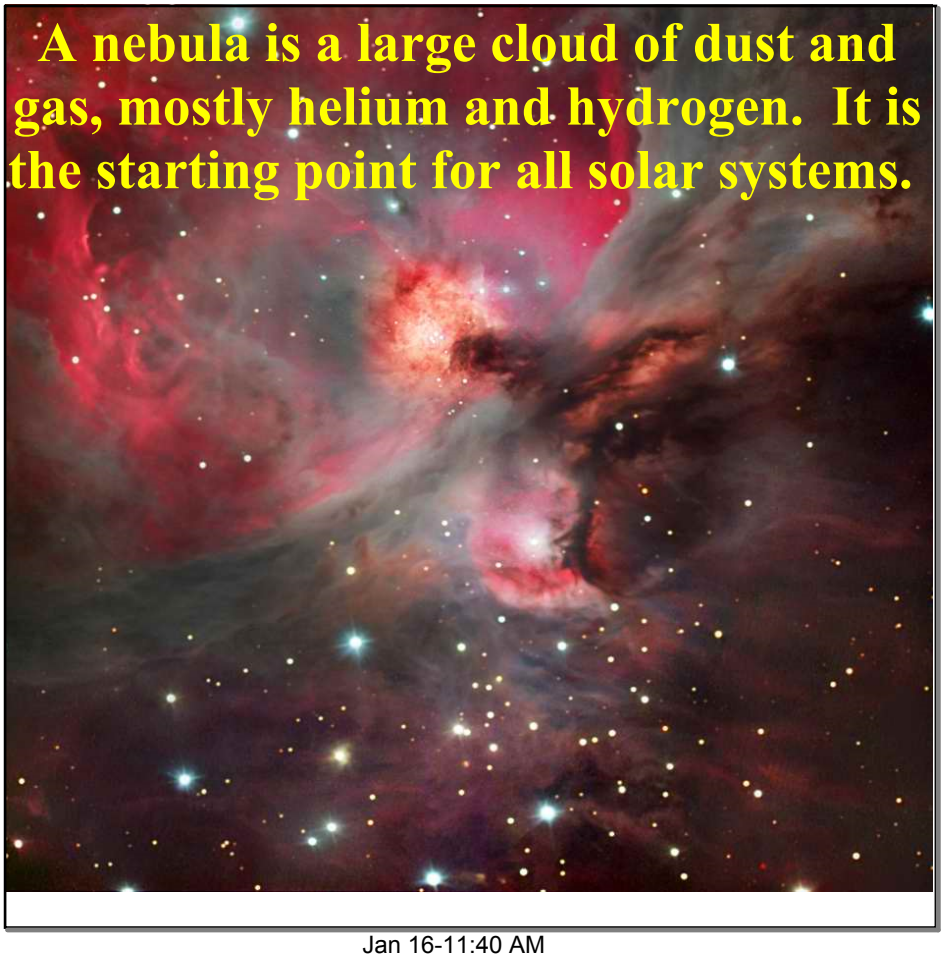
The Origin of the Planets

p 472

Apr 11-2:13 PM

We know that the force of attraction pulls objects towards each other. The more mass an object has, the more attractive force it exerts.

Jan 16-11:40 AM



Jan 16-11:40 AM

Introduction to the Solar System: Crash Course Astronomy #9

https://www.youtube.com/watch?v=TKM0P3XIMNA

Stephen Hawking - Formation of the Solar System

https://www.youtube.com/watch?v=Uhy1fucSRQI

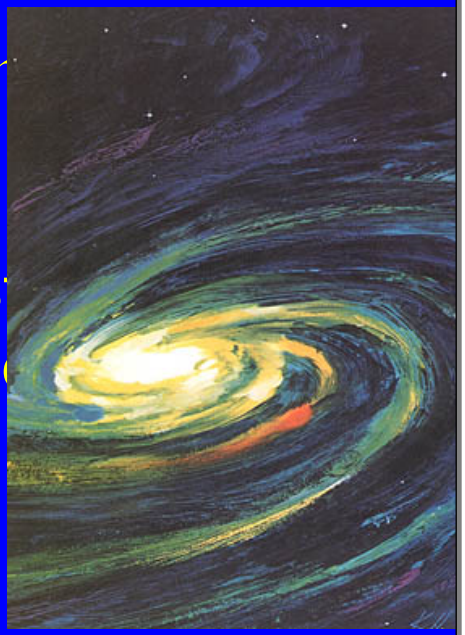
The Formation of the Solar System in 4K (Ultra HD)

https://www.youtube.com/watch?v=x1QTc5YeO6w

Oct 27-9:56 AM

The Origin of the Planets

What evidence shows us that other planets may exist?



What are the three main st of the formation of the so system?

Feb 3 - 3:05 PM

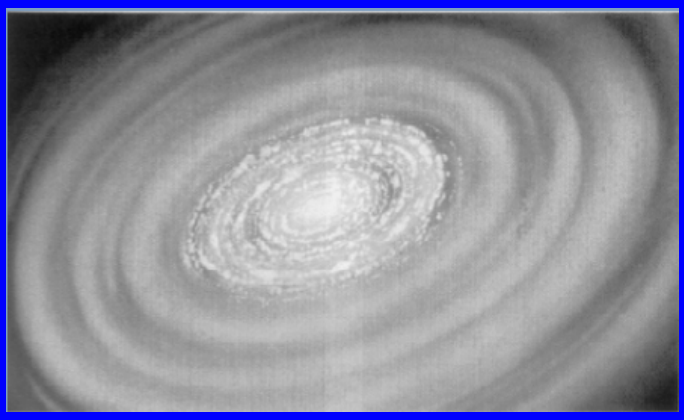
What evidence shows us that other planets may exist?

Satellites first discovered large clouds of particles in orbit around the star Vega in 1983. It was the first direct evidence that solid matter exist around other stars other than our sun.

Mar 7-2:45 PM

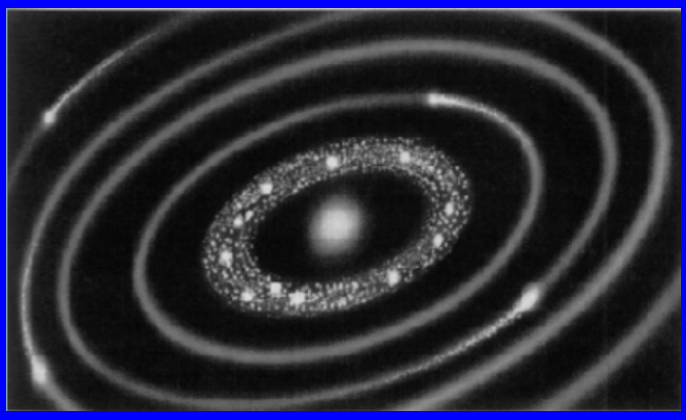
What are the three main stages of the formation of the solar system?

Step 1:
Gravity caused components of the rotating nebula to join together. As the nebula rotated it flattened out.



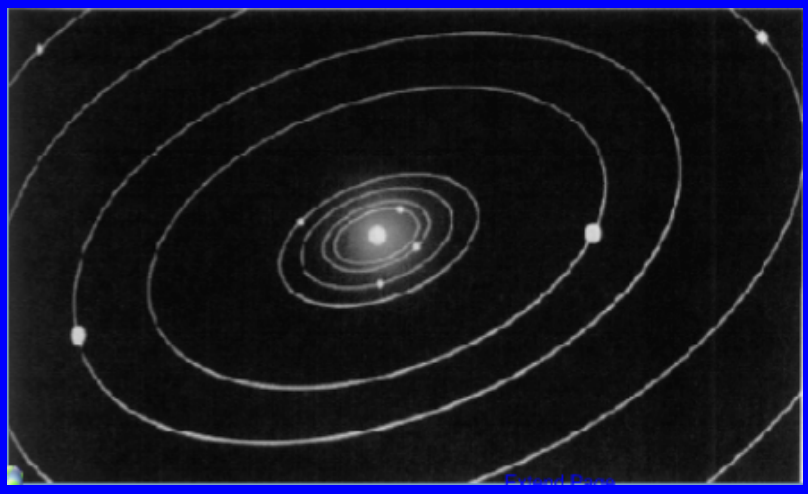
Mar 7-2:53 PM

Step 2:
As the nebula flattened out a bulge formed towards the center, known as the sun today. Cooler material further from the sun began to form chunks.



Mar 7-2:53 PM

Step 3:
The heavy materials such as rock and iron were not light enough to be blown out. As chunks of solid matter circled the Sun, they eventually collided with one another and grew in size until the Terrestrial Planets were formed.



Mar 7-2:53 PM

In early stages, our solar system contained mostly hydrogen and helium. Because of solar winds, this gas was blown to the outer parts of the solar system. The clouds of gas contracted due to gravity to form the gas giants.

Feb 3 - 3:10 PM

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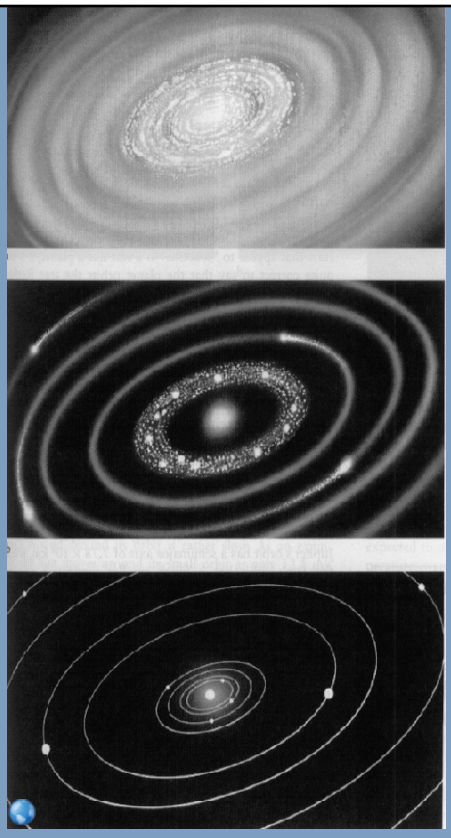
Feb 3 - 3:10 PM



