Orienteering instructions

What is Orienteering?

Orienteering is the use of a map and compass to find the direction and distance to travel in to go from one point to another. You need a map that has both the direction of magnetic north and a scale on it. You also need a compass. One that has a direction arrow that you can rotate is preferred (figure 1).

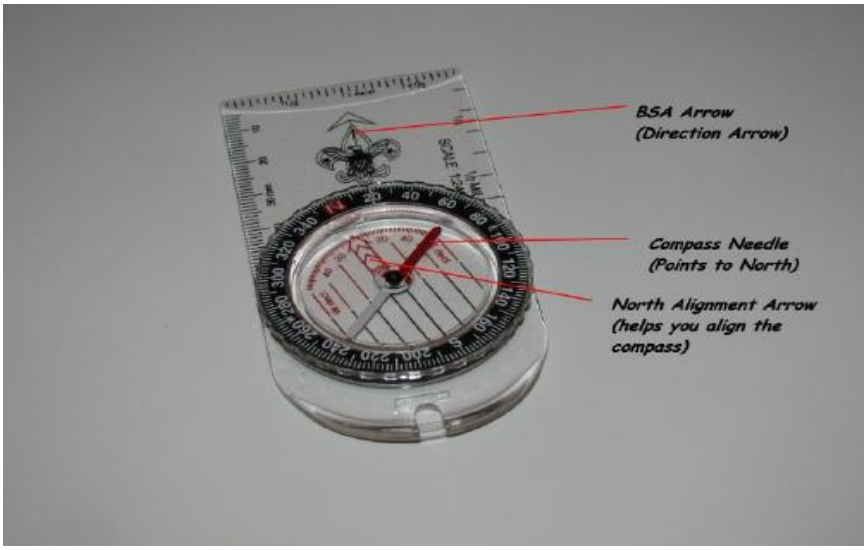

Figure 1

Steps to Orienteering

To successfully orienteer you will need to complete the following steps. Detailed instructions for each step follow this section

1. Obtain a detailed map of the area and a compass (duh)
2. Determine your pace
3. Orient the map to the land
4. Determine where you are on the map and where you want to go
5. Determine the direction (compass direction) between the 2 points and the distance
6. Using the compass, walk in the direction found in step 5, counting your paces to determine the distance.

How to Find Your Pace.

In the woods just off to your right are 2 orange posts. The distance between them is 100 ft. Walk with your normal gait between the two posts and count the number of steps/paces you take (a pace is equal to two steps). Do this in both direction multiple times until you get a consistent number. When you have this divide 100 by your number to find how long your step/pace is. Ex. It takes me 21 paces (42 steps) to travel 100 ft. So I divide 100 by 21 (42) and get almost 5 ft per pace (almost 2.5 feet per step) with some small distance still left to go. Remember this is an estimation, it will not be exact it will just help you know when you have gone too far or still need to keep walking. In this particular example if I want to travel 400 feet I would take 400/5 = 80 paces but because of the distance left over on each pace and each time you pace it might be a little different, at the end of those 80 paces I would still be off by about 20 feet. The more accurate you make the number, the better you will be, but with the kinds of distances we will be doing, this is good enough.

Orient the Map

1. Lay the map on a flat surface.
2. Put the compass on the map as in figure 2. Rotate the map so that both the compass and the line showing magnetic north on the map line up. Figure 3 shows the compass aligned to Magnetic North along with the map. North on the map now points to north in the world.

