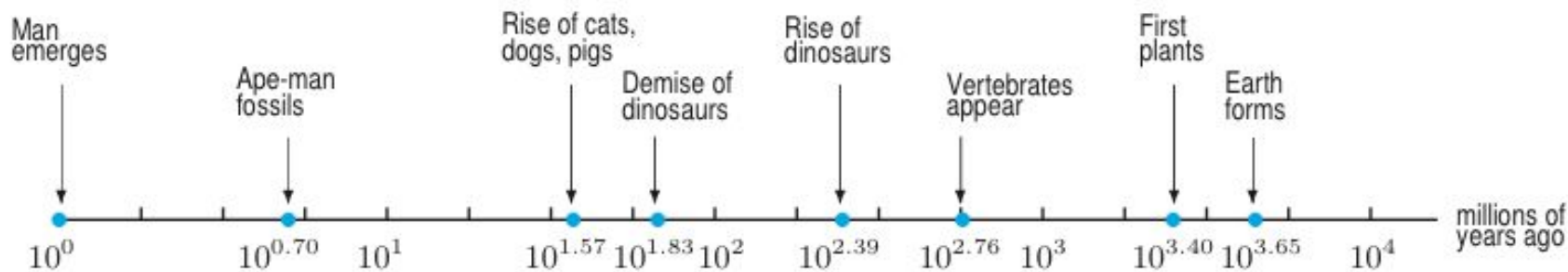
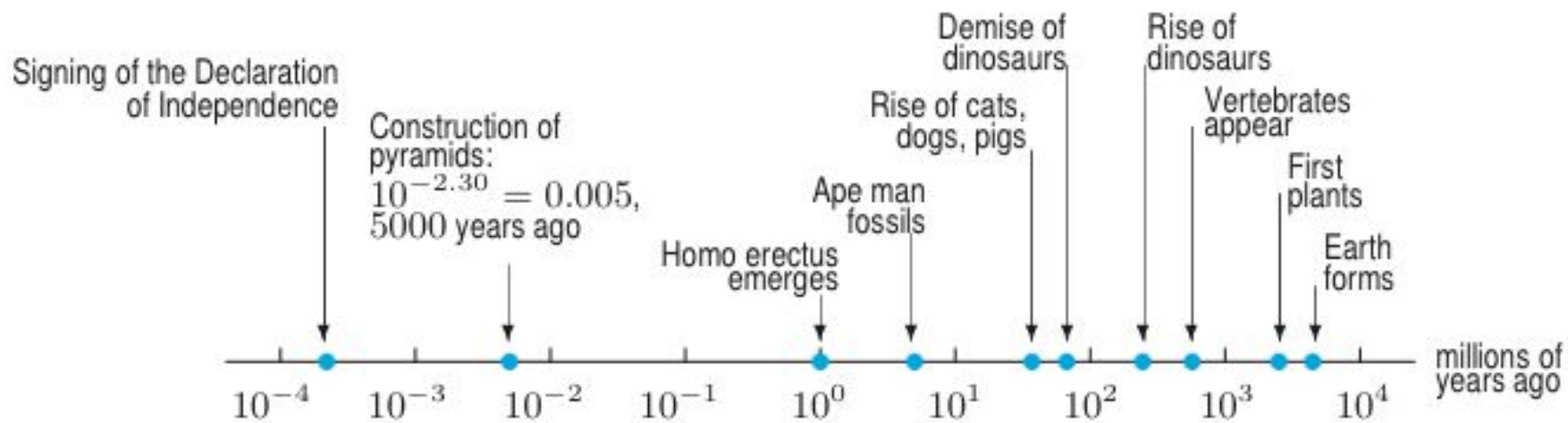
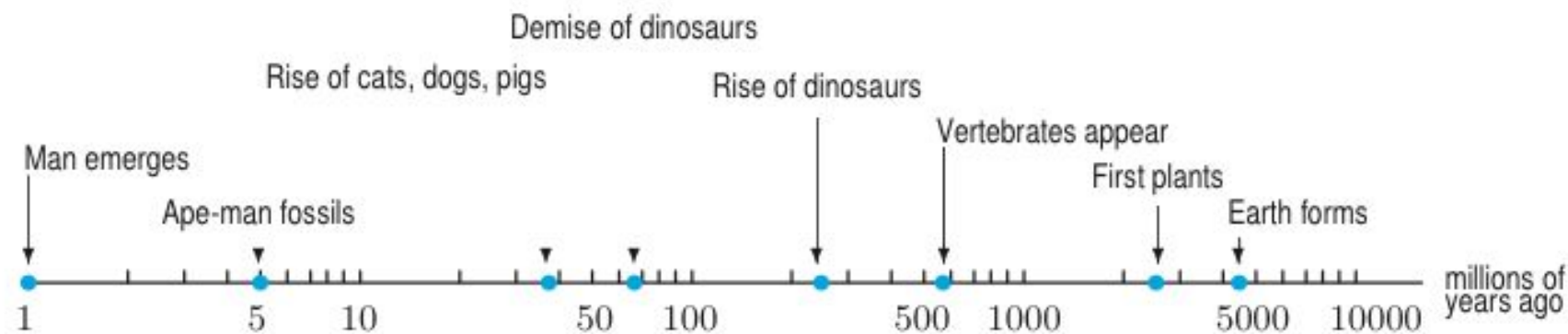
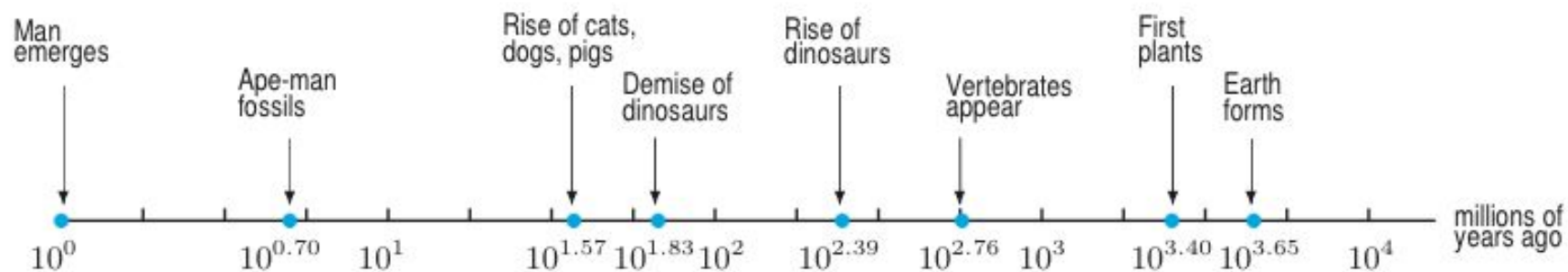


