



Activity 5: Mapping the Stars

How can I identify constellations in the night sky?

A useful tool for identifying constellations in the night sky is a planisphere or star wheel. It is like a map of the night sky showing which constellations are visible from where you live during the various seasons. You will be making your own star wheel to help you find the constellations visible in the Northern Hemisphere.

Materials

- Star Wheel templates Part A and Part B
- scissors
- stapler

Instructions

1. Print Part A and Part B of the *Star Wheel* templates.
2. Cut out the circle on the Part A template. Cut out the white oval in the middle of the Part B template.
3. On the Part B template, fold the bottom and the sides underneath to form a sleeve.
4. Now, slide the circular star map from the Part A template into the sleeve you have constructed so that the pictures show through the hole on the front.
5. To use the Star Wheel, you need to line up the date and time on the outside edge of the wheel (for the day and time you are stargazing).
6. Then, hold the Star Wheel over your head being certain that the Northern Horizon on your star map is pointing North and the southern edge is pointing South.
7. The stars shown in the Northern Horizon will be visible when you look North. The stars shown in the Southern Horizon will be visible when you look South. The stars in the middle of the wheel will be visible directly overhead.
8. You can test a digital version of your Star Wheel at this website: <http://www.nrc-cnrc.gc.ca/eng/education/astronomy/constellations/planisphere.html>.

9. You may notice when using your Star Wheel outside at night that you cannot see some of the stars shown on the Star Wheel. Some of the stars may be too dim to see from where you live, especially if you live in a larger city or town with light pollution.





