

Geology Park Training Guide

Materials List:

- Geology Park downloadable app
- Missing Organism clue cards (set of **easy**, **medium** and **hard**)
- Introduction Script for Time Travel Tours
- Erasers or small dinosaur toys for prizes
- Geology park organism playing cards
- Answer key
- Measurement stations
 - Position of continents graphics (5)
 - Altimeter readings (4)
 - Adjustable thermometers (5)
 - Atmosphere sampling containers (5)
 - Plant grids (5)

Goals of this Activity:

1. Upon completion, participants should have some knowledge of the different geologic time periods and how many millions of years ago they occurred (Cambrian through Present Day).
2. Upon completion, participants should have knowledge about the variety of organisms (plants and animals) that existed across geologic time and some of their evolutionary traits.
3. Upon completion, participants should learn that the earth's continents have drastically changed over time due to plate tectonics.
4. Upon completion, participants should understand that earth's climate has changed drastically over geologic time.

Geology Park Activity Overview:

The Geology Park activity is a game where participants travel through time to witness the Permian Extinction event; one of the largest extinction events in earth's history (excluding today). However, something goes awry and your arrival in the Permian scatters a variety of organisms to different time periods throughout geologic history. It is their job to solve educational puzzles and find and return the misplaced organisms back to the Permian period before these changes become permanent.

The activity itself has varying levels of difficulty depending on background knowledge, age and amount of time participants are willing to spend on the activity. The amount of time the activity takes does not include the introduction briefing. Introduction briefing is max 15 minutes long.

Puzzle Difficulty	Age Range	Time to Complete Activity
Easy	Young Kids (8 and under) and families	Less than 20 minutes
Medium	Mixed age families and/or casual participant	20-30 minutes
Hard	High school kids and/or adults working alone	45-60 minutes

Definition of Success:

Success for all levels (easy, medium, hard) is finding the misplaced organisms and returning them all to the Permian Period. Younger kids can be awarded a small prize (erasers, small toys, candy etc.) upon completion.