1.	**absolute age dating**	the age of a rock given as the number of years since the rock formed
2.	**C-14**	a radioactive form of carbon used in dating materials form plants and animals that lived up to about 50,000 years ago
3.	**Cretaceous-Tertiary (K-T) extinction**	About 65 million years ago, at the end of the Cretaceous, a large fraction of plant and animal families suddenly went extinct. In this Cretaceous-Tertiary or K-T mass extinction (K is for Kreide, meaning chalk in German, which describes the chalky sediment layer from that time; T is for Tertiary, the next geologic period), all land animals over about 55 pounds went extinct, as did many smaller organisms.
4.	**decay rates**	the decrease in the radiation intensity of any radioactive material with respect to time.
5.	**geologic time**	the time of the physical formation and development of the earth (especially prior to human history)
6.	**geologic time scale**	a record of the geologic events and life forms in Earth's history
7.	**half-life**	the time it takes for half of the atoms of a radioactive element to decay
8.	**index fossils**	fossils of widely distributed organisms that lived during only one short period
9.	**law of superposition**	the geologic principle that states that in horizontal layers of sedimentary rock, each layer is older than the layer above it and younger than the layer below it
10.	**Permian extinctions**	This extinction event, informally known as the Great Dying, was an extinction event that occurred 252.28 Ma (million years) ago, forming the boundary between the Permian and Triassic geologic periods, as well as the Paleozoic and Mesozoic eras. It is the Earth's most severe known extinction event, with up to 96% of all marine species and 70% of terrestrial vertebrate species becoming extinct. It is the only known mass extinction of insects. Some 57% of all families and 83% of all genera became extinct. Because so much biodiversity was lost, the recovery of life on Earth took significantly longer than after any other extinction event, possibly up to 10 million years.
11.	**radioactive decay**	the breakdown of a radioactive element, releasing particles and energy
12.	**radiometric dating**	a technique used to date materials such as rocks, usually based on a comparison between the observed abundance of a naturally occurring radioactive isotope and its decay products, using known decay rates
13.	**radioactive elements**	elements that are unstable; occur naturally in igneous rock; rate of decay is used to determine the rock's age
14.	**relative age dating**	the age of rock compared to the ages of rock layers
15.	**Uranium-Lead (U-Pb) dating**	one of the oldest and most refined of the radiometric dating schemes, with a routine age range of about 1 million years to over 4.5 billion years, and with routine precisions in the 0.1-1 percent range.