Cranborne Middle School

Curriculum Overview

Y8 Autumn Term

Core subjects	
English	**The Genre Games** Year 8 begin the year by exploring a range of different genres. We begin with Science Fiction, using the novel 'I am Number Four' as a springboard. We also read and analyse different extracts from famous authors, including HG Wells, and children are encouraged to choose and read their own science fiction novels. We look at genre-wide themes; examine techniques used by authors to build a sense of panic and tension; and delve deeper into why the world of science fiction became, and remains, so popular. We then become entangled in the great Gothic tradition, as we investigate and compare how a sense of fear is created in 'Jayne Eyre' and 'The Woman in Black'. We develop our language analysis skills before using what we have learnt about foreshadowing and pathetic fallacy in our own writing. Finally, we immerse ourselves in the awakening of Frankenstein with the pupils producing their own monster awakening scene. We end the term by looking at autobiographical writing, exploring how events are structured and how language is used to engage the reader, before creating our own dramatic autobiographical encounters.
Maths	**Ratio and Scale** This unit focuses initially on ensuring that the children have a secure conceptual understanding of what is meant by the term 'ratio' and how various models can be used to represent ratio. Based on this understanding, it moves on to sharing in a ratio given the whole or one of the parts and how to use methods such as bar modelling to ensure the correct approach is to solving a problem is taken. After this, we look at simplifying ratios and using previous answers to deepen the understanding of equivalent ratio rather than 'cancelling' purely as a procedure. We also explore the links between ratio and fraction and to understand π as the ratio of the circumference of a circle to its diameter. We may also look at the concept of gradient in relation to ratio in this unit.
	Multiplicative Change Students now turn to doing some work on the link between ratio and scaling, including the idea of direct proportion, linking various forms including graphs where for example they may have to convert between currencies. This provides rich opportunities for problem solving. This work on conversion graphs will help prepare the pupils for more formal graphical work later in the term. Links are also made with maps and scales, and with the use of scale factors to find missing lengths in pairs of similar shapes.
	Multiplying and Dividing Fractions The unit will begin by reviewing the pupil's prior knowledge for how to add, subtract, multiply and divide with fractions. We will ensure that they can add and subtract fractions in a variety of contexts as well as multiply fractions by fractions and by integers. Likewise, they should be confident when dividing fractions by fractions and integers by fractions. They will need to know a range of efficient methods for doing this, including how to use the reciprocal for changing a division problem into a multiplication one. To build on this, children will learn how to do all of the above with improper fractions and mixed numbers, and will then learn how their knowledge about these processes can be represented algebraically. Problem solving and reasoning elements will be incorporated throughout all of the lessons.
	Working in the Cartesian Plane Building on their knowledge of coordinates from KS2, students will look formally at algebraic rules for straight line, starting with lines parallel to the axes and moving on to the more general form. They may explore notions of gradient and intercepts, but the main focus will be on using equations to produce lines. Doing this should also highlight to the children the similarities and differences between sequences, lists of coordinates and lines. We may also explore non-linear graphs and mid-points of line segments.
	Representing Data Students are introduced formally to bivariate data and the idea of linear correlation. They extend their knowledge of graphs and charts from KS2 to deal with both discrete and continuous data. Appropriate graphical representation for different data types will for a key part of the unit.
	Tables and Probability We revisit the concept of probability in this brief unit, in particular looking at sample spaces and the use of tables to represent these.
Science	**Light & Sound** In a thunderstorm, you see a flash of lightning and hear thunder. Your eyes and hears detect light and sound. In this 'Big Idea', pupils learn: how you hear sounds; what changes when you make sounds of different pitch and loudness; how we see objects; and how light behaves when it hits different materials.
	Breathing & Digestion What do we need to stay healthy? In this 'Big Idea', pupils learn: how we breathe; how smoking, drinking alcohol and taking drugs can damage the respiratory system; what makes a balanced diet; how your body breaks down the food you eat to release energy; and what other nutrients you need to live and grow.
	Elements & Periodic Table What is stuff made from? In this 'Big Idea', pupils learn: what elements make up everything in the Universe; how elements can be classified; and the patterns in the physical and chemical properties of different elements.

Foundation subjects	
Art	**Little things LARGE** The aims of this project are for pupils to develop and extend their observational drawing skill, using a variety of small objects in a range of media. Different enlarging techniques are taught and pupils' research and analyse the work of a chosen artist who also explores scale and viewpoint.
Computing	**Layers of computing systems** Exploring the fundamental elements that make up a computer system.
	Media - vector graphics Creating vector graphics through objects, layering, and path manipulation.
Design Technology	**Textiles:** Pupils will research textile artists to create a piece of textiles art which will be turned into a pencil case. Students will learn to attach a zip using the sewing machine.
French	**What are we going to do at the weekend? - Que va-t-on faire le weekend?** Students recall activities, prepositions and transport to describe their weekend activities. Students analyse and deduce information about others' plans and write about family members, using a wider range of present and future tense conjugation.
	What do we eat and drink when? - Nous mangeons et buvons quoi et quand? Students revise and add to their knowledge of foods, learning quantifiers and frequency adverbs to describe their eating habits in more depth. Students revise the future tense to say what they will eat and are introduced to the past tense to begin to describe what they ate and drank.
Geography	**Extreme Environments** Pupils will study a range of extreme environments, examining both hot and cold areas of the world. They will understand why we have these environments and how they can impact the world's landscapes.
History	**Henry VIII's Reformation** Pupils will understand the reasons behind Henry VIII's break with Rome and justify the main cause.
	Elizabeth I's Policies Children will discover how Elizabeth I took control of an England in danger, but ensured its safety into the Stuart era without an immediate heir.
Music	**Jazz** Pupils will explore the key musical features of Jazz, through performing, composing and listening.
	The Xmas Factor This project involves creating a Christmas cover version of a pre-existing pop song. It is run as a whole school competition.
Physical Education	**Netball** Consolidation of the skills needed to outwit opponents within games, applying fluency, greater accuracy and quality of technique. Refining skills to enable a greater number of options to outwit an opponent. An understanding of how to improve their performance will be required and pupils will be expected to lead coaching sessions and be confident in refereeing a game if needed.
	Gymnastics / