

Note-taking  
Worksheet**The Solar System****Section 1 The Solar System**

A. Ideas about the night sky have \_\_\_\_\_ over time.

1. \_\_\_\_\_-centered model—early Greeks thought planets, Sun, Moon, and stars rotated around Earth.
2. \_\_\_\_\_-centered model—Nicholas Copernicus and Galileo Galilei observed that the Moon revolved around Earth and that Earth and the other planets revolved around the Sun.
3. \_\_\_\_\_ view—\_\_\_\_\_ includes Sun, eight planets, many small objects, and a huge volume of space.
  - a. Sun is the \_\_\_\_\_ of the solar system.
  - b. All other objects in the solar system \_\_\_\_\_ around the Sun.

B. How the \_\_\_\_\_ system formed

1. A \_\_\_\_\_ of gas, ice, and dust slowly formed
2. A cloud of material in the nebula slowly \_\_\_\_\_ in space.
3. Shock waves might have caused the cloud to \_\_\_\_\_, and the matter was squeezed into less space.
4. The cloud became more \_\_\_\_\_, rotated faster, heated up, and flattened to form a disk
5. As the cloud contracted, it grew warmer, triggering a \_\_\_\_\_ fusion reaction that created the Sun.
6. The leftover \_\_\_\_\_ became the planets and asteroids.
  - a. First four \_\_\_\_\_ planets—small and rocky with iron cores
  - b. Last four \_\_\_\_\_ planets—large and lightweight

C. Planet \_\_\_\_\_

1. Copernicus—planets had \_\_\_\_\_ orbits around the Sun.
2. Johannes Kepler—German mathematician
  - a. Discovered that the planet orbits were \_\_\_\_\_ and that the Sun was not directly in the center of the orbits
  - b. Determined that planets do not orbit the Sun at the same \_\_\_\_\_