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The Human Body

Activities (cont.)



Brief #3: The Digestive System

- **Perform an Experiment:** To understand what important part saliva plays in digestion and taste, have students perform this experiment:

Supplies: paper towels, cookies, pretzels

Teacher Note: Before beginning this experiment, make sure students are not allergic to any of these foods.

Procedure: Using paper towels, have each student dry out his/her tongue. Next, have them each take a bite of a cookie or pretzel. Follow this with a drink of water. Then have them taste the same food again without drying out their tongues. Ask them to discuss how saliva changed the taste of the food. Repeat this several times with different types of food.

- **Find 10 Fast Facts:** Have students find 10 facts about digestion and write them on index cards. Post the cards around the room.



Activity Center

- **Human Body:** Stock an activity center with large sheets of paper and lots of drawing materials (crayons, markers, paint, etc.). Students will also need scissors and diagrams of the human body. Have students work in pairs. Instruct each student to trace the body of the partner on a large piece of paper. The body shapes can be cut out. Have students draw the major components of the cardiovascular, respiratory, and digestive systems on the cut-outs. They should color-code the different systems so that they are easily identifiable.



Internet Resources

- <http://www.americanheart.org/> — official website of the American Heart Association
- <http://www.lungusa.org/> — official website of the American Lung Association
- https://www.givelife.org/index_flash.cfm — contains information from the American Red Cross about blood donation; also includes games and activities appropriate for fifth-grade students
- <http://kidshealth.org/kid/htbw> — from the Nemours Foundation; designed especially for children of all ages

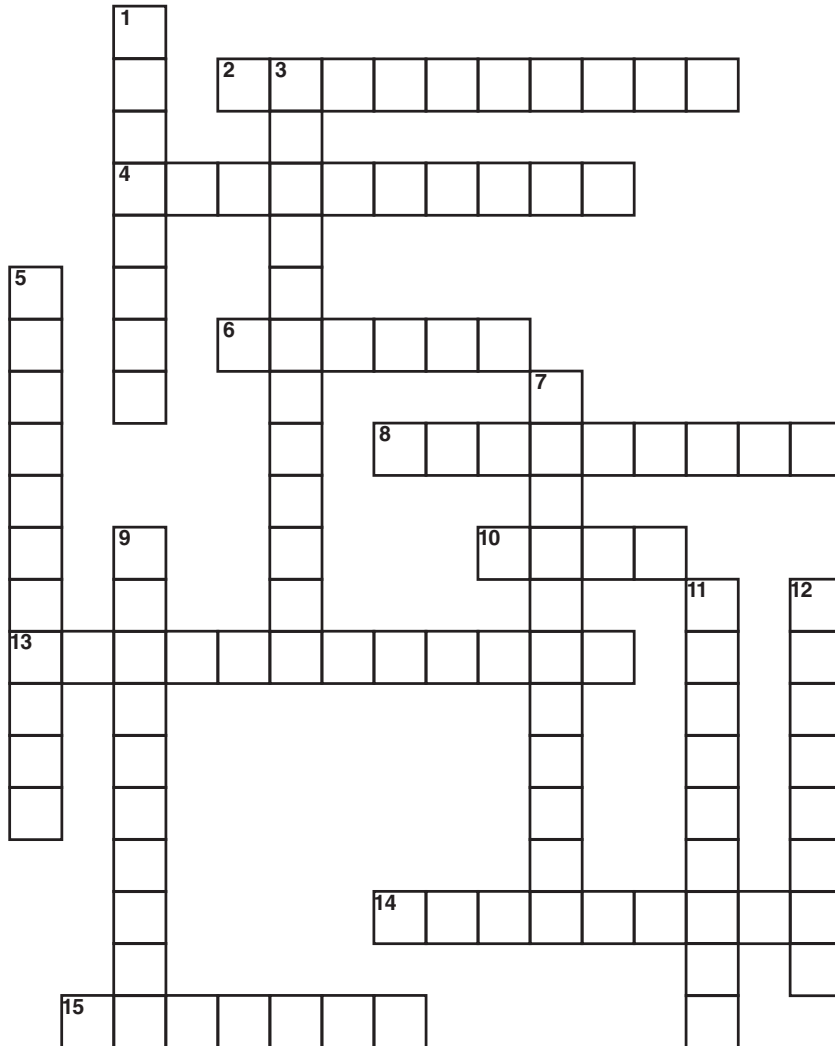


Space

Vocabulary Crossword Puzzle

Name: _____ Date: _____

Directions: Complete the crossword puzzle. All of the words are vocabulary from Unit #3.



Across

- 2. has 365 steps
- 4. ancient structure in England
- 6. star nursery
- 8. 10 trillion kilometers
- 10. hot ball of gas
- 13. moon blocks sun
- 14. explosion of a massive star
- 15. Renaissance navigational tool

Down

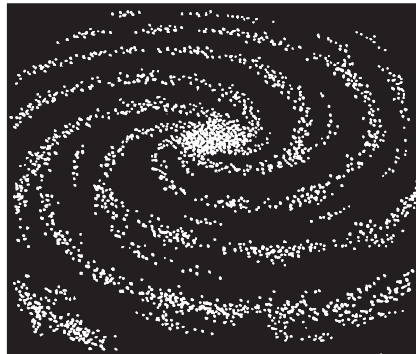
- 1. areas of strong magnetic activity
- 3. Earth creates a shadow on moon
- 5. very dense object
- 7. visible part of the sun
- 9. communication disrupter
- 11. tremendous gravitational force
- 12. Earth's galaxy

Space

Brief #4: Galaxies and Constellations



The universe is bigger than anyone can possibly imagine. No one knows for sure how large it is or all of the objects that are within it. Still, much is known about the universe.



