

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 _____