



Introduction

A solar eclipse is happening on August 21, 2017 and it's a big deal! Some of us in Oregon will even be lucky enough to see the rare total solar eclipse. The upcoming eclipse is a great opportunity for families to learn and discover together. This issue provides ideas and tips to help prepare for the big day, as well as a few suggestions on family friendly science activities. Let the countdown begin!



This series of newsletters is inspired by and created just for parents. If you have suggestions, comments, or ideas for future newsletters please email: opecc@oregonstate.edu. For additional parenting resources, like us on Facebook (Oregon Parenting Education Collaborative) and follow us on Twitter (@OPECParentingEd).

What is a Solar Eclipse?



A solar eclipse is when the moon passes between the sun and Earth and the moon's shadow blocks out all (total eclipse) or part of the sun (partial eclipse). The chance to witness a total solar eclipse from coast to coast in the United States has not happened since 1918 and will not happen again until 2024. To find out what you will see (based on where you live), use the interactive Google map provided by NASA (<https://eclipse2017.nasa.gov/> - click the Events drop down, then Eclipse Interactive Map). You can also visit <https://www.timeanddate.com/eclipse/> for additional information on the timing of the eclipse for your area.

What to Expect

- **Partial Eclipse:** During a partial eclipse, part of the sun is still visible (the moon's shadow does not cover the whole sun). It will look like the moon took a bite out of the sun!
- **Total Eclipse:** If you are lucky enough to be within the path of the total eclipse, the sky will darken for about 2 minutes. With the darkening skies, the stars may become visible and birds stop chirping.

How can my Family Prepare?



- **Protective Eyewear:** Get protective eyewear (sunglasses will not work!). You can order 'Eclipse Glasses' online but make sure that glasses meet the ISO 12312-2 standards.
- **Location:** Find a spot that works for your family (travel may be difficult!). Pick a spot that is easy to get to, get there early and don't leave until after the event.
- **Stock up:** Depending on where you live, there may be lots of visitors in town. Make sure you have all of the food, water and supplies that you will need to get you through at least few days before and after the event.



Using the Solar Eclipse to Promote your Child's Interest in Science

According to research, a child's interest and natural curiosity in science comes from her parents. A parent's positive attitude about the subject can help encourage a child's interest in science. With the upcoming total solar eclipse happening across the US, it is the perfect time to discover and explore different science themes together. The science of the stars - or astronomy - is a great way to encourage children to ask questions and learn more about the subject. To help out, we have included a few websites with child-friendly science activities that will have you and your child working together to discover and explore!

Science Activities for All Ages

National Informal Stem Education Network:

<http://www.nisenet.org/> (English & Spanish)

NASA's Eclipse Website:

<https://eclipse2017.nasa.gov/>

PBS Parents:

<http://www.pbs.org/parents/education/science/activities/>

Library Laboratory - LIB LAB:

<https://cbcpubliclibrary.net/liblab/>

Fun With Your Kids!

Eclipse Time Capsule



The next total solar eclipse in the US will happen on April 8, 2024. Create a time capsule with your child and bury it or hide it on the day of the eclipse, August 21, 2017. What you put in your time capsule is up to you! You can include a letter to your child (sharing hopes and dreams for the future) as well as photographs or an old newspaper. For more ideas, visit <https://eclipse2017.nasa.gov/do-it-yourself-time-capsules>.



"...parents with positive attitudes toward science are able to sustain their child's interest and sense of ability in the subject throughout their educational journey."

Dilshani Sarathchandra



References

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<https://phys.org/news/2017-06-total-solar-eclipse-1st-years.html>

<https://www.uidaho.edu/news/here-we-have-uidaho-magazine/in-support-of-science>



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