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Introduction

Each book in the *Power Practice*[™] series contains over 100 ready-to-use activity pages to provide students with skill practice. The fun activities can be used to supplement and enhance what you are already teaching in your classroom. Give an activity page to students as independent class work, or send the pages home as homework to reinforce skills taught in class. An answer key is provided for quick reference.

The practical and creative activities in the science series provide the perfect way to help students develop the science process skills of observing, sorting, classifying, comparing, and analyzing.

Science 5–6 provides activities that illustrate and explain concepts in life science, earth science, and physical science, and the topics covered correlate with current science standards. Use the reproducible activity pages to enrich students' study of these key topics:

- Human Body
- Plants
- Ecology
- Natural Resources
- Geology
- Weather
- Outer Space
- Chemistry
- Light and Heat

Use these ready-to-go activities to “recharge” skill review and give students the power to succeed!

Human Skeleton

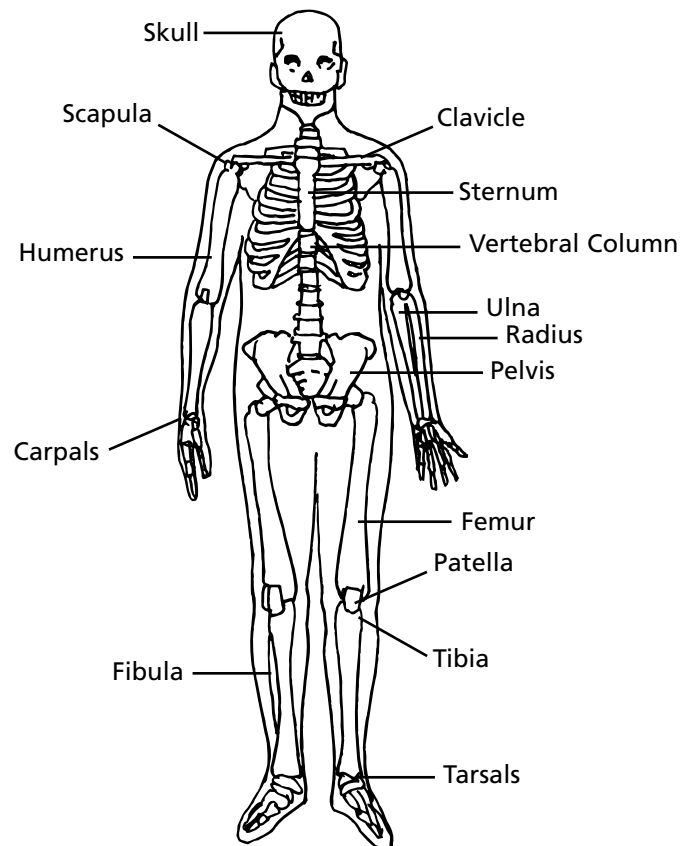
HUMAN BODY

The human skeleton contains over 200 bones. The skeleton gives the body shape and support, and it protects internal organs, such as the brain, heart, and lungs. The bones of your skull have grown together to form a protective covering around your brain. Your rib cage protects your heart and lungs. Strong connective cords, called **ligaments**, hold the bones of the skeleton together.

Match each item to its description.

- | | |
|----------------------|------------------------|
| 1 _____ thigh bone | 6 _____ ligaments |
| 2 _____ compact bone | 7 _____ collarbone |
| 3 _____ calcium | 8 _____ shoulder blade |
| 4 _____ backbone | 9 _____ kneecap |
| 5 _____ cartilage | 10 _____ spongy bone |

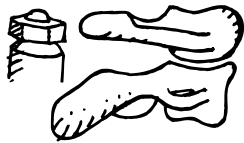
- A. patella
- B. protects the spinal cord
- C. cushions the ends of bones
- D. hard bone tissue found on outer part of bones
- E. connect bones to other bones
- F. flexible bone tissue containing collagen
- G. scapula
- H. clavicle
- I. mineral needed for strong, healthy bones
- J. femur



Types of Joints

HUMAN BODY

The place where two bones meet is called a **joint**. There are three main types of joints found in the body: immovable, partially moveable, and freely moveable. **Immovable joints** have fused together and no longer move. **Partially moveable joints** allow slight movements in all directions. **Freely moveable joints** include pivot joints, hinge joints, ball and socket, and gliding joints.



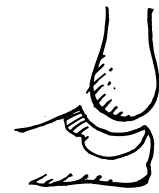
Pivot
Rotates side to side



Ball and Socket
Moves all around



Gliding
Moves up and down
and side to side



Hinge Joint
Bends and straightens

Use the words in the box to complete the sentences. You can use a word more than once.

