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**K-2 Eye Health  
and Safety Program**

TEACHER CLASSROOM  
PRESENTATION GUIDE



Our Vision Is Vision®



## **K–2 Eye Health and Safety Program**

TEACHER CLASSROOM PRESENTATION GUIDE

**This program is recommended for grade levels:**  
Kindergarten, First and Second Grades

**Subject:**  
Eye Health and Safety

**Duration:**  
One dedicated classroom session or three lessons  
conducted across three class sessions

**This curriculum has been aligned with National Health,  
National Science and National Physical Education Standards**



# Lesson One: The Importance of Sight

## Lesson Objective:

- ★ Students will associate the eyes with the ability to see
- ★ Students will be able to tell a friend or adult why good eye sight is important
- ★ Students will recognize eye color diversity

## Discussion Points:

You have five senses that increase your ability to learn and experience the world you live in.



*Seeing:* You use your eyes to see.

*Smell:* You use your nose to smell.

*Hearing:* You use your ears to hear.

*Taste:* You use your mouth to taste.

*Touch:* You use your fingers and body to touch.

Good eyesight is very important because you use your vision to learn about everything around you. Much of what you learn is through sight and you spend most of the school day doing activities that require your sight like reading and writing.

You use your eyes to do lots of other things too such as to build forts, play baseball, ride bikes, watch TV or play video games like Wii, or simply to enjoy the view outside your window.

Your eyes allow you to see many things: big or small, near or far, smooth or textured, and even colors and dimensions. Your eyes send information about everything they see to your brain so that your brain can make sense of it all!

You have 3-D vision. Each of your eyes sees from a different point of view. This helps you see length (how long things are), width (how wide things are), and depth (how deep things are). There are ways to increase vision making it easier to see by using tools such as magnifying glasses, eyeglasses and microscopes.

## Eye Color:

Look around the room at your classmates. What are the different eye colors that you see? Lots of people have brown eyes, blues eyes, and green eyes. But eyes can also be gray, “hazel”—which is a mix of brown, green and blue—golden brown or amber, and even violet. Some people even have one eye that is different from the other.



Your eye color is determined by the amount of coloring matter (pigment) called melanin that is present in the colored part of your eye, which is called the iris. The more melanin that is in the iris, the darker the eye color. People with light blue eyes have less melanin than people with dark brown eyes.

## Class Discussion:

1. Look around the room and tell me what you can see.
2. Close your eyes and tell me what you can see.
3. With one eye open and the other closed, look around the room.  
Is it easier or harder to see with one or both eyes open?
4. What do your eyes help you do?  
***See the world around you...***
5. What movements do your eyes make?  
***Open, blink, shut, wink...***
6. Why are eyes special?  
***We only get one pair. We can't get new ones. Most of what we learn is through our eyes. They are fragile and tender.***
7. How do we communicate with others using our eyes?  
***Looking, crying, winking, raising our eyebrows, squinting, closing eyes...***
8. What do we communicate with our eyes?  
***Attention, happiness, sadness, anger...***
9. What type of communication are we showing?  
***Non-verbal.***

## Optional Fun Facts About Eyes:

- ★ Each eye weighs 1/4 ounce.
- ★ The eye measures less than 1 inch in diameter.

- ★ During a blink, the eye is closed 0.3 seconds. This equates to 30 minutes each day.
- ★ One in every 12 boys/men is color blind.
- ★ The eye continuously makes small jittery movements.
- ★ Some bats have poor eyesight and use their hearing to track insects and avoid obstacles
- ★ Alligators and most birds have three eyelids.
- ★ Eagles can see a mouse one mile away.
- ★ Earthworms are blind.
- ★ Jumping spiders have eight eyes.
- ★ Owl eyes fill over half of its skull, and an owl can rotate its neck 270 degrees.
- ★ Flying insects can see up to 360 images a second during daylight, whereas the human eye processes approximately 60.
- ★ Fish sleep with their eyes open.
- ★ Starfish eyes are on its feet.
- ★ Some worms have more than 100 eyes.

## **PRE-K – GRADE 2 ACTIVITY: EYE COLOR CHARTING ACTIVITY**

### **Activity Objectives:**

- ★ Students will learn how to chart and graph using collected data.
- ★ Students will predict study results.

### **Materials:**

- ★ Paper
- ★ Plain or graph paper
- ★ Crayons, markers or colored pencils (black, gray, brown, green, blue)
- ★ Small mirror(s)

### **Instructions:**

1. Students will predict which eye color they think will be found most often in a classroom.
2. Have students look into mirrors to determine eye color.
3. On a piece of paper, have students write their names and draw a circle. Have them color the circle with the color of their own eyes.
4. Students will then turn in findings to teacher.