Vocabulary

1. galaxy
2. Milky Way
3. constellations



Galaxies

One thing that we know for sure is that the universe is full of galaxies. **A galaxy is a huge group of stars, gas, and dust that is held together by gravitational forces.**

The galaxy in which our solar system—including the Earth and sun—is located is called the Milky Way.

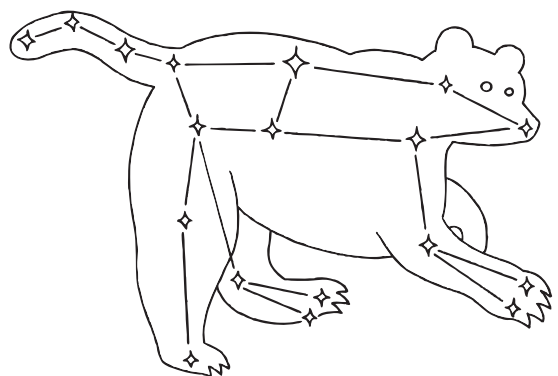
Galaxies come in different shapes and sizes. There are elliptical galaxies, which are oval-shaped; spiral galaxies, which are bulged in the center and have long, wispy arms that spiral out from the bulge; and irregular galaxies, which have no definite shape. The Milky Way is a spiral galaxy.

Even though the universe is filled with billions of galaxies—which are, in turn, filled with billions of stars—from Earth, these cosmic giants look like a single point of light. That's because they are at great distances from the Earth. The closet spiral galaxy to our Milky Way is called Andromeda. It is about 2.5 million light-years away.



Constellations

Constellations are groups of stars in the night sky that appear to form a pattern or make a picture. People have been gazing at these constellations for thousands of years. In fact, many of the constellations that are so familiar to us were originally named by people who lived thousands of years ago. Some of the most well-known constellations are the Greater Dog, Orion, and Ursa Major. The Big Dipper is a part of Ursa Major.



Chemical Changes in Matter

Brief #3: Everyday Uses of Chemicals

Focus

Chemicals can be both helpful and hurtful.

Chemicals are used in hundreds and hundreds of different ways. The vitamins that you take in the morning and the shampoo that you use to wash your hair are results of chemical technology. An entire industry in the United States is based on the development and production of chemicals that we can use to improve our lives.



Types of Chemicals

- ✓ **Petrochemicals** are chemical compounds made from coal, natural gas, or petroleum. Polyester, a type of material that is used to make clothing, is a petrochemical.
- ✓ **Agrochemicals** are chemicals that are used in the farming industry. Fertilizers and pesticides are examples of agrochemicals.
- ✓ **Polymers** are materials like plastic and nylon that are created by chemical compounds.



Chemical Safety

As helpful as chemicals are, they can also be extremely dangerous. Some chemicals can even cause death, so it's important to handle chemicals safely. You should always read the warning label on chemicals. Things that are common in most people's houses can hurt you. Cleansers, bleach, and oven cleaner can burn your skin and eyes. You might need to wear goggles or gloves to handle certain substances.

Other chemicals should not be mixed together because they can produce strong chemical reactions. Some chemicals are combustible, which means that they can catch fire easily. Even the fumes produced by certain chemicals can burn your lungs. Make sure that you read chemical warning labels.

Chemical Warning Labels



poisonous



flammable



radioactive

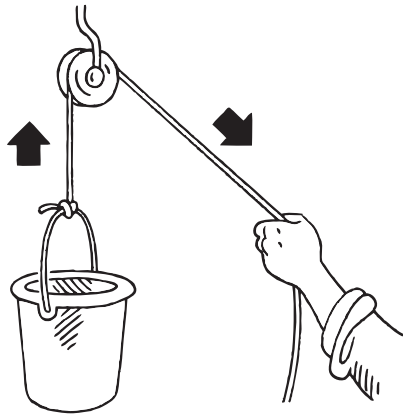
Forces and Motion

Graphic Assessment

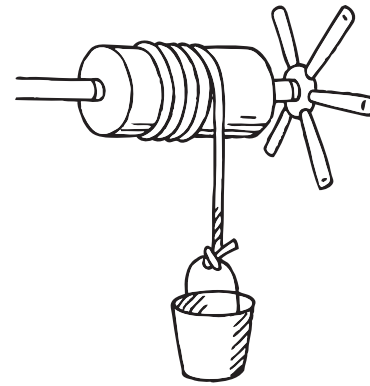
Name: _____ Date: _____

Directions: Look carefully at the illustrations below. Label the simple machines shown. On the back of this paper, draw and label another simple machine.

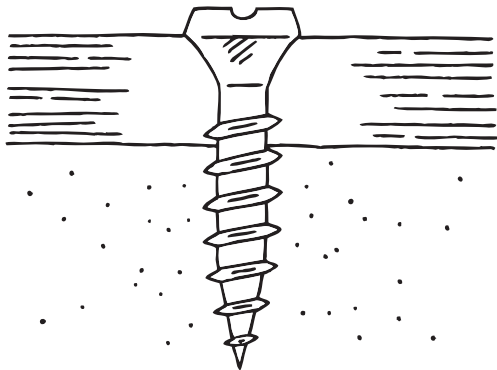
Simple Machines



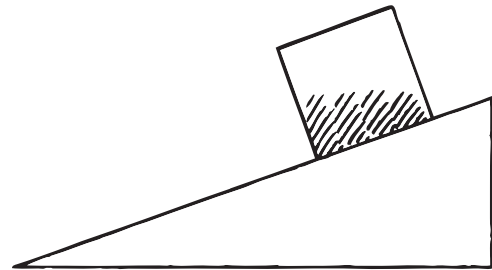
1. _____



2. _____



3. _____



4. _____

