



**Prevent
Blindness**
Ohio

Eclipse + Your Eyes

Children's Solar Eclipse Viewing Party Toolkit



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Hosting a Solar Eclipse Viewing Party?

The party planning pages include a safe viewing fact sheet, solar eclipse fact sheet, a poster, activity notes, instructions, for activity stations to keep kids entertained while waiting on the big celestial show!

Choose a Location

- o local community centers
- o museums, observatories
- o parks or open fields
- o Your own backyard is a good place to throw a party

Activities

- o Photobooth
- o Solar eclipse art
 - I. Oreo eclipse
 - II. Paper plate viewer

Children's Beverages

- o Sunkist Orange Soda
- o Capri Sun
- o Cosmic Colada

Ideas for your Solar Eclipse Viewing Party to be extra sweet and savory:

- o Crescent Moon sandwiches
- o Sun Chips
- o Moon Pies
- o Rocket Pops
- o Moon, Sun, or solar eclipse decorated sugar cookies or cupcakes.
- o Moon and star shaped cut-outs of fruit or veggies
- o Milky Way bars
- o Starburst
- o Orbit gum

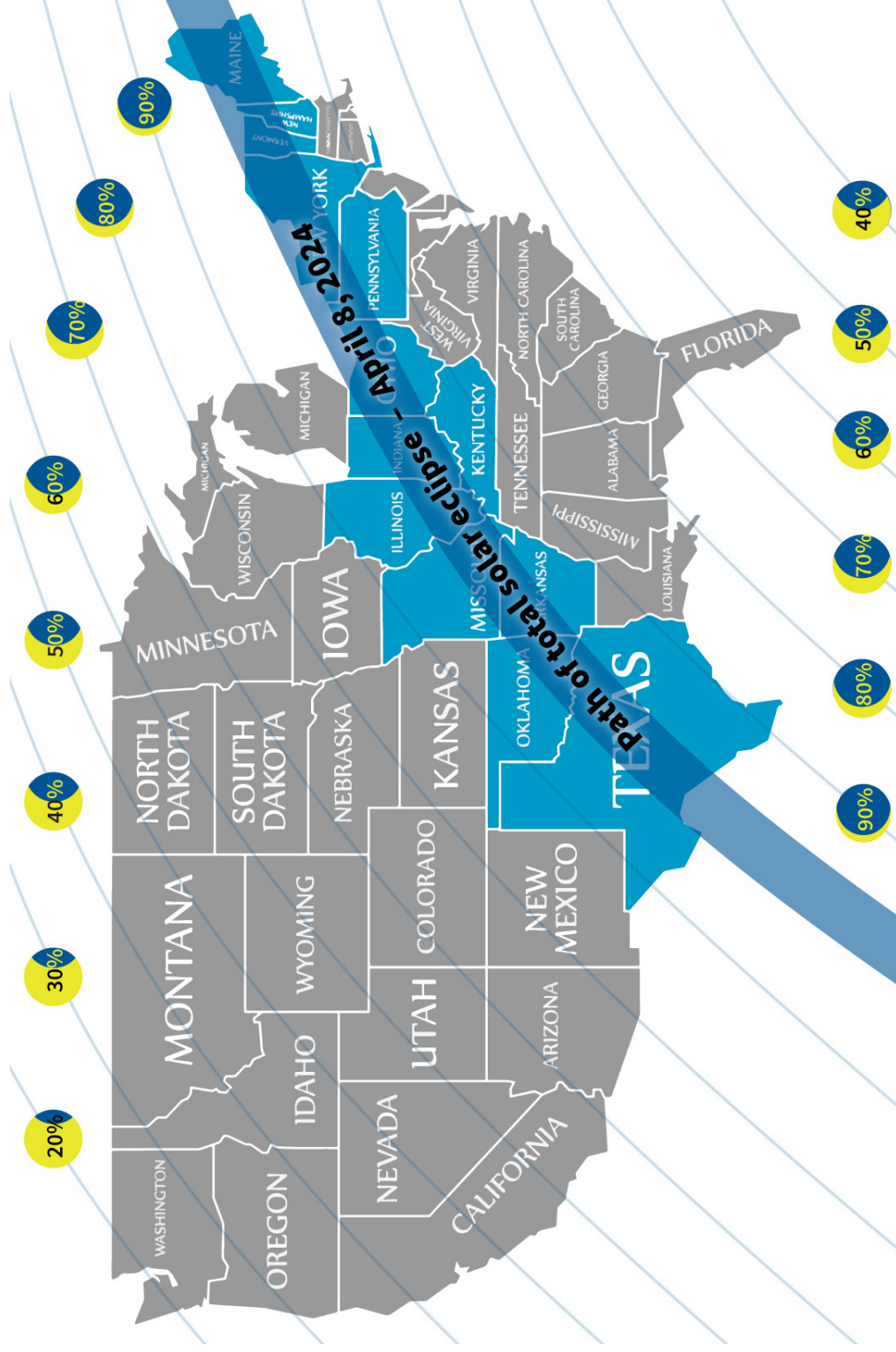


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Path of the Solar Eclipse

April 8, 2024



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What is a Solar Eclipse

A solar eclipse occurs when the moon moves between the sun and a planet, blocking the sun's light and casting a shadow on Earth. There are between 2-5 solar eclipses around the world each year. However, a total solar eclipse occurs about once every 18 months.



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Fun Facts About Eclipses

- The shadow of a solar eclipse can travel at speeds of more than 5,000 kilometers per hour.
- An eclipse can drop the temperature on Earth, anywhere between 5C all the way up to 20C.
- While neither Mercury nor Venus have eclipses (they have no moons), all other planets in our solar system do. Jupiter (with 79 moons!) has the most frequent eclipses.
- Animals are often misled by an eclipse, with many of them thinking day has turned to night – spiders start to dismantle their web, bats start to come out of their caves, crickets start to chirp, etc. And when the solar eclipse ends with the sunlight returning, roosters start to sing.



Types of Solar Eclipses



1. **Total solar eclipse** – The moon completely blocks the sun. A slight glow will be seen around the moon from the sun's outer atmosphere (the solar corona).
