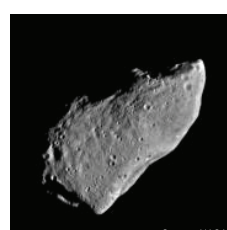


Day 4

THE MOON IS DESIGNED TO SUPPORT LIFE ON EARTH

The Moon protects and stabilizes the Earth

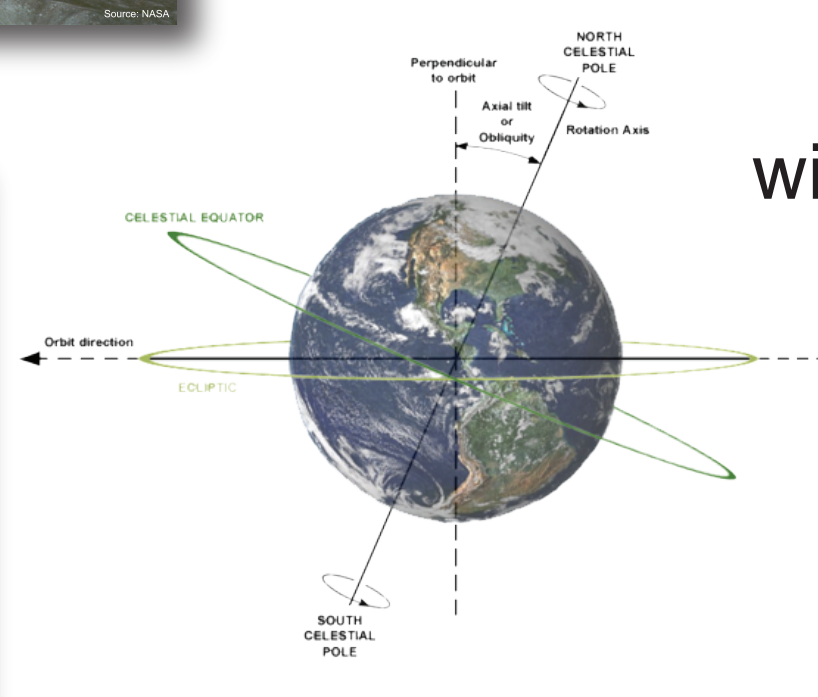
Our moon acts as protection from smaller bodies in space that might crash into us.



Scientists believe that only a minor shift in tilt was a contributing factor to the Sahara changing from a lush forest to the desert it is today. If that was only a small change, you can imagine how chaotic our climate would become with shifts of 50° or more!