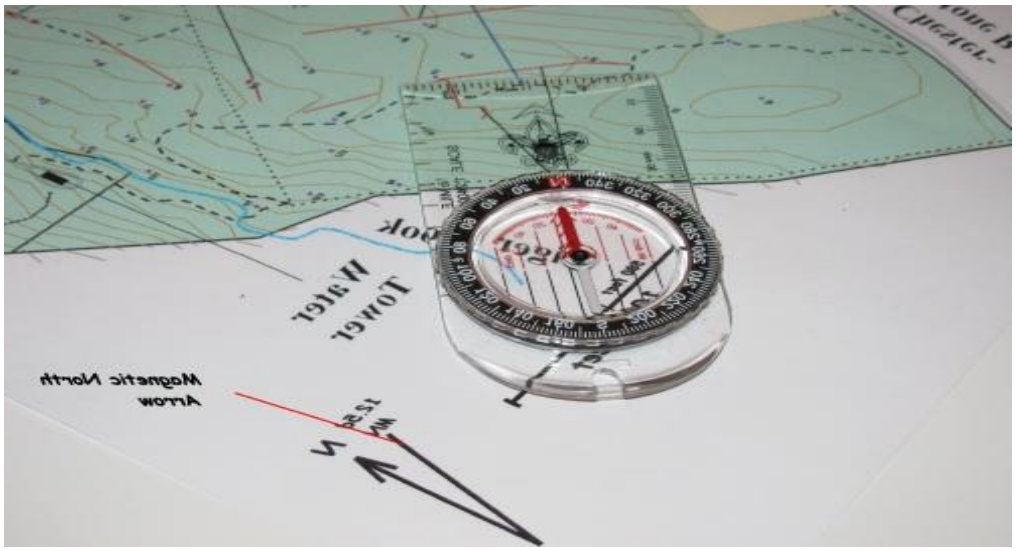

Figure 2

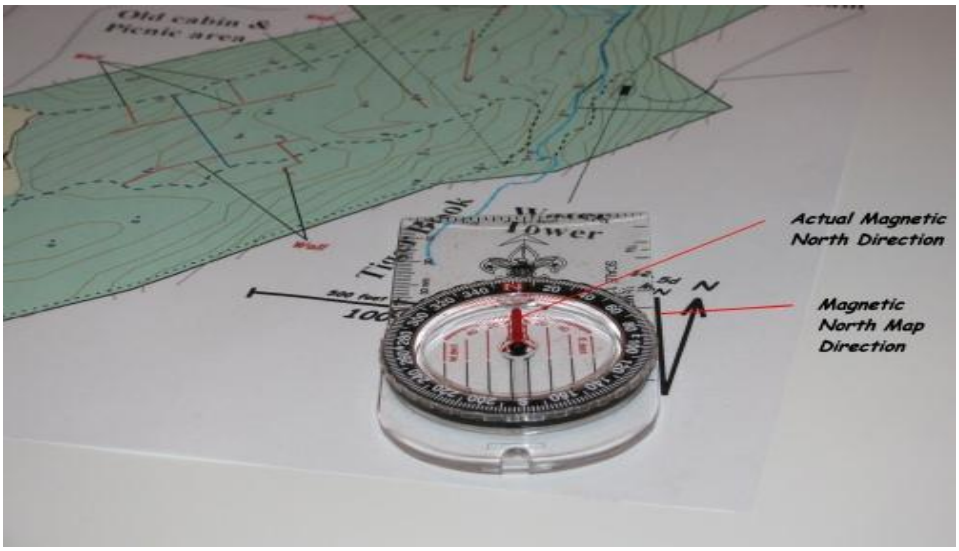

Figure 3

Determine the Direction You Want to Travel

1. Starting with the oriented map (last section), move the compass so that one edge connects the points of where you are and where you want to go (figure 4)
2. Rotate the compass (keep the housing aligned to the points) so that North on the compass aligns with the compass needle (figure 5).
3. The BSA arrow now points in the direction you want to go.