2. **Annular solar eclipse** – The sun and moon are exactly in line with Earth, but the apparent size of the moon is smaller than that of the Sun, causing a "ring of fire" effect around the moon.
3. **Partial solar eclipse** – Just as it sounds, the moon only partially blocks the sun. (There will always be a partial eclipse as the moon moves into place to cause a total or annular eclipse, but a partial eclipse can also take place without leading to a total or annular event.)

Phases of Solar Eclipses



- a. **First contact** – The instant when the partial phase of an eclipse begins.
- b. **Second contact** – The instant when the total or annular phase of an eclipse begins.
- c. **Totality** – The sun and moon are exactly in line with the earth. Moon completely blocks the sun.
- d. **Third contact** – The instant when the total or annular phase of an eclipse ends.
- e. **Fourth contact** – The instant when the partial phase of an eclipse ends.

How an Eclipse Can Damage Your Eyes

Exposing your eyes to the sun without proper eye protection during a solar eclipse can cause "eclipse blindness" or retinal burns, also known as solar retinopathy. This can damage or destroy cells in the retina (the back of the eye) that transmit what you see to the brain.

Damage can be temporary or permanent and occurs with no pain. It may take a few hours to a few days after viewing to realize damage has occurred. If you notice symptoms after viewing a solar eclipse, seek treatment from an eye care professional.

Protect your eyes from the sun!

NEVER look directly at an annular or partial eclipse without wearing ASO-approved solar eclipse safety glasses. Doing so can cause permanent damage. You can view the sun during a total eclipse, but only during the very brief time the sun is in **totality** – and even then, with caution.

How to Safely Watch a Solar Eclipse

- The best way to view a solar eclipse is by using ASO-approved solar eclipse safety glasses. Other ways you may watch include on television, at a planetarium, through a pinhole projection, with welder's glass, or through mylar filters (visit

[Ohio.PreventBlindness.org/solar-eclipse-and-your-eyes](https://www.preventblindness.org/solar-eclipse-and-your-eyes) to learn more about these options).

- **Do NOT** view an eclipse through your smartphone camera, a camera viewfinder, or unsafe filters not specifically designed for viewing a solar eclipse.

