

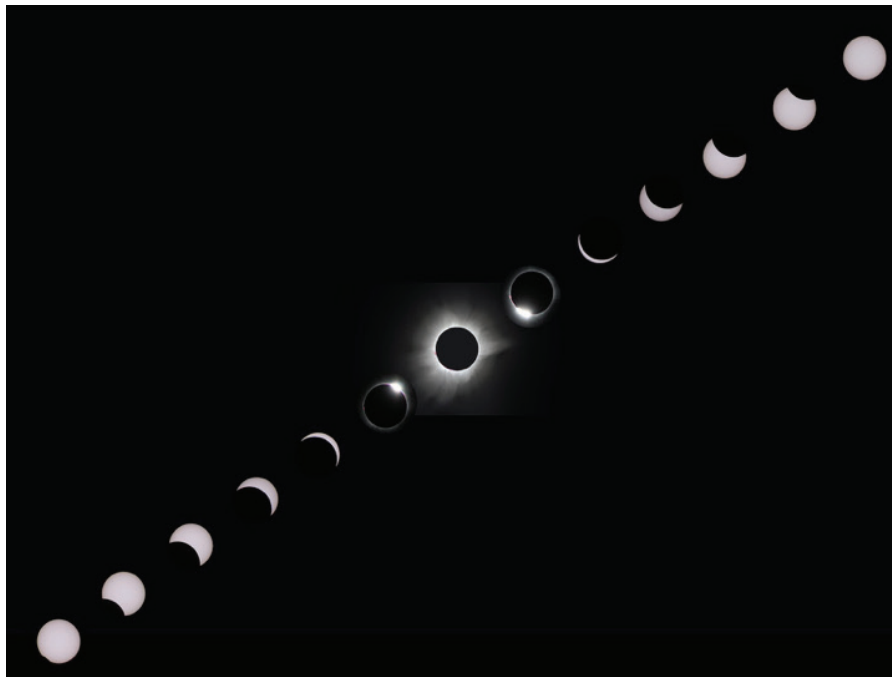


ECLIPSE CLASSROOM ACTIVITIES

PHOTOGRAPHING THE ECLIPSE TIPS AND TRICKS GUIDE

GET EXCITED!

Capturing pictures of the Sun can be difficult and requires careful safety precautions. This brief guide will help you prepare to photograph the eclipse safely and effectively on eclipse day (as long as the weather is forgiving and there aren't many clouds). If all goes well, and you have the proper equipment, you could end up with photos like these:



(Rick Fienberg / TravelQuest International / Wilderness Travel, used with permission)

WARNING: You must never look directly at the Sun, even when it is partially blocked by the Moon. Use appropriate filters on your camera or wear special eclipse glasses; be sure to read our [safe viewing guidelines](#).

Note: Want more details than we provide here? Try [this excellent guide from the American Astronomical Society](#).

WHAT KIND OF CAMERA DO YOU PLAN ON USING?

Phone Camera

SLR Camera

Telescope

Tip & tricks for each on the following 2 pages.



PHOTOGRAPHING THE ECLIPSE TIPS AND TRICKS GUIDE

TIPS FOR USING A PHONE CAMERA

Quick Disclaimer: You *can* take photos of the eclipse with your smartphone as described here, but don't expect them to come out as nice as the photos shown above. Phone cameras require a little more creativity!

TIP 1 (REQUIRED!): USE A SOLAR FILTER

- You *must* use a solar filter to cover your phone camera's lens (with caveat in Tip 4 below).
- One option is to hold the lens in front of a solar filter.
- Another option is to cut out the filter from a pair of eclipse glasses and then carefully tape it to over your phone lens. This is especially helpful when trying to use a tripod or create a timelapse.

TIP 2: GET A PHONE TRIPOD

- Keeping still while trying to capture the eclipse is crucial. You don't want your shot to be blurry from movement. Phone tripods are relatively cheap - there is one on amazon selling for \$8 a pop!

TIP 3: MAKE A TIMELAPSE

- With a tripod, you can also create a timelapse, so that you can capture different moments of the eclipse and have a better chance of catching that perfect moment when the lighting is just right.
- Most recent smartphones have a basic time-lapse feature. Alternatively, you can use an app such as **Framelapse** and **Lapse It**.



Copyright: [Camkix](#)

TIP 4: USE THE LENS FLARE!

- There is a neat trick using something called the "lens flare" that can allow you to capture the eclipse without filters or tripod. To learn about this method, [follow this link](#).

TIP 5: PHOTOGRAPH SOMETHING ELSE DURING THE ECLIPSE

- If you are feeling brave and want to exercise your artistic capabilities, try using the eclipse as a backdrop or setting to capture portraits, landscapes shots, or more unique shots. Think outside of the box, but remember to spend some time just enjoying the eclipse as well!

*For more detailed information on how to use your phone to capture the eclipse check out this site - <http://www.mirror.co.uk/news/technology-science/technology/solar-eclipse-2015-how-photograph-5351968>



PHOTOGRAPHING THE ECLIPSE TIPS AND TRICKS GUIDE

TIPS FOR USING AN SLR CAMERA

TIP 1: GATHER THE BEST EQUIPMENT YOU CAN MUSTER

You are going to need:

- Strong **neutral density filter** (might need two if one is not strong enough) Ex: One 10 stop ND filter
- **A tripod**
- **Long lens** (ideally a 600mm lens with a teleconverter)
- Cropped-sensor or DX Cameras work best, but are **not required**

TIP 2: ADJUST YOUR CAMERA SETTINGS/TRIPOD

1. Set your camera up on a tripod
2. Set ISO to lowest value (around 100)
3. Set your camera to Manual mode
4. Use the fastest shutter speed your camera has, lower it until you get something you like
5. Start out at f/8 and stop down some if the shutter speed is too fast. *If the sun looks too bright, it means you need a stronger ND filter!

TIP 3: ACCURACY AND FOCUS IS KEY

- Even the most minor inaccuracy can result in a poor shot, a blurry image. You are going to want to focus heavily on the focus of your shot.
- Practice focusing on distant objects and getting them as sharp as possible. Then when you get into taking your shots of the eclipse try to mimic what you had learned.
- It is highly recommended that you **DO NOT use autofocus**. Autofocus is often off and will certainly not be perfect when it comes to capturing images of the Sun and the Moon.

TIP 4: REMEMBER TO EDIT

- After you have gathered your plethora of photos, it's time to take them home and edit them, with Photoshop or some other photo editing program.
- **Watch out for noise when editing** - here is a helpful link for [reducing noise levels](#) in your shot. Reducing the noise in your shot can greatly improve its quality.

****For more detailed information on using your camera to capture the eclipse check out this site - <https://photographylife.com/how-to-photograph-a-solar-eclipse/>**

TIPS FOR USING A TELESCOPE

The following link provides a wonderful step by step process for capturing the eclipse using a telescope - <http://www.space.com/15730-solar-eclipse-photography-tips.html>