The Avon Valley School – Year 9 Curriculum

	*Topics may slightly overlap school terms		
	Autumn	**Spring**	**Summer**
English	**AVS short stories anthology:** students explore a diverse range of short stories focusing on the writer's craft. They also have the opportunity to write creatively and analytically. **Animal farm:** students move from studying short stories to reading a modern novel exploring the symbiotic relationship between a text and the context in which it is set.	**The author's craft: fiction** Students move from studying short stories and novels to creating their own texts within this creative unit. **Poetry: making connections** Students develop their analysis of poetry, practising the skills needed to respond personally and analytically to texts, including those of an unseen nature..	**An inspector calls:** students study a modern play where themes including social responsibility, class and gender are explored, allowing students to question a number of key issues in society.
Maths	Topics Below: All of these areas are delivered in small parts, and are no more than a couple of weeks in duration. All topics are interrelated and constantly refer to others. Each topic will consist of problem solving, challenge, and hence have a need for resilience. Alongside this is a constant need to recall basic facts and revisit older topics. All topics can be studied and practised on www.drfrostmaths.com and https://maths.sparx-learning.com		
	Calculations Expressions Angles & Polygons Formulae and functions Constructions Handling Data Fractions, Decimals & Percentages	Fractions, Decimals & Percentages Formulae & Functions Equations Formulae & Functions Working in 2D and area (including Pythagoras) Probability	Working in 2D- Area, Volume and Transformations Estimating Measures and accuracy Fractions, decimals and Percentages Graphs Transformations Ratio and Proportion Handling Data
Science	**All of these areas are delivered alongside the department's homework tool - Tassomai. Students will be introduced to a range of curriculum content from all KS3 areas via tassomai. This enables them to be ambitious with their learning, pre-learn topics and develop their recall skills.**		
	The Human Body - This topic looks at how the human body is organised and how the bones and muscles work together to create movement. It also introduces how the body responds to exercise and basic fitness concepts like heart rate and stamina. **Forces** - This topic explores different types of forces and how they affect movement and objects in everyday situations. It covers pressure, motion, and how forces can be represented and measured using diagrams and graphs. **Chemical properties -** This topic introduces different types of materials and their properties, including how matter is made of particles and how it can change state. It also explores metals, mixtures, and modern materials, as well as how heat and chemical change affect substances.	**Health & Disease -** This topic explores what it means to be healthy and fit, and how lifestyle choices affect the body. It also looks at different types of diseases, how they spread or develop, and ways to reduce health risks through balanced choices. **Pollution -** This topic explores pollution and climate change, focusing on how human activities and natural processes affect the environment. Includes types of pollution, how pollution can be cleaned up, and the role of science in monitoring pollution levels. Finally, the topic highlights the importance of global cooperation and scientific decision-making in reducing pollution and tackling climate change. **Cells -** This topic introduces cell biology, focusing on the structure and function of cells. Students learn about cell size and microscopes, including using a light microscope as a	**Energy** - This topic explores energy in physics, covering potential and kinetic energy, and how energy is transferred through work and power. Students learn about specific heat, including a required practical to measure it, and examine how energy is dissipated in systems. The topic also introduces efficiency, showing how energy transfer can be optimised and how losses affect real-world applications. **Atomic structure and periodic table** - This topic explores atomic structure and the periodic table, covering elements, compounds, and mixtures, and how substances can be separated. Students learn about the development of atomic models, including sub-atomic particles and electron arrangements, and examine how chemical formulas and equations represent reactions and the ratios of atoms.

		required practical. The topic compares eukaryotic and prokaryotic cells, explores cell division through mitosis and meiosis, and explains how cells differentiate to form specialised tissues and organs.	
History	**World War Two :** Students will learn about the key events of WWII, including Dunkirk, the Battle of Britain, and D-Day. They will explore life on the home front, the roles of women and children, and Britain's alliances, ending with the war's impact on Europe.	**The Holocaust :** Students will learn about the systematic persecution and murder of six million Jews and other groups by Nazi Germany. They will explore life before the war, the Final Solution, ghettos, concentration camps, and the human stories of suffering and survival.	**The Cold War:** Students will learn about the tension between the USA and the Soviet Union after WWII. They will explore key events like the Berlin Wall, Cuban Missile Crisis, Vietnam War, and the Space Race, understanding the global struggle for power and influence. **American Civil Rights:** Students will learn about the fight for racial equality in the USA after WWII. They will study landmark events like Brown v. Board of Education, the Montgomery Bus Boycott, and the March on Washington, examining how people challenged injustice and promoted civil rights.
