

Class Summary

Quick Facts

Outside: 2 hours

Grade: 4-8th

Offered: Year-round

Physical Activity: About a 1 mile walk over hilly terrain

Other: No special skills required

Concepts

- Design
- Navigate
- Cooperate
- Explore

[Minnesota Academic Standards >](#)

- Science
- Math
- Language Arts
- Physical Education

[Classroom Activities >](#)

- Pre-Activity: *Sunken Treasure*
- Post-Activity: *Make Your Own Compass*

STEM Components

- Identify
- Operate
- Follow Procedures
- Measure
- Analyze

IB Profiles

- | | |
|---|---|
| <input type="checkbox"/> Inquirers | <input type="checkbox"/> Open-minded |
| <input type="checkbox"/> Knowledgeable | <input checked="" type="checkbox"/> Caring |
| <input checked="" type="checkbox"/> Thinkers | <input checked="" type="checkbox"/> Risk-takers |
| <input checked="" type="checkbox"/> Communicators | <input type="checkbox"/> Balanced |
| <input checked="" type="checkbox"/> Principled | <input type="checkbox"/> Reflective |

Revised Dec 2011

Outcomes, students will:

1. Identify navigational tools from throughout human history.
2. Learn the parts of the compass and understand how each part works collectively to determine a bearing.
3. Measure distance by estimating and walking their pace.
4. Practice operating a compass in a wooded orienteering course.
5. Practice cooperation and communication when working together with a partner.

Brief Synopsis:

Feeling lost? Once you have had this class you'll never have to worry about that happening again. By combining earth science with practical outdoor skills, participants will navigate Eagle Bluff's orienteering course. Emphasis will be placed on learning how compasses have impacted human history, understanding the earth's magnetic field, and learning the parts and proper use of a compass. The culminating activity will be working cooperatively to navigate around a 10-point orienteering course in the woods.

Activity Descriptions

Finding Your Way (30 minutes)

Imagine how difficult it would be to travel deep in a forest or out at sea without the use of navigational tools. After a short introductory activity, students will brainstorm how humans have navigated throughout time.

Get Orientated (30 minutes)

Each student will be given a compass to use throughout the class and will learn the parts and functions of the compass. Step by step instructions will teach the class to dial and follow a bearing.

Setting a Pace (10 minutes)

How do you know you have reached your destination? Calculating distance by setting a pace will be essential as students travel 50-400 feet from control point to control point in the woods.

Outdoor Orienteering Practice and Course (1 hour 50 minutes)

Students will work in pairs to navigate around a 10 point orienteering course in the woods of Eagle Bluff. Each group must dial in the bearing, orient their compass, then calculate the distance in order to locate the control points. An activity accompanies the orienteering course to keep the group motivated to find the control points.