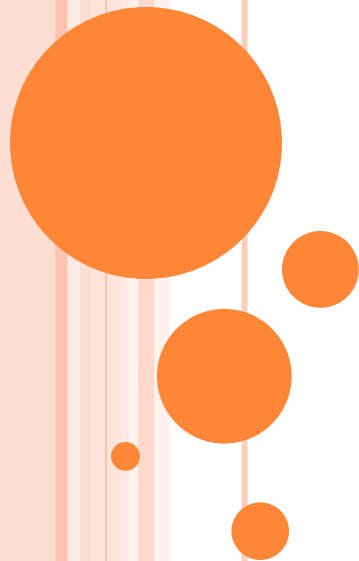


# CATEGORIZING OBJECTS IN OUR SOLAR SYSTEM



To infinity and beyond....

Solar System Unit

# OBJECTIVE

- Explore, categorize, and discuss some of the different objects in the solar system



# CARD SORT

1. As groups, look at the pictures and posted information on the Solar System Cards.
2. Create a least five different groupings with the cards.
3. Create a name for the group.
4. Write down the criteria or the group definition by using what the space object cards have in common with one another.
5. Write down all the names of the Solar System Object cards in each of the groups.



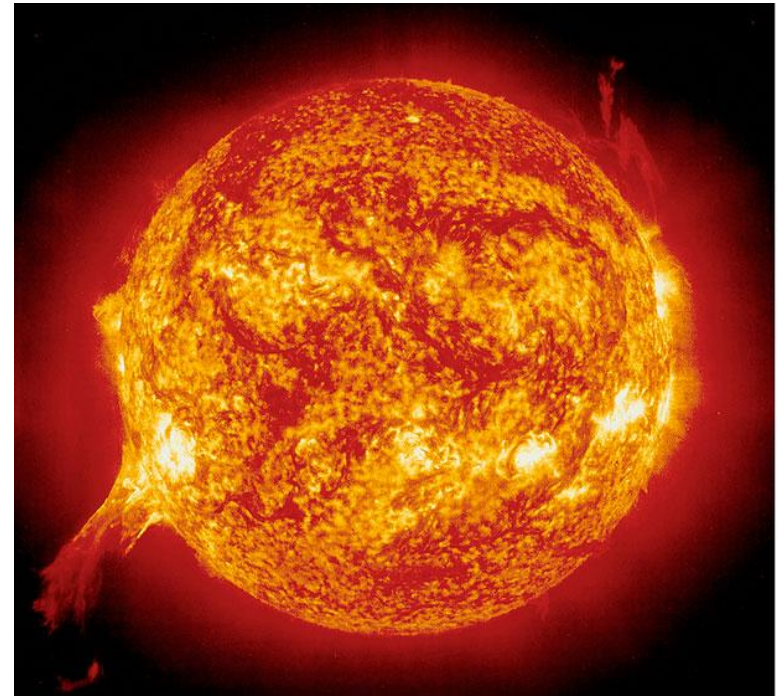
# PROCESSING

- As a group, research about the different structures on the cards, and determine whether the different Solar System objects are a star, planet, satellite/moon, dwarf planet, asteroid, or comet.
- Write down the name of the object in one of the astronomic categories in which it belongs.



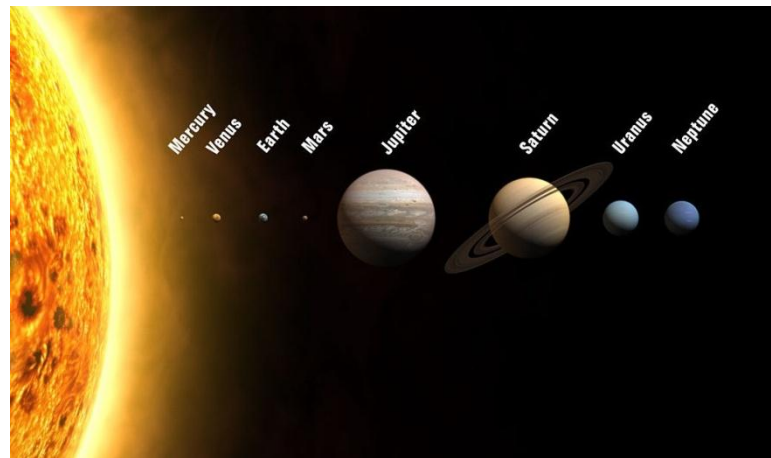
# KEY CONCEPTS

- A star is a giant ball of gas that gives off energy (light) due to thermonuclear reactions. Our Sun is the only star in the Solar System, but is one of about 200 billion stars in the Milky Way Galaxy.



