Human Body in Motion Unit Visuals: Table of Contents

Overhead Transparencies

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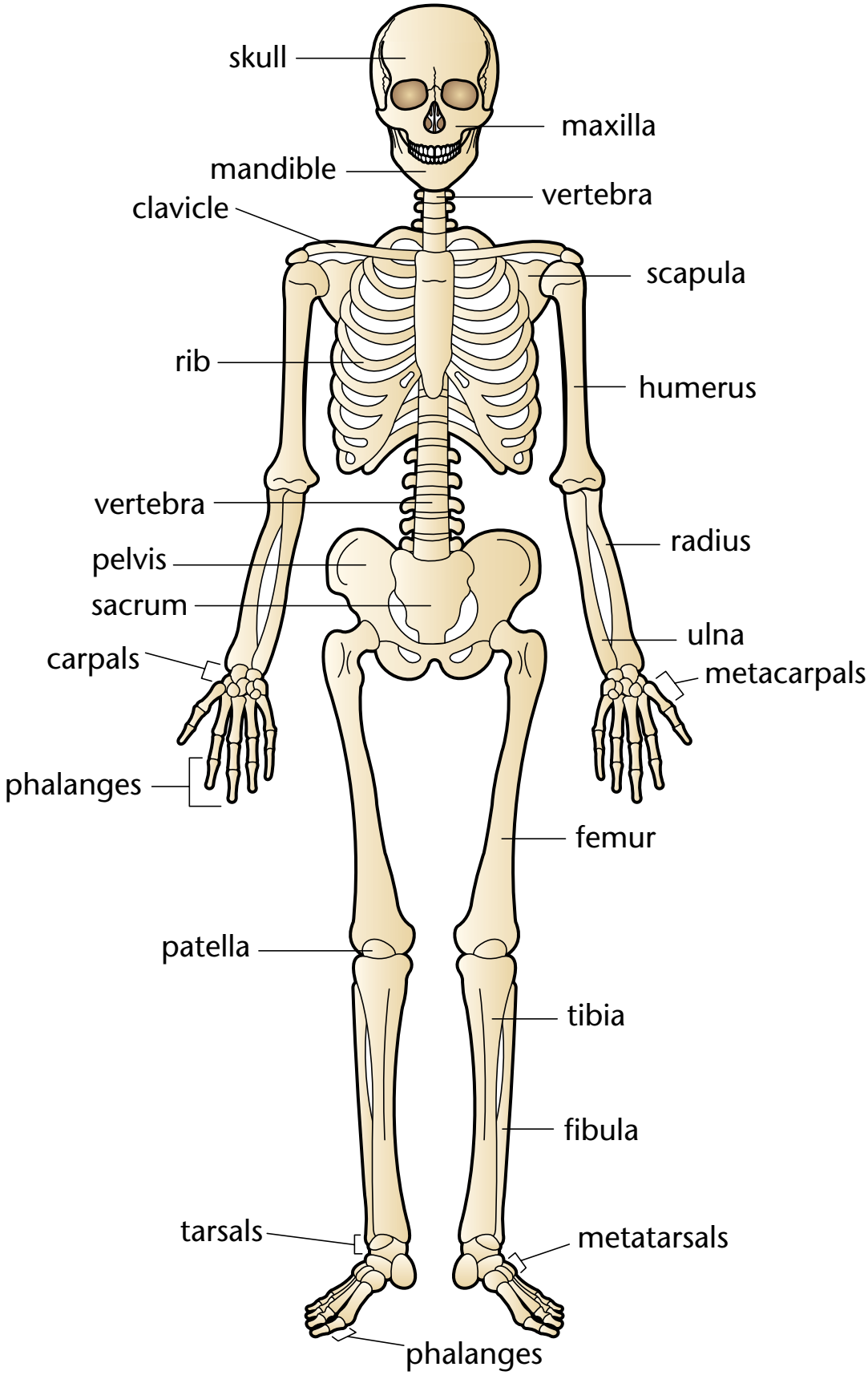
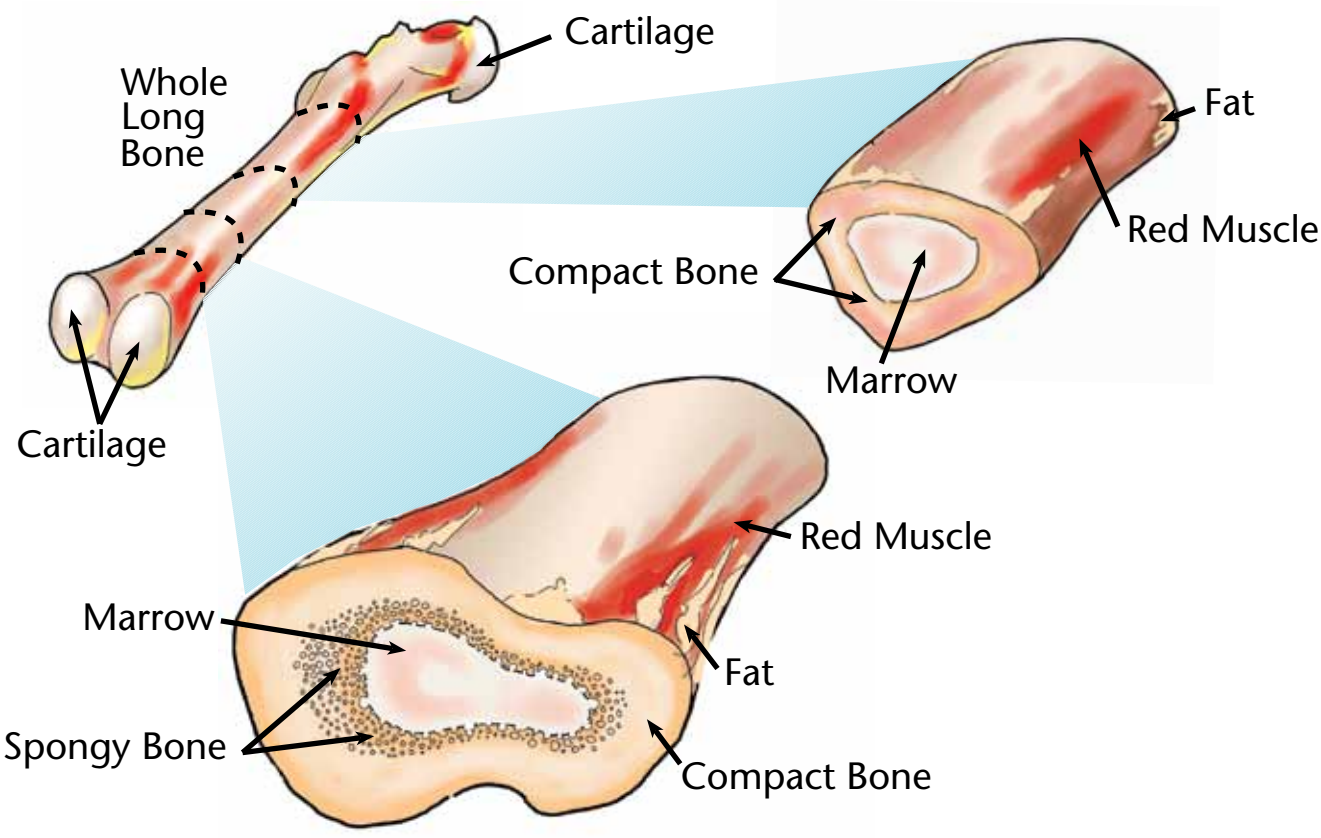
Human Skeleton



