Curriculum Offer



Curriculum Offer

SUBJECT: Science	**YEAR:** 7 - 11	**PATHWAY:** 1
SKILLS AND KNOWLEDGE PROGRESSION		
KNOWLEDGE • Develop scientific knowledge and conceptual understanding of the disciplines of Physics, Chemistry and Biology. • Pupils formulate their own questions about the natural world. • Teachers use precise questioning in class to test conceptual knowledge.	**SKILLS** • Simple questions • Simple tests • Observe changes over time • Identify and classify • Observe changes and patterns	**SPIRAL** • Yearly revisiting of topics to embed knowledge. • Repetition of practical skills. • Introduction and use of scientific vocabulary. • Frequent learning checks and recaps throughout the lesson.

YEAR/CYCLE	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
Year 7	**Plants and Animals** Discover the needs of plants with support, use songs to find common body parts.	**Light and Sound** Explore light and sound and show preferences for each. Begin to experience the use of switches.	**Materials** Discover water play and explore how materials change through forces.	**Forces and Magnets** Observe and respond to different textures and forces.	**Earth and Space** Experiencing seasons.	**States of Matter** *or* **project depending on level**
Year 8	**Plants and Animals** Explore body and plant parts, knowing how to look after each.	**Light and Sound** Change light and sound with intent and begin to experience shadows.	**Materials** Explore materials, there purpose and properties.	**Forces and Magnets** Observe and experience different forces.	**Earth and Space** Recognise the different seasons.	**States of Matter** *or* **project depending on level**
Year 9	**Plants and Animals** Explore the needs of a plant and identify body parts.	**Light and Sound** Investigate different pitches and light sources.	**Materials** Use properties to describe materials.	**Forces and Magnets** Experience how magnets work and revisit forces.	**Earth and Space** Recognise the clothing and weathers in the different seasons.	**States of Matter** *or* **project depending on level** Experience solids and liquids and how

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						to change between them.
Year 10	**Plants and Animals** Discover the needs of plants with support, use songs to find common body parts.	**Light and Sound** Explore light and sound and show preferences for each. Begin to experience the use of switches.	**Materials** Discover water play and explore how materials change through forces.	**Forces and Magnets** Observe and respond to different textures and forces.	**Earth and Space** Experiencing seasons.	**States of Matter** *or* **project depending on level**
Year 11	**Plants and Animals** Explore body and plant parts, knowing how to look after each.	**Light and Sound** Change light and sound with intent and begin to experience shadows.	**Materials** Explore materials, there purpose and properties.	**Forces and Magnets** Observe and experience different forces.	**Earth and Space** Recognise the different seasons.	**States of Matter** *or* **project depending on level**

Curriculum Offer

CURRICULUM OVERVIEW	CROSS CURRICULAR LINKS	DESTINATIONS AND PERSONAL DEVELOPMENT OPPORTUNITIES
• Route 1 pupils undertake tasks to DISCOVER, EXPLORE and EXPERIENCE themes and opportunities within the context of the topics. • Pupils are taught content and skills in line with the AAT framework. • Pupils study elements of Biology, Chemistry and Physics during each year and study each topic over a half term. • Pupils have the opportunity to engage in science related off-site activities. • A spiralling curriculum allows for key skills to be revisited, gaps in knowledge to be addressed and learning to be embedded.	English opportunities: • Spoken English • Spoken Language • Reading – Word Reading • Reading – Comprehension • Writing – Transcription • Writing – Composition • Writing – Vocabulary, Grammar and Punctuation (VGP) Maths opportunities: • Number – Place Value • Number – Addition and Subtraction • Number – Multiplication and Division • Number – Fractions • Measurement • Geometry – Shape • Geometry – Position and Direction • Statistics • Ratio • Algebra • Probability E-safety opportunities: • Privacy and Security. • Managing Online Information.	Pupils will continue in education and possibly access Entry Level qualifications. Some pupils will access social care routes.

