



Anatomy Unit

This unit begins by introducing students to the human heart, lungs and blood vessels as part of the cardiovascular system and identifies how disease emerges in the system. Then it exposes students to heart disease and stroke warning signs and what to do if they suspect someone is in crisis. (Objectives may overlap among lessons to reinforce content and skills.)

ACTIVITY	DESCRIPTION	OBJECTIVES
Heart=Muscle Lesson	Timed for 60 seconds, students attempt to squeeze a foam heart 90 times to identify a child's resting heart rate.	<ul style="list-style-type: none"> Each student will distinguish the heart's function and resting rate. Each student will point out the heart's position. Each student will differentiate the three types of muscle in the human body and create a rationale for their coexistence.
Circulation Simulation	With a 6X12 foot floor mat of the cardiovascular system, students travel the path of an oxygenated red blood cell from the lungs, to the heart, out the body and back. Returning to the lungs, students (as red blood cells) release carbon dioxide and re-oxygenate.	<ul style="list-style-type: none"> Each student will compare and contrast heart structure and function. Each student will create a flow chart depicting circulation and the role of the heart, lungs and blood. Each student will infer warning signs for heart attack and stroke based on the physiology of circulation.
Lard Lesson	Students match packets of fat with meals by adding up fat grams on the nutrition facts of food cards.	<ul style="list-style-type: none"> Each student will differentiate foods for frequency, based on nutrients. Each student will conclude balancing meals is a strategy for obtaining essential nutrients to support a healthy body and prevent cardiovascular disease.
Sticky Blood	Students compare and contrast the consistency of water vs. a water and powdered sugar mixture. The mixture (which clogs a straw) is analogous to atherosclerosis. Then a procedure called angioplasty (to widen an artery narrowed with plaque) is demonstrated using a slinky, balloon and pump.	<ul style="list-style-type: none"> Each student will compare the straw mixture and blood vessel conditions with relation to atherosclerosis. Each student will paraphrase risk factors or prevention strategies, warning signs and current treatments for cardiovascular disease.