



Eye Learn About Vision Health & Protection

Your Eyes and the Eclipse



**Prevent
Blindness**
Ohio

Our Vision Is Vision.

Preschool & Early Childhood Education Lesson

This eye health education lesson plan follows the most up-to-date National Health Education Standards Performance Indicators for Pre-K to 2nd grade. **This lesson is intended for use with children aged 3 to 5 years old.**

The lesson includes learning objectives, activities, and evaluation.

With the acknowledgment that early learning and development guidelines (ELDG's) vary by state but are nonetheless required, we encourage you to review **state ELDG's** through the Child Care Technical Assistance Network.

Health education lessons and activities are adapted from evidence-based content belonging to the Prevent Blindness **Star Pupils Eye Health and Safety Curriculum** and **Small Steps for Big Vision: An Eye Health Tool Kit for Parents and Caregivers**.

Books are referenced that created inspiration for the following content focused on the eye. This lesson focuses on eye function and children wearing eyeglasses.

For any questions about this lesson, please contact Eclipse@PreventBlindness.org

Lesson: Your Eyes and the Eclipse

Learn About...

Topic: What is a solar eclipse? How can we practice eye safety while viewing one?

Rationale: In 2023 and 2024, there will be two solar eclipses visible in the U.S. Children should be taught what happens during an eclipse, and about eye safety when viewing an eclipse to prevent injury to the eyes.

Objectives: By the end of the lesson, children will be able to:

1. Describe what happens to the Sun, Earth, and Moon during a solar eclipse.
2. Identify how to protect their eyes during a solar eclipse.

Note: There are 2 activities available to select.

Time: 15 minutes

Teaching Methods:

- Demonstrations and hands-on learning
- Storytelling with guided discussion
- Repetition and positive reinforcement

Materials:

Activity 1

- Eclipse book
- Flashlight
- Tennis ball
- Ping pong ball
- Eclipse glasses for your classroom (*can be purchased here*)

Activity 2

- Glue stick
- White paper plate
- Colored construction paper
- Marker
- Eclipse glasses for your classroom (*can be purchased here*)



Activity 1:

1. Have the children sit in a circle and tell them you will be reading a story about the solar eclipses that will be occurring this year and next year. See if they know what a solar eclipse is before starting the book.
2. Read [Between the Sun and the Earth](#).
3. Pause on pages 2-5 and explain to children the importance of the Sun, the Earth, and the Moon.
4. Using a flashlight, tennis ball (Earth), and ping pong ball (Moon), demonstrate how a shadow is cast.
5. Make the room dark and point the flashlight at the tennis ball. Move the ping pong ball to circle around the tennis ball to see the shadow. Then resume reading the book.
6. Pause on page 12 and demonstrate to the children how to put on the eclipse glasses.
7. If time permits, have children break into groups of 3 to 4 and allow them to practice putting the eclipse glasses on and taking them off.
8. Write down on a card the date and time of the eclipses in their area to take home.

Activity 2:

1. Pre-cut the blue, yellow, and gray circles for the children. Cut an arc-shaped slit into the center of each of the paper plates as well.
2. If time permits, have each student decorate their circles.
3. Once the children have decorated their Sun, Moon, and Earth, glue a popsicle stick to the back of the Moon cut-out.
4. Glue the Earth and Sun on the plate, with the Sun above the Earth.
5. Insert the Moon cut-out through the slit in the plate.
6. Have each child demonstrate moving the Moon between the Earth and the Sun with a partner to show a solar eclipse.
7. If time permits, have children break into groups of 3 to 4 and allow them to practice putting the eclipse glasses on and taking them off.
8. Write on each child's paper plate the date and time of the eclipse in their area to take home.

Key Points:

1. A solar eclipse happens when the Moon moves between the Sun and the Earth.

- a. The moon causes a shadow to appear on Earth.
- b. When a total eclipse is visible, the sky will darken (like nighttime).

2. You should never look directly at the solar eclipse unless proper eye protection is worn.

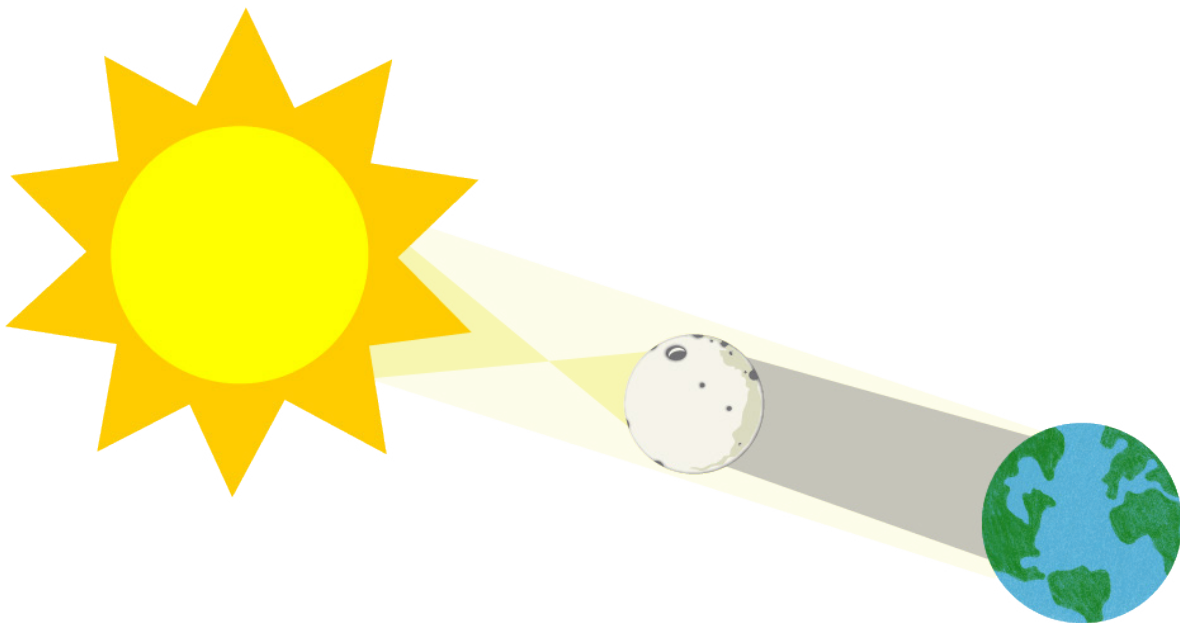
- a. A solar eclipse can cause injury to the eyes.

