Year 7 Science Curriculum at Presdales

In Year 7 you will be introduced the scientific method and important practical skills, and explore a range of topics in Biology, Chemistry, and Physics.

You will develop and practise the following **practical skills** throughout the year.

- Identifying variables in an experiment
- Making observations and gathering results
- Data handling skills
- Graph skills
- Evaluating results
- Making conclusions

You will develop and practise these **additional skills** throughout the year.

- Using and assessing models
- Identifying patterns
- Making comparisons
- Communicating scientific information
- Making links across topics

You will learn about the following key topics, and you should be able to answer the big Science questions of each topic.

- **How Science works**: I can obtain reliable results and present results in an effective manner.
- **Ecology:** I can describe what makes up an ecosystem and how different organisms are adapted to their environment.
- **States of Matter:** I can describe and explain the behaviour of solids, liquids, and gases using the particle theory of matter, and describe methods for separating different types of mixtures.
- **Simple Circuits:** I can explain what electric current and potential difference are.
- **Cells and organisation:** I can describe what a cell is and how cells work together to form an organism.
- **Elements and compounds:** I can describe what makes up elements and compounds, and give examples of each.
- **Energy and waves:** I can describe changes to energy stores during energy transfer processes, and I can describe light and sound in terms of waves.
- **Reproduction in animals and plants:** I can describe how animals and plants reproduce to make offspring.
- **Dynamic Earth:** I can identify types of rocks, explain how they are made, and describe ways in which they are broken down.
- **Forces and motion:** I can explain the motion of an object in terms of forces.
- **Heat and temperature:** I can describe what makes an object feel hot and cold, and how to minimize changes in the temperature.