Overhead Transparency: Human Skeleton (Lesson 2)
Human Body in Motion Visual 1

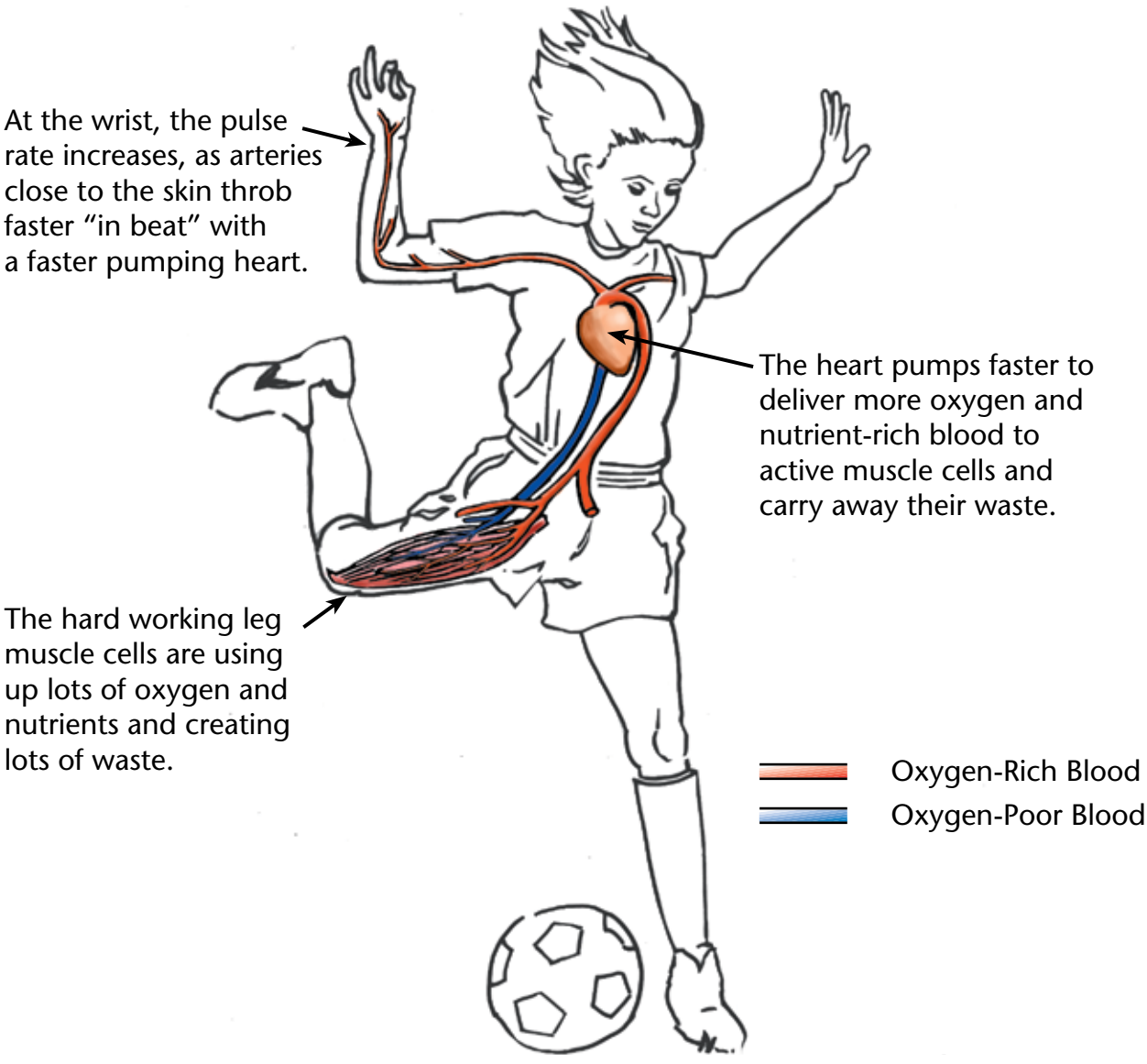
Bone Structure



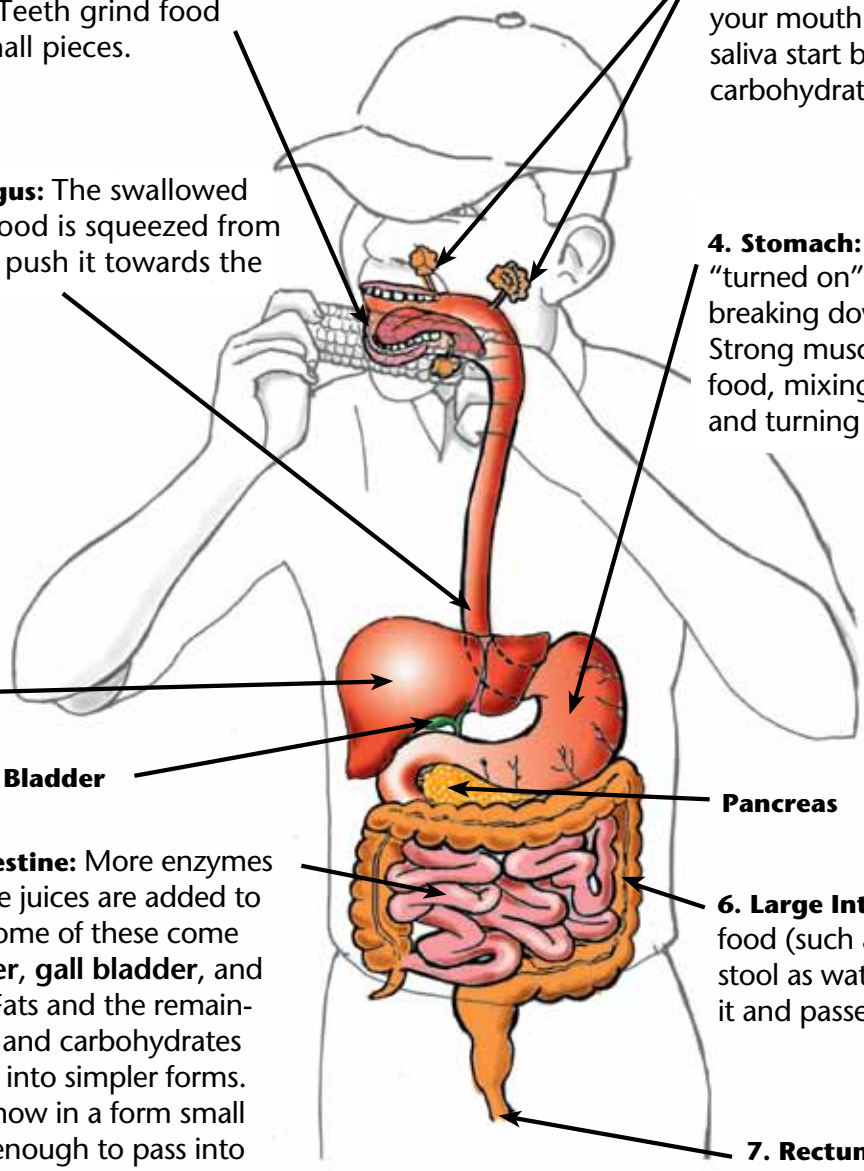
Cross Section of a Long Bone

Overhead Transparency: Bone Structure (Lesson 6)
Human Body in Motion Visual 2

The Circulatory System



The Digestive System



1. Mouth: Teeth grind food up into small pieces.

2. Salivary Glands: Saliva flows from these glands into your mouth. Enzymes in the saliva start breaking down carbohydrates.

3. Esophagus: The swallowed "ball" of food is squeezed from behind to push it towards the stomach.

4. Stomach: Stomach enzymes, "turned on" by acids, began breaking down proteins. Strong muscles "knead" the food, mixing in the enzymes and turning the food to mush.

