



[KidsHealth.org/classroom](http://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](http://www.cdc.gov/healthyschools/sher/standards/index.htm)

From the minute we wake up in the morning until the minute we go to sleep, our eyes are hard at work processing information about the world. These activities will help your students understand how the eye and brain work together to make vision possible.

## Related KidsHealth Links

### Articles for Teens:

#### Eyes

[KidsHealth.org/teen/your\\_body/body\\_basics/eyes.html](http://KidsHealth.org/teen/your_body/body_basics/eyes.html)

#### Taking Care of Your Vision

[KidsHealth.org/teen/your\\_body/take\\_care/vision\\_care.html](http://KidsHealth.org/teen/your_body/take_care/vision_care.html)

#### Visual Impairment

[KidsHealth.org/teen/diseases\\_conditions/sight/visual\\_impairment.html](http://KidsHealth.org/teen/diseases_conditions/sight/visual_impairment.html)

#### Pinkeye (Conjunctivitis)

[KidsHealth.org/teen/infections/common/conjunctivitis.html](http://KidsHealth.org/teen/infections/common/conjunctivitis.html)

#### Styes

[KidsHealth.org/teen/diseases\\_conditions/sight/stye.html](http://KidsHealth.org/teen/diseases_conditions/sight/stye.html)

#### Self

Self

## Special Needs Factsheet for Teachers

### Visual Impairments

[KidsHealth.org/en/parents/vision-factsheet.html](http://KidsHealth.org/en/parents/vision-factsheet.html)

## Discussion Questions

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

1. It's easy to take your eyes for granted when they're working well. But if they weren't, you'd notice immediately. Discuss a time when a vision problem, illness, or injury affected your eyes. What was that like? Was it able to be corrected?
2. Glasses can correct or improve many vision problems. How do glasses work? Why are they able to help some problems (like astigmatism) but not others (like color blindness)?
3. One of the things your eye is responsible for is depth perception. What is depth perception? Why is it important for activities like driving and sports?
4. The eye has several built-in defense mechanisms. What are they? What other things can you do to protect your eyes?



## Activities for Students

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

### Eye Safety Brochure

#### Objectives:

Students will:

- Identify hazards to the eyes
- Write an informational brochure

#### Materials:

- “Eye Safety Brochure” handout
- Markers, other art supplies

#### Class Time:

- 1 hour

#### Activity:

A wild pitch plunked Gabe hard in his right eye. One emergency room visit later, Gabe learned that his eye was badly bruised, but was going to be OK. He also learned how important it is to wear a batting helmet with eye protection. The eyes can get injured in many ways – during sports, in a shop class or science lab mishap, through infection, or, over time, through sun damage. Write a brochure for teens explaining why they should take eye safety seriously and suggest ways to keep the eyes protected. Use the KidsHealth articles for your research and be sure to include at least one or two photos or drawings.

#### Extensions:

Turn your brochure into a public service announcement. Write a script and videotape it or read it over the school PA system.



## The Eye's Facebook Page

### Objectives:

Students will:

- Creatively demonstrate their knowledge of the eye

### Materials:

- Paper or poster board
- Art supplies

### Class Time:

- 45 minutes

### Activity:

It's a big day in cyberspace – the eye is finally getting its own Facebook page! You're in charge of creating a profile that shows what this small but hard-working sensory organ is all about. First, you'll need to do plenty of research, so read up on the eye's parts, functions, and problems at KidsHealth.org. Then use your imagination to create a fictional profile (a real one would be against Facebook's terms of use) that includes:

- A photo or illustration
- An "About Me" section
- Personal information, such as activities, interests, favorite quotations, likes, dislikes, etc.
- At least five updates written by the eye
- At least five comments written by the eye's "friends"

### Extensions:

Write a poem in celebration of vision to post on its Facebook wall.

