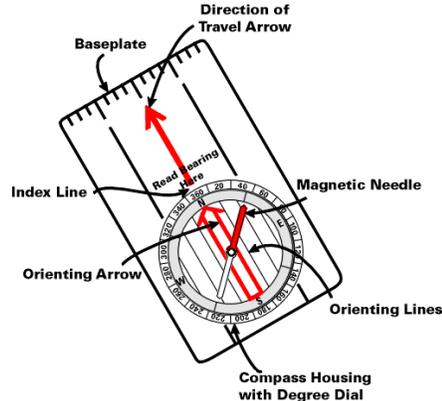


# COMPASS



- **Magnetized Needle (Red and white needle)** - Usually the red end of a pivoting compass needle. This end points to the strongest magnetic field, which is usually the **magnetic North Pole**. "Magnetic north" is different from "**true north**"—the geographic North Pole, where all longitude lines meet. Magnetic north, one of earth's two magnetic poles, lies in an island chain within the Canadian Arctic. True north and magnetic north are separated by more than 1,000 miles. (**Note:** When working with a map, you must compensate for the difference between true and magnetic north. This can be accomplished in various ways.
- **Liquid-Filled Capsule** - The housing (or dial) that contains the needle, the needle's bearing (or pivot) and damping fluid. The fluid protects the needle from jarring and minimizes needle movement during readings.
- **Rotating Azimuth Ring (or Bezel)** - A ring marked with degrees from 0 to 360 (preferably in 2° increments) that encircles the outer edge of the compass capsule. The "azimuth" is your direction of travel (expressed in degrees) between two points. Azimuth and "bearing" have come to mean the same thing.
- **Base Plate** - A rectangular, plastic, preferably transparent base where the capsule sits. Better compasses have rulers (in inches and centimeters) etched into the "straight edges" of the plate. These are helpful when measuring distances on a map. Try to select a compass that offers scales you are likely to use. Common scales are 1:24,000 and 1:25,000.
- **Orienting Arrow and Parallel Meridian Lines (or, North-South Lines)** - Located on the bottom of the compass housing. The non-magnetic arrow's directional end is usually red and, coupled with the meridian lines (which you align with the north-south lines on a topographic map); helps orient your line of travel on a map.

**Index Line or Direction-of-Travel Arrow** - Located at one end of the base plate. This is the arrow that you follow.

## To follow a certain bearing you will have to do the following:

- Turn the dial until the correct bearing (number) is lined up with the direction of travel arrow (there is usually a black line under the dial to help you line this up). (i.e. 30 degree)
- Now turn the whole compass so that the Magnetic needle (Red & White needle) lines up with the Orienting arrow (red arrow on the bottom of the dial) - (Red end of the needle in line with the red arrow on the dial). When you turn, put the compass on your palm and turn your whole body.
- The compass is now facing in the correct direction. Simply walk in the same direction as the Direction of Travel Arrow.