# Logarithmic Scale.

Event	Age (millions of years)	log (age)	Event	Age (millions of years)	log (age)
Man emerges	1	0	Rise of dinosaurs	245	2.39
Ape-man fossils	5	0.70	Vertebrates appear	570	2.76
Rise of cats, dogs, pigs	37	1.57	First plants	2500	3.40
Demise of dinosaurs	67	1.83	Earth forms	4450	3.65

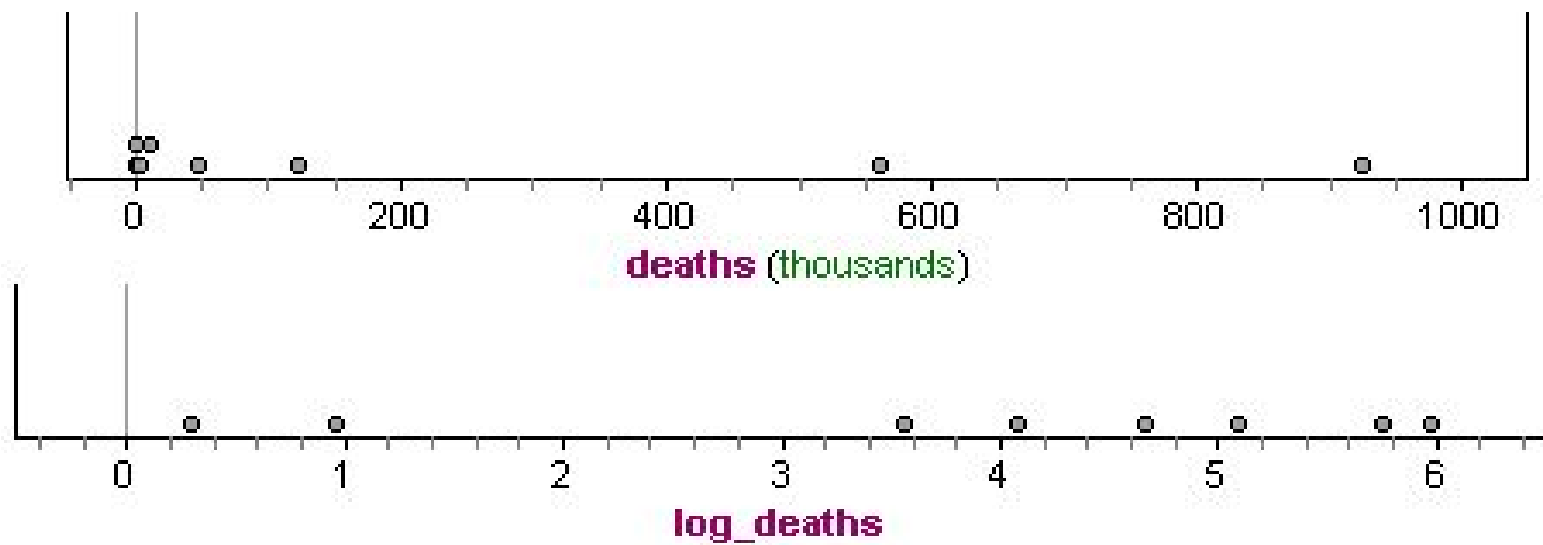






Let's try to plot this data on a logarithmic scale. First notice why it would be helpful to do so...

