

# GEOLOGIC TIME

## UNDERSTANDING TIME & MEASURING ACTIVITY

Geologic time is an important concept to understand. Numbers, especially in hundreds of millions of years, do not easily convey a picture of Earth's history. This activity is designed to visually represent significant events on Earth over the last 4.6 billion years.

### Materials

- 21' long piece of paper (ex. adding machine tape or toilet paper)
- Yard Stick or Ruler
- Images to represent each event
- Pencil & Multiple colored markers



# Instructions

- Cut your strip of paper to 21' long.
- Find or make illustrations of each event (listed below) to add to your timeline. You can use your markers or crayons to color these illustrations.
- Using your yard stick, start measuring the geologic time from the left of you strip of paper. Mark each distance along your paper with your pencil.
- Using your black marker draw a line across your paper to separate the time periods at the distances indicated below.
- Label each event and time at the appropriate distance mark and glue your illustration on the timeline at the event mark.

## Added Challenge:

Did you know that there are standardized colors that represent each part of the Geologic Time Scale? Before mounting images on the timeline, try matching the colors below, and color in the major time divisions on your timeline:

- 0" to 17'-6" - Precambrian Eon 
- 17'-6" to 19' - Paleozoic Era 
- 19' to 19'-9" - Mesozoic Era 
- 19'-9" to 20' - Cenozoic Era 

| Distance from beginning of paper strip | Event                  | Time                  |
|--|------------------------|-----------------------|
| 0"                                     | Formation of Earth     | 4.6 billion years ago |
| 5'-9"                                  | First Single Cell Life | 3.2 billion years ago |
| 17'-6"                                 | First Shellfish        | 570 million years ago |
| 18'-6"                                 | First Amphibians       | 345 million years ago |
| 18'-9"                                 | First Reptiles         | 275 million years ago |
| 19'                                    | First Dinosaurs        | 225 million years ago |
| 19'-9"                                 | Dinosaur Extinction    | 65 million years ago  |
| 19'-11 7/8"                            | First Humans           | 3 million years ago   |
| 20'                                    | Modern Society         | Present               |