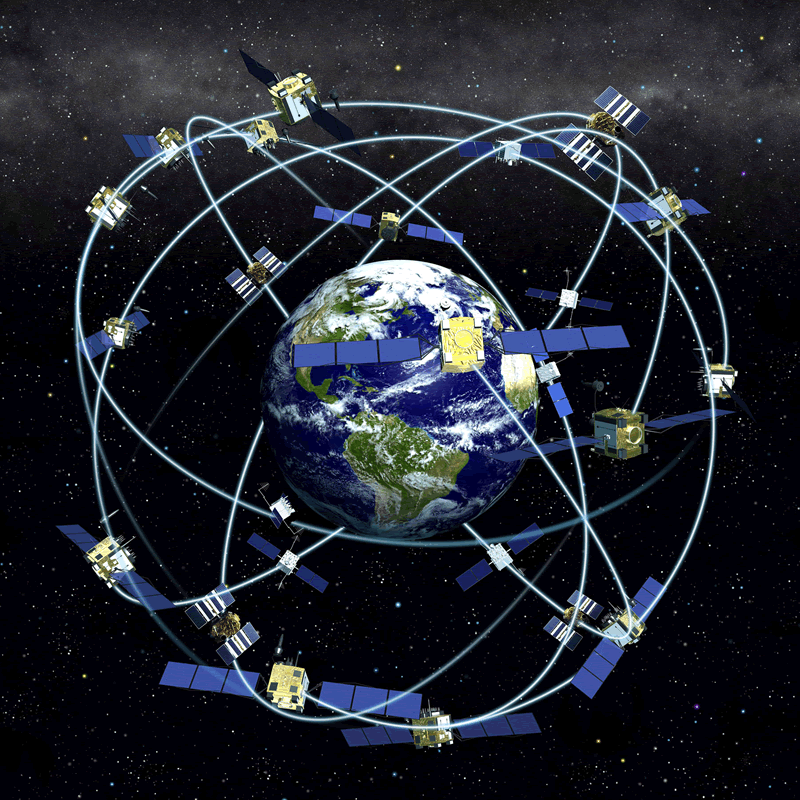
**The earth is tilted on its axis by 23 1/2 degrees and the earth is spinning, plus, it is rotating around the sun we get our seasons. When the earth is farthest away from the sun we have winter, when the earth is closest to the sun we have summer.**

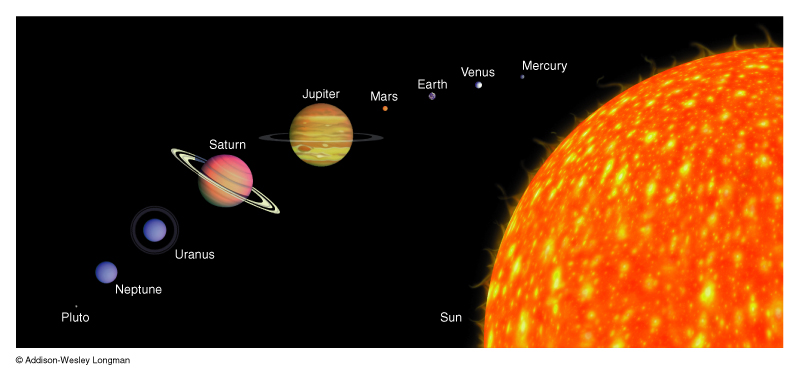
**Gravity is a force that pulls toward the center of the earth. When something's moving horizontally (parallel to the earth's surface), gravity bends its path. So gravity is necessary to keep a satellite going in a circle around the earth, rather than flying away from the earth in a straight line forever.**



**Distance from the sun affects the length of the year in that the farther a planet is from the sun, the longer it takes to make one complete revolution of the sun. That makes planets farther out from the sun have longer years. The year is thought of on earth as the length of time it takes the earth to make a "lap" around the sun, and each other planet can have its own unique year just like earth.**

**There are 9 planets in our solar system. In order from the sun they are: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune and Pluto thought Pluto is no longer cinsidered as a planet in our solar system.**

**Some planets in our solar system are 10 times as hot or as cold as ours planet is. Some have longer days, some have shorter. Gas giants in our solar system are Jupiter, Saturn, Neptune and Uranus. Rocky planets in our solr system are Mercury, Venus, Mars and Earth.**



**The Sun is our source of light (as well as 7 other planet’s in the solar system), it is the ‘daytime’ while the moon is ‘night time’. Earth takes 365 days to orbit the sun.**

**\*The Sun is a star.**

**The force that keeps us on the ground is gravity. The sun gravitational pull also keeps all the planets in our solar system. Force is measured in Newtons.**

**Our planet Earth has one moon and it orbits around us, it takes 27 days. As the Moon orbits us the Earth it self spins on its axis (titlted to 32.5 degrees). At different time of the year, the moon looks differently because of how much light is reflecting from the sun, to the moon, then to earth.**

**Difference between Star and Planet:**

**A star contains much more mass than a planet; stars are burning mass of (mainly) hydrogen and helium. A planet is a body which moves in an orbit around a star.**

**Uses of artificial satillites:**

**1. Scientist use artificial satellites for scientific research and to study the universe.  
2. Other satellites record changes in Earth and its atmosphere.   
3. Weather satellites help scientists study weather patterns and forecast the weather. Weather satellites observe the atmospheric conditions over large areas  
4. It helps transfer telephone calls over the oceans.  
5. Navigation satellites enable operators of aircraft, ships, and land vehicles anywhere on Earth to determine their locations with great accuracy. Hikers and other people on foot can also use the satellites for this purpose. The satellites send out radio signals that are picked up by a computerized receiver carried on a vehicle or held in the hand**

**Earth, as a planet, is a lot different. Earth has life - none of the others do (as far as we know).  
Earth has liquid water on its surface - none of the others do.**

**There are two types of planets out there: Gas Giants and Rocky Planets (Earth is a rocky planet).**