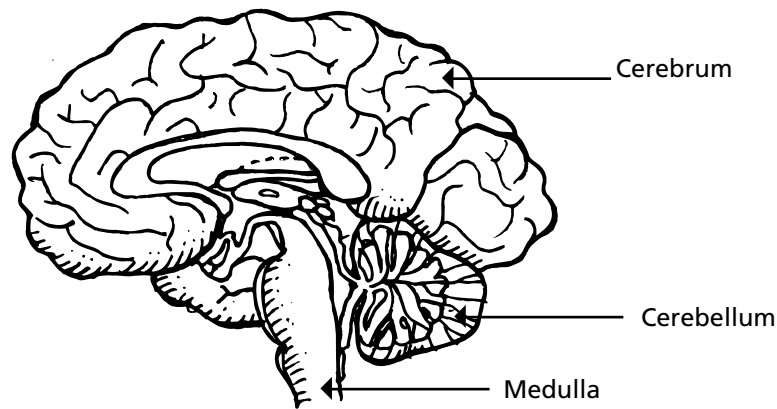
neck	hip	wrist	knee	elbow	shoulder	skull	backbone	ankle
------	-----	-------	------	-------	----------	-------	----------	-------

- 1 You have immovable joints in the _____.
- 2 Ball and socket joints are found in your _____ and _____.
- 3 Pivot joints are located in your _____ and _____.
- 4 Partially moveable joints are located all along the _____.
- 5 Hinge joints are found in your _____ and _____.
- 6 Gliding joints are found in your _____, _____, and _____.

The Brain

HUMAN BODY

The brain is the center of the nervous system. It has three main sections: the cerebrum, the cerebellum, and the brainstem. The **cerebrum** is the largest section and contains centers for the five senses, pain, memory, reasoning, and speech. The **cerebellum** controls muscular coordination and balance. The small **brainstem** is the most important because it contains the medulla. The **medulla** automatically controls vital life functions, such as your heartbeat, breathing, digestion, and blood pressure.



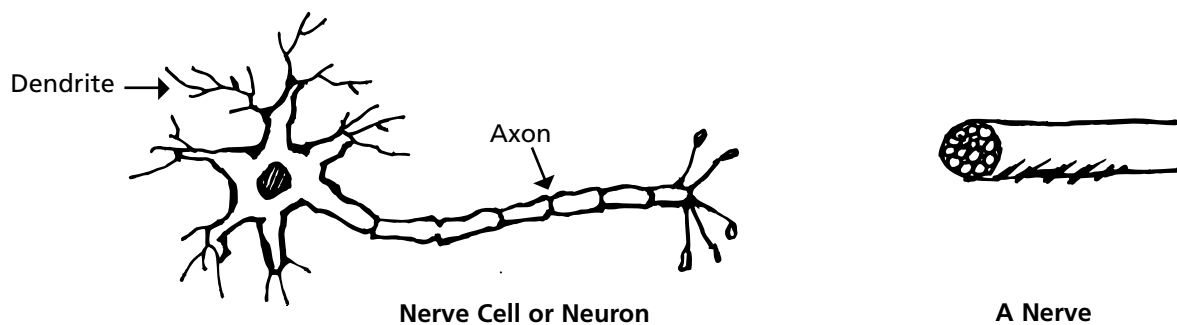
Write **cerebrum**, **cerebellum**, or **medulla** to identify which part of the brain controls the activity.

- 1 breathing _____
- 2 vision _____
- 3 balance _____
- 4 heartbeat _____
- 5 memory _____
- 6 sneezing _____
- 7 walking up stairs _____
- 8 pain _____
- 9 swimming _____
- 10 speech _____

The Nervous System

HUMAN BODY

The **nervous system** is a complex communications network. The brain is connected to the spinal cord, which branches out into hundreds of nerves. The **nerves** are made of bundles of thin nerve fibers and extend all over the body. **Sensory nerves** receive information from the sense organs and transmit messages to the brain and spinal cord. **Motor nerves** carry responses from the brain and spinal cord out to muscles, organs, and glands.



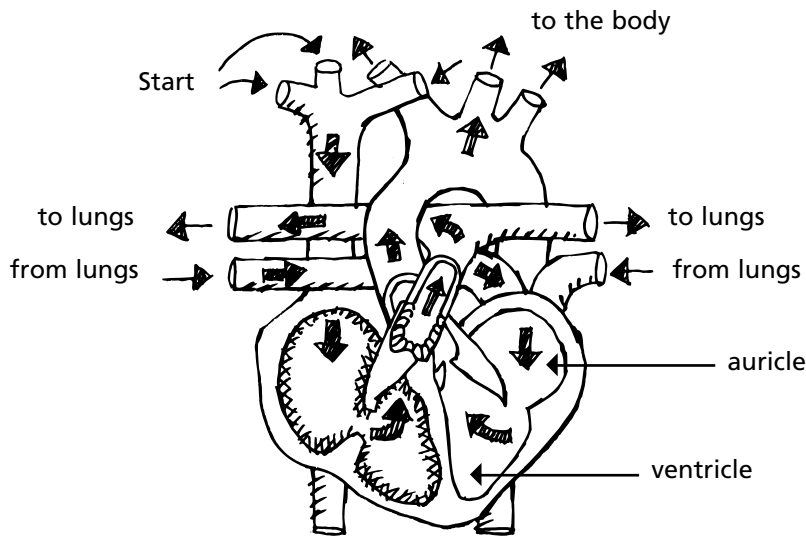
Read each statement. Write T if the statement is true or F if it is false.

