

# How to Use a Baseplate Compass

## Anatomy of a compass

**Upper Direction of Travel Arrow:** This yellow tic indicates the bearing you have selected and is in line with the lower direction of travel arrow.

**Dial:** Rotatable ring on the outside of the housing with numbers.

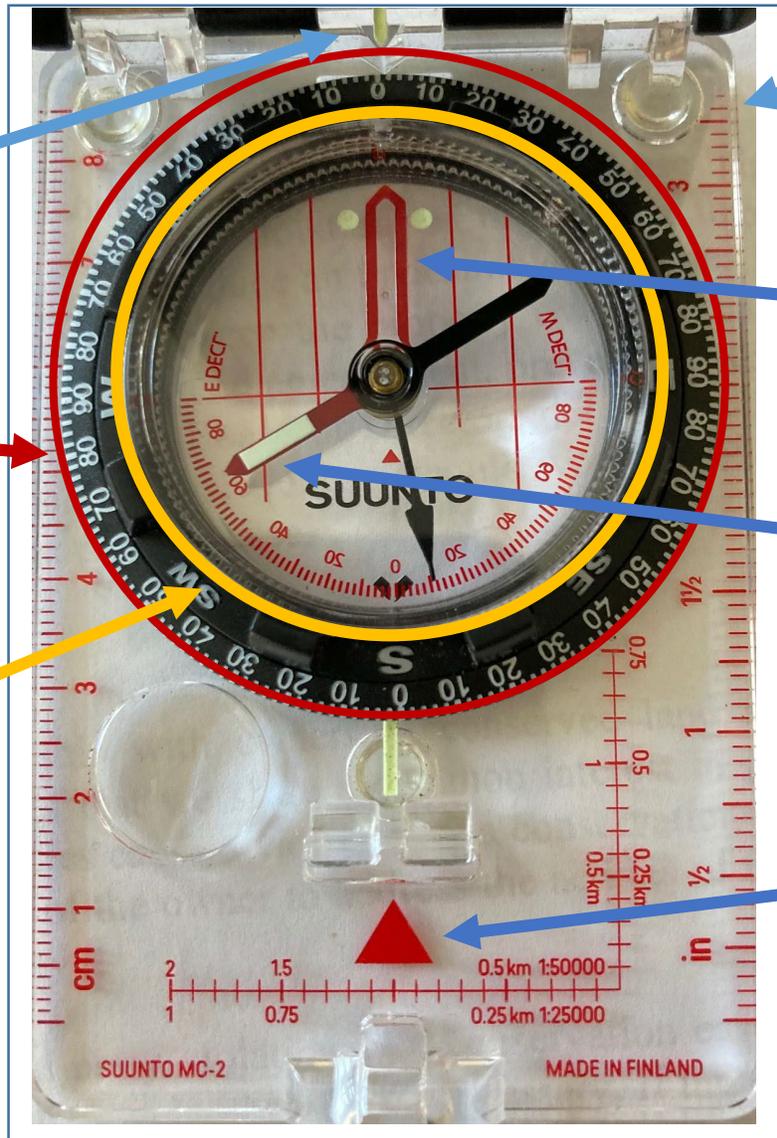
**Housing:** The clear, raised, round portion of the compass.

**Baseplate:** The clear base of the compass.

**Orienting Arrow:** This outline of an arrow turns when you rotate the dial.

**Magnetic Needle:** Floating arrow that automatically rotates to face magnetic north.

**Direction of Travel Arrow:** Shows the direction you should be facing while using the compass. It shows you the same direction as the upper D.O.T. arrow.



### Tips for Compass Success

- Always hold the compass level so the north arrow can float freely.
- Always hold the compass so the direction of travel arrow is in front of you (it should be pointing the same way as your nose).
- Be aware of metal objects that may attract the magnetic needle such as keys, rings, cell phones, and watches.



