



# The Mini Page

**Next Week:**  
Our states:  
Kentucky

Issue 12, 2024

Founded by Betty Debnam



## Darkness During the Day

### Mini Fact:

The moon is too small to cover the entire sun's disk, so a ring, or **annulus**, of bright sunlight surrounds the moon.

image courtesy NASA



On Aug. 21, 2017, the International Space Station crossed the path of the eclipse three times as it orbited the Earth. Six astronauts aboard took photographs of the umbra from space.

There's a big event happening up in the sky in a few days. Are you ready for the 2024 solar eclipse? The Mini Page explores the science of the eclipse and safe ways to observe it.

### What is an eclipse?

An **eclipse** happens when one body in space passes directly between two others. A **solar** eclipse happens when the moon passes between the Earth and the sun, blocking the sun's light.

The solar eclipse expected on April 8 will cover a large path from Texas to Maine. In its direct path, experts say, the eclipse will make it appear as dark as dusk outside.

A partial eclipse will be visible in all U.S. states except Alaska.

The last time a total solar eclipse passed over the continental United States was in 2017.

### How does it happen?

There are several stages of a total eclipse. In the first stage, the moon is partially blocking the sun. This stage can last more than an hour.

As the eclipse becomes total, the last bits of sunlight streaming through valleys on the moon cause a bright flash, known as



The diamond ring effect during the 2017 total solar eclipse.

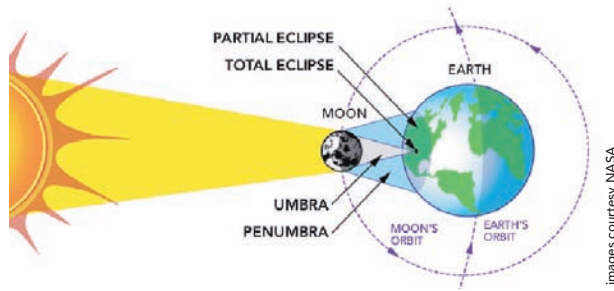


image courtesy NASA

### the diamond ring effect.

The shadow causing the partial eclipse is called the **penumbra** (peh-NUM-bruh). The shadow of the total eclipse is the **umbra** (UM-bruh).

When the diamond ring disappears and the moon completely covers the sun, it's safe to look at the eclipse. But this will only last for a few seconds. When you begin to see a crescent on the other side of the moon, it's time to protect your eyes again.

### Safety first!

**Looking directly at the sun can cause serious damage to your eyes!**

The only way to look directly at the eclipse is through special "eclipse glasses." Even very dark sunglasses are not safe to watch through.



photo by Kevin Hale

Don't look through a camera, telescope or binoculars, even with eclipse glasses.

You can also use a pinhole projector to watch the eclipse safely. Find directions and more information under Resources.

### Where and when

Over North America, the eclipse will first be seen around 11:07 a.m. Pacific time from the Pacific Coast of Mexico.

The path will continue through Texas, Oklahoma, Arkansas, Missouri, Illinois, Kentucky, Indiana, Ohio, Pennsylvania, New York, Vermont, New Hampshire and Maine. Will your home be in the path of the total eclipse?



The next total eclipse that will be visible from the **contiguous** (touching) United States will be in 20 years, on Aug. 23, 2044.

### Resources



#### On the Web:

- [bit.ly/MPpinhole](https://bit.ly/MPpinhole)
- [go.nasa.gov/3SzXKBg](https://go.nasa.gov/3SzXKBg)
- [exploratorium.edu/eclipse](https://exploratorium.edu/eclipse)

#### At the library:

- "Eclipse: How the 1919 Solar Eclipse Proved Einstein's Theory of General Relativity" by Darcy Pattison

The Mini Page © 2024 Andrews McMeel Syndication

## Try 'n' Find

Words that remind us of the total solar eclipse are hidden in this puzzle. Some words are hidden backward or diagonally, and some letters are used twice. See if you can find:



ANNULUS, APRIL, CONTIGUOUS, DIAMOND, EARTH, ECLIPSE, EFFECT, GLASSES, MOON, ORBIT, PARTIAL, PATH, PENUMBRA, SAFETY, SOLAR, SPACE, STAGE, SUN, TOTAL, UMBRA.

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

## Cook's Corner

### Spicy Baked Potato

#### You'll need:

- 1 medium-size potato
- 2 teaspoons margarine or butter
- 1/2 teaspoon taco seasoning
- 2 tablespoons shredded reduced-fat cheddar cheese

- 1 tablespoon low-fat sour cream
- 1 tablespoon chunky salsa
- 1/2 cup black beans, drained and rinsed



\* You'll need an adult's help with this recipe.

#### What to do:

1. Wash, dry and poke holes in potato with a fork. Cook potato in microwave for 6 to 7 minutes on high.
2. Cut potato in half lengthwise; allow to cool slightly. Scoop out potato into a medium-size bowl. Mix and mash in butter, taco seasoning, cheese, sour cream and salsa.
3. Place mixture back in potato shell; microwave for 45 to 50 seconds. Top with black beans.

Serves 1.

### ROOTONYM®

by Jan & Carey Orr Cook



Study the definition. When you know the missing word, fill in the letter boxes and the sentence blanks.

Answers: Look, Space, Hidden, Moon.

1. To gaze or glance at (4-letter verb)

□ □ □ □

2. The region beyond the Earth's atmosphere (5-letter noun)

□ □ □ □ □

3. Out of sight; unseen (6-letter adjective)

□ □ □ □ □ □

4. Natural body in the sky that orbits the Earth (4-letter noun)

□ □ □ □

1. To \_\_\_\_\_ at the solar eclipse, you need eye protection.
2. The moon, stars and planets are found in \_\_\_\_\_.
3. The sun will be \_\_\_\_\_ behind the moon on April 8.
4. The \_\_\_\_\_ moves around the Earth in about 27.3 days.

©2024 Cassius One LLC --- [www.myvocabulary.com](http://www.myvocabulary.com)

## Mini Jokes



**Mikey:** How does a man on the moon get his hair cut?  
**Miles:** E-clipse it!

## Eco Note



Analysis of satellite images revealed four previously unknown emperor penguin colonies, with one populated by more than 5,000 of the Antarctic birds. Scientists spotted the dark stains of guano that the penguins leave behind as they move over the otherwise icy-white landscape. While the discoveries bring the number of known colonies to 66, scientists say the recent arrival of bird flu to the Antarctic, along with climate change, are serious threats to the birds.

adapted with permission from Earthweek.com

## For later:

Look in your newspaper for articles about the coming total solar eclipse, and make a plan with your family or classmates to safely watch the eclipse on April 8.

**Teachers:** Follow and interact with The Mini Page on Facebook!



The Mini Page © 2024 Andrews McMeel Syndication

The **Mini Spy Booklets** Features 48 of your favorite puzzles from The Mini Page! Volumes 1, 2, 3, 4 and 5 are available!

Help Mini Spy and other classic characters from The Mini Page find hidden objects from a list of clues.

The 8.5x11-inch booklets are just \$5 each, plus \$1 each for shipping and handling.

Visit [MiniPageBooks.com](http://MiniPageBooks.com), or call 800-642-6480 for more information.

Mail payment to: Andrews McMeel Universal, Mini Page Books, 1130 Walnut, Kansas City, MO 64106.

