

**Activity 1: The Earth's Core**

Give your child a red and blue bar magnet from the science kit and tell him to hold the magnet in his fist. Explain to him that the core of the Earth generates a magnetic field. The core is the center of the Earth, and the Earth has layers and layers around the core. The magnet and his fist represent the Earth's core.

Wrap his fist in layers of paper towel to represent the layers around the core, discussing each layer (mantle and crust) as you place them around his fist (you can use several paper towels for each layer).

Explain that the Earth has a magnetic field similar to a bar magnet. The magnetic pole in the north is called the Earth's North Magnetic Pole. It is not in the exact location as the Geographic North Pole. The North Magnetic Pole is always changing. It is currently moving through Canada at approximately 25 miles every year. The Geographic North Pole does not change. It is always at the very top of the Earth.

You can search online for pictures that show the Geographic North Pole and the current North Magnetic Pole (type "North Magnetic Pole" in your browser and then choose Images).

On the sheet, "The Earth's Core," your child can label the layers of the Earth on the first diagram. (He can use the illustration on p. 37 of his book.) Then ask him to label the North Magnetic Pole and Geographic North Pole on the second diagram and to draw the Earth's magnetic field.

# THE EARTH'S CORE

**DIRECTIONS:** On the first image, label the Earth's crust, mantle, and core. On the second image, label the Geographic North Pole and the North Magnetic Pole. Then draw the Earth's magnetic field.

