

KidsHealth.org/classroom

#### Teacher's Guide

This guide includes:

- Standards
- Related Links
- Discussion Questions
- Activities for Students
- Reproducible Materials

#### **Standards**

This guide correlates with the following National Health Education Standards:

#### Students will:

- Comprehend concepts related to health promotion and disease prevention to enhance health.
- Analyze the influence of family, peers, culture, media, technology, and other factors on health behaviors.
- Demonstrate the ability to access valid information and products and services to enhance health.
- Demonstrate the ability to use interpersonal communication skills to enhance health and avoid or reduce health risks.
- Demonstrate the ability to use decision-making skills to enhance health.
- Demonstrate the ability to use goal-setting skills to enhance health.
- Demonstrate the ability to practice health-enhancing behaviors and avoid or reduce health risks.
- Demonstrate the ability to advocate for personal, family, and community health.

National Health Education Standards: www.cdc.gov/ healthyschools/sher/standards/ index.htm



# Grades 3 to 5 • Human Body Series **Vision**

About the size of ping-pong balls, but much more delicate, our eyes are constantly taking in information about the world around us. These activities will help your students understand how the eye and brain work together to make vision possible.

### Related KidsHealth Links

#### **Articles for Kids:**

#### **Your Eyes**

KidsHealth.org/en/kids/eyes.html

#### Movie: Eyes

KidsHealth.org/en/kids/eyes-movie.html

#### Why Do Eyes Water?

KidsHealth.org/en/kids/eyes-water.html

#### Glasses and Contact Lenses

KidsHealth.org/en/kids/glasses.html

#### **Pinkeye**

KidsHealth.org/en/kids/conjunctivitis.html

#### **Blindness**

KidsHealth.org/en/kids/visual-impaired.html

#### What It's Like to Be Color Blind?

KidsHealth.org/en/kids/color-blind.html

#### Experiment: Are Two Eyes Better Than One?

KidsHealth.org/en/kids/experiment-eyes.html

#### Experiment: The Red, White, and Blue

KidsHealth.org/en/kids/experiment-flag.html

#### Experiment: Catch the Penny!

KidsHealth.org/en/kids/experiment-penny.html

### Special Needs Factsheet for Teachers:

#### **Visual Impairments**

KidsHealth.org/en/parents/vision-factsheet.html

### **Discussion Questions**

Note: The following questions are written in language appropriate for sharing with your students.

- 1. What kinds of things do your eyes tell you? If your eyes didn't work well, what other ways could you get information?
- 2. What are some problems the eye can have? What are some ways vision problems can be corrected?
- 3. What is depth perception? Why is it important in your day-to-day life?
- 4. The eye also has the important job of making tears. What is the function of tears?





# Grades 3 to 5 • Human Body Series Vision

### **Activities for Students**

Note: The following activities are written in language appropriate for sharing with your students.

### Parts of the Eye

### **Objectives:**

Students will:

Learn the parts and functions of the eye

#### **Materials:**

- Computer with Internet access
- "Your Eyes" KidsHealth.org article
- "Parts of the Eye" handout
- · Pencil or pen

#### Class Time:

30 minutes

#### **Activity:**

Today we're going to learn all about the different parts of the eye and how they work to help us see. First, we'll each take a turn reading a paragraph from the "Your Eyes" article. Then we'll complete the "Parts of the Eye" handout.

#### **Extensions:**

- 1. Lacrimal glands to the rescue! Create a cartoon showing how the superhero glands that produce tears help protect the eye from all kinds of "villains," like smoke, dust, and germs.
- 2. Within 1 minute, have each student write all the jobs and activities they can think of in which people have to wear things over their eyes for protection. Then list all the jobs/activities and protective gear on the board.





