

Section 13.3 Modeling Celestial Motion – Answer Key

1) What happens when we pay attention to what is going on around us?

When we pay attention to what is going on around us, we start to see patterns.

2) What is the geocentric model?

The geocentric model is the model that puts Earth at the center of the solar system.

3) What is the heliocentric model?

The heliocentric model is the model that puts the Sun at the center of the solar system.

4) Define epicycle.

An epicycle is a smaller circle whose center rolls around the circumference of a larger circle.

5) When did the western world see an increase in exploration?

They saw an increase in exploration during the Renaissance.

6) Which astronomer proposed that the Sun was at the center of the solar system?

Nicholas Copernicus proposed that the Sun was at the center of the solar system.

7) Where was he from? **He was from Poland.**

8) Define solar plane. **A solar plane is an imaginary flat disk extending outwards from the Sun's equator on all sides. Along the solar plane are the planets, which orbit the sun.**

9) What did Galileo find?

He found evidence that supported the heliocentric model. He also saw four moons that orbited Jupiter.

10) What device did he have that helped him make these discoveries? **He had a telescope.**

11) What did Johannes Kepler contribute to the heliocentric model?

He added a law of planetary motion that says that planetary orbits are ellipses, not circles.

12) Define solar system

The solar system is the family of the sun and all the planets that orbit it.