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## Observing Where the Sun Sets

### Materials

- Pencil and Paper
- Magnetic Compass
- Optional: Camera

This activity is for students to do at home. When they complete it, they will have created a horizon Sun calendar much like ones that were used in many Native American tribes.

### What to Do at Home

1. Select a position where you can observe the setting Sun. Note where on the horizon the sun sets on a given night. Make a drawing or take a picture of the horizon in that general area.
2. Using a magnetic compass, mark the compass directions northwest, west, and southwest on your picture or drawing.
3. Once or twice a week for the next month, mark the location where the Sun sets for each clear day, and record the date and time of the sunset. **Be sure to always make your observations from the same spot.**
4. Discuss results in class.

*Does the sun set further to the south, further to the north, or in the same place on later days as compared with the first day?*

### Going Further

1. Observe the same star set each night for a period of about a week. **Be sure to always observe from the same spot.**

*Does its setting point change in the same way that the Sun's does?*

2. Try to guess where the Sun would set three months later. How about six months later? Mark those guesses on your horizon picture (in pencil). Check your guesses after the months have gone by.
3. Could you devise a way to make a calendar using the information in this activity?
4. Make the same type of observations of the rising point of the Sun.
5. Can you find any relationship between the location of sunset and the time of sunset?

