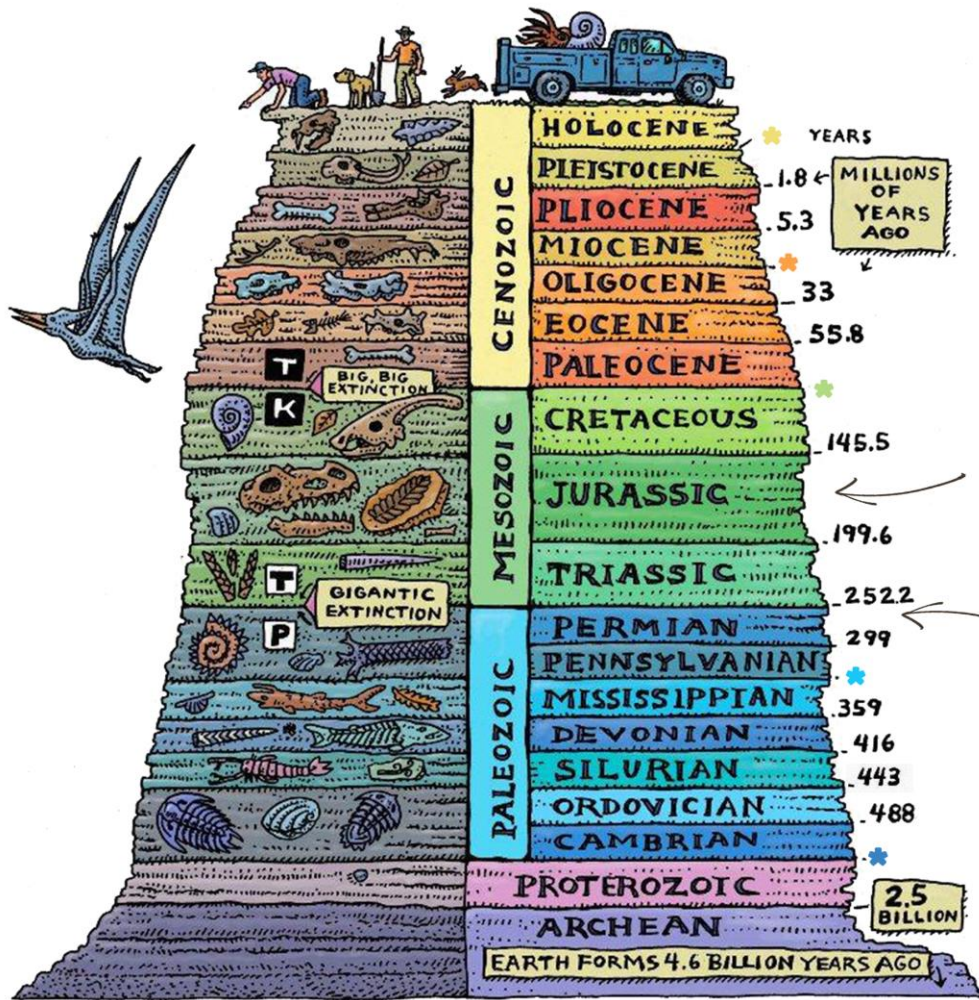


# THE GEOLOGIC TIME SCALE



This is a simplified version of the geologic time scale, which geologists use to divide the history of the earth into units of time. These units are subjective and are based on strata (layers of rock)!

There are five units in the geologic time scale the smallest are called ages, then epochs, periods, eras and eons.

Do you recognize the name of this period? It's where the movie Jurassic Park got its name. This is when the dinosaurs lived!

The P-T (Permian-Triassic) extinction was the largest of the five mass extinctions, 96% of living things were wiped out due to the aftermath of a volcanic eruption.

Let's do some geologic math, use the clues on the next page to fill in the dates.

# HOW MANY MILLION?

\* Example: If the Oligocene period was 10 million years long, how many million years ago did the Oligocene period end?

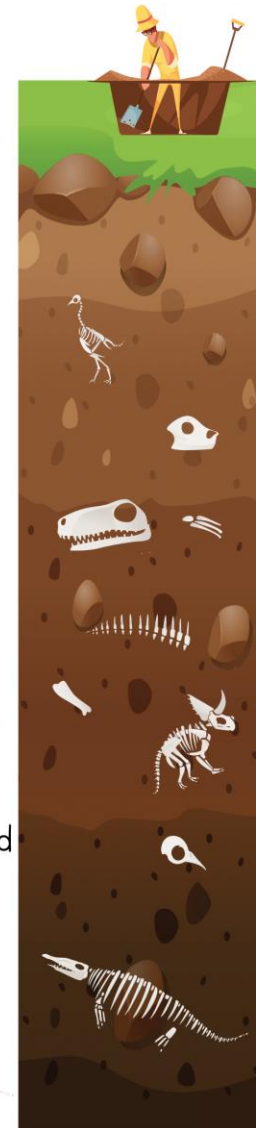
>The Oligocene period began 33 million years ago, if the Oligocene period was 10 million years long then it ended 23 million years ago.  $33 - 10 = 23$

\* We are currently in the Holocene epoch - the name comes from the greek holos meaning "whole" and kainos meaning "new". It's also known as the Anthropocene from anthropo meaning "human being" - as this is the time period that we have had such a significant impact on the planet. If the Holocene epoch began when the Pleistocene ended, and the Pleistocene was 1.79 million years long, how many million years ago did the Holocene start?

\* The Mississippian period and the Pennsylvanian period are often lumped together, this is known as the Carboniferous period. If the Mississippian Period was 40 Million years long, how many million years ago did the Mississippian period end?

\* The mass extinction that killed the dinosaurs is also known as the K-T boundary, and marks the end of the Cretaceous period - if the Cretaceous period was 4 times as long as the Pennsylvanian period, how many million years ago did the dinosaurs become extinct?

\* The beginning of the Cambrian period is also known as the Cambrian explosion because of how many new species appear in the fossil record during this time. If the Cambrian period was twice as long as the Silurian period, how many million years ago was the Cambrian explosion?



A 001 million years (just 10,000 years), 318, 655, 542