Curriculum Offer

	Geography opportunities: • Weather • Analysing and collecting data. • Identification of human features.	

Curriculum Offer

SUBJECT: Science	**YEAR:** 7 - 11	**PATHWAY:** 2 (Upper Hills)
SKILLS AND KNOWLEDGE PROGRESSION		
KNOWLEDGE • Develop scientific knowledge and conceptual understanding of the disciplines of Physics, Chemistry and Biology. • Pupils formulate their own questions about the natural world. • Teachers use precise questioning in class to test conceptual knowledge.	**SKILLS** • Asking questions • Making predictions • Setting up tests • Observing and measuring • Recording data • Interpreting and communicating results • Evaluating	**SPIRAL** • Yearly revisiting of topics to embed knowledge. • Repetition of practical skills. • Introduction and use of scientific vocabulary. • Frequent learning checks and recaps throughout the lesson.

YEAR/CYCLE	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
Cycle 1 Years 7 & 8	**Light and Sound** Change light and sound with intent and begin to experience shadows.	**Materials** Explore materials, there purpose and properties.	**Forces and Magnets** Observe and experience different forces.	**Earth and Space** Recognise the different seasons	**States of Matter** *or* **project** Experience solids and liquids and how to change between them.	**Plants and Animals** Explore the body and plant parts, knowing how to look after each.
Cycle 1 Year 9	**WJEC – Choices and Decisions** Make choices about your science work and plan a trip you may want to go on.	**Materials** Use properties to describe materials.	**Forces and Magnets** Experience how magnets work and revisit forces.	**Earth and Space** Recognise the clothing and weathers in the different seasons.	**States of Matter** *or* **project** Discover names of solids, liquids and gases.	**Plants and Animals** Explore the needs of a plant and identify body parts.

Curriculum Offer

Cycle 1 **Years 10 & 11**	**WJEC – Health and Safety EL2** Develop your knowledge of Health and Safety at home and in the lab, showing how to apply this to different situations.	**Materials** Identify and describe rocks.	**Forces and Magnets** Develop knowledge of forces, friction and magnets.	**Earth and Space** Understand day and night and develop knowledge of space.	**States of Matter** *or* **project** Name the changes of state and describe how they happen	**Plants and Animals** Understand the functions of body and plant parts.
Cycle 2 **Years 7 & 8**	**Materials** Explore materials, there purpose and properties.	**Forces and Magnets** Observe and experience different forces.	**Earth and Space** Recognise the different seasons	**States of Matter** *or* **project** Experience solids and liquids and how to change between them.	**Plants and Animals** Explore the body and plant parts, knowing how to look after each.	**Light and Sound** Investigate different pitches and light sources.
Cycle 2 **Year 9**	**WJEC – Choices and Decisions** Make choices about your science work and plan a trip you may want to go on.	**Forces and Magnets** Experience how magnets work and revisit forces.	**Earth and Space** Recognise the clothing and weathers in the different seasons.	**States of Matter** *or* **project** Discover names of solids, liquids and gases.	**Plants and Animals** Explore the needs of a plant and identify body parts.	**Light and Sound** Use materials to investigate reflection and how shadows are formed.

Curriculum Offer

Cycle 2 **Years 10 & 11**	**WJEC - Food and Health EL2** Understand the different food groups and how these help to keep our bodies healthy. Understand how to make a balanced meal.	**Forces and Magnets** Develop knowledge of forces, friction and magnets.	**Earth and Space** Understand day and night and develop knowledge of space.	**States of Matter** *or* **project** Name the changes of state and describe how they happen	**Plants and Animals** Understand the functions of body and plant parts.	**Light and Sound** Develop reflection knowledge using concave and convex mirrors.

