

COMPASS KNOWLEDGE

Parts of the Compass

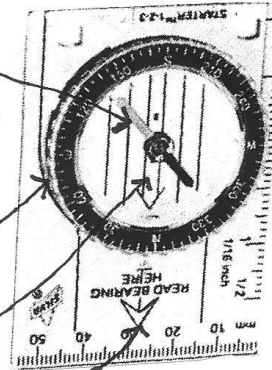
Magnetic Needle: A floating magnetized needle. The red end always points to the magnetic north of the earth, the North Pole. Usually *not* the way of travel.

Cardinal Points: The 4 main points on the compass. North, South, East, West. They make up the 4 quarters of the compass so are known as the "points of the compass". Divide the quarters again; you have Northeast, Southeast, Southwest, Northwest etc. Divide again and you have North by Northeast, East by Northeast, etc.

Compass Housing: A moveable round piece marked with 360 degrees, so you have 360 directions to travel. Azimuth, which means way, is the specific degrees you wish to travel. Turn this housing to take a bearing.

Orienting Arrow: A striped arrow painted on the base of the compass. It is fixed to always point N/360 degrees.

Direction of Travel Arrow: Points the direction to go when the compass is set.



Basic Instructions for using the compass:

Hold the compass in both hands about waist high, your elbows tightly against your side with the direction of travel arrow straight ahead, and your feet pointed straight ahead.

A: To follow a given direction, example "Go 30 degrees" turn the compass housing until 30 degrees is at the direction of travel arrow.

- Turn yourself, including feet, until the magnetic needle points to north; directly over the orienting arrow. You are now facing 30 *degrees*. Look up in the direction of travel, sight an object and walk toward it. If your instructions include a measured distance, count your steps.

B: To sight a landmark and give directions, hold the compass so the direction of travel arrow is pointed at the landmark.

- Turn the compass housing until the magnetic needle points to N, directly over the orienting arrow. The degree reading for you landmark is now in line with the direction of travel arrow.

Ways to find direction without a compass:

Shoulder to the Sun: In the morning the sun rises in the east. Turn your right shoulder to the sun, you will be facing approximately north. In the afternoon turn your left shoulder to the sun to be facing approximately north.

Your Watch as a Compass: An analog wristwatch can be used to find north. Hold a tiny stick vertically over the center of the watch so a shadow falls on the watch face. Rotate the watch until the shadow lies over the hour hand. In the afternoon north is halfway between the hour hand and the number 12 going the shortest way around the face of the watch.

Shadow Method: In a sunny location, place a straight stick vertically in the ground vertically with at least 3 feet showing. Mark the tip of its shadow. Wait 15 minutes. Mark the tip of the shadow. A line drawn from the first mark to the second mark will point east.

A Needle Compass: Rub the point of a large sewing needle over a magnet. Go over and over in the same direction about 25 times. Do not go back and forth on the magnet. Test if it is magnetized by touching a paper clip. Once magnetized balance the needle on a small cork. Attach with a piece of tape. Float the cork in a small bowl of water. The needle will point north. If the needle is not magnetized after 100 strokes you need a stronger magnet.