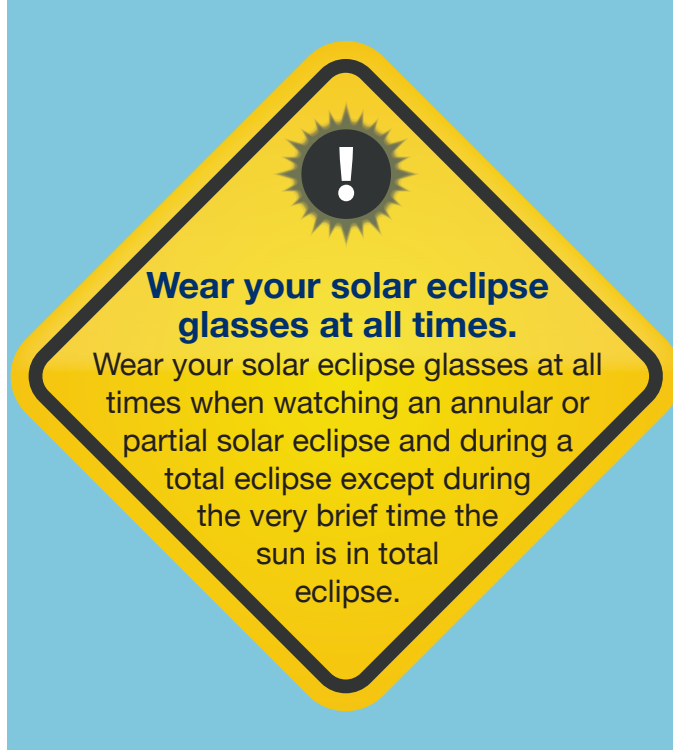
Tips for Wearing Solar Eclipse Glasses

Use expert-approved solar eclipse glasses to view a solar eclipse safely and without damaging your eyes.



Check for safety standards.

Make sure glasses meet safety requirements and are manufactured with the **ISO 12312-2 standard**. Look for ISO standard labeling on eclipse glasses and purchase them from a trusted source.



Check the fit.

Disposable eclipse glasses are designed to fit both children and adults, but check the fit before putting on eclipse glasses or providing them to a child.



Check for damage.

Check your solar eclipse glasses for damage before using them. If the lenses of your solar eclipse glasses appear torn or scratched, they are not safe to use.



Prevent Blindness Ohio has partnered with companies for the manufacture and sale of Prevent Blindness solar eclipse viewing glasses that **meet the safety requirements of ISO 12312-2 filters for direct observation of the sun.**

Talk to an eyecare professional about additional ways to keep your eyes safe while viewing a solar eclipse.

For more information, visit: Ohio.PreventBlindness.org/solar-eclipse-and-your-eyes

Photobooth

Spruce up your event photos with a custom made photo booth! Gather your art supplies and the biggest box or piece of cardboard you can find. Use your imagination to create a super spacey eclipse scene!

Supplies:

Large piece of cardboard
Scissors
Paint

Directions:

1. Paint a fun face-in-hole eclipse scene.
2. Cut face sized holes.
3. Take fun photos with your phone or camera! Don't forget to tag @PreventBlindnessOhio!



Credit: VivifyStem.com/blog/2017/7/30/solar-eclipse-party-and-activities

Paper Plate Viewer

Viewing a partial solar eclipse can expose your eyes to the sun's rays causing damage to the eye. To help keep your children's eyes safer while wearing ASO-approved solar eclipse safety glasses, you can make a paper plate viewer! Kids can have some creative fun while protecting their eyes.

Supplies:

One pair of solar eclipse glasses
Paper plate
Pen or pencil
Markers, paint or crayons
Scissors
String

Directions:

1. Trace the eclipse glasses onto the middle of the plate.
2. Use paint, markers, or crayons to customize your paper plate viewer.
3. Cut a triangle out of the plate with the nose rest as the top.
4. Cut a rectangle out of the middle of the tracing of the glasses. LEAVE room around the edges.
5. Cut slits on the vertical lines of the glasses and insert the solar eclipse glasses into the slots. For extra safety, tape the edges of the glasses to the plate.
6. If you need to, trim the nose piece for comfort.
7. Add a string to the back of the glasses to keep the paper plate viewer from slipping off.



Solar Eclipse Word Search

Find and circle words from the Word Bank. Search up, down, and diagonally to find the hidden words.