CURRICULUM OVERVIEW

- Route 2 Pupils undertake tasks to ENHANCE, DEVELOP and DEEPEN themes and opportunities within the context of the topics.
- Pupils are taught content and skills in line with National Curriculum coverage at appropriate levels.
- Pupils study elements of Biology, Chemistry and Physics during each year and study each topic over a term.
- Pupils have the opportunity to engage in science related off-site activities.
- A spiralling curriculum allows for key skills to be revisited, gaps in knowledge to be addressed and learning to be embedded.

CROSS CURRICULAR LINKS

English opportunities:

- Spoken English
- Spoken Language
- Reading – Word Reading
- Reading – Comprehension
- Writing – Transcription
- Writing – Composition
- Writing – Vocabulary, Grammar and Punctuation (VGP)

Maths Opportunities:

- Number-Place Value
- Number-Addition Subtraction
- Number- Multiplication and Division Number-Fractions
- Measurement
- Geometry-Shape
- Geometry-Position and direction
- Statistics
- Ratio

DESTINATIONS AND PERSONAL DEVELOPMENT OPPORTUNITIES

- Pathway 2 pupils will complete EL2/3 qualifications and then continue to Foundation or Independent living courses at college.

Curriculum Offer

	• Algebra • Probability E-safety Opportunities: • Privacy and Security • Managing Online Information Geography Opportunities: • Where plants grow and locations around the world • Analysing and collecting data • Where rocks are formed • Climate environment • Natural resources Life Skills Opportunities: • Electricity and safety around the home	

Curriculum Offer

SUBJECT: Science	**YEAR:** 7 - 11	**PATHWAY:** 2 (Lower Hills)

SKILLS AND KNOWLEDGE PROGRESSION

KNOWLEDGE	**SKILLS**	**SPIRAL**
• Develop scientific knowledge and conceptual understanding of the disciplines of Physics, Chemistry and Biology. • Pupils formulate their own questions about the natural world. • Teachers use precise questioning in class to test conceptual knowledge.	• Asking questions • Making predictions • Setting up tests • Observing and measuring • Recording data • Interpreting and communicating results • Evaluating	• Yearly revisiting of topics to embed knowledge. • Repetition of practical skills. • Introduction and use of scientific vocabulary. • Frequent learning checks and recaps throughout the lesson.

YEAR/CYCLE	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
Cycle 1 **Years 7 & 8**	**Materials** Explore materials, there purpose and properties.	**Forces and Magnets** Observe and experience different forces.	**Earth and Space** Recognise the different seasons	**States of Matter** *or* **project** Experience solids and liquids and how to change between them.	**Plants and Animals** Explore the body and plant parts, knowing how to look after each.	**Light and Sound** Investigate different pitches and light sources.
Cycle 1 **Year 9**	**WJEC – Choices and Decisions** Make choices about your science work and plan a trip you may want to go on.	**Forces and Magnets** Experience how magnets work and revisit forces.	**Earth and Space** Recognise the clothing and weathers in the different seasons.	**States of Matter** *or* **project** Discover names of solids, liquids and gases.	**Plants and Animals** Explore the needs of a plant and identify body parts.	**Light and Sound** Use materials to investigate reflection and how shadows are formed.

Curriculum Offer

Cycle 1 **Years 10 & 11**	**WJEC – Health and Safety EL3** Develop your knowledge of Health and Safety at home and in the lab, showing how to apply this to different situations.	**Forces and Magnets** Develop knowledge of forces, friction and magnets.	**Earth and Space** Understand day and night and develop knowledge of space.	**States of Matter** *or* **project** Name the changes of state and describe how they happen	**Plants and Animals** Understand the functions of body and plant parts.	**Light and Sound** Develop reflection knowledge using concave and convex mirrors.
Cycle 2 **Years 7 & 8**	**Forces and Magnets** Observe and experience different forces.	**Earth and Space** Recognise the different seasons	**States of Matter** *or* **project** Experience solids and liquids and how to change between them.	**Plants and Animals** Explore the body and plant parts, knowing how to look after each.	**Light and Sound** Investigate different pitches and light sources.	**Materials** Explore materials, there purpose and properties.
Cycle 2 **Year 9**	**WJEC – Choices and Decisions** Make choices about your science work and plan a trip you may want to go on.	**Earth and Space** Recognise the clothing and weathers in the different seasons.	**States of Matter** *or* **project** Discover names of solids, liquids and gases.	**Plants and Animals** Explore the needs of a plant and identify body parts.	**Light and Sound** Use materials to investigate reflection and how shadows are formed.	**Materials** Use properties to describe materials.

