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**Did a Rock Kill Off Dinosaurs?**

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Most scientists say a large meteorite or asteroid crashed into Earth 65 million years ago. The impact caused giant tsunamis in all directions. They think the collision kicked up an enormous cloud of dust and smoke that blocked out the sun. This changed Earth’s climate and wiped out the dinosaurs. In 1980, a team of researchers led by Nobel prize-winning physicist [Luis Alvarez](http://en.wikipedia.org/wiki/Luis_Walter_Alvarez), his son geologist [Walter Alvarez](http://en.wikipedia.org/wiki/Walter_Alvarez) and chemists [Frank Asaro](http://en.wikipedia.org/wiki/Frank_Asaro) and Helen Michels discovered that sedimentary layers (65 million years old) found all over the world in a specific rock layer contained a [concentration](http://en.wikipedia.org/wiki/Concentration) of [iridium](http://en.wikipedia.org/wiki/Iridium) hundreds of times greater than normal. Iridium is extremely rare in the Earth's crust because it is very dense, and therefore most of it sank into the Earth's core while the earth was still molten. However, it is commonly found in meteorites from space.

First discovered by Glen Penfield almost twenty years earlier, in 2003, some scientists rediscovered a 110-mile-wide crater buried beneath sediment along Mexico’s Yucatan Peninsula. A high-resolution map from NASA's Shuttle Radar Topography Mission (SRTM), released visible evidence of a 112-mile wide, 3,000-foot deep impact crater. They believed they had finally found the crater that might prove that a meteorite caused dinosaurs’ extinction- but they couldn’t identify the crater’s age.

Recently, scientists took samples of soil from deep within the crater. They found tektites in these samples. *Tektites* are bits of rock melted into a glasslike material. Scientists believe tektites are formed by a huge impact. They dated these tektites at 65 million years old. That’s about the same time dinosaurs became extinct.

In 2010,a team of scientists from all over the world (41 international experts from 33 institutions) reviewed 20 years of available scientific literature and agreed that a giant asteroid killed off dinosaurs and a majority of other species on Earth more than 65 million years ago. In so doing they also ruled out other theories such as massive volcanism. The hypothesis is named the Alvarez Theory after the father-and-son team who first suggested it in 1980.

A few scientists disagree with the meteorite explanation for dinosaurs’ extinction. Some other scientists think dinosaurs were doomed by a huge volcanic eruption, a sudden warming of Earth’s temperatures, a great plague, or acid rain. However, the Alvarez theory has found the most support among experts at the present time.