

## **Beneath the Earth**

What makes the ground shake?

### **Objectives:**

- Be able to express their creation in a culminating group forum activity verbally and in writing.
- Create, illustrate, and write their own mythical story.
- Understand the differences between fact and fable.
- Understand a culture's influence on explaining Earth processes.
- Begin to understand earthquake processes.

### **Standards:**

- Social Studies (5-8):
  - Culture
- Arts Education – Visual Arts (5-8):
  - Standard 3: Choosing and evaluating a range of subject matter, symbols, and ideas
  - Standard 4: Understanding the visual arts in relation to history and cultures
  - Standard 6: Making connections between visual arts and other disciplines
- Historical Understanding (5-6):
  - Standard 2: Understands the historical perspective
- Language Arts (3-5):
  - Standard 1: Uses the general skills and strategies of the writing process
- Science (5-8):
  - Science as Inquiry: Abilities necessary to do scientific inquiry
  - Earth and Space Science: Structure of the earth system
  - Science in Personal and Social Perspectives: Natural hazards
  - History and Nature of Science: Nature of science/History of Science

### **Classroom Activity Part I:**

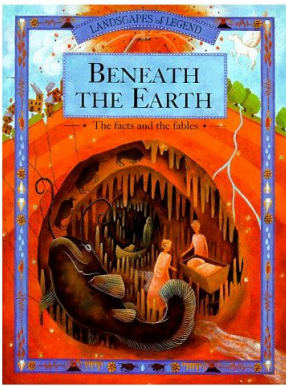
Imagine yourself living in a time without technology – a time in which questions abounded about why things are the way they are. Your only tool is your brain, your thoughts, and your imagination as to why things happened on Earth. You're sitting on the steps of the Acropolis discussing the philosophy of life when you suddenly feel the Earth shake. The structures shake fiercely and begin to fall all around you. Everyone is running and screaming unable to explain what is happening. Suddenly after what seems like eternity, everything stops and it is quiet. What just happened?

Using only your imagination, get in your assigned team and write a short story about what happened and what caused this shaking Earth. You do not know anything about the Earth processes; you do not even know what an earthquake is. Be as creative as your brain will let you.

### **Classroom Activity Part II:**

When looked at with our modern understanding of why the earth moves, earthquake myths may seem humorous and inconsequential. But they were once standards of their various cultures, a way of trying to understand the powerful natural events that could so greatly affect the lives of ancient people.

Earthquake myths evolved in virtually all cultures and reflect unique and interesting perceptions of the shifting crust. And, in spite of all the advances scientists have made in beginning to understand the reasons for earthquakes, modern myths exist that still capture the imagination of many, remaining rooted not only in the United States, but all over the world.



Using the book *Beneath the Earth*, read the chapter on the shaking Earth and the Japanese myth of the giant catfish. Other interesting fables are:

Gabrielino Indians, Southern California

Long ago, Great Spirit made a beautiful land that turtles carried on their backs in lakes and rivers. One day the turtles began to argue. Three swam east; the other three swam west. The earth shook and cracked. The turtles could not swim far, because their load was heavy. So they made up. But once in a while, the turtles argue again. Each time, the earth shakes.

Hindus of India

They believed that eight mighty elephants held up the land. When one of them grew weary, it lowered and shook its head, causing an earthquake.

Kamchatka, Siberia, Russia

A god named Tuli drove an earth-laden sled pulled by flea-infested dogs: when the dogs stopped to scratch, the earth shook.

### **Possible questions/inquiry for learners:**

How does the culture's religious or political views play into their interpretation?