

## Chauncy School – KS3 Science Curriculum

Our KS3 curriculum follows the AQA KS3 specification which equips our students to progress onto KS4 with all of the acquired skills and knowledge required. The program of study focuses on 10 big idea headings which provide students with the skills required to make predictions, analyse results, draw conclusions and evaluate practical skills. KS3 Science will also include a large amount of practical investigations where students will be able to develop their practical technique and ability within the laboratory.

The 16 skills which will be continuously assessed within lessons are shown below:

- Analyse Patterns – Students should be able to read information from graphs and spot any anomalous results.
- Discuss Limitations – Students should be able to analyse strengths and weaknesses within practicals. They should also be able to suggest ways to reduce error.
- Draw Conclusions – Students should be able to use data to support their conclusions.
- Present Data – Students should be able to present data logically by choosing the correct type of graph.
- Communicate Ideas – Students should be able to communicate their ideas in a concise and logical way.
- Construct Explanations – Students should be able to communicate their ideas and back up their ideas with evidence.
- Critique Claims – Students should be able to comment on scientific information and decide whether it is relevant or not by using evidence.
- Justify Opinions – Students should be able to form opinions and back them with evidence.
- Collect Data – Students should be able to gather data with minimal error.
- Devise Questions – Students should be able to design scientific experiments and write a fair test enquiry question.
- Plan Variables – Students should know the meaning of Control, Dependent and Independent variables.
- Test Hypothesis – Students should be able to explain if a hypothesis is correct or not.
- Identify risks – Students should be able to identify risks or hazards and decide on control measures within the laboratory.
- Examine Consequences – Students should be able to decide upon consequences when given different economical/environmental situations.
- Review Theories – Students should be able to explain why we have theories in Science and understand why theories may change.
- Interrogate sources – Students should be able to judge the reliability of the source and check for bias.

## Subject Content

<u>Big Idea</u>	Year 7		Year 8	
Forces	Speed	Gravity	Contact Forces	Pressure
Electromagnets	Voltage & Resistance	Current	Electromagnets	Magnetism
Energy	Energy Costs	Energy Transfer	Work	Heating and cooling
Waves	Sound	Light	Wave effects	Wave properties
Matter	Particle Model	Separating mixtures	Periodic table	Elements
Reactions	Metals & Non-metals	Acids & Alkalis	Chemical Energy	Types of reactions
Earth	Earth Structure	Universe	Climate	Earth Resources
Organisms	Movement	Cells	Breathing	Digestions
Ecosystems	Interdependence	Plant Reproduction	Respiration	Photosynthesis
Genes	Variation	Human Reproduction	Evolution	Inheritance

Physics unit = Blue

Chemistry units = Orange

Biology units – Green

For additional information on KS3 Science please contact [danielle.newman@chauncy.org.uk](mailto:danielle.newman@chauncy.org.uk)