Year 8 Science Curriculum at Presdales

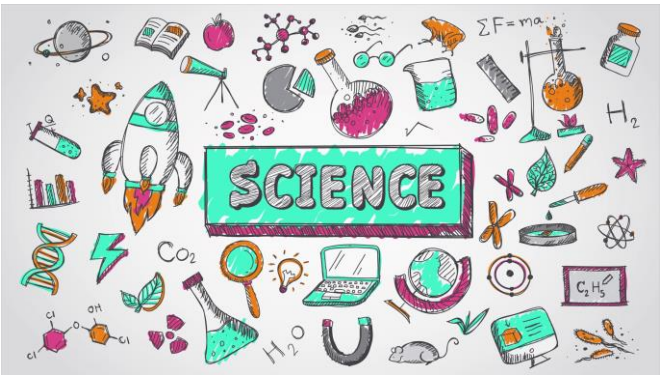
In Year 8 you will be continue exploring the scientific method and developing important practical skills, and will learn about a range of topics in Biology, Chemistry, and Physics that build upon what you learned in Year 7.

You will continue to 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 continue to 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.

- **Further how Science works**: I can identify potential sources of error in practical results and explain how to improve the accuracy and reliability of my results.
- **Health and digestion**: I can describe how food is digested, and make recommendations on individual lifestyle choices.
- **Chemical reactions**: I can use word equations to represent a range of chemical reactions that metals and metal compounds take part in.
- **Looking and listening:** I can describe how light behaves, how the human eye sees, and how ultrasound in used in real-life applications.
- **Photosynthesis and respiration:** I can explain the importance of plants and how all organisms rely on the products that plants make in photosynthesis.
- **Acids and alkalis:** I can identify characteristics of acids and alkalis, and describe reactions in which they are involved in.
- **Forces and motion:** I can apply my understanding of forces to describe how the motion of an object changes, and I can explain how a lever makes it easier to move objects.
- **Inheritance and variation:** I can explain why there is variation amongst species and between species.
- **Energy and reactions:** I can compare exothermic and endothermic reactions, and give examples of each.
- **Advanced electricity:** I can compare series and parallel circuits, and explain how an electromagnet works.
- **Particles in action:** I can explain why an object sinks or floats, and why it hurts to hold a drawing pin at one end but not the other.