5. Have students help count and categorize colors.
6. Chart the results on a graph.

### **Class Discussion:**

1. Was your classroom prediction of eye color right?
2. If you visited another classroom, do you think the results would be the same or different?
3. Do you think the results would be the same or different, if we only charted boys/girls?

### **Optional Activity Suggestions:**

- ★ Play games that emphasize the importance of seeing and not being able to see, such as “I Spy.”
- ★ Have students cut out pictures of items from magazines that require the use of each of the 5 senses.

# Lesson Two: The Eye and How We See

## Lesson Objective:

★ Students will recognize the terms used for parts of the eye.

## Discussion Points:

Referring to the *Teacher Eye Exam Diagram PDF*, review the basic parts of the eye.

Your eye is made up of many parts.

**Eyebrows (1)** help to shade your eyes. They also help to keep sweat and debris from falling into your eyes.

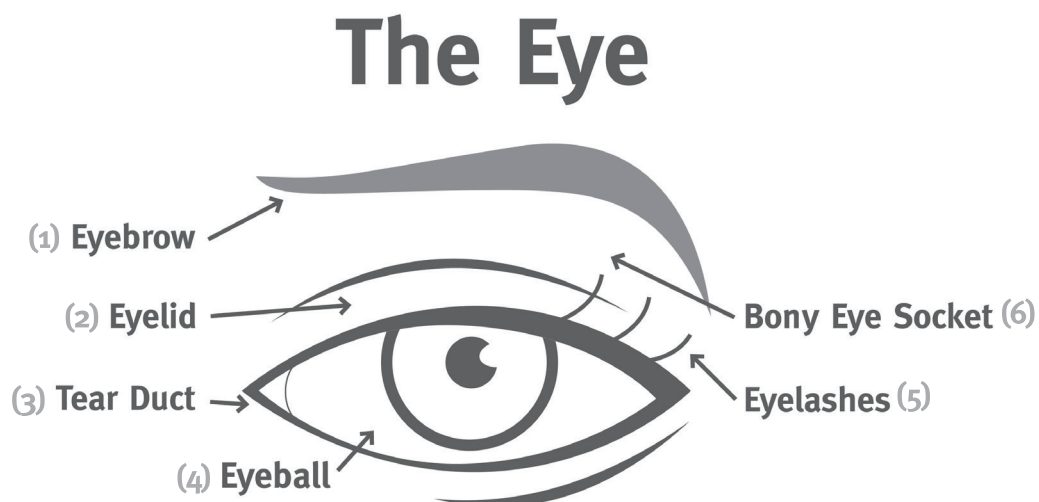
**Eyelids (2)** move up and down over your eyes like a window shade. They sweep dirt away when you blink and help spread tears. They help protect our eyes by automatically closing when an object gets too close to your eyes. Eyelids keep the light out when you sleep.

**Tear ducts (3)** drain tears from your eyes. Tears draining through tear ducts ultimately drain through your nose. This is why you often need to blow your nose when your eyes tear up or you cry.

**The Eye Ball (4)** provides a clear “window” at the front of the eye. It is about an inch in diameter and weighs just a quarter of an ounce. Within the eye are tissues, fluids, nerves, and cells that all work to help us see.

**Eyelashes (5)** are the tiny row of hairs along your upper and lower eyelids. Each eye has approximately 100–150 eyelashes on the upper eyelid and 50-70 on the lower lid. Eyelashes help keep dust and dirt, sweat, water, and other irritants from getting into your eyes, so don't cut them!

The eye rests in a **bony eye socket (6)** that helps protect the eye against impact.



## PRE-K – GRADE 2 ACTIVITY: EYE EXAM DIAGRAM

### Activity Objective:

- ★ Students will correctly identify basic parts of the eye.

### Materials:

- ★ Pens, Pencils, Markers or Crayons
- ★ *Star Pupils K-2 Eye Health and Safety Program Student Eye Exam Diagram*

### Instructions:

1. Download the *Star Pupils K-2 Eye Health and Safety Program Student Eye Exam Diagram* PDF, copy and distribute to class.
2. Instruct students to draw a line or arrow from the vocabulary word to the correct part on the eye diagram.
3. Instruct students to color the eye.



