



# Blood and Guts: The Amazing Human Machine

**Provided by:**

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Information	Program Description
Ages 10-14	Discover the ins and outs of the body and its major systems. Students will build a giant cell, make a lung model, calculate their heart rate, make a model arm, examine x-rays, and explore how different tastes are more about your brain than your tongue.
Curriculum Format	Each lesson can be presented in 45-60 minutes.  Teaching Guide with complete instructions is provided.  Teaching Kit with materials needed to present lessons is provided. User may need to provide standard classroom supplies (pencils, scissors, glue). If a lesson requires perishable items (e.g. milk), user is responsible for these purchases.

Lesson	Overview
One: Cells and Organs	Students learn that all living things are made of cells, the parts of a cell, as well as the important job cells do.
Two: Airways to the Inside (Lungs)	Students learn where the lungs are located, what they look like and what happens when we breathe.
Three: The Double Barrel Pumper (Heart)	Students learn about the heart, where its located, what it looks like and how it pumps blood through the body.
Four: Down the Food Tube (Digestion)	Students learn about the digestive process, which is the process our bodies use to break down food so we can use it.
Five: The Mighty Movers (Bones and Muscles)	Students learn about bones, muscles and joints and how they function in our bodies.
Six: Mission Control (Brain and Nervous System)	Students learn the brain is the control center of the body, regulating our reflexes, senses and memory.

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