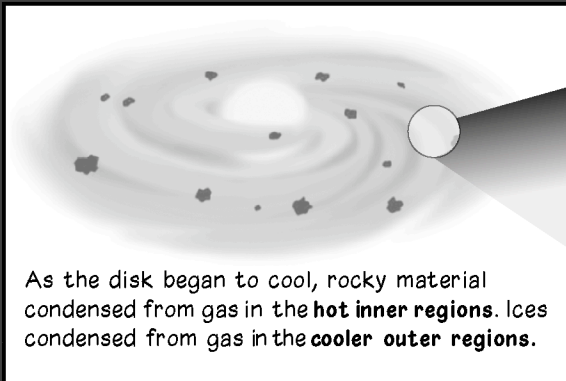
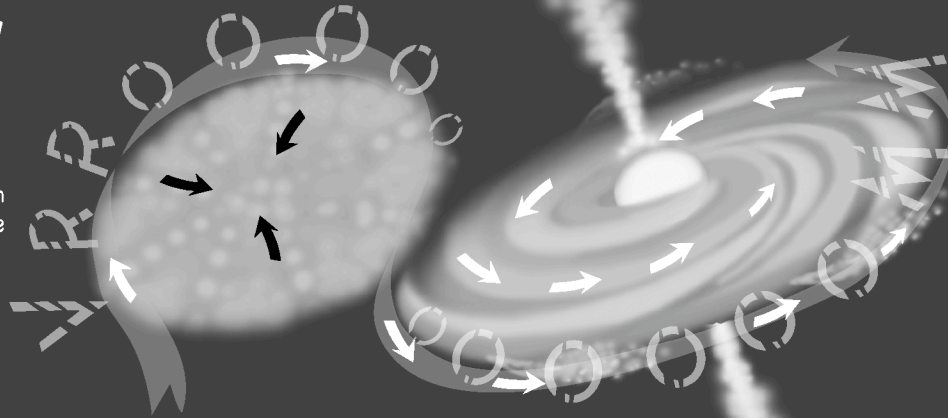


THE FORMATION OF THE
SOLAR SYSTEM

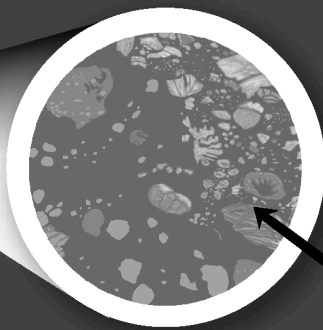
THE ADVENTURE CONTINUES ...

ABOUT 4.6 BILLION
YEARS AGO ...

The sun and the planets of our solar system were formed when a cloud of interstellar dust, ice crystals, and gas collapsed of its own gravity to form a rapidly rotating disk with a young sun at its center.

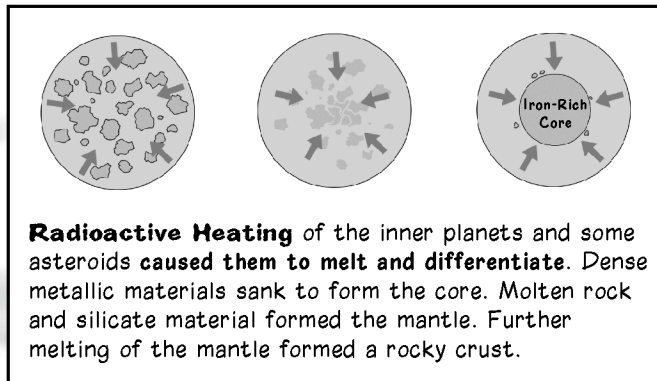


As the disk began to cool, rocky material condensed from gas in the **hot inner regions**. Ices condensed from gas in the **cooler outer regions**.



During condensation, clumps of dust grains **melted** and then **solidified** rapidly forming small glassy beads called **chondrules**. The first rocks, calcium-aluminum inclusions (called **CAIs**), also formed.

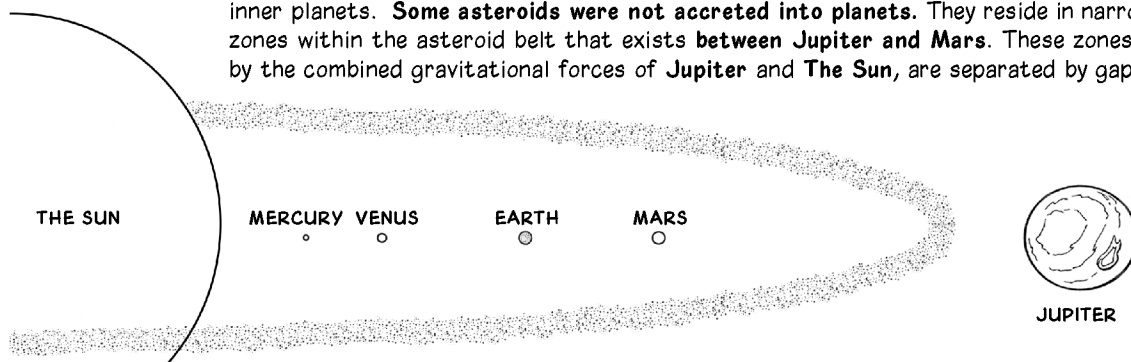
These primitive particles **collided** and **accreted** rapidly, held together by a fine-grained matrix. Through continued collisions they built into larger and larger bodies, eventually forming **The Planets**.



Radioactive Heating of the inner planets and some asteroids **caused them to melt and differentiate**. Dense metallic materials sank to form the core. Molten rock and silicate material formed the mantle. Further melting of the mantle formed a rocky crust.



Over time the asteroids residing in the inner solar system were captured by the gravity of the inner planets. **Some asteroids were not accreted into planets**. They reside in narrow orbital zones within the asteroid belt that exists **between Jupiter and Mars**. These zones, stabilized by the combined gravitational forces of **Jupiter and The Sun**, are separated by gaps.



the adventure continues when ...
Asteroids become **IMPACTS** →