Liver

Gall Bladder

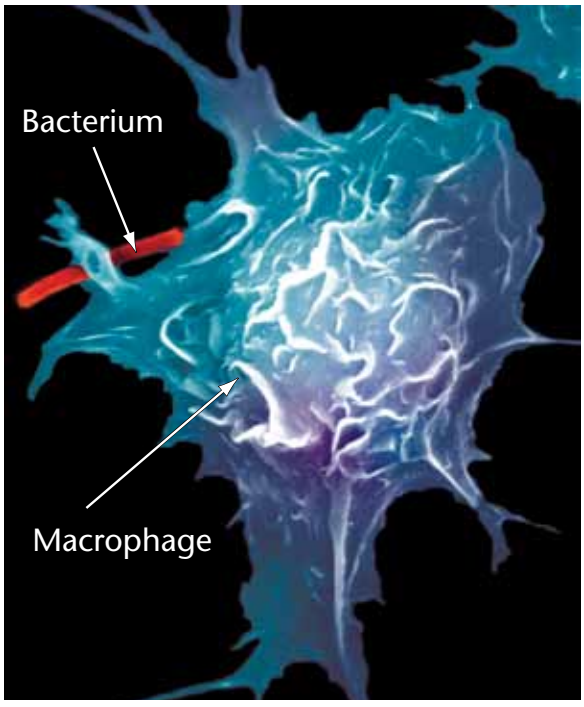
Pancreas

5. Small Intestine: More enzymes and digestive juices are added to the mush (some of these come from the **liver**, **gall bladder**, and **pancreas**). Fats and the remaining proteins and carbohydrates are digested into simpler forms. The food is now in a form small and simple enough to pass into the blood.

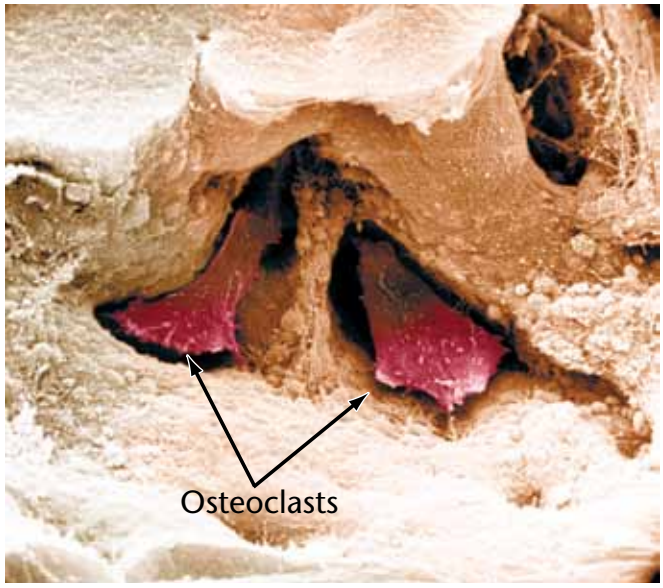
6. Large Intestine: Undigested food (such as fiber) becomes a stool as water is absorbed from it and passed to the blood.

7. Rectum: The stool is stored here until it's time to "go to the bathroom."

Amazing Cells

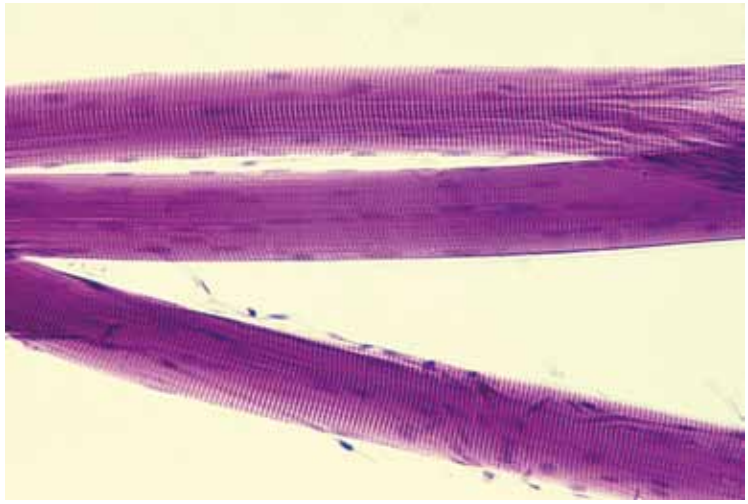


A macrophage wrapping around a bacterium.