Curriculum Offer

Cycle 2 **Years 10 & 11**	**WJEC - Food and Health EL3** Understand the different food groups and how these help to keep our bodies healthy. Understand how to make a balanced meal.	**Earth and Space** Understand day and night and develop knowledge of space.	**States of Matter** *or* **project** Name the changes of state and describe how they happen	**Plants and Animals** Understand the functions of body and plant parts.	**Light and Sound** Develop reflection knowledge using concave and convex mirrors.	**Materials** Identify and describe rocks.

CURRICULUM OVERVIEW

- Route 2 Pupils undertake tasks to ENHANCE, DEVELOP and DEEPEN themes and opportunities within the context of the topics.
- Pupils are taught content and skills in line with National Curriculum coverage at appropriate levels.
- Pupils study elements of Biology, Chemistry and Physics during each year and study each topic over a term.
- Pupils have the opportunity to engage in science related off-site activities.
- A spiralling curriculum allows for key skills to be revisited, gaps in knowledge to be addressed and learning to be embedded.

CROSS CURRICULAR LINKS

English Opportunities:

- Spoken English
- Spoken Language
- Reading-Word Reading
- Reading-Comprehension
- Writing-Transcription
- Writing-Composition
- Writing-VGP.

Maths Opportunities:

- Number-Place Value
- Number-Addition Subtraction
- Number - Multiplication and Division
- Number-Fractions
- Measurement
- Geometry-Shape
- Geometry-Position and direction
- Statistics
- Ratio

DESTINATIONS AND PERSONAL DEVELOPMENT OPPORTUNITIES

- Pathway 2 pupils will complete EL2/3 qualifications and then continue to Foundation or Independent living courses at college.

Curriculum Offer

	• Algebra • Probability E-safety Opportunities: • Privacy and Security • Managing Online Information Geography Opportunities: • Where plants grow and locations around the world • Analysing and collecting data • Where rocks are formed • Climate environment • Natural resources Life Skills Opportunities: • Electricity and safety around the home	

Curriculum Offer

SUBJECT: Science	**YEAR:** 7 - 11	**PATHWAY:** 3
SKILLS AND KNOWLEDGE PROGRESSION		
KNOWLEDGE • Develop scientific knowledge and conceptual understanding of the disciplines of Physics, Chemistry and Biology. • Pupils formulate their own questions about the natural world. • Teachers use precise questioning in class to test conceptual knowledge.	**SKILLS** • Systematic and careful observations over time, looking at similarities and differences. • Questions surrounding patterns I have found in data. Gather, record, classify and present data in a variety of ways to help in answering questions. Set up simple practical enquiries, comparative and fair test	**SPIRAL** • Yearly revisiting of topics to embed knowledge. • Repetition of practical skills. • Introduction and use of scientific vocabulary. • Frequent learning checks and recaps throughout the lesson.

YEAR/CYCLE	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
Cycle 1 Years 7 & 8	**Forces and Magnets** Experience how magnets work and revisit forces.	**Earth and Space** Understand day and night and develop knowledge of space.	**States of Matter** *or* **project** Discover names of solids, liquids and gases.	**Plants and Animals** Explore the needs of a plant and identify body parts.	**Light and Sound** Use materials to investigate reflection and how shadows are formed.	**Materials** Explore materials, there purpose and properties.
Cycle 1 Year 9	**WJEC – Choices and Decisions** Make choices about your science work and plan a trip you may want to go on.	**Earth and Space** Understanding how the movement of Earth causes day and night.	**States of Matter** *or* **project** Name the changes of state and describe how they happen	**Plants and Animals** Understand the functions of body and plant parts.	**Light and Sound** Develop reflection knowledge using concave and convex mirrors.	**Materials** Use properties to describe materials.

