

**Project FOCUS
Best Lessons
FOURTH GRADE**

Title of Lesson: Using Compasses for Explorers

Theme: Physical Science

Unit Number: **Unit Title:**

Performance Standard(s) Covered (enter codes):

SS4H2

Enduring Standards (objectives of activity):

Habits of Mind

- Asks questions
- Uses numbers to quantify
- Works in a group
- Uses tools to measure and view
- Looks at how parts of things are needed
- Describes and compares using physical attributes
- Observes using senses
- Draws and describes observations

Content (key terms and topics covered):

Magnetic Field

Compass

Explorers

Learning Activity (Description in Steps)

Abstract (limit 100 characters): Using compasses to understand the Earth's magnetic field and how explorers used this knowledge

Details: I used this opportunity to include some Science in a Social Studies lesson. My class was studying colonialism and the explorers at the time so I created an experiment to make them understand how compasses work and touch on magnetic fields. Create a powerpoint with a little background on the magnetic field and how a compass always points to North. Then tie this into how explorers found North America using a compass because when they were out at sea, everything looked the same.

A few days prior to the lesson, I mapped out routes within the classroom. I created 8 starting points in the 4 corners of the room. I then counted out a number of steps for a path the children were to follow. The class was divided into groups of 2 and each given a set of directions with a starting point. The starting points were numbered 1 through 8. Using the compass and taking a certain number of steps in specific directions then turning and going in a different direction, the children would end up at a desk with letters A through H on them. They then would trade directions with another group and try to get their path.

It can be kind of chaotic depending on the class size but it is a very fun activity and the children really respond to it.

Materials Needed (Type and Quantity):

individual compasses for groups of 2 located in the supply room in a tray labeled "compasses"

Pieces of paper labeling starting and ending points

Directions of paths created and typed for the children to follow

Notes and Tips (suggested changes, alternative methods, cautions):

Try to pair up a smarter child with a slower child. The compasses can be hard to read and must be kept steady for it to line up with North. Bring extra compasses. Some of them may decide not to work that day as they are very basic.

It also helps if you make path 1 lead to Ending Point A. That way you can know immediately whether the child followed the correct path because they will just guess sometimes.

Sources/References:

- 1)
- 2)
- 3)