Making a Geologic Time Line

Procedure: Use this lab sheet and read the directions carefully to complete the activity.

- 1. When using copying paper instead of adding machine tape, do steps 1-3. When using adding machine tape, skip to number 4.
- 2. Arrange the paper so that it is in a landscape direction and put the paper end to end until there is 5 meters of copying paper.

3.	Using clear transparent tape, tape the paper together so that there is 5 meters of paper
	from end to end.

	Distance=5 m	

- 4. Using a meter stick, draw a line through across the middle of the paper from left to right.
- 5. In the top left corner, make a scale. Label the scale: 1 cm = 10 million years
- 6. Starting on the left side of the paper, measure 5 cm, to the right on the line, and make a vertical mark. Label this mark with the word -**Today**.
- 7. From this mark, measure 1 meter to the right on this line and make a vertical mark. Label this mark 1 billion years. Measure and mark each meter after that up to 4 meters or 4 billion years from today.
- 8. Now, measure 60 cm to make the total length of the time line 4.6 meters. Mark and label this distance 4.6 billion years (**The Beginning of Time**).
- 9. Label the year and name of each era on your geologic time scale.

 Using the scale 1 cm = 10 million years, measure the distance to each era from Today by using the following information.

Eras

a.	Cenozoic Era	= 65 million years ago	=_	 cm from Today
b.	Mesozoic Era	= 245 million years ago	= _	cm from Today
c.	Paleozoic Era	= 545 million years ago	= _	 cm from Today
d.	Precambrian Era	a = 4.6 billion years ago	=	cm from Today

10. Label the major events of each era on your geologic time scale by using the basic geologic time scale as a guide. Cut out each of the major events and paste them onto the geologic time scale. (Making it easier on you: Layout each of the events on the geologic time scale before pasting them on the scale – the pieces are easier to move without the glue©)

11. Using the finished geologic time line, go back to the original *Questionnaire* sheet and compare the answers from the questionnaire to the geologic time line. Add any interesting findings to your *Questionnaire* sheet under Part II.

Directions: Cut out the pieces and use them to make the geologic time line.

Geologic Time Line Major Events

coal-forming forest	first reptiles
pangaea begins to break	dinosaurs extinct
first humans	greatest extinction on
first land animals	first mammals and
first forests	life invades land
major glaciers in N.	oldest know fossil
formation of the Western Interior Seaway	marine reptiles (mosasaur and plesiosaur)

Final Assessment: