

Science Department

Foundation Stage Scheme of Work

Year 8 Forces, Pressure, Earth and Space

14 Lessons

Aims: This unit of work is designed to introduce students to Forces, Pressure, Earth and Space.

Links to KS4:

Chapter 5 Physics – Forces Chapter 8 Physics – Space

Chapter 3 Physics – Particle Model of Matter

| Key Skills | Literacy Links: | Numeracy Links: |
|---|---|--|
| To develop an understanding of Forces and Pressure. To develop an understanding of Earth and Space. To develop practical skills in a Science labs. | Key Words: pressure, planet, season, force, Newton, Pascal Be able to read and use these keywords within Scientific situations both verbally and written. | Using large numbers to describe the distances in space. Rearranging and using the pressure equation. |
| Assessment | Cross-Curricular Links | |
| Pink sheet teacher assessed activity – Solar system theories. 50 mark test which will focus on the following key areas: Gravity, the Earth and seasons, Pressure in fluids, forces and their effects and speed, acceleration & graphs. | History – The history of the space travel and the rise of the Copernican theory of the solar system. | |
| | SMSC opportunities and British values | |
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Opportunities for further learning

Homework for year 8 is set on a weekly basis. Below are a range of different activities which could be used throughout the unit.

- **Option 1:** Students could research the uses of magnets.
- **Option 2:** Students could research different units for measuring speed and why they're required.
- Option 3: Research the Moon landings.
- **Option 4:** Students research the different theories about the solar system, starting with Ptolemy.
- **Option 5:** Students calculate their pressure on the floor.
- **Option 6:** Research the design of the aluminium drinks can.
- **Option 7:** Drawing a graph.
- **Option 8:** Biographies of Newton or Pascal after whom units are named.
- **Option 9:** Detailed study of the properties of the solar system's planets.