- 1 _____ Nerve cells, or neurons, carry messages in one direction.
- 2 _____ Sensory nerves send messages out to the muscles and glands.
- 3 _____ Nerves are made up of bundles of nerve fibers.
- 4 _____ The long extension of a nerve cell is called an axon.
- 5 _____ Reflex actions occur rapidly because the nerve messages usually only go to the spinal cord.
- 6 _____ Nerves branch out from the spinal cord and extend all over the body.
- 7 _____ Motor nerves receive messages from your sense organs.
- 8 _____ Nerve fibers are very thin.
- 9 _____ Nerve impulses travel very fast.
- 10 _____ Dendrites receive nerve impulses and send them to the cell body of the neuron.

The Heart

HUMAN BODY

The **heart** is a small but amazing muscular pump. The upper chambers receive blood and send it to the lower chambers. Then the blood is pumped into the arteries, which carry it all over the body. There are valves between the chambers that keep the blood from flowing backwards. Other valves are located at the openings of arteries that leave the heart. The closing of the valves causes the sound of your heartbeat.



valves
ventricles
auricles
lungs
body
pump
receive
blood

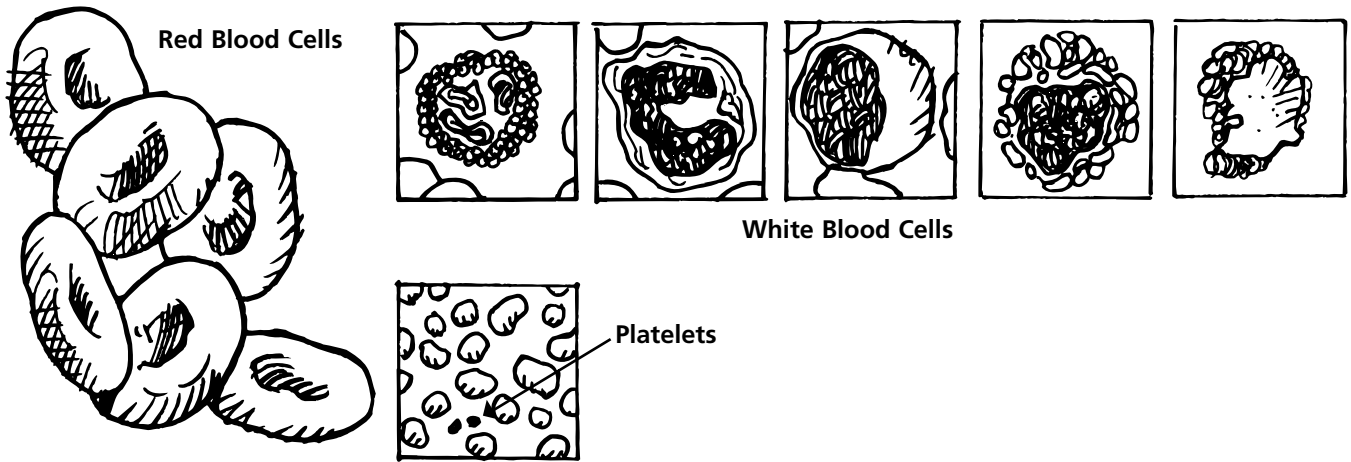
Use the words in the box to complete the sentences.

- 1 The heart continuously pumps _____ all throughout the body.
- 2 The sound of your heartbeat is made by the closing of _____ within the heart.
- 3 The right side of your heart sends blood to the _____.
- 4 The left side of your heart sends blood to the _____.
- 5 The lower chambers of the heart, called _____, have thick, muscular walls.
- 6 The upper chambers _____ the blood flowing into the heart.
- 7 The job of the ventricles is to _____ the blood out of the heart.
- 8 The upper chambers are called _____.

Your Blood

HUMAN BODY

Your blood travels away from the heart in **arteries**, and it flows back towards the heart in **veins**. Arteries and veins branch into smaller vessels that finally reach the tiny capillaries. **Capillaries** connect arteries to veins. **Plasma** is the liquid part of the blood, and it carries nutrients to all the cells. Within the blood are red blood cells, white blood cells, and platelets. The blood helps to maintain the body's temperature.



Read each statement. Write T if the statement is true or F if it is false.

- 1 _____ The blood platelets help to stop bleeding and form a blood clot.
- 2 _____ The white blood cells carry oxygen to the cells of the body.
- 3 _____ The plasma carries digested food nutrients and hormones in the blood.
- 4 _____ Red blood cells carry away carbon dioxide waste from the cells.
- 5 _____ White blood cells fight off disease by killing germs.
- 6 _____ The blood flows back to the heart in arteries.
- 7 _____ Capillaries are the tiniest blood vessels.
- 8 _____ There are more white blood cells in the blood than red blood cells.
- 9 _____ The blood helps to maintain the body's temperature.
- 10 _____ Plasma is made mostly of water.