Name _____ Date _____

Reading Comprehension

CAUSE AND EFFECT

A **cause** is the reason something happens. An **effect** is what happens as a result of the cause.

Reread pages 14–15 of *Heat and Light Energy*. Then fill in the missing information to complete the charts below.

Cause	Effect
Light waves strike a mirror.	_____

Cause	Effect
_____	A shadow forms behind an object.

Tell about an everyday example of absorption. Be sure to include the cause and effect.

_____

_____

_____

Grammar

PLURALS

Ways to Form Plurals	Singular Nouns	Plural Nouns
Add *-s*	liquid eye	liquids eyes
Add *-es*	class dish	classes dishes

Write the plural form of the noun in parentheses to complete each sentence.

1. All _____ contain moving particles with kinetic energy. (object)

2. We use _____ to measure air temperature or body temperature. (thermometer)

3. Most _____ get bigger when they warm up. (material)

4. Thermal energy does not move easily through _____ such as plastics or rubber. (insulator)

5. Thermal energy can move through solids, liquids, and _____. (gas)

6. Many electromagnetic _____ come from the Sun. (wave)

7. Water _____ in a heating pot may form a convection current. (particle)

8. Two _____ may have the same temperature but different amounts of thermal energy if one glass contains more water than the other. (glass)

Find three other singular nouns in *Heat and Light Energy*. Write the nouns and their plural forms here.

_____

_____

Writing

Review how the eye works on pages 18–19 of *Heat and Light Energy*. Choose one object you look at every day. Get ready to write a paragraph about what happens when you see that object. Write your topic sentence and supporting sentences below. Use words such as *first, next,* and *last* to show the order of steps that happen as light moves through the eye.

Topic Sentence

Supporting Sentences

Now use your sentences to write a paragraph about how your eyes and brain work together to allow you to see the object.

Vocabulary

Suffix	Meaning	Example
-ion	action or process	*pollute* (verb) *pollution* (noun)
-ment	action or process	*measure* (verb) *measurement* (noun)
-or	someone or something that does an action	*collect* (verb) *collector* (noun)

Add the suffix *-ion, -ment,* or *-or* to each underlined verb to create a noun. You may need to change the spelling. Write the noun on the line.

1. Metals can <u>conduct</u> thermal energy easily. Metals are good _____.

2. Light rays <u>reflect</u> off the surface of a mirror. Then we see a _____.

3. Plastics can <u>insulate</u> a pot handle. A plastic handle is an _____ that can protect our hands from a hot pot's thermal energy.

4. A pot on a hot stove can <u>conduct</u> thermal energy. Thermal energy moves through the pot by _____.

5. The Sun gives off, or <u>radiates</u>, energy. Through _____, some of this energy moves through space to Earth.

6. Light <u>moves</u> away from its source in straight lines. The _____ of the light changes when the light rays strike an object.

7. Some surfaces <u>reflect</u> lots of light. For example, a bike has a _____ that light bounces off. This makes it easier for cars to see the bike at night.

8. Different materials can <u>refract</u> light rays, or make them bend. This _____ causes the speed of the light to change.