

Problem 1:

Put the following events on the timeline above:

- A. Mesozoic Era Begins
- B. Paleozoic Era Begins
- C. Cenozoic Era Begins
- D. K-T Extinction Event
- E. Permian Extinction Event
- F. Appearance of Brachiopods
- G. T-Rex appearance

Tyrannosaurus rex

The T. rex was one of the largest land carnivores of all time. They lived about 70 million years ago and grow up to 40 feet in length and 12 feet in height.

Problem 2:

How long have Crinoids been around and why do you think they still survive today?

K-T Mass Extinction Event


This event happened at the end of the Cretaceous Period (65 mya) and led to the extinction of the dinosaurs. It was caused by an Asteroid impact in Yucatán, Mexico. The impact caused a global catastrophe and rapid cooling. 76% of species on the planet became extinct.

End of Permian Mass Extinction Event

Approximately 250 mya extreme volcanic activity in Siberia caused global warming. The planet had elevated CO₂ and sulfur levels causing ocean acidification, acid rain, and changes in ocean and land chemistry.



A modern crinoid.
Image courtesy of the NOAA Office of Ocean Exploration and Research, 2016 Deepwater Exploration of the Marianas.



The word crinoid means "lily-like" in Greek. They first appear in fossils from the Ordovician Period. There were more than 6,600 species discovered, of which around 6000 are extinct.