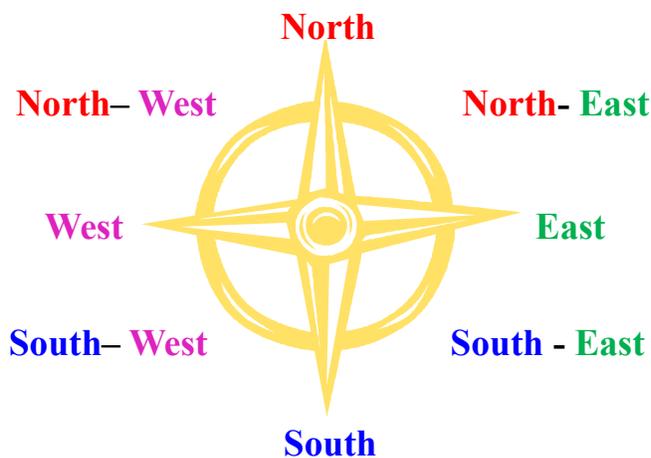


Mad about Maps!



The ability to use a map and a compass to navigate your way is called **orienteering**. Orienteering is not only a neat way to impress your friends and family, it is a great skill to have if you are going to spend a lot of time outdoors! The more you practice reading a map and using a compass, the better you will become!



You can remember the order of the directions using a saying:

Never **E**at **S**our **W**atermelons

Make up a saying to help remember.

Test Your Sense of Direction!

1. Take a good look around. Think about features near you like lakes or towns.
2. Without looking at a compass, point to which way is north.
3. Check your compass! Were you right?

Maps can be a Mouthful...

Cardinal Directions - the four main directions (north, south, east, west).

Intermediate Directions - directions between cardinal directions (northeast).

True North - a fixed point on the surface of the earth at the North Pole.

Magnetic North - the direction your compass points to, it can vary slightly over time.

North Arrow - a sign on all maps indicating which way is north.

Map Scale - the scale indicates the *ratio* of a map. If the scale says 1:1000, that will mean 1cm on the map is 1000 meters on the ground.

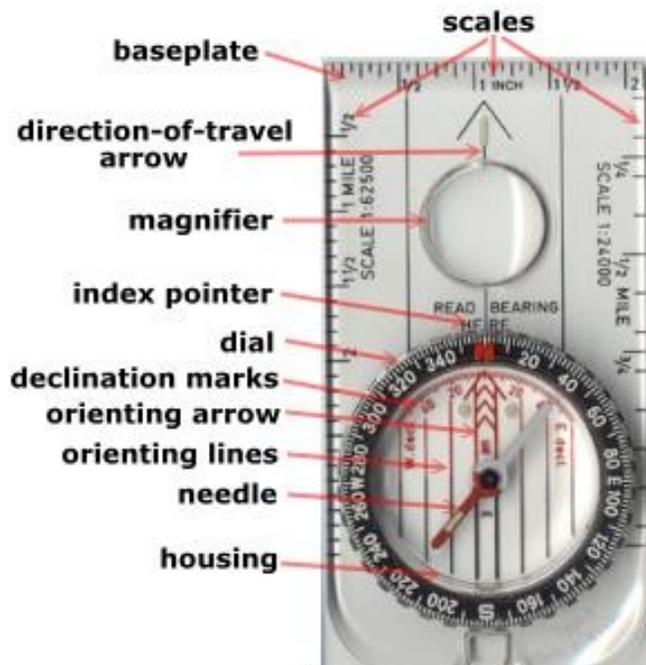
Legend - usually on the side of the map, will tell you the meaning of all the symbols and colours on the map.

How Do I Use a Compass?

1point

Put Red Fred in the Shed!