Curriculum Offer

Cycle 1 **Years 10 & 11**	**GCSE or WJEC – Health and Safety EL3** Develop your knowledge of Health and Safety at home and in the lab, showing how to apply this to different situations.	**Earth and Space** Develop knowledge of the solar system and what the planets of made of.	**States of Matter** *or* **project** Demonstrate the water cycle.	**Plants and Animals** Sort food groups and know the needs of plants and animals.	**Light and Sound** Investigate different vibrations and refraction.	**Materials** Apply knowledge of materials to choose a materials for a use.
Cycle 2 **Years 7 & 8**	**Earth and Space** Understand day and night and develop knowledge of space.	**States of Matter** *or* **project** Discover names of solids, liquids and gases.	**Plants and Animals** Explore the needs of a plant and identify body parts.	**Light and Sound** Use materials to investigate reflection and how shadows are formed.	**Materials** Use properties to describe materials.	**Forces and Magnets** Experience how magnets work and revisit forces.
Cycle 2 **Year 9**	**WJEC – Choices and Decisions** Make choices about your science work and plan a trip you may want to go on.	**States of Matter** *or* **project** Name the changes of state and describe how they happen	**Plants and Animals** Understand the functions of body and plant parts.	**Light and Sound** Develop reflection knowledge using concave and convex mirrors.	**Materials** Identify and describe rocks.	**Forces and Magnets** Develop knowledge of forces, friction and magnets.

Curriculum Offer

Cycle 2 **Years 10 & 11**	**GCSE or WJEC - Food and Health EL3** Understand the different food groups and how these help to keep our bodies healthy. Understand how to make a balanced meal.	**GCSE** *or* **States of Matter** *or* **project** Demonstrate the water cycle.	**GCSE** or **Plants and Animals** Sort food groups and know the needs of plants and animals.	**GCSE** or **Light and Sound** Investigate different vibrations and refraction.	**GCSE** or **Materials** Apply knowledge of materials to choose a material for a use.	**GCSE** *or* **Forces and Magnets** Measure and explain forces.

CURRICULUM OVERVIEW

- Route 3 Pupils undertake tasks to EMBED, DEMONSTRATE and APPLY knowledge and understanding through themes and opportunities within the context of the topics.
- Pupils develop and enhance skills taught in Years 7,8, and 9.
- Pupils experience both conceptual and practical learning.
- Pupils have the opportunity to engage in science related off-site activities.
- Pupils study the topics on a cycle to give a broad and balanced curriculum.

CROSS CURRICULAR LINKS

English Opportunities:

- Spoken English
- Spoken Language
- Reading-Word Reading
- Reading-Comprehension
- Writing-Transcription
- Writing-Composition
- Writing-VGP

Maths Opportunities:

- Number-Place Value
- Number-Addition Subtraction
- Number Multiplication and Division
- Number-Fractions
- Measurement. Geometry-Shape. Geometry-Position Direction
- Statistics
- Ratio
- Algebra
- Probability

E-safety Opportunities:

DESTINATIONS AND PERSONAL DEVELOPMENT OPPORTUNITIES

- EL2/3 qualifications and then continue to Foundation or Independent living courses at college.
- AQA Entry Level Science
- AQA GCSE Science Synergy
- Possible Level 1 courses at college

Curriculum Offer

	• Privacy and Security • Managing Online Information Geography Opportunities: • Where plants grow and locations around the world. • Analysing and collecting data. Where rocks are formed – climate. Environment. Natural resources. Life Skills Opportunities: • Electricity and safety around the home Computing Opportunities: • Uses of digital technology. D of E Opportunities: • Outside environment and health and safety.	