**Orienteering Week #4 Study Sheet:**

Although most route-finding depends more on map-reading than compass work, there will be some occasions when you will have to travel by dead reckoning, like if there are *no usable landmarks*, or it is *dark*. Even if you are traveling by map features, your compass can serve *as a backup* to confirm that you are not completely off course.

The following instructions are as simple as I can make them, but you can only really learn these skills by doing them.

To do them, you need a compass and a map. You don’t even really need a map – you can make a pretend one, with just starting and ending points on it.

1. **How to take a compass bearing off of a map from one point to another**.
   1. Draw a line , or lay a straight edge, from starting point (usually where you are) to ending point (usually the next control point).
   2. Place the long edge of your compass along this line, with the direction-of-travel arrow pointing toward the ending point.
   3. Turn the bezel of the compass until the orienting arrow points to the top of the map (the lines within the compass ring should be parallel to the edge of the map, and to any blue north-south index lines)
   4. Read the bearing at the index line of the compass*: this is the direction you want to go.*
   5. **Note:** Your map does *not* need to be oriented for this process – you are *ignoring* the magnetic needle.
   6. **Note:** You do *not* need to adjust for angle of declination for this process, as long as you also do *not* adjust in step #2!
2. **How to travel following a compass bearing:**
   1. Line up the desired bearing (direction) to the index line of the compass. (It will be already lined up if you just completed the process in #1)
   2. Hold the compass in front of you, with the direction of travel arrow pointing forward.
   3. Turn your whole body, with the compass too, until the magnetic arrow lies within the orienting arrow (“red in the shed”)
   4. Hold the compass at eye-level and pick a destination (like a tree or rock) that is directly in the line of the direction-of-travel arrow.
   5. *Run* to that destination.
   6. Repeat.