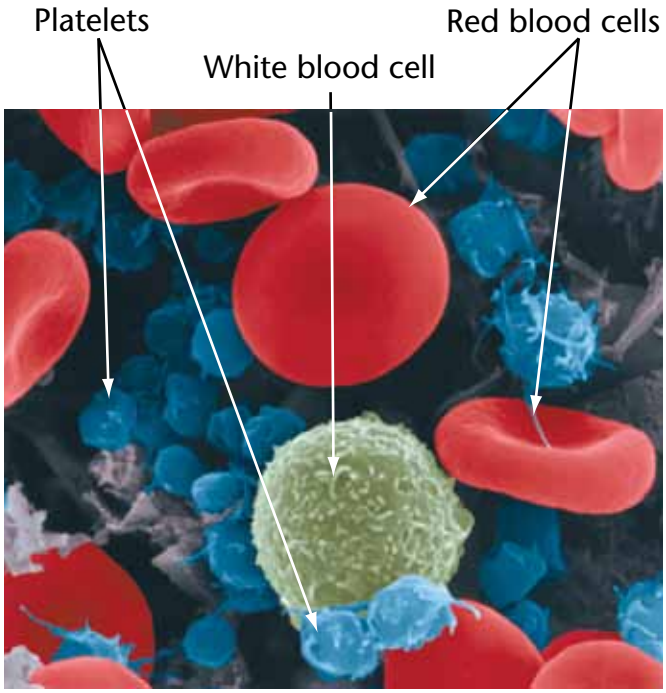
Two osteoclasts "eating away" old bone matrix.

Nerve cells, or neurons, from the brain.



Three skeletal muscle cells pulled apart for easy viewing.

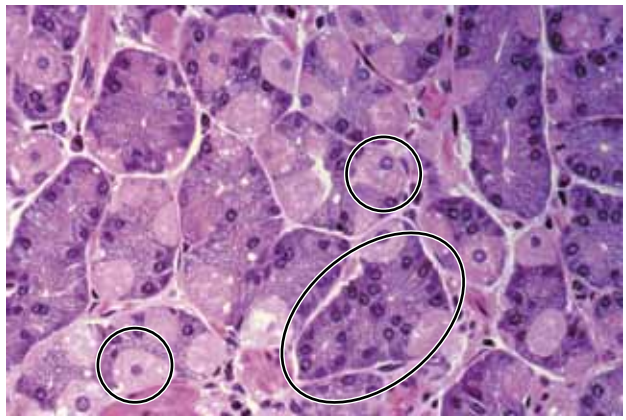
Amazing Cells



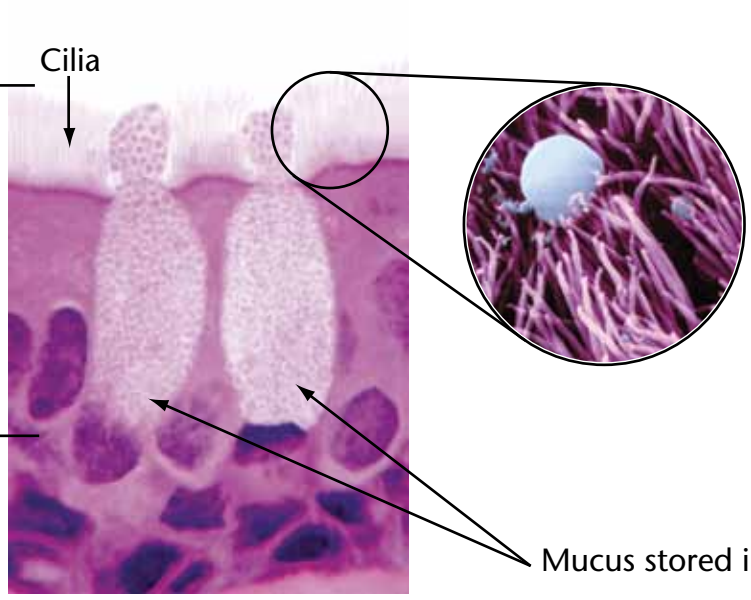
Red blood cells (carriers of oxygen), a white blood cell (disease fighter), and some platelets (blood clotting helpers).

