Scavenger Hunt!

Orienteering Post-lesson Plan

Purpose: To help students practice and explore compass using skills through a game

Concepts:

- A compass can be used to help give somebody else directions
- 'Taking a bearing' is the practice of figuring out the position of an object in relationship to you using a compass
- Remember the rhyme from orienteering class, 'Put Red in the Shed and follow Fred' and use it to help you take a bearing—'Point Fred and your friend and put Shed under Red!'

Learning Outcomes: Students will be able to

- Take a bearing using a compass
- Describe how to plot out an orienteering course in the form of a scavenger hunt
- Teach another class how to take bearings and read bearings using a compass

Minnesota Academic Standards: (example)

Science:

 6.2.2.2.3 Recognize that some forces between objects act when the objects are in direct contact and others, such as magnetic, electrical and gravitational forces can act from a distance.

NASPE (National Association for Sports & Physical Education)

- Standard 1: Demonstrates competency in motor skills and movement patterns needed to perform a variety of physical activities.
- Standard 2: Demonstrates understanding of movement concepts, principles, strategies, and tactics as they apply to the learning and performance of physical activities.
- Standard 3: Participates regularly in physical activity.
- Standard 4: Achieves and maintains a health-enhancing level of physical fitness.
- Standard 5: Exhibits responsible personal and social behavior that respects self and others in physical activity settings.
- Standard 6: Values physical activity for health, enjoyment, challenge, self-expression, and/or social interaction.



CLASS LENGTH: 45+ MINUTES

AGES: 5TH GRADE AND UP

SEASON: ANY

GROUP SIZE: 5-30 STUDENTS

SAFETY: Depending on when and where (indoors or outdoors) you choose to do the activity, the students might need winter clothes.

MATERIALS: Compasses (as few as two compasses will work but ideally one for every 3-4 students), paper, pencils, clipboards, a gymnasium/playground/large classroom, treats/treasure (optional)

PRE-CLASS PREP: Decide on a location and make sure it's available for your use.

CLASS OUTLINE:

I. Introductions - 5 min.
II. Taking a bearing - 15 min.
III. Making a scavenger hunt - 20 min.
IV. (Optional) Trading scavenger hunts – 30 min.
V. Wrap-up – 10 min.

RESIDENTIAL OUTDOOR ENVIRONMENTAL EDUCATION - 2007

I. Introduction (5 min.)

- A. Lesson Preview Tell the students that today they will be getting a chance to use the skills that they learned at the Audubon Center's orienteering class. Write a brief lesson preview on the board so they know what to expect.
- **B. Grabber** Get out a treasure (real or fake—candy works but so does a cut out paper coin) and offer it up to the first person who can remember the rhyme from orienteering class ("Put Red in the Shed and follow Fred"). Tell the students that today they are going to be making their own orienteering courses and they'll be hiding those treasures for each other to find.

II. Class Experiences (50 min +)

A. TAKING A BEARING

Hand out the compasses and have the students place them around their necks. Before the students can make their own scavenger hunts they need to know how to take a bearing (they may have learned this in the orienteering class but most likely will need a refresher).

- Tell the students that the difference between following a bearing and taking a bearing is that when you're following a bearing, the number is given to you but you don't know where you're going (like in the orienteering class). When you're taking a bearing, you pick where you're going and figure out the number yourself so you can give it as an instruction to somebody else.
 - Have all of the students stand and face the same object. Make sure they are holding their compasses properly (flat in their hands and with Fred pointing directly in front of them). Reinforce that Fred should be pointing at that object.
 - Now have the students twist the compass housing until the Shed is under Red. They may all get slightly different numbers, so explain that that's because they are all standing in different places in relationship to the object.
 - Practice this skill by walking around the room and placing an object in various places, then having them take a bearing from where they're standing.

B. CREATING A SCAVENGER HUNT

Tell the students that they will be using their new skill of taking a bearing to create a scavenger hunt. Take them to a gymnasium, or out to the playground, or wherever you choose to go (should be a relatively large area—you could make it extra challenging by letting them use hallways and empty classrooms).

- Split the students into groups of 3-4 students.
- They will need to work as groups to set up a 5-point course (more or less depending on time constraints) for their classmates to follow using bearings. The treasure can either be left at the end or split up amongst the points. (With older students you may want to give them only these instructions and let them decide how to proceed).
- Have them start at different places, making sure they remember where they started (have the groups leave a piece of paper with their group name on it at their starting location).
 - An effective and simple way to create the course is by sending one group member off to the next desired location and then having them stand there while the other team members take a bearing from the previous point.
 - \circ $\$ Have the groups measure out and record the paces between each point.
 - Make sure they leave something at each point—a piece of paper with their group name on it, or their specific treasure!
 - Have the students record the bearings and paces on a piece of paper, for example:
 - A-B: 40°, 5 paces
 - B-C: 121°, 12 paces
 - C-D: 63°, 9 paces

C. TRADE SCAVENGER HUNTS

• Have the groups exchange scavenger hunts and follow each others, collecting the prizes that were distributed! If the students have fully understood both how to take a bearing and how to read a bearing, they will be able to follow each other's instructions.

III. Conclusion (10 min.)

- Answer any questions the students had.
- Have a discussion about successes/challenges
 - If you noticed that there was a lot of confusion/chaos during the activities, ask the students what was especially challenging about creating an orienteering course and using a compass.
 - What went well or didn't go well about working in a group?
- Have the students explain back to you how to use a compass, both for following somebody else's directions as well as creating their own courses.
- Have students brainstorm situations in which knowing how to use a compass might come in handy, and have them explain how they would use their compass in such situations.

IV. Extensions/Variations

- For younger students or if you don't have compasses, you may also simply have them create scavenger hunts using the simple cardinal directions (north, south, east, and west) and pacing. You will need to know at least where North is, or you can designate different directions to different walls in your classroom or gymnasium. For example, they might create a set of instructions that reads "5 paces North. 2 paces West. 6 paces South. 3 paces West. 9 paces North. 1 pace East. Etc") At the final point, they can leave a note or another indicator that the followers have arrived at the right place.
- As an **extra challenge** for older students, don't leave anything at the points to indentify them as such. Rather, have the students indicate with a sheet of paper the starting location, and then create the course with bearings and paces, but do not make it obvious where the points are located until the last point. The students who follow the course will have to be extremely accurate with their bearings and pacing in order to successfully arrive at the end of the course.

V. Authentic Assessment

You will be able to assess students' learning based on their success creating an effective scavenger hunt (i.e. you or another group of students should be able to follow their scavenger hunt and complete it with relative ease!)

VI. Background Information

(See ACNW Orienteering lesson plan for a refresher on how to use a compass)

VII. References

http://www.barossalight.sa.scouts.com.au/games/**compass**-games.pdf http://www.ehow.com/info_7847742_grade-projects-chinese-invention-compass.html