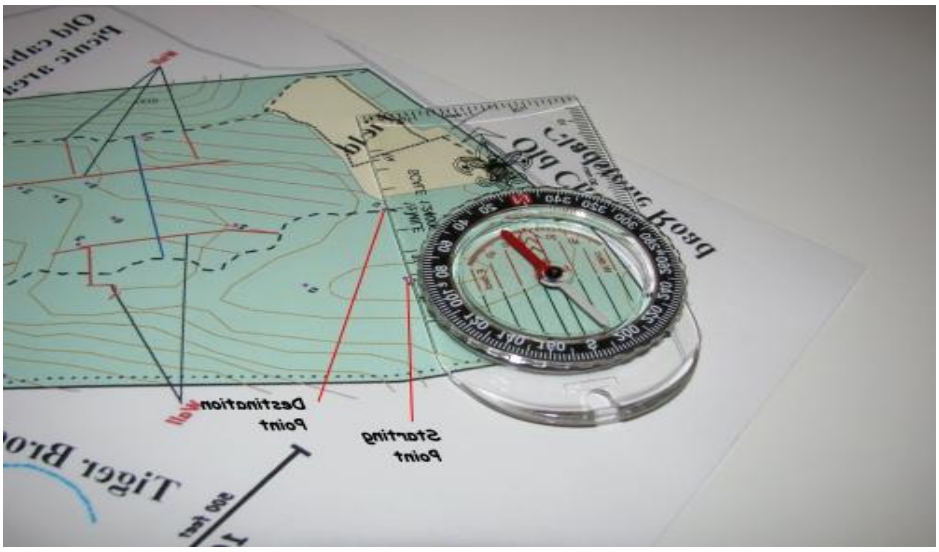

Figure 4

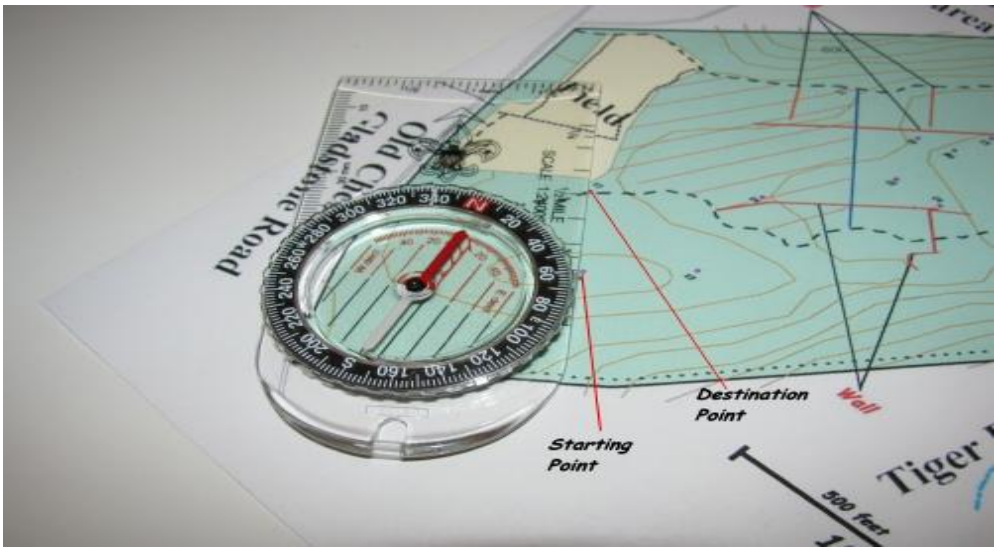

Figure 5

Determine How Far You Need to Go

1. Measure the scale on the map (figure 6). Here 500 feet on the map = 45 mm on our compass.
2. Determine scale of map = 500 ft/ 45 mm = 11 feet /mm.
3. Measure the distance between the 2 points (figure 7). Here the distance = 27 mm.
4. Determine how many feet you need to go = 27mm * 11 feet/mm = about 300 feet.
5. Determine how many paces. In this example 1 pace = 5 feet so 300 feet/5 = 60 paces.

Figure 6

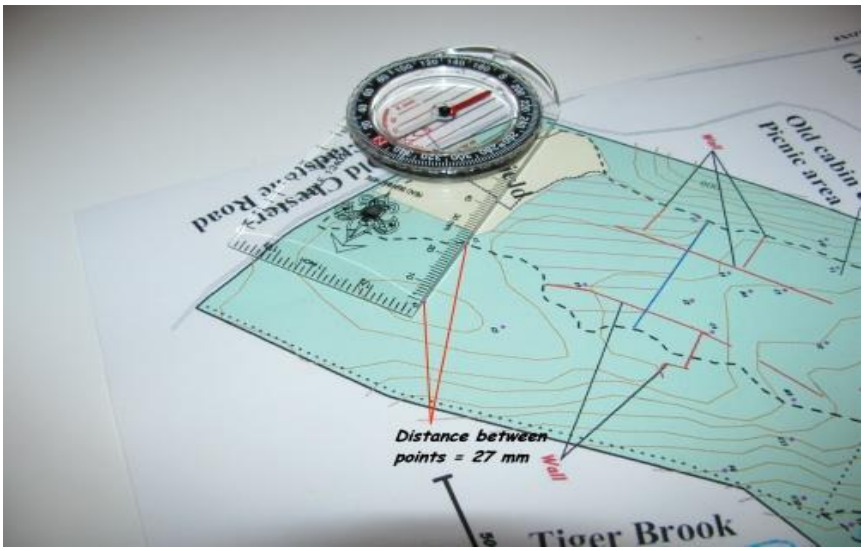

Figure 7

Walk To Your Destination

Once you have a bearing on your compass do not twist the 2 parts! To walk in the right direction turn yourself so that the red arrows line up. Then choose an object about 100 feet away (or as far as you can clearly see) in the direction you want to go. Then without looking at compass (once it is lined up) walk directly to the object you chose and count steps/paces. Once there again use your compass with red arrows aligned to choose another object to walk towards. Continue this pattern until you reach your next point and then redo the map orienting.

On the go Reminders:

1. Line up all arrows. (map and compass)
2. then place compass on starting point
3. rotate extension arrow to race?? new destination
4. Find distance by measuring on map then calculate using the scale