

CHAPTER OVERVIEW

10: War of the Worlds- How Impacts Build Planets

How was the Earth formed? How did the Moon get here? Are all planets formed in the same way? Deep questions like these often seem unanswerable, especially in the elementary school classroom! But as we have seen, simple models can convey concepts and ideas with a power and scope that few people appreciate.

Don't worry, we won't create entire worlds from scratch, but we are going to use models and activities to demonstrate how the active environment of a solar system shapes and changes the surface of planets both suddenly, and gradually over long periods of time. The theory that things usually change gradually over time, but occasionally are radically transformed by titanic events is called **punctuated equilibrium**. There is a lot to learn about how the surface of the Earth and Moon got the way they are today, so let's go exploring!

[10.1: Modeling the Moon's Surface in Clay](#)

[10.2: Dynamically Modelling The Moon's Surface in Flour](#)

[10.3: Exploring Crater Rays in Detail](#)

[10.4: Dynamically Modeling The Lunar Surface in Plaster](#)

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