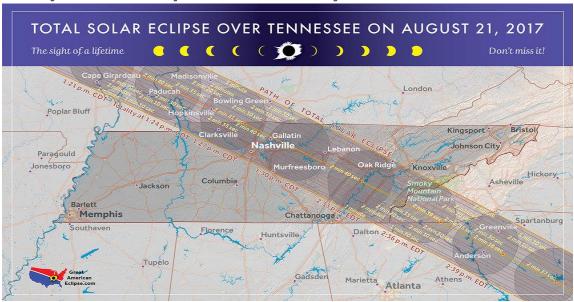
# PRIGRITY FINANCIAL SOLUTIONS

We can't always see the future of your financial needs but we can help prepare and protect your vision on how you see yourself in retirement.

Your glasses will be on their way.....

# Are you on the path of Totality?



On Monday, August 21, 2017, all of North America will be treated to an eclipse of the sun. Anyone within the path of totality can see one of nature's most awe inspiring sights - a total solar eclipse. This path, where the moon will completely cover the sun and the sun's tenuous atmosphere - the corona - can be seen, will stretch from Salem, Oregon to Charleston, South Carolina. Observers outside this path will still see a partial solar eclipse where the moon covers part of the sun's disk.

Per NASA, the only safe way to look directly at the uneclipsed or partially eclipsed sun is through special-purpose solar filters, such as "eclipse glasses" or hand-held solar viewers. Homemade filters or ordinary sunglasses, even very dark ones, are not safe for looking at the sun.

If you are within the path of totality, remove your solar filter only when the Moon completely covers the sun's bright face and it suddenly gets quite dark. Experience totality, then, as soon as the bright sun begins to reappear, replace your solar viewer to glance at the remaining partial phases.

# 15 Facts you should know about the Solar Eclipse

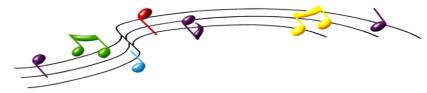
- **1. This will be the first total solar eclipse in the continental U.S. in 38 years.** The last one occurred February 26, 1979. Unfortunately, not many people saw it because it clipped just five states in the Northwest and the weather for the most part was bleak. Before that one, you have to go back to March 7, 1970.
- **2.** A solar eclipse is a lineup of the Sun, the Moon, and Earth. The Moon, directly between the Sun and Earth, casts a shadow on our planet. If you're in the dark part of that shadow (the umbra), you'll see a total eclipse. If you're in the light part (the penumbra), you'll see a partial eclipse.
- **3.** A solar eclipse happens at New Moon. The Moon has to be between the Sun and Earth for a solar eclipse to occur. The only lunar phase when that happens is New Moon.
- **6. It's all about magnitude and obscuration.** Astronomers categorize each solar eclipse in terms of its magnitude and obscuration, and I don't want you to be confused when you encounter these terms. The magnitude of a solar eclipse is the percent of the Sun's diameter that the Moon covers during maximum eclipse. The obscuration is the percent of the Sun's total surface area covered at maximum. Here's an example: If the Moon covers half the Sun's diameter (in this case the magnitude equals 50 percent), the amount of obscuration (the area of the Sun's disk the Moon blots out) will be 39.1 percent.
- **7. Solar eclipses occur between Saros cycles.** Similar solar and lunar eclipses recur every 6,585.3 days (18 years, 11 days, 8 hours). Scientists call this length of time a Saros cycle. Two eclipses separated by one Saros cycle are similar. They occur at the same node, the Moon's distance from Earth is nearly the same, and they happen at the same time of year.
- **8. Everyone in the continental U.S. will see at least a partial eclipse.** In fact, if you have clear skies on eclipse day, the Moon will cover at least 48 percent of the Sun's surface. And that's from the northern tip of Maine.
- **9. It's all about totality.** Not to cast a shadow on things, but likening a partial eclipse to a total eclipse is like comparing almost dying to dying. I know that 48 percent sounds like a lot. It isn't. You won't even notice your surroundings getting dark. And it doesn't matter whether the partial eclipse above your location is 48, 58, or 98 percent. Only totality reveals the true celestial spectacle: the diamond ring, the Sun's glorious corona, strange colors our sky, and seeing stars in the daytime.



