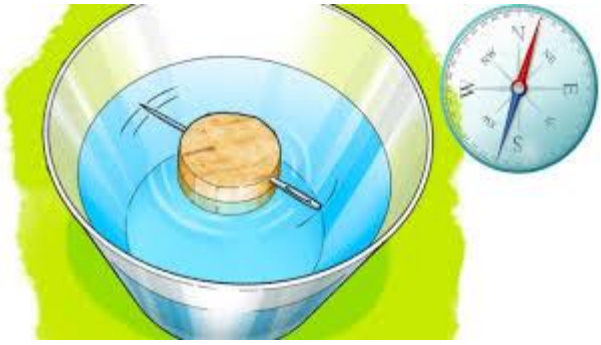
GEORGIA
BURTON 4-H CENTER ON TYBEE ISLAND

Orienteering
Pre-Post Trip Activities

Activity 1. Orienting Your House

Have students draw an overhead view of their house and label some of the rooms (bedroom, bathroom, kitchen, etc.) similar to a blueprint. Then label the directions and find out what direction each room is facing in the house. For example, after drawing out the house and finding the directions, a student might see that their bedroom is on the east end of the house and the kitchen is at the south-west end of the house. For more advanced age groups, have the students find the degrees of each room for an even more exact and challenging twist. Students may use a compass app on a cell phone, an actual compass, a website like google maps, or even the sun (rises in the east, sets in the west).

Activity 2. Make a Compass



Review magnetism, how compasses were invented, and how they work. Take a sewing needle and rub it in one direction with a magnet for a few minutes (do not rub back and forth). Then take a cork and place it floating in the middle of a bowl of water and lay the needle on it. If there is a breeze or fan, you may want to cover the bowl with something clear to block interference. Watch which way your compass points. You can check your compass with a real compass or compass app. Discuss why this works and how the earth has a magnetic field which our compass picks up.

Activity 3. Field Maps

Teach students to use different types of maps (road map, topography map, physical maps, and time zone maps, etc.). Discuss the differences between the maps. When would you use each type of map? What do the different symbols mean? While GPS is used in most wilderness industries today, when would a map be helpful? Who uses maps?

Activity 4. Partner Directions

Assign each student a partner. One partner is given a list of directions while the other is given a compass. The directions, different for each pair, lead to a particular hidden object, which the teacher has previously set out. The student with the map must stand behind a line and give his/her respective partner the list of directions. For example, the directions could include to walk two steps north, then jump three times to the west and so on. The partner with the compass must hear each direction and then use the compass to perform each step. Once the directions lead the student to the respective hidden object, he/she picks it up and runs back to his/her partner.

Activity 5. Scavenger Hunt

Separate the students into teams of two to four, with each team having their own compass. In a large field, wooded area or room, spread out items for the teams to find. Give each team a set of instructions on how to find each hidden item. For example, to find the first item, you can tell them to go 300 degrees for eight steps, then 60 degrees for eight steps and, finally, 180 degrees for eight steps. Teams must write what item they find there and then move onto the next set of directions, which will take them to the next hidden item.

Activity 6. Magnets

Start by reviewing how compasses work because of a magnetic force field around the earth. Then distribute magnets to small groups or partners. What happens if you put together two magnets? Do they become stronger together? Have students experiment with magnets, a variety of sizes of magnetic objects, and write observations about strengths of different combinations of magnets. Have them try to push two positively charged areas together, what happens? Discuss how do these small magnets model the relationship between the earth's magnetic core and compasses? If the north pole is negatively charged what would the needle of the compass be charged if it points north?

Activity 7. Navigating Change

Divide the students into two groups, the groups will be debating which is better: using a phone or using a compass. Before beginning the debate, give the groups 10 minutes to come up with talking points to prove their argument. The teacher will be the moderator of the debate. At the end of the round, have both groups switch arguments, giving them 5 more minutes to come up with new talking points.