

Mad About Maps



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These activities use a compass. If you don't have a compass, you can download a compass app on your phone or other device.

Compasses and maps are tools for **navigating**, or finding your way around, and have been used by people for hundreds of years. No matter where you are or where you are going, the four **cardinal directions** never change. Knowing the directions is important.



Remember the four cardinal directions with a saying:

Never **E**at **S**our **W**atermelon

Make up your own saying! Can you make more than one? Write them in your Nature Notebook!





N _____ **E** _____ **S** _____ **W** _____

1. Map Your Backyard

You probably know your backyard like the back of your hand. Put that knowledge on paper by making a map! You will need blank paper and pencil crayons.

- First you will need a **north arrow** at the top of your map. This will tell you how to look at the map. Lay a piece of paper down with the compass on top. The magnetic arrow on the compass points north. Turn the top of your page to line up with north. Draw an arrow pointing the same direction, and add the other directions. This is your north arrow!
- With north still lined up, start to draw what is around you. You might have trees, buildings, trails, gardens, or a shoreline on your map. Make sure that each type of object has a unique symbol. It may help to imagine what a bird would see if it looked down. You are drawing a bird's eye view.
- Adding a **legend** is like adding a dictionary. You can look up the meaning of shapes and colours on a map. In a corner of your map, list the symbols you used and write what they are.



Legend	
	Tree
	Building
	Road
	Water

Test your map!

- Ask a parent to hide 'treasure' and draw an **X** on the map where it is. Ask them to draw a trail on the map for you to follow to the treasure. Use the trail and the map symbols to find your way to the treasure!
- After you find the treasure, ask a parent to hide it in a different place and only draw an **X** on the map, no trail! See if you can find your way using only the map symbols.

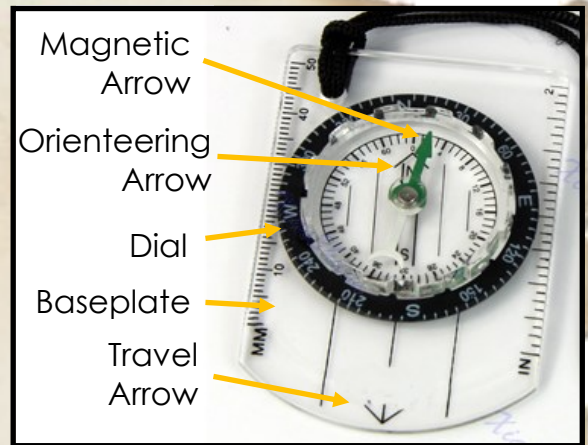


2. Use a Compass

People have used compasses for over 2,000 years! If you don't have a compass, you can download a compass app on your phone or other device.

Finding Cardinal Directions

- Hold the compass flat at waist height.
- Rotate until you are facing the same direction as the **magnetic arrow**. You will be facing north!
- Now turn to your right and you will face east. Turn right again to face south. Practice finding the cardinal directions at different locations.



Travel from A to B

- Stand in your mapped area. Draw an A on your map where you are standing, and choose an object to label B and travel to.
- Lay your map down and draw a line from A to B. Place the long edge of the **baseplate** against this line with the **travel arrow** facing the same direction as B. Turn the dial so **N** (north) lines up with your map's north arrow.
- Hold your compass flat at waist height and turn your body until the magnetic arrow lines up with **N**. The **travel arrow** will face B! Keep the magnetic arrow aligned with **N** and walk in the direction the travel arrow points.
- If you can't see B, walk straight towards a landmark in B's direction. Repeat step f until you reach Point B!



English: *Map*
French: *Carte*
Ojibwe: *Akii-mazina'igan*

3. Make a Compass

Materials: magnet, needle, paper, water, bowl, scissors

Rub one end of the needle on one side of the magnet 30 times (the north pole if your magnet is labeled). Always rub in the same direction.

Flip the magnet over and rub the other end of the needle on this other side 30 times. Again, rub in the same direction.

Cut a circle about 5cm in diameter out of paper. Carefully thread the needle through the paper circle as seen in the picture. Label the circle with N (north) and S (south) directions.

Place the paper and needle on the surface of the water. Both ends of the needle should be above the floating paper circle.

Watch it slowly rotate and then stop. Check the directions with a compass. One end of the needle (the one that you rubbed on the north pole of the magnet) should point to north and the other south.

