

Nova's Guide to the Solar System

Learning objective: To describe the movement of the Earth and other planets relative to the Sun in the solar system.

Follow the steps below to illustrate our local space neighborhood. Use the word bank to label your diagram accurately.

Draw: Create a scientific diagram of the inner solar system. Use a clean, educational style. Include the Sun in the center, with three distinct elliptical orbital rings around it. Place the Earth on the third ring, ensuring it is drawn at a slight tilt to represent its axis. Use clear, neat lines for the orbits and ensure the Sun is colored to look like a bright, radiating star. Label the key components clearly using the provided word bank.



Label words: Sun · Orbit · Earth · Axis · Solar System · Gravity

Steps:

1. Step 1: Draw a large, glowing circle in the center of your page to represent the Sun. Label it.
2. Step 2: Draw three elliptical (oval-shaped) paths around the Sun. These are called orbits. Label one orbit.
3. Step 3: Draw the Earth on the third orbit from the Sun. Draw a small, tilted line through the center of the Earth to represent its axis.
4. Explain why the Earth stays in its orbit rather than floating off into deep space.

5. Compare and contrast the Sun's position in our solar system to the position of the planets.
6. Justify your answer: Does the Sun move around the Earth, or the Earth around the Sun? Use evidence from your drawing.