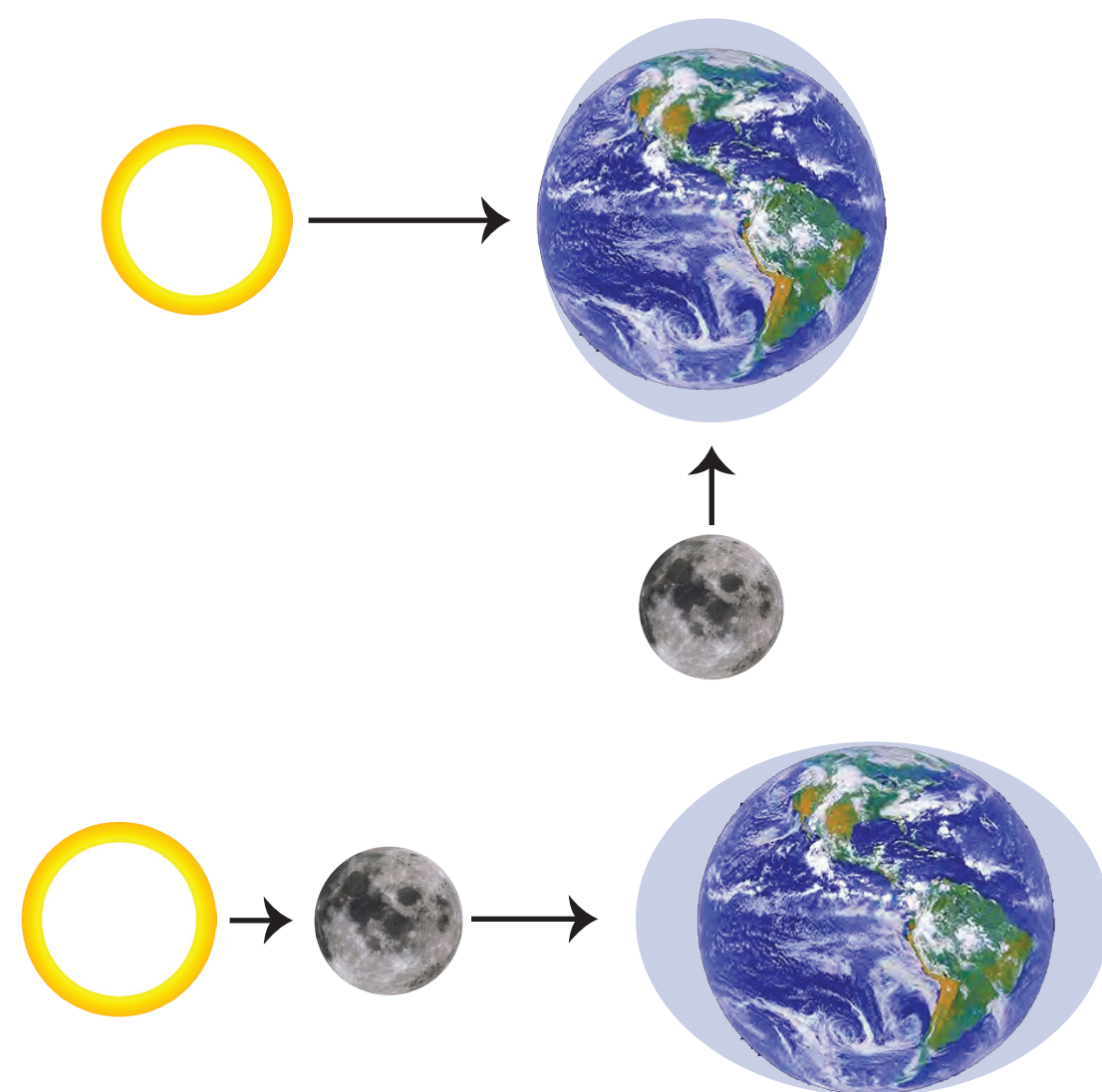
The shift would also create stronger and more persistent winds. Hurricanes and extremely violent waves would cause significant environmental damage.

Our moon also stabilizes the Earth's tilt. Currently our tilt is around 23°. Without the moon our tilt would vary erratically, changing from 0-90° relatively rapidly.



The Moon creates tides that benefit marine organisms

Our moon is the proper size to produce moderate tides. These tides both create beaches and cleanse them. Without the moon, the difference between low and high tides would be very small. With no great change in tides our oceans would stagnate and life within them would die.



Neap tides occur when the moon and sun are perpendicular to each other around the earth. This produces very low tidal changes.

Spring tides occur when both the moon and the sun's gravities are pulling in the same direction. This causes much higher high tides, and lower low tides. In some cases, like the Bay of Fundy (left), this change can be extreme!

Starfish, sea anemone, urchins, crabs, and numerous other animals call tide pools their home. Without the cleansing of the water moving in and out daily, the pools would stagnate and become lifeless.



Tides provide natural signals for animals to live by

The moon provides signals to marine organisms. These signals tell animals when to mate, spawn, and lay eggs.



Fish known as grunions (left) and Sea Turtles (right) both lay their eggs high on the beach beyond high tideline. This helps protect their eggs from being washed away and also protects from marine predators.

And God said, "Let there be lights in the expanse of the sky to separate the day from the night, and let them serve as signs to mark seasons and days and years, and let them be lights in the expanse of the sky to give light on the earth."

And it was so. God made two great lights - the greater light to govern the day and the lesser light to govern the night. And God saw that it was good. And there was evening, and there was morning - the fourth day.
-Genesis 1:14-19 (NIV)