**Space Objects and Giants Key**

* **What Makes Up Our Solar System?**
  + \_\_the Sun\_ \_Planets \_\_ \_Moons\_\_\_\_ Asteroid Belt Lots of Space All sorts of bits and pieces of rock
* **Asteroids**
  + Asteroids are \_\_rocky\_\_ and metallic objects that are too \_small\_ to be   
    considered planets.
    - They are between \_\_1\_ and \_1,000\_\_km in diameter.
    - They are \_\_irregularly\_\_\_ shaped.
    - Made up mostly of \_\_\_\_iron\_\_\_ and \_\_\_\_nickel\_\_\_\_
  + Two different theories for how they are formed.
    - 1. They are remains of a planet that was \_\_\_\_destroyed\_\_\_\_ in a massive collision.
    - 2. They represent material that never formed into a \_\_\_planet\_\_\_\_\_
  + They do not have an \_\_\_\_atmosphere\_\_\_\_ and they orbit the \_\_sun\_\_\_.
  + They are usually found in the asteroid belt.
    - This is the area between \_\_\_Mars\_\_\_\_ and \_\_\_\_Jupiter\_\_\_
    - All asteroids in the asteroid belt \_orbit\_ the Sun in the \_same\_\_direction as planets.
    - It takes about \_\_3.3-6\_\_ years for an asteroid to orbit the Sun.
    - Contains \_75%\_\_ of known asteroids which is about \_\_\_100,000\_\_\_ asteroids.
* **Meteoroids, Meteors, and Meteorites**
  + Meteoroids are simply smaller versions of \_\_\_\_\_\_asteroids\_\_\_\_\_\_
  + Meteors are when meteoroids enter Earth’s upper \_\_\_atmosphere\_\_\_\_ and \_burn\_ up in the process
    - You can see these as streaks of light across the \_\_sky\_\_\_
    - These are \_\_\_shooting stars\_\_\_\_\_
  + A meteorite is a portion of a large meteoroid that \_\_\_survived\_\_\_\_ the trip through Earth’s atmosphere and landed on Earth’s \_\_\_surface\_\_\_\_\_\_\_
* **Comets**
  + Comets are small bodies in space that are made up of \_\_ice\_\_, \_dust\_, \_\_gas\_\_ and small particles.
  + You can think of them as \_\_\_\_dirty snowballs\_\_ in space.
  + When they come closer to the \_\_\_\_sun\_\_\_ the ice vaporizes.
    - This causes the streak of gas which is referred to as the comets \_\_\_\_\_tail\_\_\_
  + Comets are found in two locations
    - \_\_Oort Cloud\_\_ - Which is located beyond \_\_\_Pluto\_\_\_
    - \_Kuiper Belt\_ - Which is located beyond \_\_\_Neptune\_\_
      * These two regions are filled with \_\_\_Billions\_\_\_\_ of comets.
* **Gas Giants (pg. 76)**
  + The Four Gas Giants In Order from the Sun are:

1. \_\_\_\_\_Jupiter\_\_\_\_\_\_ 2. \_\_\_\_\_Saturn\_\_\_\_\_\_ 3. \_\_\_\_\_Uranus\_\_\_\_\_\_\_4. \_\_\_\_\_Neptune\_\_\_\_\_\_

* The Gas Giant planets orbit \_\_\_far\_\_ from the Sun.
* They have \_\_deep, massive\_\_\_ atmospheres and that become more \_\_dense\_\_ the deeper you go.
* Gas Giants are \_\_larger\_\_\_ in size compared to the Terrestrial Planets.
* **Jupiter (pg. 76-77)**

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| Distance From the Sun | Length of Day (rotation) | Length of Year (revolution) | Tilt of Axis | Diameter | Density | Surface Temperature | Surface Gravity | Number of Satellites |
| 5.20 AU | 9h 55min | 11.86 y | 3.13 | 142,984km | 1.33g/cm3 | -145C | 253% of Earth | 62 |

* Jupiter is the \_\_\_largest\_\_\_\_ planet in the solar system and it \_rotates\_\_ the fastest.
* Jupiter has \_\_\_huge storms\_\_\_\_ that travel across its surface.
  + The best known is the \_\_Great Red Spot\_\_
* Jupiter has the most \_\_Moons\_\_
* **Saturn (pg.78-79)**

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| Distance From the Sun | Length of Day (rotation) | Length of Year (revolution) | Tilt of Axis | Diameter | Density | Surface Temperature | Surface Gravity | Number of Satellites |
| 9.58AU | 10h39min | 29.5y | 26.73 | 120,536 km | 0.69g/cm3 | -180C | 106% of Earth | 53 |

* Saturn has a large \_\_ring system\_\_\_\_\_\_\_
* This Ring System contains many individual rings that form \_\_\_bands\_\_\_
* The rings are made up mostly of left over pieces form collisions of Saturn’s moons with comets and asteroids.
* **Uranus (pg.80-81)**

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| Distance From the Sun | Length of Day (rotation) | Length of Year (revolution) | Tilt of Axis | Diameter | Density | Surface Temperature | Surface Gravity | Number of Satellites |
| 19.2 AU | 17h 24m retrograde | 84 y | 97.8 | 51,118 km | 1.27g/cm3 | -210C | 79% of Earth | 27 |

* Uranus’ atmosphere contains \_methane\_ which causes the blue-green color.
* Uranus is \_\_tilted on its axis\_\_ as it orbits the sun.
* Seasons on Uranus last 21 years
* **Neptune (pg.82-83)**

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| Distance From the Sun | Length of Day (rotation) | Length of Year (revolution) | Tilt of Axis | Diameter | Density | Surface Temperature | Surface Gravity | Number of Satellites |
| 30.1 AU | 16h 7min | 164.7y | 28.5 | 49,528km | 1.64g/cm3 | -220C | 112% of Earth | 13 |

* Neptune is the \_\_farthest planet\_\_ from the sun.
* Neptune has the strongest winds\_\_\_
* Neptune has a Moon called Triton.
  + The moon is spiraling inwards\_\_ towards Neptune.
  + When the moon will eventually be \_\_pulled apart\_ by the gravitational pull of Neptune.