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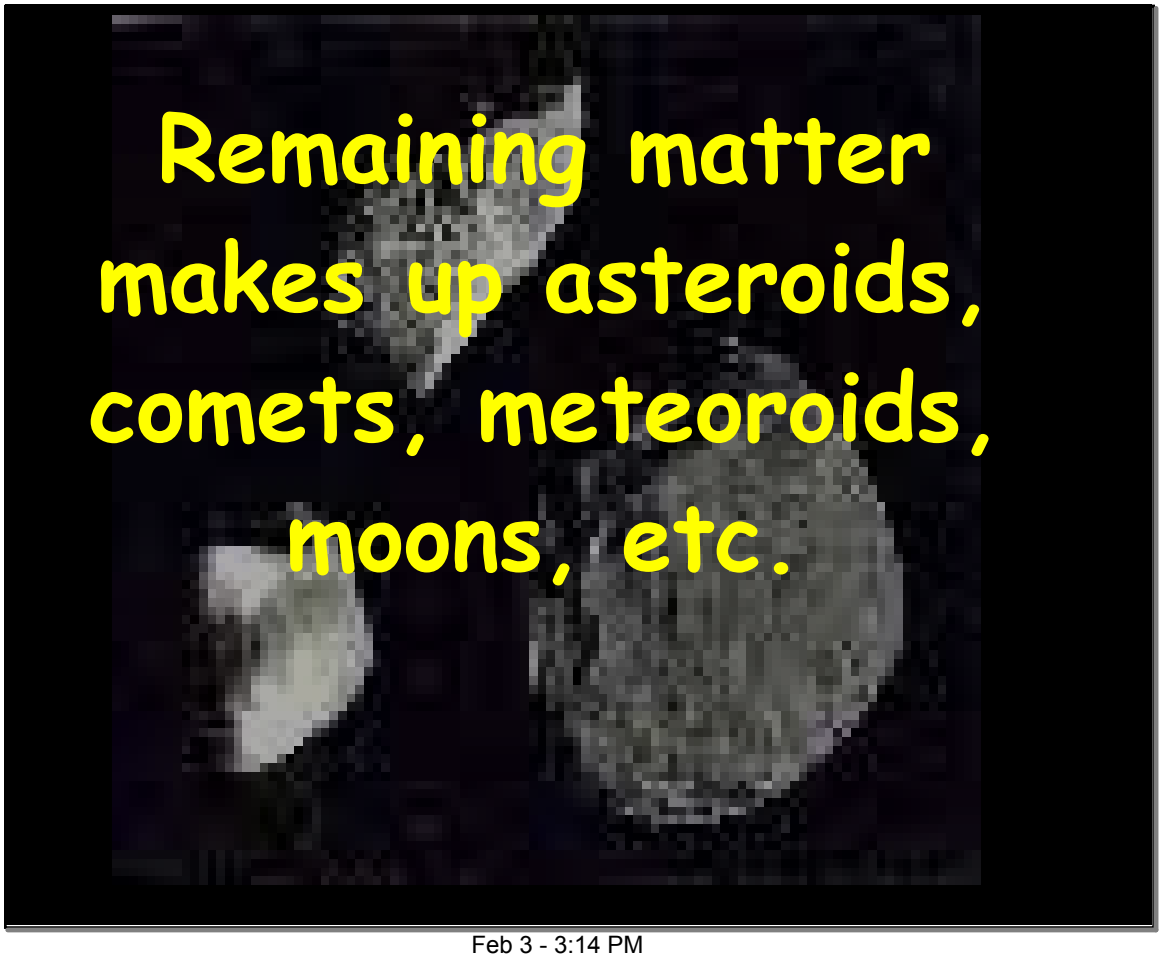
Feb 3 - 3:09 PM



Feb 3 - 3:14 PM

Exoplanets: Crash Course Astronomy #27

https://www.youtube.com/watch?v=7ATtD8x7vV0

Oct 27-10:06 AM

Homework

- P.473 # 1-4
- Read p.476-479

Oct 6 - 8:03 AM

p 473

1. Gravity is the force responsible for bringing materials together in space.

2.

- Dust and gas of a nebula clumps together
- larger clumps keep gathering more particles eventually becoming a large central mass (sun/star) and other smaller clump amass material
- Nuclear fusion occurs when enough mass of gases, sun is born- the sun blasts away hydrogen and helium to outer regions of solar system forming gas giants and masses of dust, metal and rock form inner rock planets closer to the sun

Jun 2-1:16 PM

3. a) The gas giants - Jupiter, Saturn, Neptune, Uranus- formed similar to the sun due to their composition of gases

b) The Inner planets were to close to the sun and too hot to condense into gas planets. They are much denser therefore couldn't have formed like gas planets.

4. a) Minor bodies - asteroids, meteoroids, comets, natural satellites

b) Looking at the matter they are composed of lets scientists have information on the materials present before the planets formed.

Nov 2-1:18 PM

The heavy materials such as roc and iron were not light enough to be blown out. As chunks of solid matter circled the Sun, they eventually collided with one another and grew in size until the Terrestrial Planets were formed.

Feb 3 - 3:12 PM