# Grades 3 to 5 • Human Body Series **Vision**

### **Eyewitness News**

### **Objectives:**

Students will:

- Learn about the parts, functions, and problems of the eyes
- Write a story about the eyes in the style of a newspaper article

#### Materials:

• Newspaper, pencil or pen, "Eyewitness News" handout

#### Class Time:

• 2 hours (can be done over several days)

#### **Activity:**

You're the newest reporter for the Eyewitness News, a newspaper all about our wonderful, magnificent eyes. Your job is to help readers understand the many parts, functions, and problems of this small but complicated organ. First, look through a newspaper, noticing the various parts (news, features, editorials, sports, etc.). Then read the articles about eyes and vision at KidsHealth.org. Choose a topic to cover. For example, will you interview a hardworking lens or a busy retina? Will you write a sports article on the great teamwork of rods and cones? Will you write a letter to the editor about why tears make you happy? Every news article should answer the questions, Who, What, When, Where, Why, and How, so use the "Eyewitness News" handout to outline your thoughts. Be sure to come up with catchy headline and a great lead (opening sentence) that makes your audience want to keep reading. Add an illustration and caption, too. Afterward, we'll combine all the articles into one eye-opening newspaper.

#### **Extensions:**

- 1. A visually impaired person wouldn't be able to read your newspaper in its traditional form. Brainstorm ways to make your articles accessible to people who can't see.
- 2. Braille is a form of writing for blind people in which letters are represented by patterns of raised bumps. Research the Braille alphabet online. Then translate your headline into Braille, either by drawing the dots or using peel-and-stick plastic or felt dots (available in craft or office supply stores).

## Reproducible Materials

Handout: Parts of the Eye

 $Kids Health.org/classroom/3 to 5/body/functions/vision\_handout 1.pdf$ 

**Handout: Eyewitness News** 

KidsHealth.org/classroom/3to5/body/functions/vision\_handout2.pdf

Quiz: Vision

 ${\it KidsHealth.org/classroom/3to5/body/functions/vision\_quiz.pdf}$ 

Answer Key: Vision

 ${\it KidsHealth.org/classroom/3to5/body/functions/vision\_quiz\_answers.pdf}$ 



KidsHealth.org is devoted to providing the latest children's health information. The site, which is widely recommended by educators, libraries, and school associations, has received the "Teachers' Choice Award for the Family" and the prestigious Pirelli Award for "Best Educational Media for Students." KidsHealth comes from the nonprofit Nemours Foundation. Check out www.KidsHealth.org to see the latest additions!

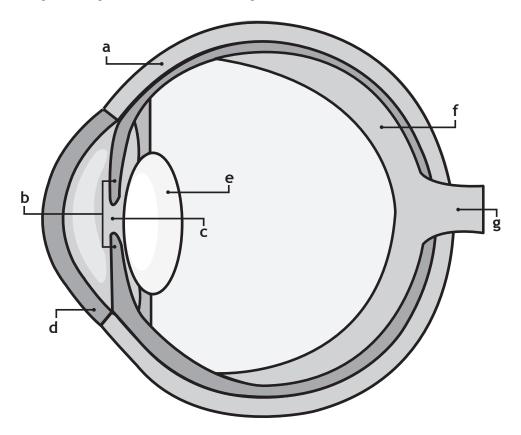




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## Parts of the Eye

Instructions: Using the diagram as a guide, fill in the blanks using the words from the word bank.



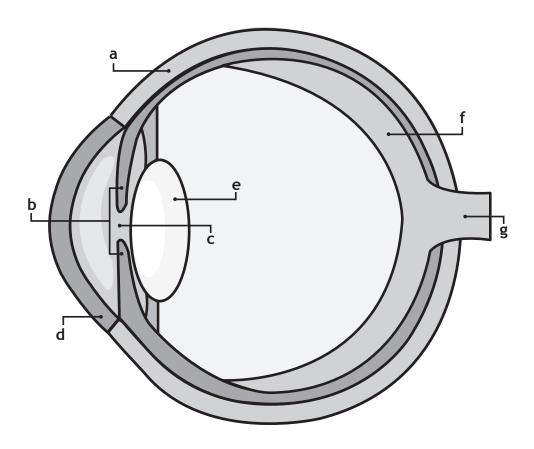
WORD BANK			
cornea	lens	pupil	sclera
iris	optic nerve	retina	

- a. The white part of the eye is the \_\_\_\_\_\_.
- b. The colored part of the eye is the \_\_\_\_\_\_.
- c. The black circle in the middle of the eye is the \_\_\_\_\_\_.
- d. The transparent bump in the front of the eye is the \_\_\_\_\_\_.
- e. The \_\_\_\_\_\_ focuses light on the back of the eyeball.
- f. The \_\_\_\_\_ changes light the eye receives into nerve signals.
- g. The \_\_\_\_\_ carries nerve signals from the eye to the brain.





