

Proportional Solar System

Information about the different planets (can be used for CC , Cycle 2 , weeks 7 and 8)

Mercury (Large marble)

- Closest to the Sun and therefore the fastest
- One of the smallest planets, only a little larger than the earth's moon
- Unlike the clouds surrounding Venus, Mercury has very little atmosphere
- Takes 88 days to orbit around the Sun
- Temperature range is from a high of 620 degrees to a low of negative 346 degrees

Venus (Golf ball)

- Second planet from the Sun
- Takes 224.7 days to orbit the Sun
- It is the most brilliant of all the planets because it is covered with layer of dense, yellow clouds that are reflecting the sun's light because it is close to the sun
- Surface not visible even through telescope because of the clouds
- Surface of the planet is extremely hot- about 900 degrees
- It is about the same size as the earth

Earth (Golf ball)

- Third planet from the Sun
- It takes 365 days to orbit around the Sun
- Only planet known to sustain life
- Continents make up less than 1/3 of Earth's total surface with the remaining 70% covered by water.
- Has 5 layers of atmosphere which shield us from the sun's radiation
- Earth is the only planet that contains water in both frozen and liquid form

Mars (Large marble)

- Fourth planet from the Sun
- Known as the "red" planet.
- It takes 687 days to orbit around the Sun
- It is the only other planet that has polar ice caps and seasons that parallel the earth.
- Smaller than earth and covered with large rocky deserts.
- Very thin atmosphere causing temp to fluctuate from -200 degrees in polar region to 80 degrees near the equator and makes it impossible for surface water to exist.

Asteroid belt exists between Mars and Jupiter and is made up of large chunks of rock and metal – this asteroid belt holds more than 200 asteroids that are larger than 60 miles in diameter as well as 750,000 that are approximately $\frac{3}{4}$ of a mile in diameter. There are millions of smaller asteroids also contained in this belt. This also orbits around the sun.

Jupiter (soccer or basketball)

- Is the fifth planet from the Sun
- Orbits the Sun once every 4,333 days!
- Largest planet in the solar system, over 12 times wider than the earth
- Has several layers of dense gases that lay below the clouds
- Many violent storms in Jupiter's atmosphere caused by its rapid spinning on it's axis (once every 10 hours)
- Ring system surrounds Jupiter caused by rising and falling gases

Saturn (soccer ball)

- Sixth planet from the Sun
- Orbits the Sun once every 29 ½ years or 10,759 days.
- Second largest plant in solar system, nine times wider than the Earth
- Described as most beautiful planet because of the rings which are made up of chunks of rock and ice and are bright
- Rings around Saturn are thin. Three main rings can be seen with a telescope but there are 4 more for a total of 7 rings

Uranus (tennis ball)

- 7th planet from the Sun
- Orbits around the Sun once every 84 years.
- Gaseous planet like Jupiter and Saturn
- Has distinct blue green appearance because of methane in atmosphere
- It is 4 times wider than the Earth.
- When looking at it , Uranus appears to be lying on its side. It's 11 rings circle the planet top to bottom instead of around the middle like Saturn

Neptune (tennis ball)

- 8th planet from the Sun
- Orbits around the sun every 165 years or 60,189 days.
- It radiates more heat than it absorbs.
- Fourth largest of all the planets, almost 4 times wider than the earth
- It is the windiest planet in the solar system
- Clouds with methane make the planet appear blue.
- Neptune has 4 rings that surround it.

** This information was compiled using several sources but primarily used a book I got at Kennedy Space Center , Planets, Moons and Stars by Laura Evert and information cards also from KSC, Planets in our Solar System which contained descriptive information on each of the planets