The small circles outline **individual** parietal cells.

The larger circle outlines a **group** of chief cells.



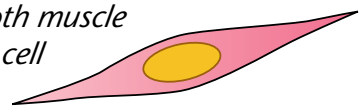
The parietal cells, shown in pink, produce an acid that "turns on" the protein-digesting enzymes made by the chief cells, shown in purple.



Cilia moving mucus up and out of the trachea.

Goblet cells and ciliated epithelial cells in the trachea.

How the Human Body Is Organized

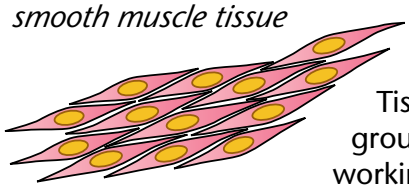


smooth muscle cell

Cells are the building blocks of the human body.

CELL

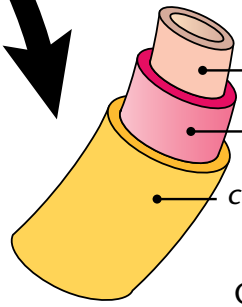
smooth muscle tissue



Tissues are groups of cells working as a unit.

TISSUE

blood vessel



epithelial tissue

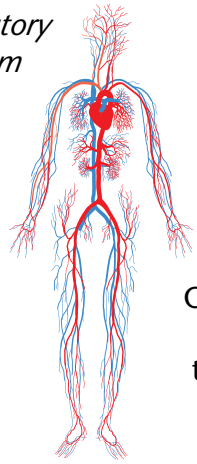
smooth muscle tissue

connective tissue

Organs are made up of several types of tissues.

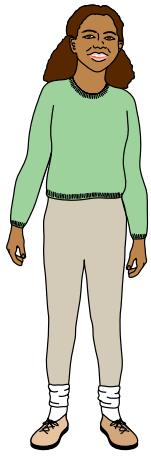
ORGAN

circulatory system



Organ Systems are two or more organs working together to accomplish an essential task.

ORGAN SYSTEM



Humans are made up of many organ systems.

HUMAN BODY

Overhead Transparency: How the Human Body Is Organized (Lesson 11)
Human Body in Motion Visual 7

Steam Blower from Zorr

An Alien Example

Steam Blower from Zorr

An Alien Organ Example

Use the space below to describe the special capabilities of your circled organ. What does it do for the alien? Use sketches and words in your description.

Name of organ steam blower

My alien uses the steam blower to cook food, scare off enemies, and remove wrinkles from its apron.

Steam Blower from Zorr

Alien Cell Examples

Name of first cell type: faucet cell

Special Things It Can Do	What It Looks Like
Faucet cells pump out lots of water.	Faucet cells are very large and plump—filled with water. They have water pumps to pump water out quickly and lots of pores for water to escape from.

Name of first cell type: boiler cells

Special Things It Can Do	What It Looks Like
Boiler cells produce enough heat to turn water into steam.	Boiler cells are cup shaped to collect the water released by faucet cells. They contain lots and lots of energy-rich nutrients that they "burn" to produce enough heat to boil water.