

Name _____

Date _____ Per. _____

SCALE EVENTS WORKSHEET

For each EVENT, figure out the TIME “DISTANCE from SCHOOL” value, in miles, then find a familiar point on a map of your area that is very close to that distance from your school. Indicate that “**Special Place**” in that column. Then summarize that information on the lines *below* the table.

ACTUAL TIME	TIME “DIST. from SCHOOL”	TO SPECIAL PLACE:	TO EVENT....
Ten year lifetime	1 mm	XXXXXXXXXX	
1 million years ago	1 football field (fbf)	XXXXXXXXXX	
7 mya	7 fbf = 0.4 mile	*	first hominins
10 mya	10 fbf = 0.6 mile		
50 mya	50 fbf = 3 miles		
65 mya	65 fbf = 4 miles	*	Dinosaur Extinction
100 mya	100 fbf = 6 miles		
150 mya		*	first birds
220 mya		*	first mammals
250 mya	250 fbf = 15 miles		Permian Extinction
310 mya		*	first reptiles
320 mya		*	first pre-mammals
365 mya		*	first amphibians
400 mya			first lobe-fin fishes
440 mya			first jawed fishes
500 mya	500 fbf = 30 miles	*	first fishes (jawless)
530 mya			first cephalochordates
1000 mya = 1 bya	1000 fbf = 60 miles		
4.6 bya	4600 fbf = 276 miles		Origin of Solar System

These are approximate times and approximate distances

<u>Time</u>	<u>Event</u>	<u>: = Miles</u>	<u>*to Special Place:</u>
7 mya	(first hominins)	: <u>0.4</u>	_____
65 mya	(dinosaur extinction)	: _____	_____
150 mya	(first _____)	: _____	_____
220 mya	(first _____)	: _____	_____
320 mya	(first _____)	: _____	_____
365 mya	(first _____)	: _____	_____
500 mya	(first _____)	: _____	_____

DISCUSSION

- On this scale, what distance equals 10 years of your life? _____
- What does this experience tell you about *when* the different kinds of vertebrates (animals with backbones) *first* appeared? A) all about the same time; B) all within a short period of time; C) different times, spread out over millions of years.
- What does the chart showing the *traits* of different vertebrates tell you about the likely source of those traits? A) modifications of traits in previous groups; B) completely new traits, unrelated to traits in previous groups; C) no consistent pattern here.
- Has this experience caused you to change your impressions about past life? _____ If so, in what way?