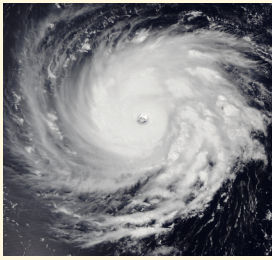


SIO 15: NUMBERS AND TRIVIA - PART 2



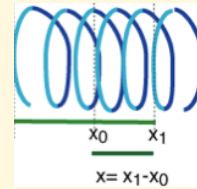
Energy

An average 10-day hurricane releases as much energy as the Mw=9.5 1960 Chile earthquake.



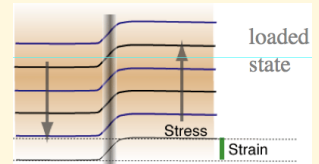
5300

times as much energy from the Sun received on Earth's surface than from within.



potential energy

comes in many flavors, e.g. an apple hanging on a tree, a deformed spring, or a strained earthquake fault.

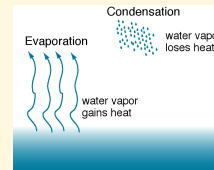


convection

the most effective way to transport heat. On Earth, it drives plate tectonics.

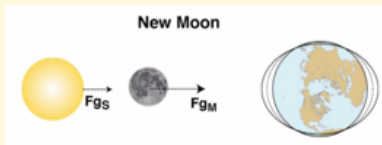
forces and stresses

lead to deformation and strain.



latent heat

taken up during evaporation, released during condensation.



Earth tides

the gravitational interaction of Earth with the Moon and the Sun cause tides on Earth. Most places on Earth experience 2 daily high and 2 low tides. Spring tides usually occur twice monthly, during Full and New Moon.



Blood Moon

the redly tinted Full Moon during a total lunar eclipse, when Earth is between the Sun and the Moon and casts a complete shadow on the Moon.



Pluto

no longer a planet. It was downgraded to dwarf planet. Pluto has a relatively large satellite, Charon which is why Pluto is considered as 'not having cleared its orbit'. As of 2018, Pluto shares its status with 4 other Solar System bodies: Ceres, Haumea, Makemake and Eris. A bit smaller than Pluto, Ceres is the largest asteroid while Eris is beyond Pluto and larger than the former planet.



Hale Bopp

a comet discovered in 1995. It reached its perihelion in 1997 and made a great show with 2 visible tails. Comets have a rocky core and an icy shell ('dirty snowball').



Blue Moon

'once in a blue Moon' refers to things that don't happen too often. A Blue Moon is an extra Full Moon, e.g. a second Full Moon in a month or a forth Full Moon in a season or a 13th Full Moon in a year.



Ceres

with about 950 km across the largest object in the Asteroid Belt between Jupiter and Mars. Some asteroids have Mars- or Earth-crossing orbits which is why they have the potential to collide with planets. The asteroid that impacted in Chicxulub, Mexico 66 Mio years ago caused the extinction of the dinosaurs.