Word Bank

annular
blindness
damage
darkness

eclipse
eye
filter
glasses

moon
path
partial
pinhole

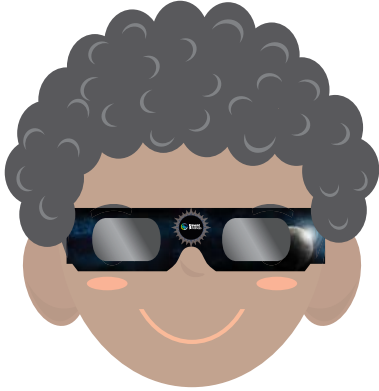
prevention
protect
shadow
sun

totality
safety
retina
vision

D	X	S	F	D	V	N	S	H	A	D	O	W	F
P	A	T	H	N	R	E	T	I	N	A	M	F	I
H	N	M	P	S	P	H	D	Y	B	K	S	O	L
O	N	R	A	V	P	R	O	T	E	C	T	E	T
K	U	G	R	G	R	F	H	B	A	M	Y	Y	E
S	L	U	T	X	E	B	Y	L	O	T	P	E	R
U	A	O	I	Y	V	T	N	I	A	T	L	H	X
G	R	R	A	M	E	C	G	N	C	O	U	K	D
L	D	E	L	F	N	E	S	D	H	T	D	O	P
A	P	B	A	D	T	D	G	N	C	A	U	A	S
S	M	S	R	F	I	C	I	E	N	L	C	K	U
S	B	N	P	T	O	P	C	S	F	I	X	F	N
E	D	A	R	K	N	E	S	S	I	T	I	N	N
S	N	I	C	R	C	H	X	S	M	Y	B	O	O
V	O	V	I	S	I	O	N	L	D	C	O	I	L
T	D	E	E	C	L	I	P	S	E	M	Y	K	V

Solar Eclipse Word Scramble

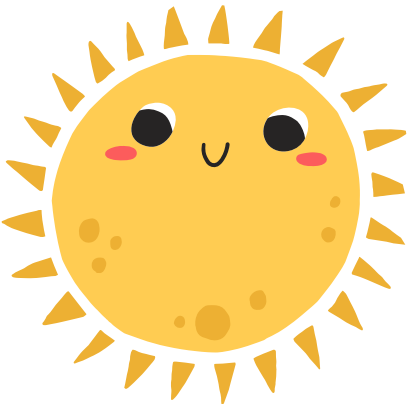
Unscramble the solar eclipse words then use them in a sentence.



