



Mrs. Greenwood's Bus Stop Astronomy

The night sky has many wonders to see! These activities will help you find them. Always have a parent with you when you go out at night to see the stars. Let's get started!

Activity One: Getting my directions

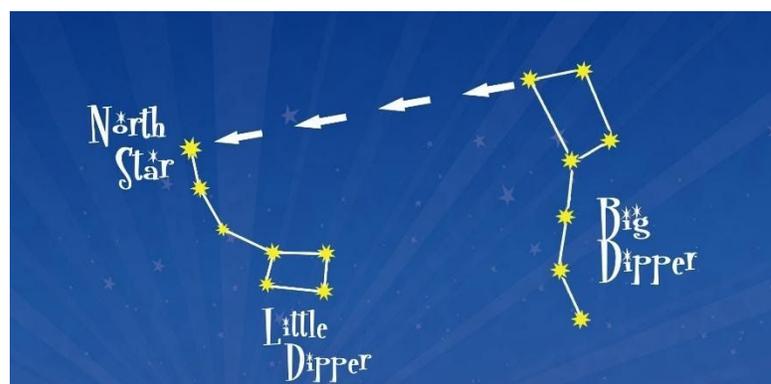
1. Face where the Sun comes up in the morning.
This is the East. Keep facing East as you do the other steps.
2. Hold your right arm straight out to your side.
This is the South.
3. Hold your left arm straight out to your side.
This is the North.
4. Behind your back is where the Sun sets. This direction is the West.

5. Optional activity is to put a drawing of the Sun on your wall in your room in the East and the letters E, S, N and W for the four directions.

Activity Two: Measuring the sky

You have a tool to measure with. It is your hand! A fist held out in front of you with your thumb down you can find the North Star. Where the sky meets the ground we call it the horizon.

1. First, find the direction North.
 2. Place the bottom of your fist even on the horizon.
 3. Now place your other fist on top of it.
 4. Count four fists high and look for the North Star.
 5. To help you the North Star will be at the very tip of the group of stars we call the little dipper.
- The little dipper looks like a pot with a handle. You can also find it following a line made by the last two stars in the pot on the big dipper.



Activity 3: Making your Star Wheel

1. You first have to cut out the star wheel and the star wheel holder. Cut the star wheel out by cutting just outside of the names of the months to make a big circle.
2. Next cut around the outside edge of the star wheel holder. Do not cut off the bottom white part inside of the black line.
3. To cut out the inside white area that has the words Facing North, Facing South, Facing East and Facing West, fold this white area in half so you can make a cut to get your scissors inside. Cut out the rest of the white to make a nice open window.
4. Fold the bottom white area up behind the front of the star wheel holder and staple it or tape it in place. There are two staple marks to show you where to staple.
5. Now put the star wheel inside of the star wheel holder so you can see the stars.

Activity 4: Using your Star Wheel

1. Turn the star wheel to set the time and date you are going out to look at the stars.
2. You will need a flashlight to look at your star wheel. It is best to cover the lens with a red marker or material to make it easier on your eyes.
3. Once outside, find your directions and face the North. Count your hands to find the North Star or find the big dipper to find it.

(You will always be able to see the North Star in your star wheel at any time of the year.)

4. Find the North Star on the star wheel and then you can look for the other nearby stars. They are grouped in what are called constellations and they have been given names by people from long ago and on all parts of the Earth.
5. There is also usually a planet or the moon to observe. You may even see a “shooting star” which is really just a rock burning up in the air as our planet flies through space and runs into it. Enjoy and keep looking up!