# Lesson Three: Eye Safety

## Lesson Objective:

- ★ Help students identify objects in and around the home that can be dangerous to their eyes
- ★ Introduce the concept of sports safety to students
- ★ Introduce students to the need to protect their eyes from the sun

## Discussion Points:

Because you only get one pair of eyes, it is very important that you do everything you can to protect them from injury. Objects found around the home can be harmful to your eyes. Sports can also be dangerous to your eyes. And so can spending time in the sun without sunglasses.

## Class Discussion:

1. **The following objects** commonly found in or around the home can be dangerous to your eyes.

Sling Shot	Sticks	Rubber Bands	Chemicals	Hammer
Nails	Chemistry Set	Detergent	Baseball Bat	Saw
Pencil	Pens	Darts	Cleaners	Spray Cans
Shooting Toys	Tools	Soap	Bows and Arrows	Scissors
Knives	Fishing Hook			

2. Can you think of other objects that could be dangerous to your eyes?

## SPORTS EYE PROTECTION:

### Discussion Points:

When you play sports, you must take special care to protect your eyes especially when you play baseball, basketball and racquet sports and when swimming. Mom, dad and the eye care professional can help you select cool safety glasses that will keep your eyes safe when you play sports!

### Class Discussion:

1. Can you think of some other sports that might be dangerous to your eyes?

**Examples:** *Tennis, Lacrosse, Soccer, Softball, Wrestling*

## SUN PROTECTION:

### Discussion Points:

It's fun to play sports and games in the sun, but did you know that too much sun can hurt your eyes? The more time you spend outside, the more your eyes are at risk for damage from the sun's ultraviolet rays.

#### ***What are ultraviolet rays and how can they hurt your eyes?***

The sun releases energy (radiation) in many forms. The sunlight you see is one form. The heat you feel from the sun is another. Ultraviolet (UV) rays, a third type, are invisible to the eye. UV rays can burn your skin causing sunburn. They can also damage your eyes and permanently hurt your vision.

UV rays come directly from the sun, but they are also reflected from the ground, from water, snow, sand and other bright surfaces.

It's especially important to protect your eyes from the sun in the middle of the day—10 am to 3 pm—when UV rays are very bright and strong.

Even though UV rays are stronger in very sunny southern states like Texas or Florida and in mountainous states at higher altitudes like Colorado or New Mexico, they can hurt your eyes no matter where you live.

***It is very important to protect your eyes from the sun anytime you are outside!*** To protect your eyes from the sun you should wear sunglasses that block the UV rays and wear a brimmed hat or cap. A wide brimmed hat or cap will block about half of UV rays. A brimmed hat or cap can also protect against the UV rays that can reach your eyes from above or around glasses.

**Conclusion: You only get one pair of eyes and can't get new ones so it is very important to take care of them. If you are unable to see an object close up or far away and it appears blurry, or you are having headaches or any pain your eyes, let me, your mom or dad or an adult know right away.**

## **PRE-K – GRADE 2 ACTIVITY: EYE HEALTH AND SAFETY COLORING SHEETS**

### **Activity Objective:**

- ★ Each coloring sheet reinforces a positive eye health and safety message.

### **Materials:**

- ★ *Star Pupils K-2 Eye Health and Safety Program* Coloring Sheets.
- ★ Pens, pencils, markers or crayons.

### **Instructions:**

1. Download and distribute the *Star Pupils K-2 Eye Health and Safety Program* Coloring Sheets. We have provided several for you to choose from.
2. Review the safety message on the coloring sheet(s) you have selected.
3. Instruct students to color the sheets.

### **Optional Classroom Activity: Eye Hazard Classroom Collage**

Using magazines, newspapers or images from the Internet, have the students locate pictures of objects commonly found in the home, yard or playground that could be dangerous to the eyes. Create a classroom collage of eye injury hazards. Display in classroom.

### **Take-Home Activity: Safety Eye Check Worksheet**

Download PDF of the *Safety Eye Check Worksheet* and distribute to class. Instruct students to have their parents or caregivers help them locate vocabulary words of objects commonly found in and around the home that are dangerous to eyes.

# Appendix

## Star Pupils K–2 Eye Health and Safety Program

Alignment with National Health Education Standards (NHES), National Science Education Standards (NS) and National Physical Education Standards.

Grade levels: Kindergarten, First and Second Grades

### Lesson One: The Importance of Sight

#### LESSON OBJECTIVE:

- Students will associate the eyes with the ability to see.
- Students will be able to tell a friend or adult why good eyesight is important.
- Students will recognize eye color diversity.

#### EYE COLOR CHARTING ACTIVITY OBJECTIVES:

- Students will learn how to chart and graph using collected data.
- Students will predict study results.

