

Knowledge Summary

Year 7 Term 4 2023/24

Science

Physics Module Space



Essential Questions/Knowledge

- What is the unit that astronomers use to measure distance?
- How are we able to see planets?
- Identify some patterns in the Solar System
- How would you describe differences between seasons?
- How would you describe the motion of the Sun, stars, and Moon across the sky?
- How would you describe patterns in data linking day length during the year?
- What are the phases of the Moon?
- How can we see the Moon from Earth?

How students will be assessed on their knowledge

- · Daily retrieval
- In-class tasks
- Extended writing questions
- End of unit assessments

Questions/Knowledge to deepen understanding

- How would you describe the structure of the Universe in order of size and of distance away from the Earth?
- How could you use the speed of light to describe distances between astronomical objects?
- Explain how the properties and features of planets are linked to their place in the Solar System
- Explain why we see objects in the Solar System, and why they appear to move as they do
- Make deductions from observation data of planets, stars, and galaxies
- What do you predict the effect of the Earth's tilt would be on temperature and day-length?
- What do you predict would be the impact on the seasons if there were no tilt?

Key Concepts

- The Night Sky
- The Solar System
- The Earth
- The Moon and Changing Ideas

Tier 2 and 3 vocabulary linked to the unit

- Astronomy
- Universe
- Satellite
- Solar System
- Planets
- Galaxies
- Latitudes