USGS
science for a changing world

Earth Egg
3-5

Modified from activity created by Laurie Molnar
University of Pittsburgh at Johnstown

Key Points:

1. Students will gain a better understanding of the composition, ratio and proportion of the Earth's crust, mantle and core.
2. Students will be introduced to the scientific theory of plate tectonics.

Materials:

* overhead projector/transparencies
* globe
* colored chalk
* brown hard-boiled eggs
* plastic knives
* plates
* napkins
* garbage bag (for clean-up)

Introduction:

1. Ask students what a globe represents. Explain that a globe is a model of our Earth and that models are used to represent an object or item.
2. Present a model of the Earth's interior. Ask students how they think scientists are able to predict what the inside of our Earth looks like.
3. Explain the concept of inferences (conclusions and predictions) and use an example that children can relate to (guessing what is inside of a wrapped present by shaking, smelling, or weighing it). Explain that scientists drill into the Earth, study energy waves from earthquakes, and study rocks that spew from volcanoes in order to learn more about our Earth.
4. Explain that scientists have concluded that the Earth has three main layers, the crust, mantle and core. Using colored chalk, draw the layers on the board. Present information on the Earth's layers.
5. Explain the concept of plate tectonics. (The crust is like a jigsaw puzzle made of approximately 20 huge slabs of rock called "tectonic plates." According to