

The Universe

Astronomy:

Celestial Objects:

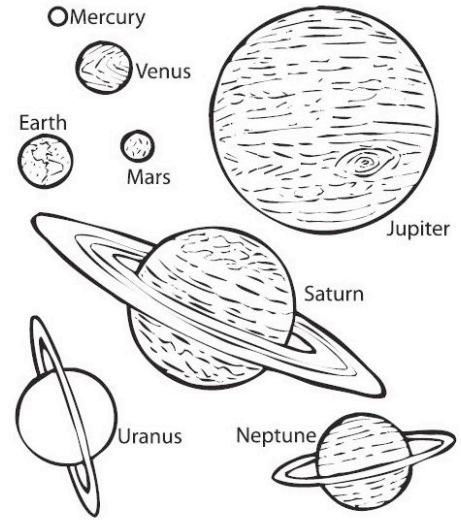
Luminous:

Non-luminous

Planets

To be a planet:

- Be in orbit around a _____ (such as the Sun)
- Have enough _____ to be pulled into a stable sphere shape by gravity
- _____ its orbit (ie – its mass must be greater than anything else that crosses its orbit)



Planet:								
Description:								

Dwarf Planets

Examples:

- They are objects that:
 - _____ around a star
 - Have enough _____ that they are spheres
 - Do not dominate their orbit

Did you know?

Until recently, Pluto was considered to be the ninth planet. It was only reclassified in 2006 to Dwarf Planet.

Other Celestial Bodies

- **Moons**
- **Asteroids**
 - Composed of _____ and _____.
 - Most are found in the _____, between Mars and Jupiter.
 - They can be as small as a pebble and as large as _____ across.

- **Meteors**
 - Each streak is a piece of _____ burning up as it enters our atmosphere.
 - The rock is a _____.
 - If it hits Earth it is called a _____.

Did you know?

About 100 tones of meteoroids as small as dust particles fall to the surface every day.

A leading theory on the extinction of the dinosaurs suggests that a 10 km meteorite impact is responsible for the mass extinction

Did you know?

Most comets are named after their discoveries. A recent example of this is the comet Hale-Bopp.

•Comets

- Big Dirty Snowballs
- Comets actually have two tails. The _____ (yellow) and the _____ (blue)

•Stars

The Rocky Planets			

The Gas Giants			

The Big Bang Theory

Expanding Universe

- The Universe is expanding, filled with galaxies that are moving _____ from one and other.
- _____ first observed this when he identified individual stars inside the Andromeda galaxy and realized it was separate from the Milky Way.
 - He also observed that all galaxies are moving away from each other, and the _____ a galaxy is the _____ it travels.

Big Bang Theory

- All matter and energy in the Universe expanded from one tiny dot.
- There was a hot dense expansion approximately _____ billion years ago.
- The Universe was extremely hot and _____ spread outward very quickly.
- As the universe _____, energy began turning into matter (mainly H).
- Over thousands of years, this matter became _____, which eventually became _____ and _____.

Evidence for the Big Bang Theory

- i) _____ is actually radiation, remnants of energy released from the Big Bang.
- ii) _____: As galaxies move, the light they emit shifts towards the red end of the light spectrum.
 - Many distant galaxies exhibit red shift.

Did you know?

Television and Static: Some of the static on your TV set is caused by leftover radiation from the Big Bang.