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Learning Activity 1

What is the relationship between the moon and the Earth's ecosystem? Is the moon more than just the light in the night? Does the moon actually affect things here on Earth?

The moon is an astronomical body that orbits the Earth as its only natural satellite. The moon is believed to have formed roughly 4.5 billion years ago, which would mean it formed soon after Earth, and it is also believe to be formed from debris left over after an impact between Earth and a hypothetical mass called Theia. (*Moon* 2020)

One of the most significant effect the Moon has on Earth, if not the most, is that the moon stabilizes our rotation. Without the moon, Earth would "wobble violently" as it spins. This would cause climatic changes over time. (Glass) We could see intense periods of heat or cold, shorter days, days without a "night". It could cause some very severe issues for our planet. Luckily, our moon does exactly what the Earth needs it to in order to maintain a stable climate so our complex life-forms continue to have the opportunity to evolve. (Reichard, 2018)

The moon also plays a significant part in ocean tides. High and low tides are caused by the Moon, although the Sun does play a part, that of the Moon is more significant. The Moon's gravitational pull creates tidal force. This tidal force causes the Earth and its water to bump out on two sides: the one closet to the Moon, and the side farthest away, causing high tides. (*What Causes Tides?*)

The moon is really more than a face in the night sky after all.

Resources

Moon. (2020, July 07). Retrieved July 11, 2020, from https://en.wikipedia.org/wiki/Moon

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Reichard, J. S. (2018). *Environmental geology*. New York, NY: McGraw-Hill.

What Causes Tides? (n.d.). Retrieved July 11, 2020, from https://scijinks.gov/tides/