#### NHES

*Standard 6: Students will demonstrate the ability to use goal-setting skills to enhance health.*

- 6.2.1 Identify a short-term personal health goal and take action toward achieving the goal.
- 6.2.2 Identify who can help when assistance is needed to achieve a personal health goal.

#### NS

*Standard 1: Science as Inquiry*

- Abilities necessary to do scientific inquiry
- Understanding about scientific inquiry

*Standard 2: Physical Science*

- Position and motion of objects
- Light, heat, electricity, and magnetism

*Standard 3: Life Science*

- The characteristics of organisms
- Organisms and environments

*Standard 5: Science and Technology*

- Understanding about science and technology
- Abilities to distinguish between natural objects and objects made by humans

*Standard 6: Personal and Social Perspectives*

- Personal health
- Characteristics and changes in populations
- Types of resources
- Changes in environments

*Standard 7: History of Nature and Science*

- Science as a human endeavor

### Lesson Two: The Eye and How We See

#### LESSON OBJECTIVE:

- Students will recognize the terms used for parts of the eye.

#### EYE EXAM DIAGRAM ACTIVITY OBJECTIVE:

- Students will correctly identify basic parts of the eye.

#### NS

*Standard 1: Science as Inquiry*

- Abilities necessary to do scientific inquiry
- Understanding about scientific inquiry

*Standard 3: Life Science*

- The characteristics of organisms
- Organisms and environments

### Lesson Three: Eye Safety

#### LESSON OBJECTIVE:

- Help students identify objects in and around the home that can be dangerous to their eyes.
- Introduce the concept of sports safety to students.
- Introduce students to the need to protect their eyes from the sun.

#### EYE HEALTH AND SAFETY COLORING SHEETS ACTIVITY OBJECTIVE:

- Each coloring sheet reinforces a positive eye health and safety message.

#### NHES:

*Standard 1: Students will comprehend concepts related to health promotion and disease prevention to enhance health.*

- 1.2.1 Identify that healthy behaviors impact personal health.
- 1.2.4 List ways to prevent common childhood injuries.
- 1.2.5 Describe why it is important to seek health care.

*Standard 2: Students will analyze the influence of family, peers, culture, media, technology, and other factors on health behaviors.*

- 2.2.1 Identify how the family influences personal health practices and behaviors.
- 2.2.2 Identify what the school can do to support personal health practices and behaviors.

*Standard 5: Students will demonstrate the ability to use decision-making skills to enhance health.*

- 5.2.1 Identify situations when a health-related decision is needed.
- 5.2.2 Differentiate between situations when a health-related decision can be made individually or when assistance is needed.

*Standard 6: Students will demonstrate the ability to use goal-setting skills to enhance health.*

- 6.2.1 Identify a short-term personal health goal and take action toward achieving the goal.
- 6.2.2 Identify who can help when assistance is needed to achieve a personal health goal.

*Standard 7: Students will demonstrate the ability to practice health-enhancing behaviors and avoid or reduce health risks.*

- 7.2.1 Demonstrate healthy practices and behaviors to maintain or improve personal health.
- 7.2.2 Demonstrate behaviors that avoid or reduce health risks.

*Standard 8: Students will demonstrate the ability to advocate for personal, family, and community health.*

- 8.2.1 Make requests to promote personal health.
- 8.2.2 Encourage peers to make positive health choices.

#### NS

*Standard 5: Science and Technology*

- Abilities of technological design
- Understanding about science and technology
- Abilities to distinguish between natural objects and objects made by humans

#### National Physical Education Standards

*Standard 5: Exhibits responsible personal and social behavior that respects self and others in physical activity settings.*

#### Resources:

<http://www.cdc.gov/HealthyYouth/SHER/standards/index.htm>

[http://www.educationworld.com/standards/national/nph/health/k\\_4.shtml#nph-h.k-4.1](http://www.educationworld.com/standards/national/nph/health/k_4.shtml#nph-h.k-4.1)

[http://www.nap.edu/openbook.php?record\\_id=4962&page=104](http://www.nap.edu/openbook.php?record_id=4962&page=104)

[http://www.educationworld.com/standards/national/science/k\\_4.shtml](http://www.educationworld.com/standards/national/science/k_4.shtml)

<http://www.aahperd.org/naspe/standards/nationalStandards/PEstandards.cfm>

[http://www.educationworld.com/standards/national/nph/pe/k\\_12.shtml](http://www.educationworld.com/standards/national/nph/pe/k_12.shtml)