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Astronomy

**The Geology**

**Of the Moon**

The moon is a very special place with many special features. Some discoveries have made back centuries ago, when Galileo was studying the moon, and some have been made more recently after a couple successful missions to the moon. Some of the features that Galileo discovered was the *Maria* and the highlands Galileo made this distinction when he noticed that the darker regions seem much more smoother compared to their lighter region, that he called *Terrae* for land.

Galileo was right that there was some sort of distinction; however he was wrong about being any water in the moon. The moon did have uniqueness and a certain aura that till this day still captivates us. The moon is world that is unlike any other. For instance it is the only moon in our solar system that is that huge. Aside from its side it fails to revolve around the sun, instead it revolves around Earth.

The way the *Maria* was formed is simply but the extrusion of vast amount of lava that accumulated in the lowlands of large craters. This flow of lava made a surface that appears to smoothen out the plane and give it that ocean look from far away.

The way craters were formed is different. Crater formation can be calculated by the impact of the meteor. The formation of a crater is usually divided into three stages *Compression, Excavation, and Modification.* In the compression stage meteor kinetic energy is transferred through the ground by shock wave, which is then expanded. After the shock wave has happened the rocks relax and rarefaction wave is established. This wave travels upward and allows the rocks to expand explosively. The exaction is accomplished very rapidly and the duration of the event depends mainly on the size of the meteorite and its velocity.

Impact crates are typically circular in contrast to many volcanic craters, which are frequently asymmetrical or elongated. An interesting fact that I picked up on this reading was that the craters in the moon could easily be related to a forest, with many trees. Even though many craters look the same, they can easily tell us a story, all depending on their size and shape each crater holds certain uniqueness. Some craters are perfect bowl shape, while other have a flat surface a certain swirl at the bottom, all these characteristics are dependent of time, size of meteor, and velocity.

In conclusion this reading really helped analyzing the moon more in a pictorial way, as there were many photographs that helps describe the impact in the moon and also shows us the moons history.