## Parts of the Eye Answer Key



WORD BANK			
cornea	lens	pupil	sclera
iris	optic nerve	retina	

- a. The white part of the eye is the \_\_\_\_\_\_\_.
- b. The colored part of the eye is the \_\_\_\_\_\_ iris
- d. The transparent bump in the front of the eye is the \_\_\_\_\_\_ cornea
- e. The \_\_\_\_\_\_ focuses light on the back of the eyeball.
- f. The <u>retina</u> changes light the eye receives into nerve signals.
- g. The \_\_\_\_\_ carries nerve signals from the eye to the brain.





## **Eyewitness News**

Instructions: You're a reporter for Eyewitness News, a newspaper that's all about the eyes. After reading the KidsHealth.org articles, choose the eye-related topic that most interests you. Use this handout to outline your story before you start writing. Make sure your article answers the questions: Who?, What?, When?, Where?, Why?, and How?

EYE	WI	TNE	ESS	
N	E	W	5	M

Write an eye-catching headline:

Write the lead (grab the reader's attention with an interesting fact for the first sentence of the article; no nore than 20 words):	Why:
	How:
	Write additional interesting details and quotations.
Write facts for the rest of the article (give the most mportant information first, the 5Ws as well as How?, if they're not already in your lead):	Detail 1:
Vho:	Detail 2:
Vhat:	Detail 3:
Vhen:	Quotation 1 (helps make the story come alive): "
Vhere:	Quotation 2 (helps make the story come alive):





## Quiz

Instructions: Complete the crossword puzzle.			
·	11		
8	1 10		
	1 10		14
		12	
7 2 9		3	
		3	
	-	H	
4	5		
6			
	_		

#### **Across**

- 1. The colored part of the eye.
- 2. The glands that make tears.
- 3. The transparent dome in front of the iris.
- 4. The white part of the eye.
- 5. The \_\_\_\_\_\_ body is the largest part of the eye and gives the eye its shape.
- 6. Special cells on the retina that sense black, white, and shades of gray.

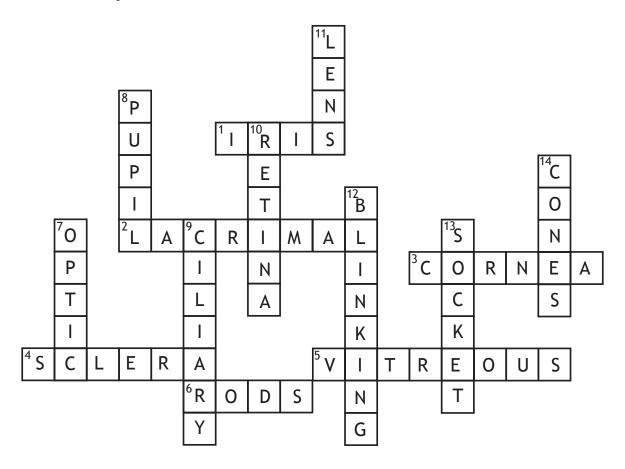
#### Dowr

- 7. The nerve that carries impulses from the eye to the brain.
- 8. The black circle in the center of the iris.
- 9. The muscle responsible for changing the shape of the lens.
- 10. When an image reaches the \_\_\_\_\_ at the back of the eye, the image is upside down.
- 11. It focuses light on the back of the eyeball.
- 12. Doing this helps the eyelids to keep the eyes moist and clean.
- 13. The hollow part of the skull that holds the eyes.
- 14. These cells in the retina sense color.





## **Quiz Answer Key**



#### Across

- 1. The colored part of the eye.
- 2. The glands that make tears.
- 3. The transparent dome in front of the iris.
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