



Venture

Venture Curriculum

- Introduction to formal curriculum.
- Short Sharp task focused.
- Careful consideration for when English and Math's timetabled.
- For students with social emotional and mental health difficulties.
- This curriculum offers a bridge between our Explorer and Navigator curriculum's.
- Students can follow a GCSE Pathway, Entry Level Pathway or both dependent on needs.
- Flexibility within the curriculum to meet social and emotional needs.

7V - Venture Curriculum – Science 6 Lessons Weekly

Click here for [SoW access](#)

Click here for [baseline](#)

Year	2021 – 2022 Autumn 1 Unit 1	2021 – 2022 Autumn 2 Unit 2	2021 – 2022 Spring 1 Unit 3	2021 – 2022 Spring 2 Unit 4	2021 – 2022 Summer 1 Unit 5	2021 – 2022 Summer 2 Unit 6
	<p>Topic: Intro to Lab B1 Cells, B2 Structure and function of body systems.</p> <p>Suggested Key Questions: What are cells? What are the various systems within the body and what do they do?</p> <p>Key Skills and Knowledge: B1</p> <ul style="list-style-type: none"> - Describe what a cell is. - Explain how to use a microscope to observe a cell. - Describe the similarities and differences between plant and animal cells. - Describe the functions of the 	<p>Topic: B3 Reproduction (plant – focus), C1 The particle model.</p> <p>Suggested Key Questions: How do plants reproduce? What are particles and how are they used to model behavior in the states of matter?</p> <p>Key Skills and Knowledge: B3</p> <ul style="list-style-type: none"> - Name the parts of a flower. - State what is meant by pollination. - Name two methods of pollination. - Describe the process of fertilisation in plants. 	<p>Topic: C2 Elements, atoms and compounds, C3 Reactions</p> <p>Suggested Key Questions: What are elements, atoms and compounds? What is a chemical reaction?</p> <p>Key Skills and Knowledge: C2</p> <ul style="list-style-type: none"> - State what an element is. - Recall the chemical symbols of six elements. - State what atoms are. - Compare the properties of one atom of an element to the properties of many atoms. 	<p>Topic: C4 Acids and alkalis P1 Forces</p> <p>Suggested Key Questions: What are acids and alkalis? What do forces do and are the different types of forces?</p> <p>Key Skills and Knowledge: C4</p> <ul style="list-style-type: none"> - Name some common properties of acids and alkalis. - Describe, in simple terms, what the key words 'concentrated' and 'dilute' mean/ - Describe broad colours of universal indicator for acids, 	<p>Topic: B3 Reproduction - Link to PSHE during this half term. P2 Sound.</p> <p>Suggested Key Questions: How do humans reproduce? What are the properties of sound?</p> <p>Key Skills and Knowledge: B3</p> <ul style="list-style-type: none"> - State the definitions for adolescence and puberty. - State changes to the bodies of boys and girls during puberty. - Name the main structures of the male and female 	<p>Topic: P3 Light, P4 Space – Link to man on the moon.</p> <p>Suggested Key Questions: What are the properties of light? What do we know about the solar system?</p> <p>Key Skills and Knowledge: P3</p> <ul style="list-style-type: none"> - Describe what happens when light interacts with materials. - State the speed of light. - Describe the features of a mirror image. - Identify examples of specular reflection

