

Nova's Solar System Expedition

Learning objective: To describe the movement of the Earth and other planets relative to the Sun in the solar system, and to understand that the Sun, Earth, and Moon are spherical bodies.

Nova the barn owl is preparing for a flight through space! Use the word bank to help Nova label the Solar System sequence and complete the facts about our local space neighbourhood. Sort the celestial bodies by their size and position.

Word bank: Sun · Mercury · Venus · Earth · Mars · Jupiter · Saturn · Uranus · Neptune · Spherical · Orbit · Axis

1. 1. Nova says that planets are not flat discs. What is the correct scientific term for the shape of the Sun, Earth, and Moon? (1 mark)

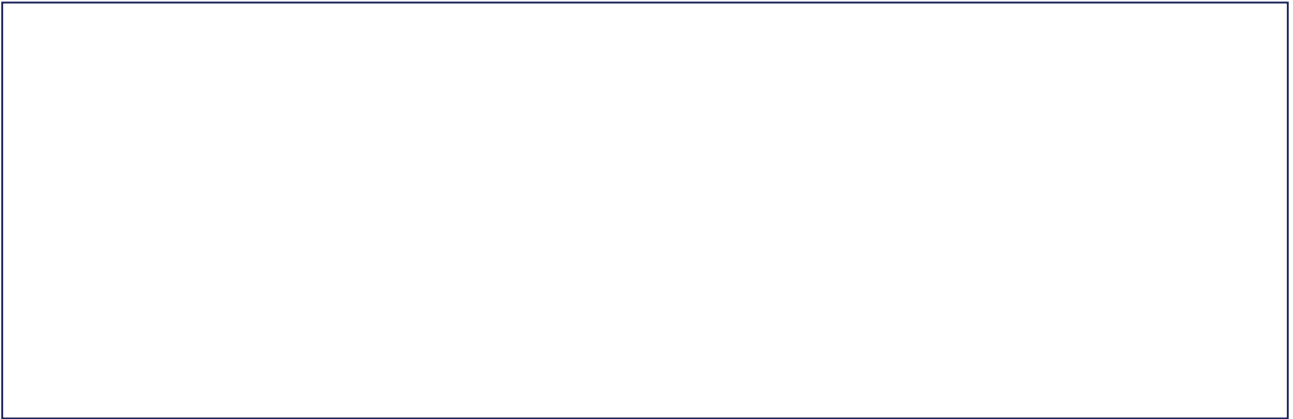
2. 2. List the eight planets in the correct order, starting from the one closest to the Sun. (4 marks)

3. 3. The Earth completes one full rotation on its tilted _____ every 24 hours. What does this movement cause on Earth? (2 marks)

4. 4. Explain the difference between 'rotation' and 'orbit' in your own words. (3 marks)

5. 5. Why do we see the Sun 'move' across the sky during the day if it is actually the Earth that is moving? (2 marks)

Draw: Draw a diagram of the Earth orbiting the Sun. Include an arrow showing the direction of the Earth's orbit and draw a dashed line through the Earth to represent its tilted axis.



Extension challenge: Nova wants to know how much a 1kg bag of space-snacks would cost if it were £2.50 per kilogram on Earth, but the price tripled on Mars due to transport costs. Calculate the total cost for 3kg of snacks on Mars.