Solar Eclipse Educational Resource Links

Expectation from: A Framework for K-12 Science Education
ESS1.B: Earth and the Solar System

A model of the solar system can explain eclipses of the sun and the moon. Earth's spin axis is fixed in direction over the short-term, but tilted relative to its orbit around the sun. The seasons are a result of that tilt and are caused by the differential intensity of sunlight on different areas of Earth across the year. (MS-ESS1-1)

ALL	**National Science Teaching Association** • Administrator Guide • Educator Guide • General Information Guide **General Information** • https://eclipsewise.com/ • https://www.greatamericaneclipse.com/ (great animations!) • Moeclipse.org • https://www.timeanddate.com/eclipse/in/usa/st-louis?iso=20240408 • https://eclipse.aas.org/eclipse-america-2024
6-8 websites	**Discovery Education: For districts with an EdPlus partnership** Solar Eclipse Channel My NASA Data (includes) • Mini Lessons • Interactives • Lesson Plans **National Solar Observatory:** 9 Solar Eclipse Lesson Plans and Activity Guides Eclipse2024.org Includes Eclipse Simulators **NASA Eclipse** https://eclipse.gsfc.nasa.gov/
6-8	**YouTube**

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videos	**Solar Eclipse 101 / National Geographic (4:57)** A total solar eclipse happens somewhere on Earth once every year or two. What is an eclipse? Learn more about how solar eclipses happen, the four types of eclipses, and how to view the sun safely if you're within the path of totality. **Solar Eclipse 2024: Everything you Need to Know about the Total Solar Eclipse: (4:38)** Mark your calendars for Monday, April 8, 2024 - the date of the next total solar eclipse! MyRadar meteorologist Matthew Cappucci breaks down everything you need to know to get ready! **PBS Learning Media** Solar Eclipses Every now and then, the Sun, Earth, and Moon align so that, when viewed from the Earth, the Moon eclipses the Sun's light.
6-8 activities	**STAR*net (Science-Technology Activities and Resources For Libraries** Solar Eclipse Activities for Libraries = Sort by Age and Activity Time **Exploratorium:** Explore Hands-on, teacher-tested activities for the classroom and beyond. **NASA Science:** Activity: How can the little moon cover the Giant Sun?
6-8 Books	**American Astronomical Society** https://eclipse.aas.org/resources/books-articles **When the Sun Goes Dark by Andrew Franknoi and Dennis Schatz** Help youngsters understand the excitement about the recent solar eclipse with this charming and straightforward story about how eclipses of the Sun and Moon occur. Includes easy activities using ordinary items to make models, and explores common questions kids have. **Totality!: An Eclipse Guide in Thyme and Science by Jeffrey Bennett** *Totality!* features a unique combination of rhyme and science that makes it suitable for a wide range of ages **Eclipse: How the 1919 Solar Eclipse Proved Einstein's Theory of General Relativity (Moments in Science) by Darcy Pattison.** This nonfiction illustrated picture book explains how the push (acceleration) and pull (gravity) of space affects light.

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