

How to Use a Map and Compass

Feeling lost? Bring this cheat sheet with you for a step-by-step refresher.

STEP ONE: TAKING A BEARING FROM A MAP

A bearing is simply the direction - in degrees - in which in destination lies. As long as you know where you are on a map, you can use your compass to find your way to any other landmark.

1. Place your compass on the map with the straight edge along the planned line of travel – your start and finish. Make sure the direction-of-travel arrow on the compass is pointing in the direction of your destination.

2. Rotate the bezel until the "N" points to north on the map. You'll know you hit the sweet spot when the orienting lines on the compass are parallel with the grid lines on the map. You can also use the edge of the map if you don't see any lines.

3. The number that's now lined up with the index line on the compass is your true bearing! Because remember, when you're on a map, you will always use true north as the context for your bearing.

STEP TWO: USING YOUR COMPASS IN THE FIELD

Now that you've taken your bearing on the map, you're ready to start using it in the field! But before you do, you'll need to convert that bearing to a unit your compass understands: magnetic. And you'll do that using declination – or the angle difference between true and magnetic north for your specific location.

1. Find the declination for your area using the diagram in the map's legend. The declination will be a number in degrees followed by either west or east.

2. To calculate magnetic bearing, you'll need to do a little simple math:

For West Declinations: True Bearing + Declination = Magnetic Bearing

For East Declinations: True Bearing - Declination = Magnetic Bearing



QUICK TIP: Need an easy way to remember whether to add or subtract? Use WEST IS BEST (ADD IT) or EAST IS LEAST (SUBTRACT IT).

WEST IS BEST (ADD IT) EAST IS LEAST (SUBTRACT IT)

3. Rotate the compass bezel until the magnetic bearing you calculated lines up with the index line.

4. Holding the compass flat in front of you, turn your entire body until the needle nests inside the orienting arrow - or shed. This is what we call putting "RED FRED IN THE SHED."

5. The direction-of-travel arrow should now be pointing precisely to your destination. Look up, select a landmark in front of you, and get moving! If Red Fred ever leaves his shed, stop immediately, and turn your body along with the compass until he's back home. Keep following the direction-of-travel arrow until you've reached your destination.



QUICK TIP: Walking towards a landmark instead of focusing on your compass will let you keep your eyes up and on the lookout for any obstacles in your path.

Know Your Compass

Before you go anywhere, be sure to familiarize yourself with the parts of your compass.



1. Baseplate: The command center of your compass, with all the tools you need to take measurements on a map.

2. Straight Edge with Ruler: Helps you line up your location and your intended destination. Use the ruler to calculate distances using your map's scale.

3. Rotating Bezel: Marked with degrees from zero to 360. Later, these numbers will help you set a bearing toward your destination.

4. Direction-of-Travel Arrow: When holding the compass flat in front of you, this triangle should point the way you want to go.

5. Index Line: Found on the bezel or just above it (depending on your compass), this fixed line is an extension of the direction-of-travel arrow and is used to mark a bearing.

6. Needle: Always points to Magnetic North, not True North. We'll get into the difference when we talk about declination.

7. Orienting Arrow (The Shed): When the needle rests in The Shed, you can be confident you're headed in the right direction.

8. Orienting Lines: Run parallel to – and rotate with – the orienting arrow. They'll help you line up your compass with True North on a map.