

Solar Eclipse Viewing Permission Slip

On August 21, 2017, Northeast Dubois communities will be in the path of a partial solar eclipse. This event is being called "The Great American Solar Eclipse," because it is the first time since 1918 a solar eclipse will be visible on a path across the entire continental United States. Northeast Dubois Schools are planning a viewing opportunity for students to experience this educational event.

We are partnering with the Dubois Branch Library who has received approved glasses for our students to use to safely view the skies during the eclipse. We will take all precautionary measures to make this experience both safe and enjoyable. Homemade filters or ordinary sunglasses, even very dark ones, are not safe for looking at the sun. Students will not be permitted to look at the un-eclipsed or partially eclipsed sun through unfiltered cameras, telescopes, binoculars, or other optical devices, with or without glasses. (For more information on viewing the eclipse safely to prevent eye damage, please visit <https://eclipse2017.nasa.gov/safety>.)

A parent or guardian signature on this sheet is **required** by August 21st in order for students to participate in the event using the ISO 12312-2 marked ISO approved eclipse glasses. Students whose parents do not complete this form will not be able to participate.

Parental Consent

Student Name: _____ Teacher: _____ Grade: _____

I/We, parent(s)/guardian(s) of _____, hereby give consent for my/our son/daughter to participate in this school-approved activity to view "The Great American Solar Eclipse" on August 21, 2017 at Northeast Dubois Schools using eclipse-safe viewing glasses. My/our son/daughter will abide by the school's rules and regulations as well as guidelines set up by the teachers. I/We have been informed viewing the eclipse involves risk, which could result in injury to the eyes, if eclipse-safe viewing glasses are not worn properly. I/We hereby release Northeast Dubois School Corporation as well as any and all of its employees and volunteers from any and all liability for any and all harm arising to my/our son/daughter as a result of this school-approved activity.

Parent/Guardian Name:

Parent/Guardian Signature: _____ Date: _____

Student Signature: _____ Date: _____

The Great American Solar Eclipse of 2017 for Northeast Dubois School System

The Dubois Branch Library is thrilled to be a part of the NASA and the Space Science Institute's special program to educate and equip communities to take part in watching the upcoming solar eclipse on Aug. 21st. We received 1,000 pairs of certified solar eclipse glasses through this program as well as materials to help us present programs and information to the public. We decided the best use of these glasses would be to give most of them to the Northeast Dubois Schools so that their students and staff could watch the eclipse safely since the timing falls during school hours. We are presenting programs or information about the eclipse and safe viewing procedures to all the classes.

Below is the basic information the public needs to know.

1. In Dubois County there will be a partial eclipse that will start at 12:57 p.m. on Monday, Aug. 21st. The maximum coverage will occur at 2:25 p.m. and will cover about 96.6% of the sun. The eclipse will conclude at 3:50 p.m.
2. You must wear certified eclipse glasses at all times when looking directly at the sun, even during a partial eclipse. Not doing so can cause unrepairable eye damage and possible blindness.
3. Your eclipse glasses must have come from a reputable vendor. There has been a glut of uncertified, fake glasses sold in stores and on-line. They must have ISO 12312-2 marked on them (though some of the fakes have this too). When you put them on you should not be able to see any regular light source other than the sun or reflection of the sun through the filters. If you can see anything else, they are not safe to use to view the eclipse.
4. Make sure your filters have no scratches, tears or punctures and are not coming loose from the cardboard frame. If they are, throw them away.
5. Do not look through cameras, binoculars or telescopes, even with your eclipse glasses on. These instruments must also have specially purchased filters to be considered safe to view the sun. Do not view the sun through your camera on your phone.
6. Stand still and cover your eyes with your eclipse glasses or solar viewer before looking up at the bright sun. After looking at the sun, turn away and remove your filter — do not remove it while looking at the sun.
7. If your eclipse glasses or viewers are compliant with the ISO 12312-2 safety standard, you may look at the uneclipsed or partially eclipsed Sun through them for as long as you wish. Furthermore, if the filters aren't scratched, punctured, or torn, you may reuse them indefinitely. Some glasses/viewers are printed with warnings stating that you shouldn't look through them for more than 3 minutes at a time and that you should discard them if they are more than 3 years old. *Such warnings are outdated and do not apply to eclipse viewers compliant with the ISO 12312-2 standard adopted in 2015.*

8. An alternative method for safe viewing of the partially eclipsed sun is pin hole projections. For example, cross the outstretched, slightly open fingers of one hand over the outstretched, slightly open fingers of the other, creating a waffle pattern. With your back to the sun, look at your hands' shadow on the ground. The little spaces between your fingers will project a grid of small images on the ground, showing the sun as a crescent during the partial phases of the eclipse. Or just look at the shadow of a leafy tree during the partial eclipse; you'll see the ground dappled with crescent Suns projected by the tiny spaces between the leaves. The same can be done with a colander or a large serving spoon with small holes.
9. Why it is not safe to look at the sun with your bare eye. The rods and cones in the human retina are very sensitive to light. Even a thin sliver of the sun's disk covers thousands of these light-sensitive cells. Normally during daylight conditions, the iris contracts so that only a small amount of light passes through the lens and then reaches the retina. This level of indirect sunlight is perfectly OK and the eye has evolved over millions of years to safely see the daylight world under most circumstances. The problem is that the sun's surface is so bright that if you stare at any portion of it, no matter how small, it produces enough light to damage individual retinal cells. It takes a few seconds for this to happen, but afterwards you will see a spot as big as the solar surface you glimpsed when you look away from the sun at some other scenery. Depending on how long you gazed at the sun and how badly the retinal cells were damaged, this spot will either fade away in time or remain permanent. You should never assume that you can look away quickly enough to avoid eye damage because every person is different in terms of their retinal sensitivity, and you do not want to risk being the one who damages their eyes just to try to look at the sun.
10. For more information about the eclipse and safe viewing alternatives go to <http://eclipse2017.nasa.gov>