- 10. You want to be on the center line. This probably isn't a revelation, but the Moon's shadow is round. If it were square, it wouldn't matter where you viewed totality. People across its width would experience the same duration of darkness. The shadow is round, however, so the longest eclipse occurs at its center line because that's where you'll experience the Moon's shadow's full width.
- 12. The center line crosses through 12 states. After a great west-to-east path across Oregon, the center line takes roughly nine minutes to cross a wide swath of Idaho, entering the western part of the state just before 11:25 a.m. MDT and leaving just before 11:37 a.m. MDT. Next up is Wyoming, where the umbral center line dwells until just past 11:49 a.m. MDT. From 11:47 a.m. MDT until 1:07 CDT (note the time zone change!), the dark part of the Moon's shadow lies in Nebraska. The center line hits the very northeastern part of Kansas at 1:04 p.m. CDT and enters Missouri a scant two minutes later. At 1:19, the shadow's midpoint crosses the Mississippi River, which at that location is the state border with Illinois. The center line leaves Illinois at its Ohio River border with Kentucky just past 1:24 p.m. CDT. Totality for that state starts there two minutes earlier and lasts until nearly 1:29 p.m. CDT. The center line crosses the border into Tennessee around 1:26 p.m. CDT. Then, just past the midpoint of that state, the time zone changes to Eastern. North Carolina has the midpoint of the eclipse from 2:34 p.m. EDT until just past 2:38 p.m. EDT. The very northeastern tip of Georgia encounters the center line from just past 2:35 p.m. EDT until not quite 2:39 p.m. EDT. Finally, it's South Carolina's turn. The last of the states the center line crosses sees its duration from 2:36 p.m. EDT to 2:39 p.m. EDT.
- **13. Totality lasts a maximum of 2 minutes and 40.2 seconds.** That's it. To experience that length, you'll need to be slightly south of Carbondale, Illinois, in Giant City State Park. You might think about getting there early.
- **14.** The end of the eclipse for the U.S. is not on land. The center line's last contact with the U.S. occurs at the Atlantic Ocean's edge just southeast of Key Bay, South Carolina. I'm pretty sure the crowd won't be huge there.
- **15. Cool things are afoot before and after totality.** Although the big payoff is the exact lineup of the Sun, the Moon, and our location, keep your eyes open during the partial phases that lead up to and follow it. As you view the beginning through a safe solar filter, the universe will set your mind at ease when you see the Moon take the first notch out of the Sun's disk. Around the three-quarters mark, you'll start to notice that shadows are getting sharper. The reason is that the Sun's disk is shrinking, literally approaching a point, and a smaller light source produces better-defined shadows. At about 85 percent coverage, someone you're with will see Venus 34° west-northwest of the Sun. If any trees live at your site, you may see their leaves act like pinhole cameras as hundreds of crescent Suns appear in their shadows.

# A Few Fun Things To Do On Eclipse Day

# \*Make a Fun Playlist of Music



### Here's a few to get you Started:

- Moon Shadow, Cat Stevens
- Total Eclipse of the Heart, Bonnie Tyler
- Eclipse, Pink Floyd
- Ain't no Sunshine, Bill Withers
- Moon Dance, Van Morrison
- Total Solar Eclipse Cocktail Recipe



Prep time
5 mins
Total time
5 mins

### **Ingredients**

- 4 ounces Sparkling Clementine or Orange Pop
- 1.5 ounces Dark Rum
- Orange Slice for Garnish

### **Instructions**

- 1. Pour Sparkling Clementine or Orange Pop over Ice in a cocktail glass
- 2. Gently pour dark rum on top
- 3. Garnish with an orange slice

\*\*\*If you are feeling like a true Astronaut you could substitute TANG for the 4 ounces of sparkling clementine or orange pop!\*\*\*



MoonPies are always a hit, especially with kids, and should be easy to find at your grocery store. Although not lunar, Little Debbie's Star Crunch snacks, plus Milky Way and Mars candy bars, can help hold up the astronomy theme.

# \*Write Yourself a Letter for the Next Eclipse April 18, 2024

Write yourself a letter to open in 2024. List things you would like to happen between now and then. Think of some goals to maybe set for yourself both personally and professionally. Is there something special you would like to do or maybe a trip you want to take soon. Let your imagination run wild......

# We also wanted to give you some area events on that day so you can get out and enjoy the view.....

### **Knox County**

- Mayor Tim Burchett is hosting an eclipse watch party at The Cove at Concord Park from 11 a.m. to 3:30 p.m. There
  will be food trucks, music, and a limited number of free eclipse glasses. The event is free and open to the public.
- Pellissippi Community College is having a Tailgate in Totality on the day of eclipse.
- Farragut is hosting a Solar Eclipse Party from 1 to 3 p.m. at McFee Park. The first 450 participants will receive free
  eclipse glasses. Other activities will include children's crafts, face painting and cookie decorating. Concessions will
  be provided by First Baptist Concord.

### **Blount County**

- Blount County Public Library has activities and an eclipse viewing outside on Pedestrian Bridge from 1-4p.m. Free NASA approved viewing lasses will be provided on a first come, first serve basis. The event is free and open to the public.
- First United Methodist Church in Maryville has plans for a sundrop and viewing of the eclipse from the church's front lawn.
- Great Smoky Mountain National Park has an eclipse viewing at Cades Cove.

### **Anderson County**

 The Manhattan Project National Historical Park is allowing visitors to view the eclipse from 1-4 p.m. at the Park Visitor Center at the American Museum of Science and Energy. A Limited number of free eclipse glasses will be available.

### **Cumberland County**

- Crossville has several opportunities for residents to view the eclipse. The big South Fork National River and Recreation Area has a viewing from 1 - 4p.m. There are also viewings art the Bandy Creek Visitor Center in Oneida and Gateway Visitor Center. There will be a limited number of eclipse viewing glasses for the public.
- Roan State Community College is hosting an eclipse party from noon to 3 p.m. on the day of the eclipse.

### **Monroe County**

- Sweetwater's Niota Public Library has a Planet Walk and eclipse education session on August 14 at 4 p.m.
- Historic Downtown Sweetwater is hosting an eclipse festival from 10 a.m. to 5 p.m.

• Tellico Plains hosts a Standing in the Shadow of the Moon event from 7 a.m. to 5 p.m. on August 21. There will be a three day festival leading up to the Eclipse on August 19 and August 20.

### **Roane County**

• Kingston Parks and Recreation is hosting a Total Eclipse of the Park at Fort South West Point from 1 p.m. until the sun comes back out. The event is free and eclipse glasses will be provided while supplies last.

### **Sevier County**

• The Pigeon Forge Public Library has an eclipse viewing with festivities beginning at 1:30 p.m.