slsagse: _____



onom: _____



uns: _____



ahtre: _____



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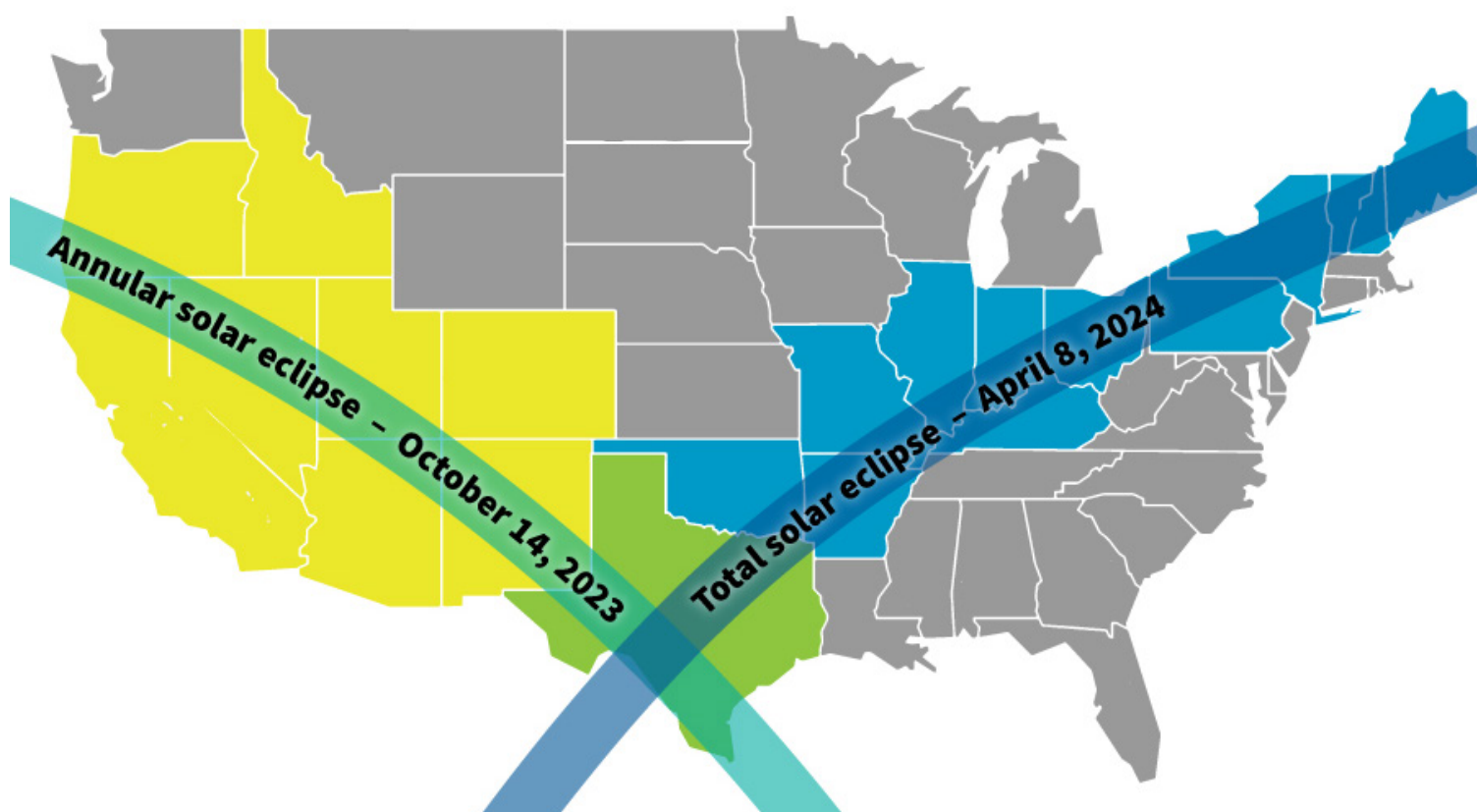
For more information, visit
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Paths of the Solar Eclipse

Please label the states where the **October 14, 2023** annular solar eclipse was fully visible based on the path below.

How many did you name _____?

Please label the states where the **April 8, 2024** eclipse will experience totality based on the path below. How many did you name _____?



NEVER look directly at the sun! Remember to protect your eyes.

No matter what state you live in, wear your eclipse glasses at all times when watching the October annular solar eclipse. Wear your eclipse glasses at all times during the April solar eclipse, except during the very brief time the sun is in total darkness if you are in the path of totality.



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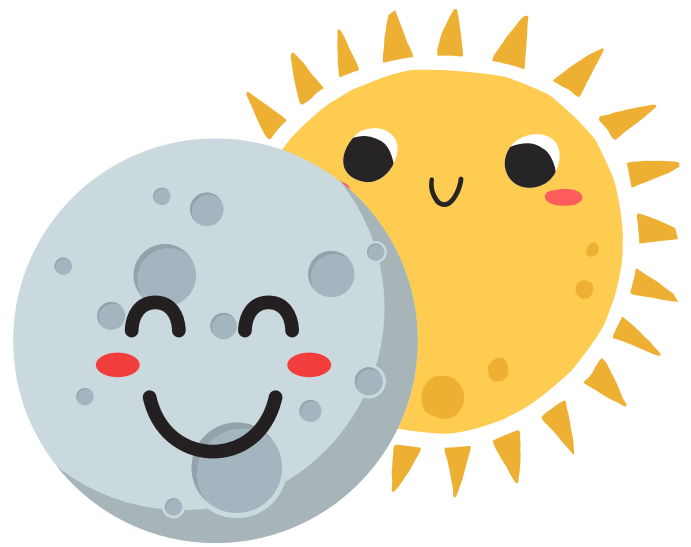
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2024 Solar Eclipse

Name: _____

I am _____ years old.



