

Get Ready to Safely View the Spectacular Event

On April 8, 2024, a celestial spectacle is set to grace the skies: a Total Solar Eclipse! Although we will not be able to view the full eclipse from Florida, Hillsborough County Public Schools is thrilled about this extraordinary astronomical event and the multitude of opportunities it offers for students to delve into the wonders of science, technology, engineering, and mathematics (STEM) right from the comfort of their own homes.

Hillsborough County Public Schools is dedicated to providing a high-quality education and fostering a love for learning in our students. We believe that events like the Total Solar Eclipse present excellent opportunities for students to connect with the world of STEM and expand their knowledge beyond the classroom.

As the eclipse approaches, we encourage parents and teachers to engage with their students in exploring the wonders of our universe. This experience can spark a lifelong interest in science, technology, engineering, and mathematics.

Here are some **important safety guidelines** to follow during a total solar eclipse:

- Always inspect your solar filter or eclipse glasses before use. If scratched, punctured, torn or damaged do not use.
- Always supervise children using solar filters and eclipse glasses.
- Do not look at the uneclipsed or partially eclipsed Sun unless you are using eclipse glasses.
- Stand still and cover your eyes with your eclipse glasses or solar viewer before looking up at the bright Sun. If you wear glasses, keep them on and place the eclipse glasses on over them.
- View the Sun through eclipse glasses or a handheld solar viewer during the partial eclipse phases before and after totality.
- You can view the eclipse directly without proper eye protection only when the Moon completely obscures the Sun's bright face – during the brief and spectacular period known as totality. (You'll know it's safe when you can no longer see any part of the Sun through eclipse glasses or a solar viewer.)
- As soon as you see even a little bit of the bright Sun reappear after totality, immediately put your eclipse glasses back on or use a handheld solar viewer to look at the Sun.

What is a Total Solar Eclipse?

A Total Solar Eclipse occurs when the moon completely covers the sun, casting a shadow on Earth and turning day into night. This event promises to be an awe-inspiring and educational experience for students and families alike.

This will occur on April 8th and will appear partially to us from Tampa beginning at 1:43pm and ending at 4:15pm with maximum view at 3:00pm.

View maps of the Path of Totality, [Total Solar Eclipse of 2024: Here Are Maps of the 'Path of Totality' | Space](#)

Learning Opportunities for Students

Hillsborough County Public Schools encourages students to make the most of this rare celestial event by engaging in educational activities related to STEM disciplines. Here are some ideas to get students started:

- 1. Safe Observation Techniques:** Emphasize the importance of specialized eye protection designated for solar viewing during a total solar eclipse. Teach students the necessity of using proper eyewear or pinhole projectors to observe this natural phenomenon without damaging their eyes. [How to make a solar eclipse viewer to safely watch the eclipse | Live Science](#)
- 2. Create a Solar Eclipse Model:** Encourage students to construct a model illustrating how total solar eclipses occur. This hands-on activity helps them understand the intricate geometry of the Earth, the moon, and the sun. [Educator Guide: Model a Solar Eclipse | NASA/JPL Edu](#)
- 3. Study Solar Energy:** Explore the concept of solar energy and its applications in real-world scenarios. Discuss how solar panels work and their crucial role in renewable energy production. [How do solar panels work? | Live Science](#)
- 4. Astronomy and Geometry:** Delve into the geometry involved in eclipses, exploring the positions of celestial bodies, including the Earth-Sun-Moon system, celestial mechanics, and the physics of light and shadow. This can be an engaging way to connect math and science.
- 5. Historical and Cultural Aspects:** Investigate the historical and cultural significance of eclipses in various societies. Discuss ancient myths, legends, and the profound impact of eclipses on human history. [Solar Eclipse Myths From Around the World \(nationalgeographic.com\)](#)
- 6. Art and Creativity:** Inspire students to express their creativity through art projects inspired by the eclipse. This could include paintings, drawings, or even poetry related to the event.
- 7. Technology and Telescopes:** Guide students with access to telescopes or binoculars on how to safely observe the eclipse and learn about the equipment used in astronomy. [Different Ways to Safely View a Solar Eclipse \(youtube.com\)](#)
- 8. Online Resources:** Leverage online resources, such as live streams and educational websites, to augment students' understanding of eclipses and astronomy.

Don't miss this extraordinary celestial event, and let it be a source of inspiration and learning for our students. We look forward to witnessing the magic of the universe together!



Resources:

[Eclipses - NASA Science](#)

[Safety - NASA Science](#)

<https://my.nsta.org/resource/127966>