## **Finding Magnetic North:**

1. Hold the compass flat with the direction of travel arrow pointing the same direction you are facing.
2. Turn the housing until the N on the dial lines up with the upper direction of travel arrow on the compass.
3. Turn your body until the red end of the magnetic needle is 'boxed' within the orienting arrow.
4. You are now facing Magnetic North.

## **Following a Bearing:**

A bearing is a direction of travel indicated by the numbers and letters around the dial on your compass. Surveys often use bearings to indicate the direction of travel from a reference point (often a boundary corner). Use these steps to follow a bearing along a boundary line:

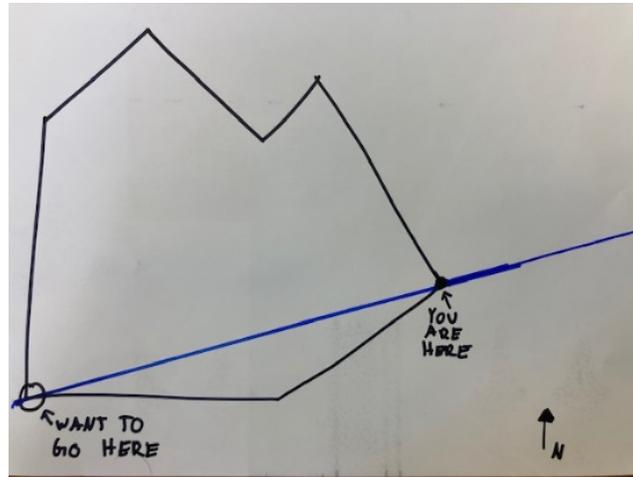
1. Look at the survey to identify which bearing you want to follow, and which starting reference point you will use (this is a point feature identified by the map, for example a rod or pipe at a boundary corner).
2. Holding the compass level, with the direction of travel arrow facing the same way as you, turn the dial so the bearing from the survey is lined up with the direction of travel arrow.
3. Continuing to hold the compass level, rotate your body until the magnetic needle is lined inside the orienting arrow.
4. Make sure you are at, or in line with, the starting reference point. Adjust your body as needed.
5. Keeping the compass flat, bring it to eye level and fold the top with mirror over the compass toward you. You should be able to see the compass dial and arrows in the mirror and look through the crescent opening just above the upper direction of travel arrow to see ahead of you.
6. After checking the north arrow is inside the orienting arrow, select an easily identifiable landmark through the crescent opening that is on your compass shot line (for example, a distinct tree or boulder).
7. Tuck the compass away and walk to the landmark, counting your paces.
8. To continue along this bearing repeat steps 4-7 using your most recent landmark as your reference point.



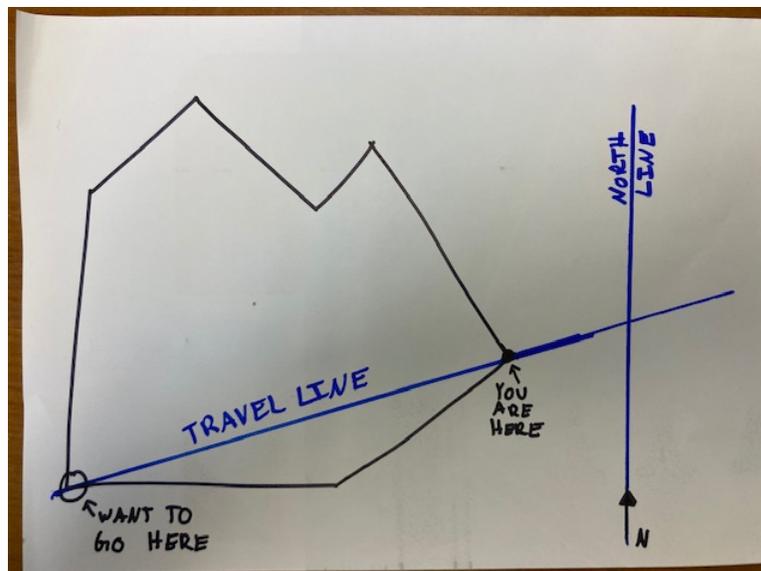
## Finding your way between Two Known Points:

If you know your location on a map and would like to go to another known location using a path that does not follow a marked heading you can use a compass, pencil and ruler to determine the direction of travel you should take.