	<p>components of a cell.</p> <ul style="list-style-type: none"> - Describe examples of specialised animal cells. - Describe examples of specialised plant cells. - Name some substances that move into and out of cells. - Describe the process of diffusion. - Name an example of a unicellular organism. - Identify some structures in an amoeba. <p>B2</p> <ul style="list-style-type: none"> - Name the parts of the gas exchange system. - State that the parts of the gas exchange system are adapted to their function. - Describe the processes of inhaling and exhaling. - Describe how a bell jar can be used to model what happens during breathing. - Describe the structure of the skeleton. - Describe the functions of the skeletal system. - Describe the role of joints in movement. - Explain how to measure the force 	<ul style="list-style-type: none"> - Describe how seeds and fruits are formed. - State what is meant by seed dispersal. - Name the methods of seed dispersal. <p>C1</p> <ul style="list-style-type: none"> - Describe how materials are made up of particles. - Use the particle model to explain why different materials have different properties. - Describe the properties of a substance in its three states. - Use ideas about particles to explain the properties of a substance in its three states. - Use the particle model to explain changes of state involving solids and liquids. - Use the particle model to explain boiling. - - Describe changes of state involving gases. - Use the particle model to explain evaporation, condensation, and sublimation. - Use the particle model to explain diffusion. - Describe evidence for diffusion. 	<ul style="list-style-type: none"> - State what elements and compounds are different. - Identify elements within compounds. - State how many different elements are in a compound by looking at a chemical formula. - Name the elements in a compound. <p>C3</p> <ul style="list-style-type: none"> - State what a chemical reaction is. - State what happens to the reactants in a chemical reaction. - State some signs of a chemical reaction. - Identify reactants and products in word equations. - Write word equations to represent chemical reactions. - State what a fuel is. - State what fuels react with when they burn. - State simply what a decomposition reaction is. - Describe the products of a decomposition reaction. - State what happens to the mass of the reactants and products in chemical reactions. 	<p>alkalis, and neutral solutions.</p> <ul style="list-style-type: none"> - State that indicators will be different colours in acids, alkalis, and neutral solutions. - State simply what happens during a neutralisation reaction. - Give one example of a neutralisation reaction. - State the type of chemical made when an acid and alkali react. - Match the type of salt that will form from the type of acid used. <p>P1</p> <ul style="list-style-type: none"> - Explain what forces do. - Describe what is meant by an interaction pair. - State an example of a force deforming an object. - Recognise a support force. - Describe the effect of drag forces and friction. - Explain why drag forces and friction arise. - Describe the effects of a field. - Describe the effect of gravitational forces on Earth and in space. - Identify familiar situations of 	<p>reproductive system.</p> <ul style="list-style-type: none"> - State a function of the main structures of the male and female reproductive system. - State the definition of gametes. - State what is meant by fertilisation. - State the definition of gestation. - State how long a pregnancy lasts. - State a simple definition of the menstrual cycle. - State the main stages in the menstrual cycle. - Present key pieces of information in a sequence. <p>P2</p> <ul style="list-style-type: none"> - State some features of waves. - State what happens when waves hit a barrier. - State that waves in the same place affect each other. - Name some sources of sound/ - Name materials that sound can travel through. - State that sound travels more slowly than light. - Describe the link between loudness and amplitude. - Describe the link between frequency and pitch. 	<p>and diffuse scattering.</p> <ul style="list-style-type: none"> - Describe and explain what happens when light is refracted. - Describe what happens when light travels through a lens. - Name parts of the eye. - Describe how the eye works. - Explain what happens when light passes through a prism. - Describe how primary colours add to make secondary colours. <p>P4</p> <ul style="list-style-type: none"> - Name some objects seen in the night sky. - Place some objects seen in the night sky in size order. - Name the objects in the Solar System. - Describe some similarities and differences between the planets of the Solar System. - Describe differences between seasons. - Describe the motions of the Sun, stars, and Moon across the sky. - Describe the phases of the Moon. - Explain why you see phases of the Moon.
--	---	--	---	---	--	---

