Audubon VERMONT

Orienteering

Grades 5-8

What to Expect

Our 4-hour orienteering program introduces students to the art, science, and enjoyment of using a map and compass to navigate through the woods. Students will begin the day in our Education Barn with a morning lesson on map reading; how a compass works; how to find, read, and follow a bearing; and how to use a compass with a map. After this lesson and a break for lunch, everyone is ready to split into small teams of 3-5 students and use the skills they learned in the morning to navigate through an orienteering course. The course takes everyone off-trail through and around the Green Mountain Audubon Center's beautiful fall forests and beaver ponds where there is always something interesting to see. At the end of the day, students have the satisfaction of having learned a new skill, applied it, and worked together in a team to complete a challenge. This program is a fun, developmentally-appropriate, and experiential way to reinforce the geography, science, and math concepts addressed below in the related Vermont Grade Expectations.

Essential Questions and Understandings

How can we use a map and compass to navigate through the woods?

- Orienteering is navigating using a map and a compass.
- Maps have features that help us orient ourselves and navigate to where we want to go (i.e. scale, legend, contour lines, compass rose, landmarks etc.)
- Compasses orient us to the cardinal directions (north, south, east, and west), and can be used as a tool to help us walk along a specific bearing (any degree between 0-360).
- The red pointer in a compass is magnetized and aligns with the magnetic field of the earth; "Red" always points toward magnetic north.
- In Vermont, magnetic north is about 15 degrees west of the location of the true North Pole.

Vermont Grade Expectations

H&SS11: Interpret and Solve Geographic Problems - Students review how to interpret maps (including legend, scale, landmarks) and use a map of the Green Mountain Audubon Center to navigate through an orienteering course.

S26: Electromagnetic Forces – Students learn how a compass works and how to use it to navigate through an orienteering course.

M13: Geometry and Measurement Concepts – Similarity – Students use the scale on the orienteering map to determine how far they should travel between flags in the woods.

Key Words

1. Orienteering
2. Map
3. Compass
4. Scale
5. Legend
6. Contour
7. Compass rose
8. Landmark
9. Magnetic north
10. True North
11. Bearing

Audubon VERMONT

Recommended Resources for Orienteering

Coming soon….