# **Core Skills Analysis**

## Science

- Phoebe demonstrated an understanding of the solar system's structure by accurately recalling the order of the planets from the sun, including the classification of Pluto as a dwarf planet.
- She identified the components and characteristics of the sun, explaining its composition primarily of hydrogen and helium and its essential role in providing heat and light necessary for life on Earth.
- Phoebe learned about the moon, describing its distinct features such as its orbit around Earth and its impact on tides, showcasing her grasp of gravitational effects.
- She was able to recognize the eight phases of the moon, indicating her understanding of lunar cycles and their significance in relation to Earth's movement.

## Literacy

- Phoebe employed mnemonic devices to aid her memory regarding the planets, illustrating her creativity and understanding of effective learning techniques.
- She summarized information about both the sun and the moon in clear and concise language, demonstrating her ability to communicate complex scientific ideas effectively.
- The use of visual aids, such as the slideshow, helped reinforce her comprehension of the topics, indicating that Phoebe benefits from multimodal learning environments.
- By accessing resources like BBC Bitesize, she practiced research skills, enhancing her ability to find and interpret information from credible sources.

## Geography

- Phoebe connected her understanding of the moon's phases to natural phenomena, such as tides, which helps her relate scientific concepts to everyday life.
- She recognized the Earth's position in relation to the sun and moon, reinforcing her spatial awareness and knowledge of celestial movements.
- By discussing the solar system, she explored the geographical significance of other celestial bodies, enhancing her knowledge of Earth's place in the universe.
- The activity encouraged Phoebe to think about the broader implications of the solar system, potentially sparking an interest in astronomy and its relevance to geography.

#### Tips

To enhance Phoebe's learning experience regarding the solar system, consider integrating hands-on activities such as building a model of the solar system or creating a chart of the planets with interesting facts. You might also encourage her to keep a moon journal where she notes the moon's phases each night to deepen her understanding of its cycle. Furthermore, online interactive activities such as virtual planetarium tours could enrich her understanding of astronomical concepts and make learning more engaging.

#### **Book Recommendations**

- <u>There's No Place Like Space: All About Our Solar System</u> by Tish Rabe: Join the Cat in the Hat as he takes young readers on a rhyming adventure through the solar system, introducing the planets and other celestial bodies in a fun and engaging way.
- The Darkest Dark by Chris Hadfield: Written by astronaut Chris Hadfield, this picture book

tells the story of a young boy who dreams of being an astronaut and teaches children about the excitement and wonders of outer space.

• <u>Space Encyclopedia: A Tour of Our Solar System and Beyond</u> by Elizabeth Carney: This comprehensive guide offers illustrations and facts about the solar system, planets, moons, stars, and galaxies, making it an excellent resource for curious young minds.

## **Learning Standards**

- SC1/3.1a Understanding the Earth and Space: Recognising the components of the solar system.
- SC2/2.1d Using scientific vocabulary to communicate ideas accurately.
- GEO1/1.2 Investigating the geographical significance of celestial bodies.