Geography -	**Superpowers** Students learn about the rise and fall of countries that can be called Super powers. The UK, China, Russia and India are all studied and the opportunities and challenges that come with being a super power are examined **Middle East:** Students learn a detailed case study of the Middle East region, including physical and human features of the region.	**Natural resources - Can earth cope?:** Students learn about the importance of natural resources, the consequence of the exploitation of them, and how to manage them more sustainably. **How do Disaster Risk Managers reduce the harm from natural hazards?** Students learn about tectonic hazards; the causes, consequences and solutions to minimise risk	**Coastline of the UK:** Students learn about the coastline of the UK, how it is shaped, and how it shapes human behaviour. **Rocks and geological timescales:** Students learn about the geological timescale, main rock types and human interaction with rock landscapes such as quarrying.
Computing	**Python programming with sequences of data:** Students learn sequence, selection, iteration, and string/list manipulation in Python. They develop computational thinking, problem-solving, and coding skills through practical projects, gradually increasing in complexity and real-world relevance.	**Media: animations:** Students explore 3D modelling and animation using industry-standard software. They develop creativity, technical skills, and project management while linking computer science concepts to practical and media applications. **Data science:** Students will learn how to use data to investigate problems and make real-world decisions. They will explore local and global data, spot patterns, create visualisations, and use an investigative approach to solve problems, including challenges in their school.	**Representations: going audiovisual:** Students learn how images and sounds are represented using binary digits. They will explore digital media, manipulate images and audio using software like Audacity, and understand how digital representations work in real-world applications. **Introduction to Cybersecurity:** Students will learn how to stay safe online and protect data. They will explore common cybercrimes like hacking and malware, understand social engineering tricks, and discover methods to secure networks and personal information.
Art	**Independent themed projects** Students work on an independent basis. They have 5 different themes to pick from. "Archetecture", "Natural Forms", "Bugs and Butterflies", "Still Life" and "Sea Creatures". Students will then gather their own images, research different artists and techniques and create an individual body of work. Students will use a range of different media and work in many different styles. Projects are student led with teacher support to ensure the students are able to produce their best outcomes, making progress over the year.		
DT - Textiles	**Year 9 Technology students have two timetabled lessons per fortnight, delivered across two different material areas. As a result, students work with each Technology teacher once per fortnight.** *Class groupings are determined by the Performing Arts faculty.* Students work independently and choose one of two themes: **Food & Drink** or **Flora & Fauna**. This unit of work introduces students to designing from a single starting point or theme. Students will develop critical thinking and problem-solving skills as they generate, refine, record, and present their ideas. They will follow an **iterative design process**, testing, evaluating, and refining their ideas, designs, and outcomes throughout the project. Students will explore contextual references, both traditional and contemporary, analysing the work of professional designers and artists to broaden and deepen their understanding. They will investigate their chosen theme and create visual mood boards in response to their starting point (Food & Drink or Flora & Fauna). Throughout the unit, students will experiment with a wide range of tools, techniques, and materials to develop and present a well-crafted, thoughtful outcome.		

DT - Catering	Students will learn advanced food safety including the requirements for bacterial division and how to prevent it. Students will learn about the qualities to look for when buying foods and the correct storing conditions for different ingredients. Students will also gain an understanding of the effects of different cooking methods on nutrients and investigate food labelling regulations. Student will prepare and cook a variety of higher level dishes.		
DT - Product Design	Learners will explore the three core materials based on wood, metal and plastic, and will also be introduced to CAD (Computer Aided Design) to engrave a title onto their plaques using laser cut technology. The unit will introduce learners to the theoretical side of the three core materials used followed by smart connect and retrievals to secure their understanding in materials and CAD. For the practical element learners will firstly be introduced to health and safety within the workshop and the safe use of tools, machinery and equipment. Learners will then work with the core materials, use their individual observational skills, understand a basic engineering drawing and experience marking out to a visually clear degree of accuracy. Learners will independently use tools, machinery, equipment and be shown specialist techniques and surface treatments and finishes in order to produce a safe and usable product. Learners' practical abilities will also be documented throughout the making of their Hook and Plaque Project.		