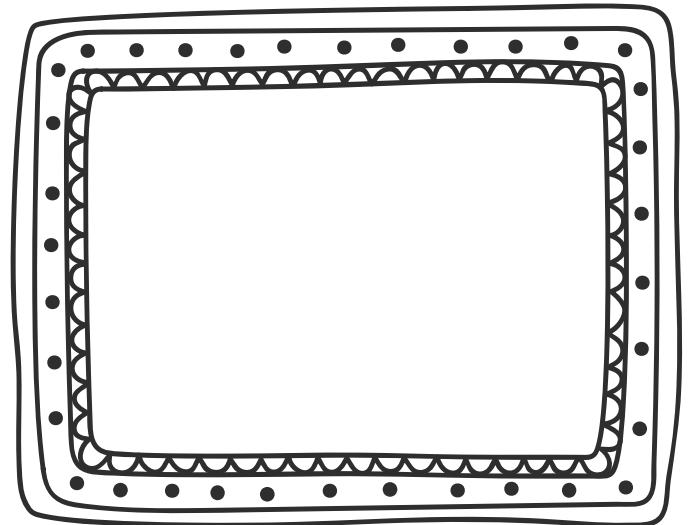
I traveled to watch the eclipse:

☐ YES ☐ NO

I watched the eclipse from:

I watched the eclipse with:

A drawing of the eclipse:



Today's
weather was:

Was it total darkness?

☐ YES ☐ NO

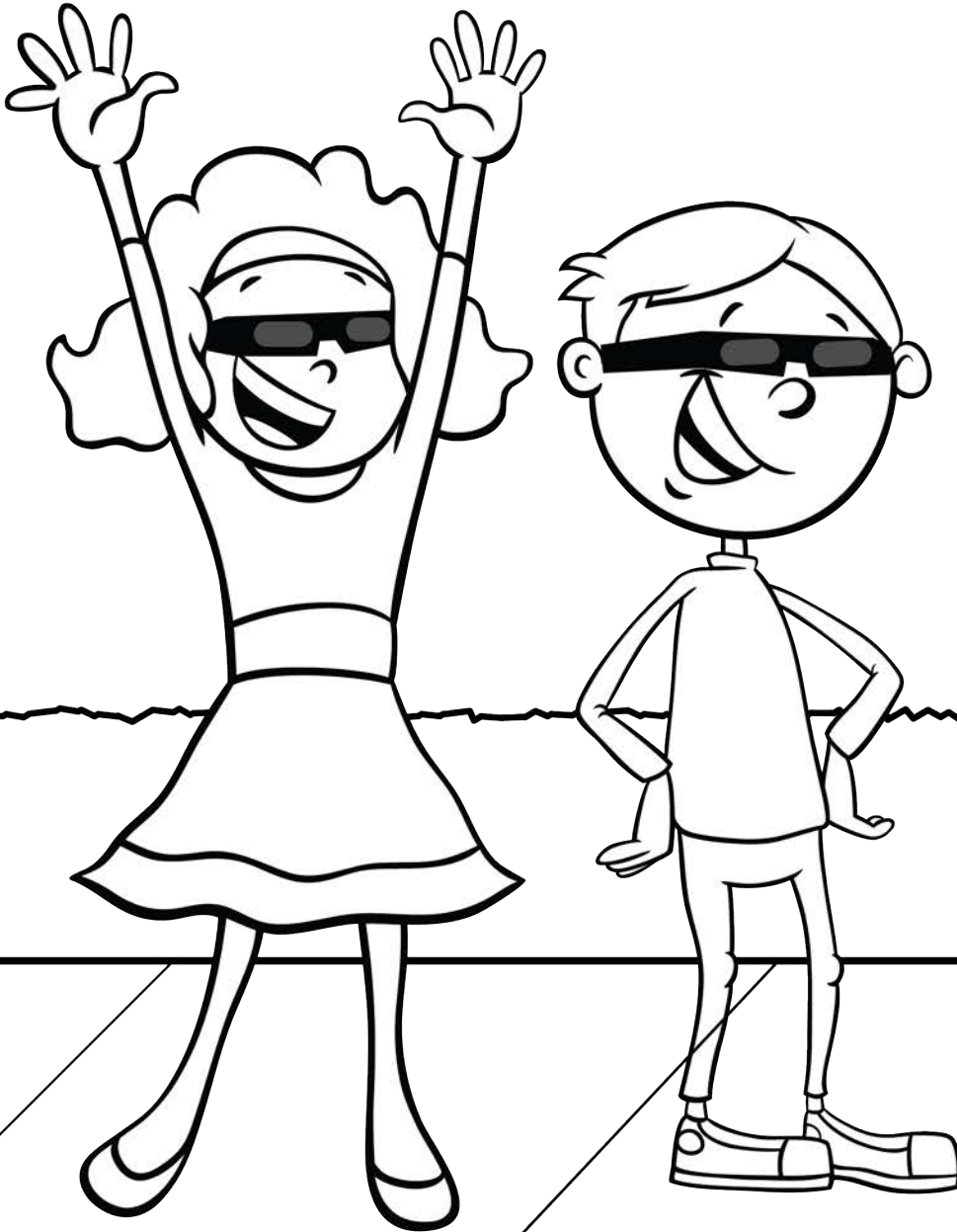
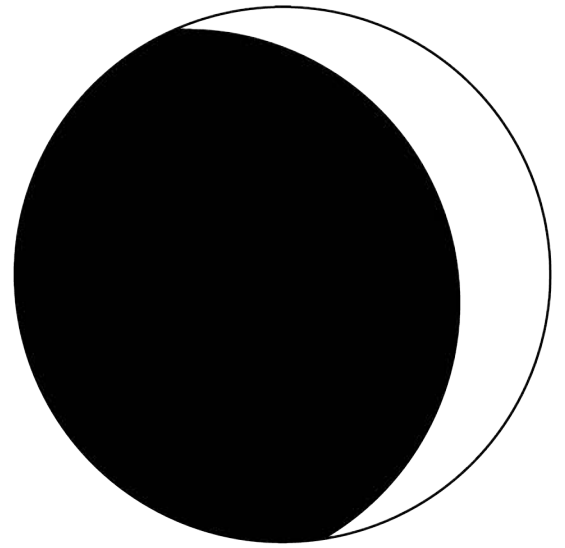
What I will remember the most:



