## Hierarchy Of the Universe

## Hierarchy

HIERARCHY is a system (un sistema) of ranking (clasificación) in a certain order (cierto orden)

http://www.clipartpanda.com/categories/hierarchy 20clipart

## hierarchy of the Universe

What is the difference between the universe, a galaxy (galaxia) and a solar system (sistema solar)?!

Universe= all of space (espacio) and time (tiempo) and its contents (contenidos)

Galaxy= a group of stars (estrellas), gasses, and dust (polvo) held together by gravity

Solar system= a system of planets and other objects orbiting (orbitando) a star


The Universe
http://www.nasa.gov/centers/goddard/news/releases/2010/10-023.html


Andromeda Galaxy
http://apod.nasa.gov/apod/ap051222.html

## OUR GALAXY

Our galaxy is the Milky Way!
It is over 100,000 lightyears in diameter.

Lightyear= the distance light travels in 1 year (la distancia que la luz viaja en 1 año)


## Our Galaxy: The Milky Way

- Our galaxy has a spiral shape (forma de espiral).
- The Milky Way is one of millions (uno de los millones) of other galaxies in the Universe

http://www.nasa.gov/multimedia/imagegallery/image_feature_202.html


## OuR Solar System

- Earth is part of a Solar System (parte de un Sistema solar)
- The Solar System is heliocentric, with the Sun in the middle (el sol en el medio)
- Our Solar System has 8 planets (planetas), three dwarf planets (Ceres, Pluto, Eres), 60 moons (lunas), thousands of asteroids,

http://photojournal.jpl.nasa.gov/catalog/PIA12114 comets, and millions of meteors)


## Planets

Planets are bodies that orbit the Sun (orbitan el sol) and are held together by gravity (ligada por la gravedad)

- Our Solar System is composed of 9 planets
- Mercury, Venus, Earth and Mars are "Terrestrial Planets"
- Jupiter, Saturn, Uranus, and Neptune are "Jovian Planets'

http://www.physics.unlv.edu/~jeffery/astro/planet/planet.html


## What else is in our Solar system?

Moons are satellites (satélites) of other orbiting bodies (cuerpos en órbita)

Asteroids are small orbiting bodies that are too small to be called planets


Meteoroids are debris that travel through space. Most are no bigger than a pebble (guijarro)

## HUBBLE SPACE TELESCOPE

- The Hubble Space Telescope is a telescope that was launched by NASA in 1990
- This telescope orbits the Earth at 17,000 mph while taking photographs of other stars, planets, and galaxies

http://www.nasa.gov/mission_pages/hubble/story/index.html

