Earth Time Line

<u>Background</u>: Scientists have developed a time scale for earth history called the Geologic Time Scale. This scale outlines the major events in Earth's history. Scientists use the principle of superposition, radiometric dating, and the fossil record to create the scale.

Goal

Construct an Earth time line that shows major time divisions and major earth events using the following materials:

- Paper tape
- Scissors
- Metric ruler
- Table of Major Earth Events (provided on back)

Use the following scale for your model: 1 millimeter = 1 $\underline{\text{million}}$ years before present. (1mm = 1mybp).

<u>Step 1</u>: Use the above scale for your model and the age of Earth (4,600 mybp) to determine how long your paper tape needs to be.

Length of paper tape in millimeters = _	
Length of paper tape in centimeters =	
Length of paper tape in meters =	

<u>Step 2</u>: Measure and cut the paper tape. Decide which end of the paper tape is today (0 mybp) and which end is the beginning of Earth (4,600 mybp).

<u>Step 3</u>: Use the information in the table below to show the four major time eras on your time line. Always measure from the "today" end of the tape. Color and label each era.

Era	Time Range in mybp	Color
Cenozoic	0-66	yellow
Mesozoic	66-251	green
Paleozoic	251-542	blue
Precambrian	542-4,600	red

Step 4: Add the key events information given on the Geologic Time Scale to your time line in the correct location. You may need to write very small and/or use arrows to label some key events.