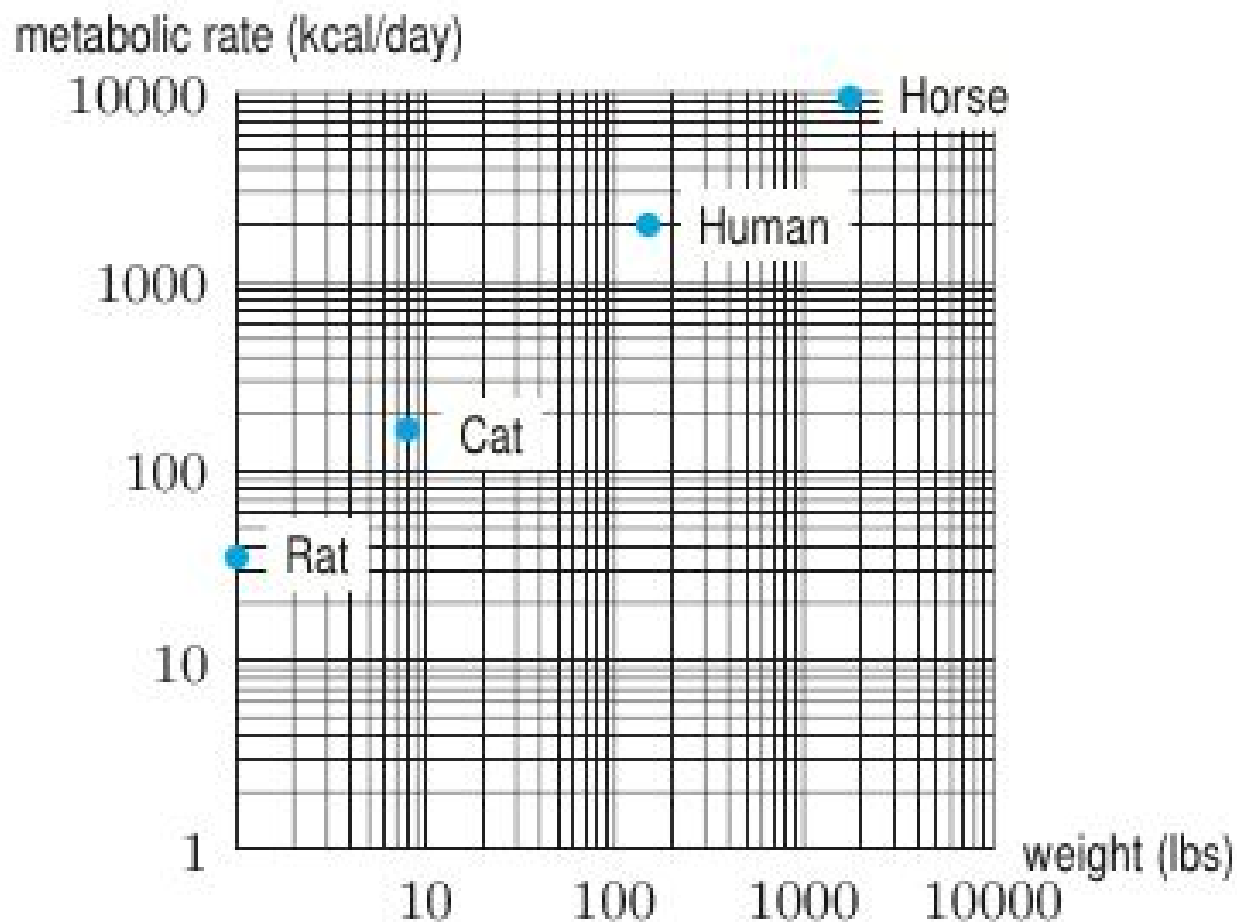
Cause	Deaths
Scarlet fever	2
Whooping cough	9
Asthma	3613
HIV	12,113
Kidney diseases	46,095
Accidents	121,599
Malignant neoplasms	559,888
Cardiovascular disease	823,746



## Log-Log graphs

*The metabolic rate (in kcal/day) for animals of different weights*

Animal	Weight (lbs)	Rate (kcal/day)
Rat	1	35
Cat	8	166
Human	150	2000
Horse	1750	9470



## Semi-Log graphs

Here are some data from bounce tests of a softball dropped from a height of 10 feet.

Bounce Number	1	2	3	4	5
Rebound Height	3.8	1.5	0.6	0.2	0.05