

Science Rationale

Science at The Coppice Academy contributes significantly to pupils' enjoyment and understanding of the world and their place within it. It is made accessible to all pupils through a focus on practical work, first-hand experience and special events designed to inspire and engage learners. Teaching key skills such as making observations, predictions and evaluation of first hand observations are of equal importance to knowledge and understanding. Key Stage 3 pupil's learning is greatly focused towards developing a strong and broad platform of science understanding, as well as building independent and problem solving skills. Consequently pupils develop their own ability to explore, discover and establish understanding about life around them. Key stage 4 pupils are well matched to appropriate accreditation and certification such as BTEC and Unit Awards in Science.

KS3 Curriculum

Pupils are taught one unit of work every half term. (6 per year)

Least able pupils	Middle ability pupils	Higher ability pupils
<p>Year 7</p> <ol style="list-style-type: none"> 1. The senses / Body Parts 2. Food, drink and Exercise 3. Lifecycle and Growth 4. Further afield 5. Exploring Materials 6. Electricity 	<p>Year 7</p> <ol style="list-style-type: none"> 1. Parts of the Body and Senses 2. Plants 3. Variations and Food Chains 4. Grouping and Classifying Material 5. Electricity 6. Forces and Motion 	<p>Year 7</p> <ol style="list-style-type: none"> 1. Parts of the Body and Senses 2. Plants 3. Variations and Food Chains 4. Grouping and Classifying Material 5. Electricity 6. Forces and Motion
<p>Year 8/9 Curriculum Year 1</p> <ol style="list-style-type: none"> 1. Lifecycle and Growth 2. The Heart / The Skeleton 3. Food, Teeth and Claws 4. Plants 5. Grouping Materials / Changing Materials 6. Forces 	<p>Year 8/9 Curriculum Year 1</p> <ol style="list-style-type: none"> 1. Human Skeleton 2. The Heart and Circulation/ Cells 3. Changing / Separating materials 4. Acid and Alkali 5. Sound 6. Earth and Beyond 	<p>Year 8/9 Curriculum Year 1</p> <ol style="list-style-type: none"> 1. Human Skeleton 2. The Heart and Circulation/ Cells 3. Changing / Separating materials 4. Acid and Alkali 5. Sound 6. Earth and Beyond
<p>Year 8/9 Curriculum Year 2</p> <ol style="list-style-type: none"> 1. The Lungs 2. Health 3. Environment 4. Separating Materials 5. Light 6. Sound 	<p>Year 8/9 Curriculum Year 2</p> <ol style="list-style-type: none"> 1. Drugs and Medicine 2. Food, Exercise and Staying Healthy 3. Characteristics of Living Things 4. Living Things and their Environment 5. Rocks and Weathering 6. Light 	<p>Year 8/9 Curriculum Year 2</p> <ol style="list-style-type: none"> 1. Drugs and Medicine 2. Food, Exercise and Staying Healthy 3. Characteristics of Living Things 4. Living Things and their Environment 5. Rocks and Weathering 6. Light

KS4 Curriculum Year 10 - 11

Pupils work towards accreditations and certification in Science

Least able pupils follow AQA Pre- Entry Level Unit Award (4 Units Awards over two years)	Middle ability pupils follow AQA Entry Level Unit Award (8 Units Awards over two years)	Higher ability pupils follow <u>BTEC Level 1 Applied Science</u> (5 topics covered over two years)
<ol style="list-style-type: none"> 1. Investigating Acids and Alkalis 82637 2. Introduction to our Solar System. 86716 3. Biology Plants 72174 4. Forces and Friction 72167 <p>Pupils have the opportunity to complete the CREST Discovery award. (This provides a real-life experience of 'being' a scientist allowing students to develop their enquiry, communication and problem solving skills) CREST Discovery</p>	<ol style="list-style-type: none"> 1. Acids and Alkalis 86833 2. Science - Solar System 79471 3. Introduction to Plant Biology 70359 4. Circuits and Conductors 71463 5. Friction 71464 6. Food webs 98115 7. Dissolving, Separating and Changing Materials 75646 8. The Human Body (Unit 1) 75122 <p>Pupils have the opportunity to complete the CREST Discovery award. (This provides a real-life experience of 'being' a scientist allowing students to develop their enquiry, communication and problem solving skills)</p>	<ol style="list-style-type: none"> 1. Forensic Science 2. Healthier Living 3. Growing Plants for Commercial Use 4. Causes of disease and maintaining health. 5. Making and testing cosmetic products. <p>Pupils have the opportunity to complete the CREST Bronze Award. (This provides a real-life experience of 'being' a scientist allowing students to develop their enquiry, communication and problem solving skills)</p>

KS5

The curriculum develops learner's skills, knowledge and understanding to ensure they have the breadth of

knowledge and scientific enquiry skills in order to succeed at their chosen Further Education establishment. Learners go on to study science in a variety of ways at Blackfriars FE, Walton Hall and Reaseheath College.

