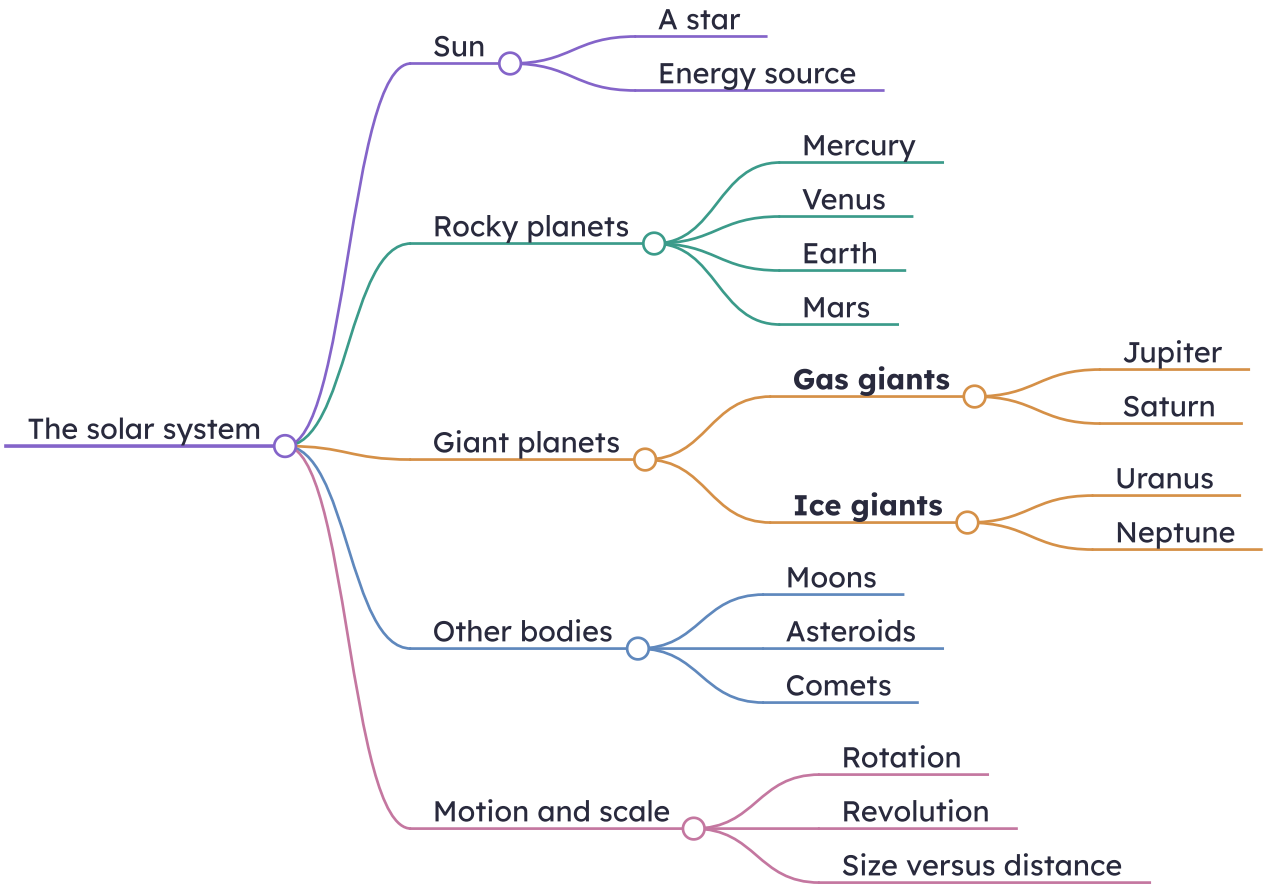
The solar system

Distinguish planets, orbital motion, rotation, and the limitations of diagrams.



Read one branch at a time. Then cover the details and explain them in your own words.

Understand the topic

The Sun is a star, and eight planets orbit it alongside other bodies. Rotation is spinning about an axis; revolution is orbital motion around another body. Diagrams often compress distances and enlarge planets to make them visible. Check the scale before using a picture to compare size or spacing.

How the map is organized

Group planets by broad characteristics, then use motion and scale branches to interpret observations.

> **Watch out for this**
> Earth's seasons are mainly related to axial tilt, not simply its changing distance from the Sun.

Try it yourself

List the planets in order from the Sun. Explain why a classroom diagram rarely shows both sizes and distances to the same scale.

Two questions to answer

Earth's rotation produces…

Different parts of Earth face the Sun as Earth rotates.

Why check a diagram's scale?

A readable diagram can distort the true relative sizes and distances.

Sources

science.nasa.gov
https://science.nasa.gov/solar-system/

Original practice material compiled by Studera.ai. Explore at studera.ai/en/resources/mind-map-examples.