

Name \_\_\_\_\_ Date \_\_\_\_\_

# The Eye and Light

## Lesson 4 The Eye and Vision



Grade 7 Science Content Standards—5.g: Students know how to relate the structures of the eye and ear to their functions.  
Also covers: 6.b, 6.d, 6.e

**Skim** Lesson 4 of your book. Write three questions that come to mind. Look for answers to your questions as you read the lesson.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

### Review Vocabulary

**Define** organ as it is used in science, using your book or a dictionary.

organ

\_\_\_\_\_  
\_\_\_\_\_

### New Vocabulary

**Define** each vocabulary term using your book or a dictionary.

cornea

\_\_\_\_\_

pupil

\_\_\_\_\_

iris

\_\_\_\_\_

retina

\_\_\_\_\_

pigment

\_\_\_\_\_

### Academic Vocabulary

**Define** flexible as it is used in this lesson using your book or a dictionary.

flexible

\_\_\_\_\_  
\_\_\_\_\_

Lesson 4 The Eye and Vision (continued)

**Main Idea**

**How the Eye Forms an Image**

I found this information on page \_\_\_\_\_.

I found this information on page \_\_\_\_\_.

I found this information on page \_\_\_\_\_.

**Details**

**Model** *the path light takes through the human eye. Draw the eye and the path followed by the light. Label the cornea, pupil, iris, lens, and retina. Show where an image is formed.*

**Identify** *the function of each part of the eye.*

| Part   | Function |
|--------|----------|
| Cornea |          |
| Lens   |          |
| Retina |          |

**Analyze** *the role of rod cells and why you cannot see color well at night.*

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**SUMMARIZE IT**

Summarize the main ideas of the above sections.

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Lesson 4 The Eye and Vision (continued)

**Main Idea**

**Seeing Color**

I found this information on page \_\_\_\_\_.

I found this information on page \_\_\_\_\_.

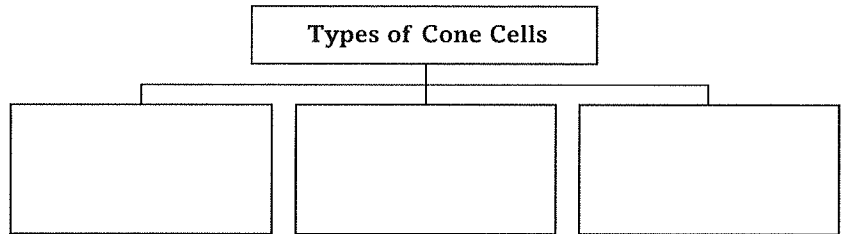
I found this information on page \_\_\_\_\_.

**Common Vision Problems**

I found this information on page \_\_\_\_\_.

**Details**

**Distinguish** three types of cone cells. Identify which color of light each type is most sensitive to.



**Summarize** what happens when light hits pigment. Then name the 3 primary colors of pigment.

**Analyze** color deficiency and its causes.

**Contrast** nearsightedness and farsightedness. Complete the table.

|                   | Nearsightedness | Farsightedness |
|-------------------|-----------------|----------------|
| Location of image |                 |                |
| Corrected by      |                 |                |

**SUMMARIZE IT**

Rephrase the main ideas of the above sections.

# The Eye and Light Chapter Wrap-Up

Now that you have read the chapter, think about what you have learned and complete the table below. Compare your previous answers to these.

1. Write an **A** if you agree with the statement.
2. Write a **D** if you disagree with the statement.

| <b>The Eye and Light</b>  | <b>After You Read</b> |
|---|-----------------------|
| • Light is a form of energy that travels in waves.                |                       |
| • Transparent materials reflect most of the light that hits them. |                       |
| • All telescopes use mirrors.                                     |                       |
| • Light enters the eye through the retina.                        |                       |

## Review

Use this checklist to help you study.

- Review the information you included in your Foldable.
- Study your *Science Notebook* on this chapter.
- Study the definitions of vocabulary words.
- Review daily homework assignments.
- Re-read the chapter and review the charts, graphs, and illustrations.
- Review the Standards Check at the end of each lesson.
- Look over the Standards Review at the end of the chapter.

### SUMMARIZE IT

After studying the chapter, write one summary sentence for each lesson to explain the chapter's main ideas.

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