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SOLAR ECLIPSE



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Cosmic Colada

The Ingredients:

Ice
1 C. Pineapple Juice
1/2 C. Pineapple Tidbits
1/2 C. Cream of Coconut
1/4 C. Dark Blackberry Puree or Syrup
Black Food Coloring, if desired
Sugar for Rimming
Yellow Food Coloring
Red Food Coloring
Corn Syrup for Rimming



From:
[SeasonalMemories.com/
solar-eclipse-colada-drinks](http://SeasonalMemories.com/solar-eclipse-colada-drinks)



The Directions:

We will first want to rim our glasses so the sugar will have time to dry before adding your drinks. In a small sandwich bag, add about 1/4 cup of granulated sugar, 4 drops red food coloring, and 2 drops yellow food coloring. Zip up tight and hand it over to your little one to shake and pinch until all of the sugar is colored. You can add more food coloring to get it to the color you want! Dip just the edge of the glasses in corn syrup and let the excess drip off. Dip into the colored sugar several times, and set aside to dry. In a blender, add in the pineapple juice, pineapple tidbits, and cream of coconut. Add 3-4 cups of ice depending on what consistency you want, and blend well. Add more ice or pineapple juice if needed. Stir in the blackberry puree and black food coloring if desired, and pour into your glasses and serve immediately.



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Oreo Cookie Eclipse

You can use sandwich cookies to demonstrate how the moon covers the sun during timeline of an eclipse. Then enjoy a sweet treat afterward to celebrate!

Supplies:

10 Oreo Cookies
Sweet tooth

Directions:

1. Separate each cookie into two parts.
2. Place the cookie over the cream to show the progression of the moon over the sun during the eclipse.
3. Enjoy eating the cookies.



Solar Eclipse Playlist



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Total Eclipse of the Heart by Bonnie Tyler

Eclipse by Pink Floyd

Ain't No Sunshine by Bill Withers

Dark Side of the Moon by Chris Stapleton

Blinded by the Light by Bruce Springsteen

Talking to the Moon by Bruno Mars

Steal My Sunshine by Len

Here Comes the Sun by The Beatles

Fly Me To the Moon by Frank Sinatra

You Are My Sunshine by Jimmie Davis or Johnny Cash

For more information, visit

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