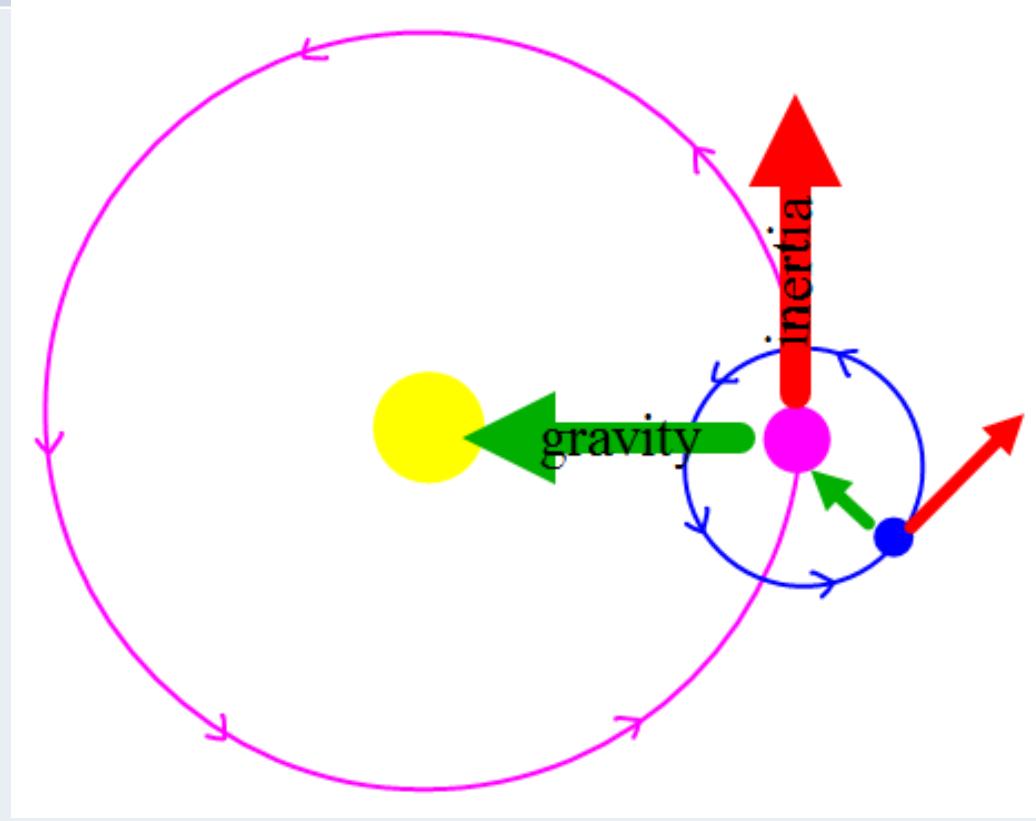


Notes: Structure of our Solar System

Topic	Details
1. solar system -	The Sun and the objects that move around it
2. How many stars are in our solar system?	1
3. Law of Universal Gravitation -	<ul style="list-style-type: none">• All objects are attracted to each other by a gravitational force.• strength depends on mass and distance stronger – more mass, closer
4. Why does the Moon orbit Earth and NOT the Sun?	Because the Moon is closer to the Earth than to the Sun.

Notes: Structure of our Solar System

Topic	Details
5. Inertia (i ner shu)	A tendency to stay at rest or move in a straight line
6. How do gravity & inertia impact the orbit of the Sun, Earth and Moon?	 A diagram showing the Earth's orbit around the Sun. A yellow circle represents the Sun at the center. A blue circle represents the Earth's path. A pink curved arrow indicates the direction of motion along the orbit. At one point on the orbit, a green arrow labeled "gravity" points towards the Sun from the Earth. A red arrow labeled "inertia" points radially outward from the Earth, perpendicular to its orbital velocity vector. This illustrates how the gravitational pull of the Sun (gravity) keeps the Earth on its curved path while the Earth's inertia (tendency to move in a straight line) causes it to want to move tangentially to the curve.