<p>exerted by different muscles.</p> <ul style="list-style-type: none"> - State the function of major muscle groups. - State the definition of antagonistic muscles. <p>Key Skills: EP1 Asking scientific questions</p> <ul style="list-style-type: none"> • Begin to identify an observation that could be recorded or measured over time. <p>EP2 Planning investigations</p> <ul style="list-style-type: none"> • Carry out the method carefully and consistently. • Begin to identify risks and hazards. <p>EP3 Collecting, recording, and presenting data</p> <ul style="list-style-type: none"> • Record observations. <p>EP4 Analysing patterns in data</p> <ul style="list-style-type: none"> • Begin to identify a pattern in data from a results table or bar chart with support and guidance. • Begin to make a conclusion with some support. 	<p>- Describe simply what gas pressure is.</p> <ul style="list-style-type: none"> - State examples of gas pressure in everyday situations. <p>Key Skills: EP1 Asking scientific questions</p> <ul style="list-style-type: none"> • Begin to identify an observation that could be recorded or measured over time. <p>EP2 Planning investigations</p> <ul style="list-style-type: none"> • Carry out the method carefully and consistently. • Begin to identify risks and hazards. <p>EP3 Collecting, recording, and presenting data</p> <ul style="list-style-type: none"> • Record observations. <p>EP4 Analysing patterns in data</p> <ul style="list-style-type: none"> • Begin to identify a pattern in data from a results table or bar chart with support and guidance. • Begin to make a conclusion with some support. 	<p>- Describe how to find out the mass of a reactant or product.</p> <ul style="list-style-type: none"> - State simply what happens in endothermic and exothermic changes. - Identify a reaction as endothermic or exothermic. <p>Key Skills: EP1 Asking scientific questions</p> <ul style="list-style-type: none"> • Begin to identify an observation that could be recorded or measured over time. <p>EP2 Planning investigations</p> <ul style="list-style-type: none"> • Carry out the method carefully and consistently. • Begin to identify risks and hazards. <p>EP3 Collecting, recording, and presenting data</p> <ul style="list-style-type: none"> • Record observations. <p>EP4 Analysing patterns in data</p> <ul style="list-style-type: none"> • Begin to identify a pattern in data from a results table or bar chart with support and guidance. 	<p>balanced and unbalanced forces.</p> <ul style="list-style-type: none"> - Define equilibrium. - Identify when the speed or direction of motion of an object changes. <p>Key Skills: EP1 Asking scientific questions</p> <ul style="list-style-type: none"> • Begin to identify an observation that could be recorded or measured over time. <p>EP2 Planning investigations</p> <ul style="list-style-type: none"> • Carry out the method carefully and consistently. • Begin to identify risks and hazards. <p>EP3 Collecting, recording, and presenting data</p> <ul style="list-style-type: none"> • Record observations. <p>EP4 Analysing patterns in data</p> <ul style="list-style-type: none"> • Begin to identify a pattern in data from a results table or bar chart with support and guidance. 	<p>- Describe how the ear works.</p> <ul style="list-style-type: none"> - Describe how your hearing can be damaged. - Describe what ultrasound is. - Describe some uses of ultrasound. <p>Key Skills: EP1 Asking scientific questions</p> <ul style="list-style-type: none"> • Begin to identify an observation that could be recorded or measured over time. <p>EP2 Planning investigations</p> <ul style="list-style-type: none"> • Carry out the method carefully and consistently. • Begin to identify risks and hazards. <p>EP3 Collecting, recording, and presenting data</p> <ul style="list-style-type: none"> • Record observations. <p>EP4 Analysing patterns in data</p> <ul style="list-style-type: none"> • Begin to identify a pattern in data from a results table or bar chart with support and guidance. • Begin to make a conclusion with some support. 	<p>Key Skills: EP1 Asking scientific questions</p> <ul style="list-style-type: none"> • Begin to identify an observation that could be recorded or measured over time. <p>EP2 Planning investigations</p> <ul style="list-style-type: none"> • Carry out the method carefully and consistently. • Begin to identify risks and hazards. <p>EP3 Collecting, recording, and presenting data</p> <ul style="list-style-type: none"> • Record observations. <p>EP4 Analysing patterns in data</p> <ul style="list-style-type: none"> • Begin to identify a pattern in data from a results table or bar chart with support and guidance. • Begin to make a conclusion with some support.
--	---	---	---	---	---

	EP5 Evaluating data and methods.	EP5 Evaluating data and methods.	<ul style="list-style-type: none"> • Begin to make a conclusion with some support. EP5 Evaluating data and methods.	<ul style="list-style-type: none"> • Begin to make a conclusion with some support. EP5 Evaluating data and methods.	<ul style="list-style-type: none"> • Begin to make a conclusion with some support. EP5 Evaluating data and methods.	EP5 Evaluating data and methods.
Links to Gatsby Benchmarks:	<p>Benchmark 2, – Learning from the Career and Labor Market information. Benchmark 3 – Addressing the needs of the student and * - Personal Guidance</p> <p>Students to consider what skills are needed to be a police officer or a detective... lead onto looking at what skills are needed for different roles they are interested in and what qualifications.</p>	<p>Benchmark 2, – Learning from the Career and Labor Market information. Benchmark 3 – Addressing the needs of the student and * - Personal Guidance Benchmark 4 – Linking Curriculum to learning Benchmark 8 – Personal Guidance</p> <p>Students to consider what skills are needed to access the opportunities they are interested in. Going into work places/remote visits. Research. Writing C.Vs and cover letters.</p>	<p>Benchmark 2, – Learning from the Career and Labor Market information. Benchmark 3 – Addressing the needs of the student and * - Personal Guidance Benchmark 5- Encounters with employers and employees</p> <p>Students to consider what skills are needed to access the opportunities they are interested in. Research.</p>	<p>Benchmark 2, – Learning from the Career and Labor Market information. Benchmark 3 – Addressing the needs of the student and * - Personal Guidance Benchmark 5- Encounters with employers and employees</p> <p>Students to consider what skills are needed to access the opportunities they are interested in. Research.</p>	<p>Benchmark 2, – Learning from the Career and Labor Market information. Benchmark 3 – Addressing the needs of the student and * - Personal Guidance Benchmark 6 – Experience of Work places</p> <p>Students to consider what skills are needed to access the opportunities they are interested in. Looking at careers in sports and researching sports.</p>	<p>Benchmark 2, – Learning from the Career and Labor Market information. Benchmark 3 – Addressing the needs of the student and * - Personal Guidance Benchmark 6 – Experience of Work places</p> <p>Students to consider what skills are needed to access the opportunities they are interested in. Looking at careers in sports and researching sports.</p>