1. Start by holding your compass flat in your palm at waist height.
2. Move the circular dial until the **N** or **360** is aligned with the **travel arrow**.
3. The red arrow on the compass will point north no matter which way you turn. Rotate your body until the **red arrow** (know as **red Fred**) is in the orienteering arrow (**the shed**). You will have red Fred in the shed and will be facing **magnetic north!**

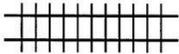


Now travel from A to B

1. Pick a point on your map to start from (A) and a destination point (B). Rotate your map so point A is closest to you.
2. Place the compass on your map so that the edge of the baseplate touches both points. You may have to rotate the compass.
3. Set your compass by turning the dial so the N is aligned with the north arrow on your map.
4. Go stand at point A. Hold your compass flat and turn your body to put red Fred in the shed!
5. The direction of travel arrow is pointing straight to point B! If you can't see point B, walk straight towards a landmark in point B's direction. Then repeat the steps when you get there until you reach point B!

Map Symbols

All maps have symbols on them to represent landmarks. Symbols represent things like roads, buildings and lakes. Sometimes map symbols can look strange! Can you guess what these symbols mean:

- | | | | |
|----|--|----|---|
| A. |  | E. |  |
| B. |  | F. |  |
| C. |  | G. |  |
| D. |  | H. |  |

Answers

- | | |
|--------------------|----------------------|
| E. Boat Launch | A. School |
| F. Windmill | B. Hospital |
| G. Bridge | C. Information Booth |
| H. Rail Road Track | D. Camp Ground |

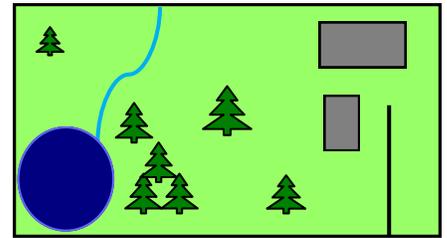
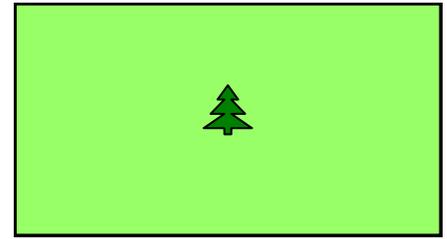
Time to make a map!

1 point

A great place to map is your backyard! You'll need paper and coloured pencils.

1. Start by selecting a landmark to be the center of your map. It can be a tree, building, garden; anything that won't move! Draw a symbol in the middle of your paper to represent it.

2. Draw the landmarks closest to the center. Keep adding symbols for landmarks as you move farther from the center. Try and be specific with your symbols. (Ex. for each tree species create a new tree symbol).



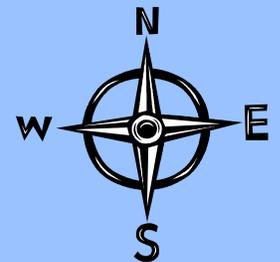
Challenge 1. Adding a Legend

1 point A legend is like a dictionary. You can look up the meanings of colours and shapes on a map. Start by creating a list in a corner of your map of all the colours and shapes you've used and beside each write what they mean. Draw a box around it and add a title so people don't confuse it for a strange landmark!

Legend	
	Tree
	Building
	Road
	River
	Water
	Land

Challenge 2. Adding a North Arrow

1 point Stand in the mapped area. Turn so you are facing the direction that is at the top of your map. Lay your map flat on the ground. Lay your compass on top of your map. The red arrow on the compass will point north, which ever way it points is north on your map! Remember the north arrow won't always point to the top of your page. Draw an arrow pointing the same direction. You have a north arrow!



Challenge 3. Testing Your Map! 1 point

Have a parent hide 'treasure' and draw an X on the map where it's hidden. Then ask them to draw a trail on the map for you to follow to the treasure! Use the trail and the symbols on your map to help navigate your way!

Once you have found the X, have a parent re-hide the treasure in a different location. This time, only draw an X on the map, no trail! See if you can navigate your way there only using the symbols on the map!

Keep your map handy this summer to record wildlife sightings in your yard.