## Reproducible Materials

### Handout: Eye Safety Brochure

[KidsHealth.org/classroom/9to12/body/functions/vision\\_handout1.pdf](http://KidsHealth.org/classroom/9to12/body/functions/vision_handout1.pdf)

### Quiz: Vision

[KidsHealth.org/classroom/9to12/body/functions/vision\\_quiz.pdf](http://KidsHealth.org/classroom/9to12/body/functions/vision_quiz.pdf)

### Answer Key: Vision

[KidsHealth.org/classroom/9to12/body/functions/vision\\_quiz\\_answers.pdf](http://KidsHealth.org/classroom/9to12/body/functions/vision_quiz_answers.pdf)



Name: \_\_\_\_\_

Date: \_\_\_\_\_

## Eye Safety Brochure

Instructions: Use this template (or an online brochure-making program) to design a brochure about eye safety. Include ways to protect the eyes from injury, infection, and sun damage. When you finish writing the text and imagery, cut out and glue the two pages back to back. Fold along the lines to create the brochure – right side in first, then left side over.

**INSIDE FLAP**

**BACK**

**FRONT**

A large rectangular area defined by a dashed border, intended for creating a brochure. It is divided into three vertical sections by two vertical dotted lines. The sections are labeled 'INSIDE FLAP', 'BACK', and 'FRONT' from left to right. The 'INSIDE FLAP' section is the narrowest, the 'BACK' section is the widest, and the 'FRONT' section is the same width as the 'INSIDE FLAP'.



Name: \_\_\_\_\_

Date: \_\_\_\_\_

## Eye Safety Brochure

Instructions: Use this template (or an online brochure-making program) to design a brochure about eye safety. Include ways to protect the eyes from injury, infection, and sun damage. When you finish writing the text and imagery, cut out and glue the two pages back to back. Fold along the lines to create the brochure – right side in first, then left side over.

**INSIDE LEFT**

**INSIDE MIDDLE**

**INSIDE RIGHT**

A large rectangular area defined by a dashed border, divided into three vertical sections by two vertical dotted lines. The sections correspond to the labels 'INSIDE LEFT', 'INSIDE MIDDLE', and 'INSIDE RIGHT' above them.



Name: \_\_\_\_\_

Date: \_\_\_\_\_

## Quiz

Instructions: Answer each question.

1. The colored part of the eye is called the \_\_\_\_\_.
2. A medical doctor who specializes in examining, diagnosing, and treating the eyes and eye diseases is called an:
  - a. optometrist
  - b. ophthalmologist
  - c. optician
  - d. otolaryngologist
3. The \_\_\_\_\_ glands produce tears.
4. When the cornea isn't perfectly round, it results in a vision problem called:
  - a. myopia
  - b. hyperopia
  - c. strabismus
  - d. astigmatism
5. Images of the things we see are projected onto the \_\_\_\_\_ at the back of the eye.
6. True or false: The sun's ultraviolet (UV) rays can harm the eyes.
7. The \_\_\_\_\_ carries signals from the retina to the brain.
8. If cone cells don't work properly, that will probably result in:
  - a. blindness
  - b. color blindness
  - c. limited depth perception
  - d. a lack of peripheral vision
9. Cloudy areas in the lens of the eye are called \_\_\_\_\_.
10. True or false: People who are legally blind have lost their sight completely.



## Quiz Answer Key

1. The colored part of the eye is called the \_\_\_\_\_ *iris* \_\_\_\_\_.
2. A medical doctor who specializes in examining, diagnosing, and treating the eyes and eye diseases is called an:
  - a. optometrist
  - b. ophthalmologist
  - c. optician
  - d. otolaryngologist
3. The \_\_\_\_\_ *lacrima* \_\_\_\_\_ glands produce tears.
4. When the cornea isn't perfectly round, it results in a vision problem called:
  - a. myopia
  - b. hyperopia
  - c. strabismus
  - d. astigmatism
5. Images of the things we see are projected onto the \_\_\_\_\_ *retina* \_\_\_\_\_ at the back of the eye.
6. True or false: The sun's ultraviolet (UV) rays can harm the eyes.
7. The \_\_\_\_\_ *optic nerve* \_\_\_\_\_ carries signals from the retina to the brain.
8. If cone cells don't work properly, that will probably result in:
  - a. blindness
  - b. color blindness
  - c. limited depth perception
  - d. a lack of peripheral vision
9. Cloudy areas in the lens of the eye are called \_\_\_\_\_ *cataracts* \_\_\_\_\_.
10. True or false: People who are legally blind have lost their sight completely.