# KEY CONCEPTS

- A **planet** is a celestial body that is in **orbit** around the Sun, has enough mass to be nearly **spherical in shape**, and has cleared out the **neighborhood** around its **orbit**



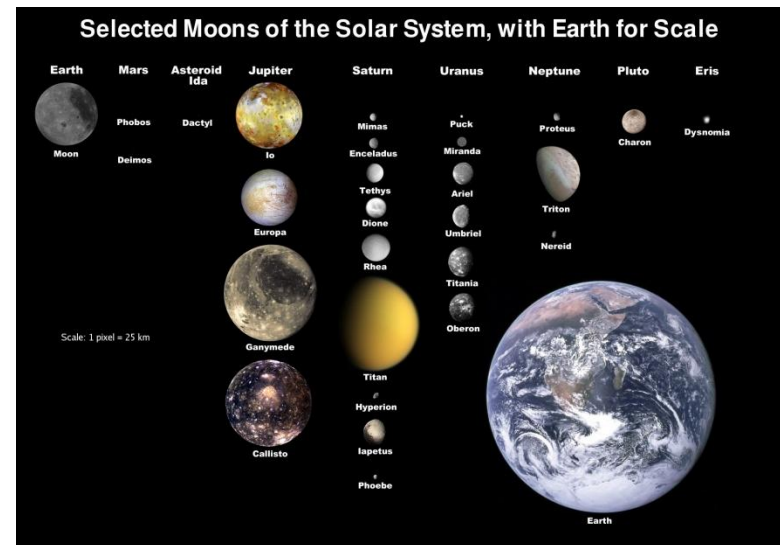
# KEY CONCEPTS

- A “**dwarf planet**” is a celestial body that is in **orbit** around the Sun, has enough mass to be nearly **spherical in shape**, has **not** cleared the **neighborhood** around its orbit (that is, it shares its orbital neighborhood with other objects like it)



# KEY CONCEPTS

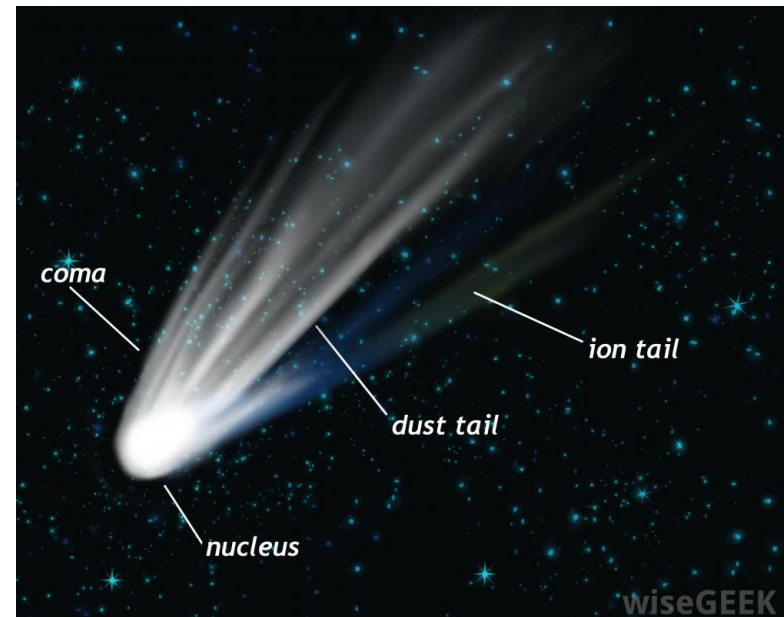
- A satellite (moon) is an object that orbits another object that orbits the Sun, such as a planet, dwarf planet or asteroid.





# KEY CONCEPTS

- A **comet** is a small body that **orbits** the Sun, usually with a highly **elliptical** orbit, and that exhibits a **coma** (atmosphere) and tail when it approaches the **Sun**. For such a coma to form, the comet must be made, at least in part, of **ice**.



# KEY CONCEPTS

- An asteroid is a small body that orbits the Sun, often, but not necessarily, within the Asteroid Belt, a region of the Solar System between the orbits of Mars and Jupiter. Asteroids are composed mostly of rock and metal and thus would not show a significant coma.

