

Overview of the KS3 Science Syllabus

Forces	Speed	Gravity	Contact forces	Pressure
Electromagnets	Voltage and 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 and non-metals	Acids and alkalis	Chemical energy	Types of reaction
Earth	Earth structure	Universe	Climate	Earth resources
Organisms	Movement	Cells	Breathing	Digestion
Ecosystem	Interdependence	Plant reproduction	Respiration	Photosynthesis
Genes	Variation	Human reproduction	Evolution	Inheritance

Buxton Science Department Aims

Our Key Stage 3 (KS3) Science lessons are engaging and promote learning. Using a logical order of objectives, we teach big ideas and mastery goals to equip students for success at GCSE. Our schemes of work also provide a method to follow student progress as their understanding develops during KS3.

The students will be tested regularly through both years at KS3.

In year 7 students will be taught in their form groups (mixed ability).

In year 8 students will be put into ability groups based on their performances from the end of unit assessments and end of year exam in year 7.

Scientist enquiry has been divided into four main areas:

Analyse

- Analyse patterns
- Discuss limitations
- Draw conclusions
- Present data



Communicate

- Communicate ideas
- Construct explanations
- Critique claims
- Justify opinions



Enquire

- Collect data
- Devise questions
- Plan variables
- Test hypotheses



Solve

- Estimate risks
- Examine consequences
- Review theories
- Interrogate sources



Working scientifically gets students working in similar ways to scientists and teaching methods provides comprehensive coverage of working scientifically. There will be plenty of opportunity for students to carry out practical work throughout KS3.

BUXTON SCHOOL SCIENCE DEPARTMENT YEAR 7 ORDER OF UNITS



Chemical Reactions
Particle Theory and Weathering
Particle Physics
Electricity and Forces
Ecology
Cells, Tissue and Growth

Assessment: after each unit there will be three assessments

1. End of unit test
2. Practical test called the “Can do Task”
3. Literacy written task.

There will also be an end of year exam in June.

BUXTON SCHOOL SCIENCE DEPARTMENT YEAR 8 ORDER OF UNITS



Periodic Table
Reactions
Healthy Bodies
Respiration and Circulation
Energy and Motion
Forces and Waves

Assessment: after each unit there will be three assessments

1. End of unit test
2. Practical test called the “Can do Task”
3. Literacy written task.

There will also be an end of year exam in June.