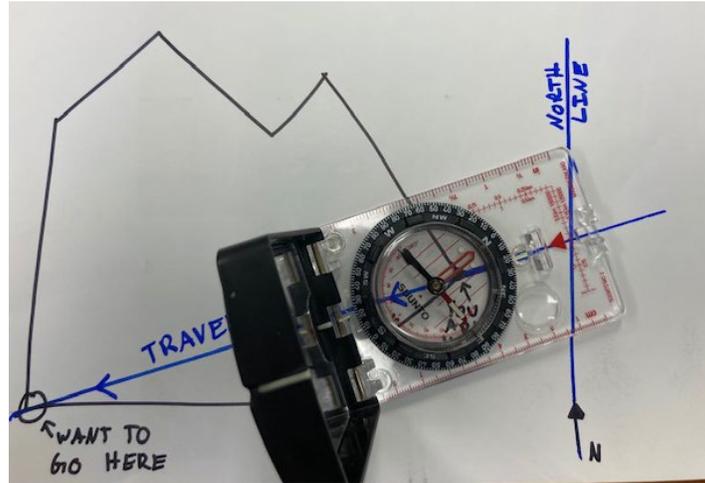
1. Identify your location and destination on a map, then use a ruler to make a line that extends beyond your start and end points on your map.



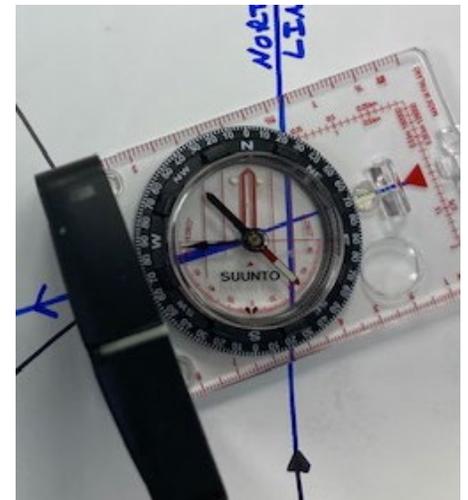
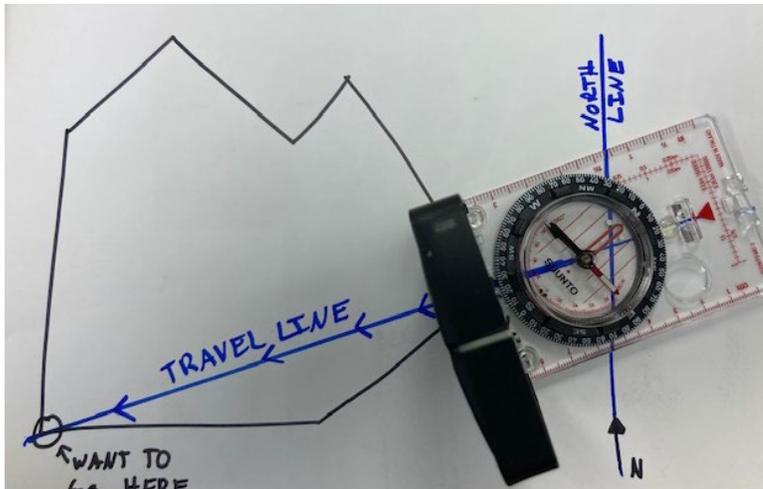
2. Extend the north line on your map so it intersects with the line of travel



3. Place the compass on your map so both direction of travel arrows are on the travel line and facing the destination.



4. Slide the compass until the north line is inside the dial and easily visible. Rotate the dial so the red lines in the dial are parallel to the north line



5. You now have the bearing of your travel line correctly in your compass! You can pick the compass up and, without changing the dial, follow the bearing to your destination.

