

# KEY

## What Killed the Dinosaurs?: Support for Hypotheses

Hypotheses	Evidence	Evidence	Evidence
<p><u>Asteroid Impact</u></p> <ul style="list-style-type: none"> <li>• impact creates dense clouds of dust blocking the sun's rays cooling temps. Kitting plants/animals - than greenhouse gases created from impact ↑ temps to extreme</li> </ul>	<p><u>Rare metal-iridium</u>, common in asteroids, but rare on Earth found in heavy cone, at time of dino extinction rock layer</p> <p><u>Fossil record</u> - dinos not declining in # before impact</p>	<p><u>Melted Rock</u> - pieces of once molten rock called impacta ejecta, are evidence of an explosion powerful enough to melt bedrock &amp; propel it from origin</p>	<p><u>Fractured Crystals</u> quartz crystals, "shocked quartz" - a distinct pattern of fracturing caused by high-energy impacts or explosions</p> <p><u>Impact Crater:</u> dated to time of dino. extinction</p>
<p><u>Volcanism</u></p> <ul style="list-style-type: none"> <li>• global-scale volcanic activity spewed so much gas, ash &amp; dust it blocked sunlight</li> <li>• temps ↓, plants died</li> <li>• dinos poorly adapted for new temps. died out</li> </ul>	<p><u>Rare metal-iridium</u> can be found in molten rock deep in Earth came to surface due to mass volcanic eruptions</p>	<p><u>Fractured Crystals</u> Some scientists believe volcanic activity can also cause</p> <p><u>Lava flow:</u> dated to show activity for 500,000 yrs leading up to dino. extinction</p>	<p><u>Fossil Record</u> gradual decline in dino. fossils indicate slow climate change due to volcanic activity</p>
<p><u>Mammal Competition</u></p> <ul style="list-style-type: none"> <li>• mammals &amp; dinos competed for same food sources</li> <li>• mammals ate dino eggs</li> <li>• mammals better suited for climate change</li> </ul>	<p><u>Fossil Record:</u> record shows increased mammals after dino extinction</p>		
<p><u>Continental Drift</u></p> <ul style="list-style-type: none"> <li>• as continents drifted, climates became drier &amp; cooler</li> <li>• ecosystems produced less food ∴ dinos were not supported</li> </ul>	<p><u>Fossil Record:</u> Some scientists believe fossil evidence shows the decline of dino species over millions of yrs before extinction</p>	<p><u>Sea level:</u> Continental drift &amp; ocean regression caused continents to become drier &amp; cooler = less hospitable to dinos</p>	