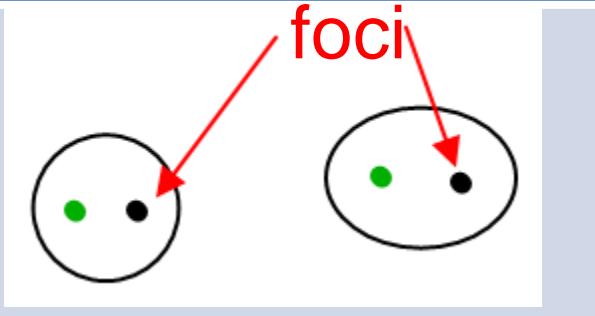
Notes: Structure of our Solar System

Topic	Details
7. What objects orbit the Sun?	Planets, dwarf planets, asteroids, comets
8. Planet -	<ol style="list-style-type: none">1) It orbits the Sun2) It has a nearly spherical shape3) Its mass is larger than the total mass of all objects that orbit nearby
9. Dwarf planets do not fit which criteria?	# 3

Notes: Structure of our Solar System

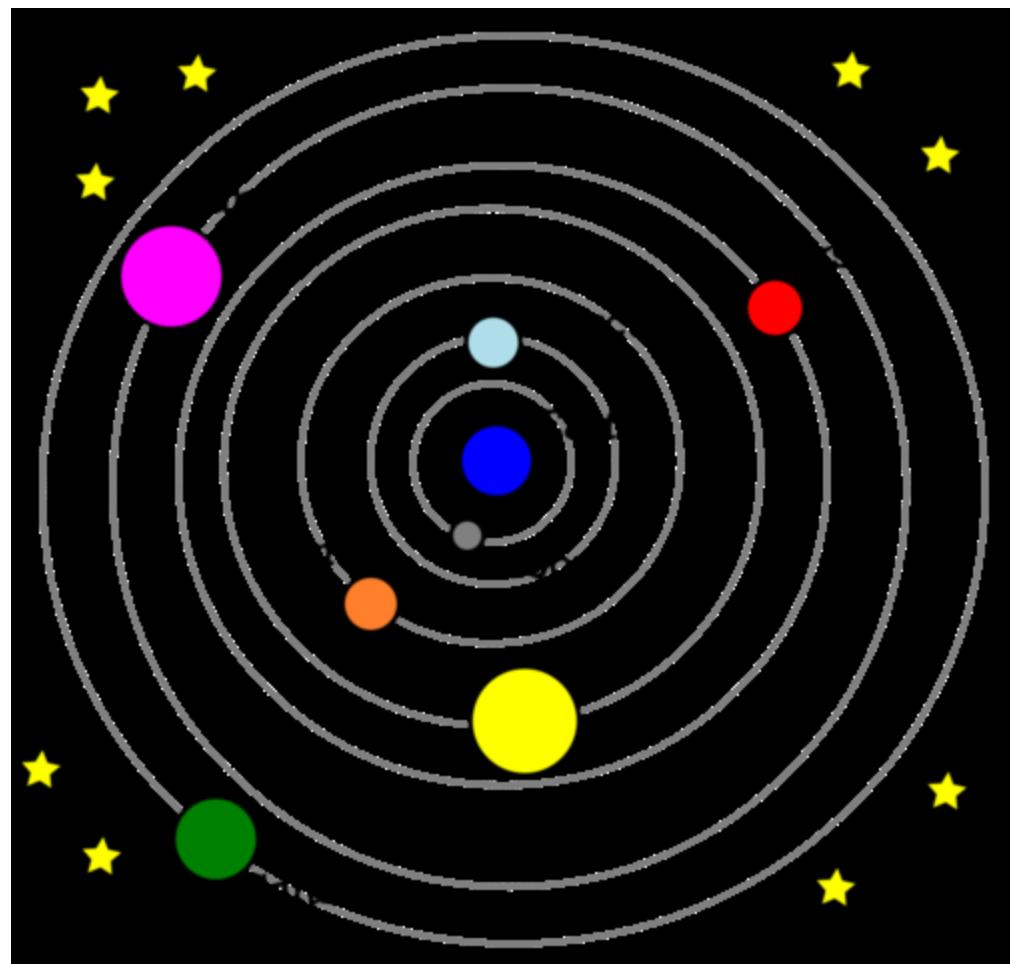
Topic	Details
10. Asteroid -	irregular shaped piece of rock and ice that orbits the Sun in the asteroid belt between Mars & Jupiter
11. comet -	A mixture of rock, ice & dust that orbits the Sun in long elliptical orbits
12. astronomical unit – Why is it used?	<ul style="list-style-type: none"><li data-bbox="783 897 1820 951">Average distance from the Earth to the Sun<li data-bbox="783 1026 1820 1081">Objects in the solar system are so far apart

Notes: Structure of our Solar System

Topic	Details
13. What is the shape of the planets' orbits?	<p>Ellipses, not circles</p> 
14. Why does a planet's speed increase when it is closer to the Sun?	Stronger gravitational force - closer
15. Compare distance from the Sun and period of revolution?	As distance increases, period of revolution increases

Past Model of Solar System

- Geocentric
(EARTH centered)



Modern Model

- Heliocentric
(SUN centered)