3. How can we look at a solar eclipse safely?

- a. Parental supervision is required for children to view the eclipse.
- b. Put on your solar eclipse glasses to view an eclipse safely.
- c. Regular sunglasses will NOT protect your eyes during an eclipse.
- d. Wear the solar eclipse glasses for the entire duration of the eclipse.
- e. Do not try to look at the solar eclipse or take a picture with a smartphone.

4. When are the solar eclipses?

- a. October 14, 2023
- b. April 8, 2024



ACTIVITY 1: Flashlight Path



ACTIVITY 2: Solar Eclipse Path

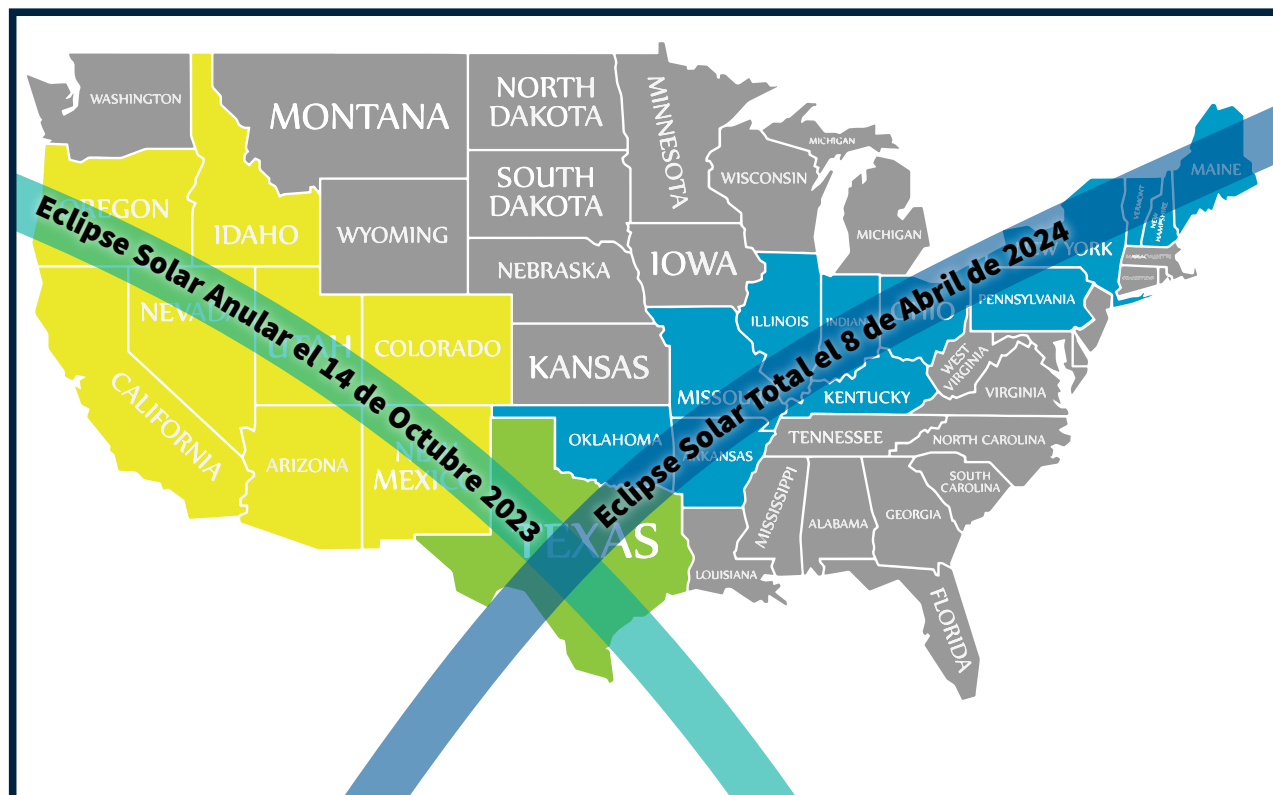


Evaluation Plan – Lesson: Your Eyes and the Eclipse Eye

Measurable Objectives	Implementation Activities	Length of Lesson	Methods of Evaluating Objectives and Documentation
<p>By the end of the lesson, children will be able to:</p> <ol style="list-style-type: none">1. Describe what happens to the Sun, Earth, and Moon during a solar eclipse.2. Identify ways to protect their eyes during solar eclipse viewing.	<p>Educator will guide the children through the book about eclipses, pausing to make sure children understand what happens to the Sun, Moon, and Earth during a solar eclipse.</p> <p>Children will create a mock eclipse using white paper plates, as well as practice wearing solar eclipse glasses.</p>	15 Minutes	<p>Observe each child pass the Moon between the Sun and the Earth on their plate diagram.</p> <p>Ensure all children can successfully put on the solar eclipse glasses.</p>

Resources

Path of Solar Eclipse



Fact Sheets for Teachers

- **Solar Eclipse and Your Eyes**
- **Tips for Wearing Solar Eclipse Glasses**
- **What is a Solar Eclipse?**

Contact Us

- **info@pbohio.org**