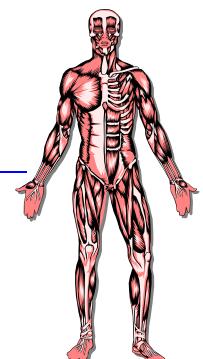
- 1. Research how the heart regulates its rhythm.
- 2. Research further the blood transportation system.
- 3. Research the composition of blood.
- 4. Find out more about the nutrient needs of blood.

RELATED RESOURCES



Captioned Media Program

- The Human Heart #3478
- Pumping Life: The Heart and Circulatory System #2516



World Wide Web



The following Web sites complement the contents of this guide; they were selected by professionals who have experience in teaching deaf and hard of hearing students. Every effort was made to select accurate, educationally relevant, and "kid-safe" sites. However, teachers should preview them before use. The U.S. Department of Education, the National Association of the Deaf, and the Captioned Media Program do not endorse the sites and are not responsible for their content.

ALL ABOUT THE HEART

http://www.kidshealth.org/kid/body/heart_nosw.html

Learn about the heart, including heart parts, "It's Great to Circulate," "Blood Gets Around," and more.

THE HEART: AN ONLINE EXPLORATION

http://sln.fi.edu/biosci/heart.html

From the Franklin Institute, explore the heart, following the blood through the vessels, learn how to have a healthy heart, read about the history of heart science.

CIRCULATORY SYSTEM

http://tgjunior.thinkquest.org/5777/cir1.htm

Learn how the blood gets around the body, explains the definitions of oxygen, carbon dioxide, and other words. Click on other topics such as "Heart," "What Is Blood," or click on the icon to go on a tour.