Core PE	Students learn about activities such as outwitting opponents, accurate replication, safe exercise, maximum performance, orienteering/team building/coaching, team building and coaching.		
Drama	**Games:** Students learn to improve their level of individual skill and tactical awareness, as well as the principles of attack and defence in a range of indoor and outdoor games activities. Students perform skills in progressive practices and small game situations to maximise understanding and personal application. **Greek Theatre:** Developing an understanding of how Greek theatre was used and how it is relevant today. Focusing on Choral work, ensemble development through the exploration of Blood Brothers - Narration **Character Development:** Focusing on Role of the wall characters social class impact Vocal and physical skills requited to explore character and relationship. K&U social and historical aspect of the text Blood Brothers	**Gym and Trampolining:** Students learn the principles of body tension and learn basic gymnastic skills and movements, which are then transferred onto the trampoline. In both areas, students have to create, adapt and perform an individual routine showcasing their level of skill. **Arts inspiration:** Students develop their researching skills as they research an artist, craftsperson or arts practitioner. They are then required to present what they have learnt from their research, sharing key information about the person's arts practice, career, life and work.	**Athletics/Safe Exercise/Orienteering:** Students are encouraged to implement the safe principles of exercise and then try to maximise their performance in the athletic disciplines. Here they are encouraged to achieve personal bests in all activities by applying techniques learnt, alongside the motivation to improve. In orienteering, students develop the ability to map read, and to do so under increased pressure via various competitive orienteering challenges. **Arts skills share - passing on arts skills to others:** Students will take on the responsibility of creating and planning their own arts skills workshop. They will then deliver the workshop to their participants, and reflect on how well it went.
Adventure Youth Service	**First Aid:** Students will learn about different jobs involving First Aid. **Service**: Students will learn about different jobs involved in Forests and local woods, as well as job roles in gardening. **Rambling**: Exploring the National Trust and learning the Country Code. Students take part in a five-mile ramble.	**Cookery**: Students will cook a three-course meal on an open fire, serve the food and wash up. **Roadcraft:** Theory and assessment of keeping safe as a pedestrian, cyclist and knowing the Junior Highway Code. Students will also learn basic cycle maintenance.	**Interests**: A practical unit where students pursue particular interests for 3 months. **Campcraft:** Students learn how to look after themselves, including how to maintain their hygiene and safety, and how to pack their camping equipment. **Shield:** A unit of work about the codes of life. Students make a shield, demonstrating the codes of life that help people decide how to live their lives.
PSHE	**Peer influence, substance use and gangs:** Students learn about healthy and unhealthy friendships, developing assertiveness, the risks of substance misuse, and how to recognise and avoid gang exploitation. **Setting goals:** Students identify their skills, explore post-school options, develop decision-making abilities, take control of their career journey, learn about working and earning money, and understand the labour market.	**Respectful relationships:** Students learn about families, relationships, conflict resolution, and understanding relationship changes, with content that reflects diverse identities and inclusive romantic and sexual relationships. **Healthy lifestyle:** Students learn about diet, exercise, maintaining a balanced lifestyle, making healthy choices, and basic first aid.	**Intimate relationships (includes Sex Education):** Students learn about consent, contraception, the risks of STIs, attitudes to pornography, and applying consent in real-life and online/offline situations. **Employability skills:** Students learn about employability skills and how to manage a professional online presence.

RWV	**Living Well: Are Peace and Reconciliation Essential for Living Well?:** Students will learn how peace and reconciliation contribute to personal and global wellbeing. They will explore forgiveness, justice, and conflict resolution through religious and non-religious examples.	**Why Do People Commit Crimes?:** Students will learn about crime and punishment, exploring why people break the law. They will examine morality, social responsibility, and the impact of choices on society, linking to GCSE themes.	**Medical Issues**: Students will learn about moral and ethical questions surrounding life, death, and medical technology. They will explore how medical decisions affect individuals and society and consider differing perspectives.