



Quarrybrook

EXPERIENTIAL EDUCATION CENTER

Program Title: **Compass**

Audience: 5th grade students

Program Theme: Learning how to use a compass enables us to keep our direction anywhere on the planet. Through hands-on exploration, students will learn how to use a compass and how to measure distance based on their individual pace count. Once students have mastered these skills, they will separate into teams and be challenged to complete a compass course in our Quarrybrook woods.

Program Goals: Students will know how a compass works, and how to find a bearing and travel in that direction. Students will understand the concept of pace in relation to determining distance traveled by foot.

Next Generation/Common Core Connections:

CCSS.MATH.PRACTICE.MP5 Use appropriate tools strategically.

Program Outline:

Note: This lesson fits into the two-hour time slot allotted for field classes. However, the length of each activity depends on the understanding of each student within the group. Therefore, some of the activities might take longer than others. There are extra activities in case students need more practice before moving on to the final compass course.

Activity 1: COMPASS INTRODUCTION – Students will be introduced to the compass and gain a general understanding of its purpose. Students will learn the parts of a compass, and begin practicing how to find a bearing and travel in that direction.

Objective: Students will be able to find a bearing provided by the instructor.

Intended Outcome: Students will be able to point in the correct direction of the bearing provided by the instructor.

Activity 2: PRACTICE COURSE – Once students have an understanding of how to find a bearing, they will participate in a practice compass course. Students will be given a clue card and will have to travel from point to point while trying to determine the correct pattern.



Teachers and other adults will be helpful by providing assistance to groups that appear like they are confused during this activity.

Objective: Students will be able to complete the practice compass course.

Intended Outcome: Students will complete the practice compass course and provide the correct pattern through which their clue card took them.

Activity 3: PACING – Students will be introduced to the concept of pace (number of steps) as a means of measuring distance. Students will practice walking their “pace” and determine their own pace-to-feet conversion.

Objective: Students will be able to understand pacing as a means of measuring a distance.

Intended Outcome: Students will be able to walk a distance between two points and accurately estimate its length in feet based on their paces.

Activity 4: COMPASS COURSE – Once students have an understanding of how to take a bearing, how to measure their paces, and their different roles on a compass team, students will embark on a compass course, traveling through the woods from point to point with a small group.



Teachers and other adults will be asked to monitor one or two groups and guide them as needed. This activity is meant for students to work together and gain a better understanding as a small group.

Objective: Students will use the skills from the previous activities to complete the compass course.

Intended Outcome: Once the allotted time is up, students will gather back together and discuss which points they traveled. This will determine if students followed the correct path or not.

Conclusion/Wrap-up: Students will share with the group what path they followed on the compass course. Students will also share difficulties/ah-ha moments while on the compass course as a team.