

## DAY 5 EXPERIMENT

# Go!

## DIY Compass

### Materials (per group)

- ☐ Plastic container lid
- ☐ Marker
- ☐ Small piece of cork
- ☐ Metal paper clip
- ☐ Strong magnet
- ☐ Water
- ☐ World map
- ☐ Optional: world map paper place mats with countries labeled (found at teacher stores), 1 per child
- ☐ Babel Legend cards (11-7-070), 1 per child

### Class Time Directions

Today at *The Incredible Race*, we're learning about the continent of North America. Point to the map. There are 23 countries in North America, including Canada, Mexico, the United States, Haiti, and Jamaica. Believe it or not, according to the Joshua Project, there are 153 groups of people who have not heard about the good news that Jesus came to save them from their sins. Those groups have over 12 million people in them! That's a lot of people who need to hear the gospel! Read 1 Chronicles 16:23–24.

If you were going to visit Mexico to share the gospel with people there, which direction would you go to get there? Allow answers. What if you wanted to go to Haiti

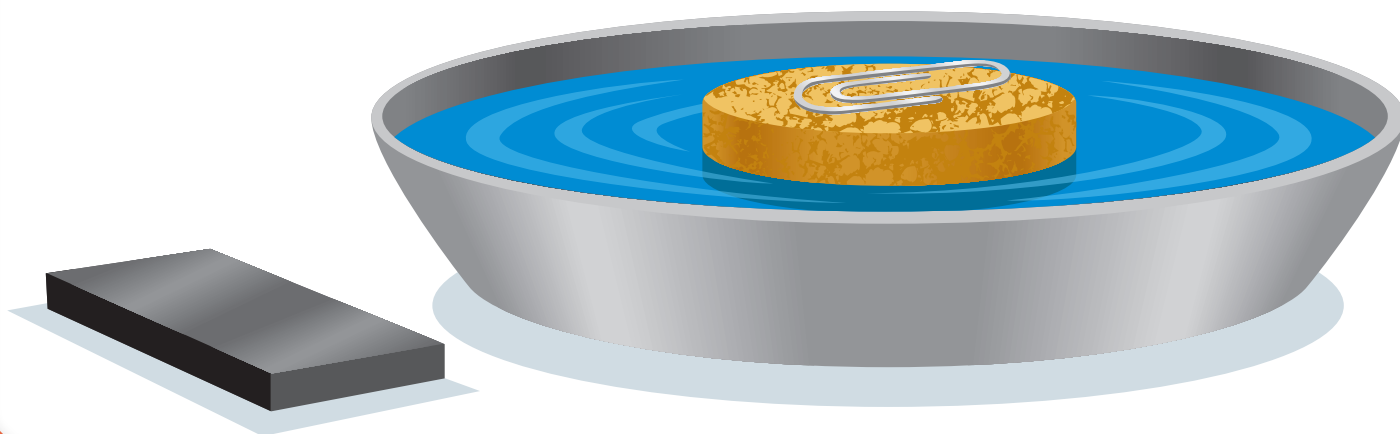
to tell people about their Creator and Savior? Allow answers.

When we travel, we need to know which direction to go. A compass is a tool that helps people find their way and know which direction to go. Today, we're going to make our own compass.

In the beginning, God created a magnetic field around the earth to help to protect us from the sun's rays. This field is decaying over time, and this decay actually confirms the teaching of the Bible that the earth is relatively young (about 6,000 years old). The magnetic field is decaying so quickly that it couldn't be millions of years old; instead, it's just thousands of years old.

Eventually, people discovered that they could use this magnetic field to help them figure out what direction they were going and which direction they needed to go to get where they wanted to go. The magnetic field has a north pole, which is located near the North Pole on the map, and a south pole, which is located near Antarctica. We are going to make a magnet out of a paper clip and watch as it lines itself up with the earth's magnetic field. And then we will find out how we can use it to navigate!

Pass out the container lids. With the marker, kids can write N, S, E, W (for north, south, east, west) on the inside of the container lid (so that the sides are sticking up). If it were a clock, picture N at noon, S at 6 o'clock, E at 3 o'clock, and W at 9 o'clock. Pour water into the lid. Carefully stroke



the paper clip over the magnet in the same direction each time. Place the clip on the cork. Place the cork in the water. Watch the clip spin and orient N/S. Rotate the container lid so that the N and S line up along with the needle's orientation. If you wanted to go to Guatemala, which direction would you go? To Canada? Compare the direction to these places on the map with the direction the compass

indicates you would need to go. What affects the magnetized needle?

Note: If you bought place mat maps, give each child one and have him put his compass on it. Ask various directional questions, as suggested.

Pass out the Babel Legend cards, 1 per child.