AUDITORIUM PROGRAM SUMMARY

EXPLOSIVE EARTH

Level: **Grades 3-5** Length: **45 minutes**

PROGRAM DESCRIPTION

Witness the awesome power of planet Earth and learn what goes on beneath the surface to create these awe-inspiring events. Using demonstration and discussion, students will explore what drives these geologic events and learn more about the role of plate tectonics in shaping our planet.

CURRICULUM CORRELATIONS

Students will:

- Discover the destructive and constructive properties of earthquakes and volcanoes. **S5E1a**
- 2. Explore the inner workings of the earth as well as these events. **S5E1b**
- 3. Learn how humans are working to predict these geologic events and how to minimize their impact. **S5E1c**

ESSENTIAL QUESTION

In what ways is Earth an *active* and *changing* system?

PROGRAM VOCABULARY

Effusive	Explosive	Lahar	Liquefaction
P Waves	Pyroclastic	S Waves	Tsunami

ASSOCIATED VOCABULARY

Convection	Plate Tectonics	Divergent	Transform
Mantle	Crust	Subduction	
Convergent	Ring of Fire	Fault / Boundary	

PRE-VISIT ACTIVITIES

As a class, review vocabulary. Discuss some of the earliest explanations for earthquakes and volcanoes, both those of myth and those from the scientists of the day.

AT THE MUSEUM

Visit **Fantastic Forces** to experience the active forces of Earth. Also visit **A Walk Through Time in Georgia** to view the Plate Tectonic Theater maps and videos on continental collisions. Looking for a paleontological connection? Check out our **Giants of the Mesozoic** to see some incredible animals of in our tectonic past.

POST-VISIT ACTIVITIES

Discuss major historical events related to the movement of tectonic plates (volcanoes, earthquakes, tsunamis) and plot the events and dates on a world map to identify patterns. Have students research the history of seismology to discover the latest advances in detecting earthquakes and tsunamis.

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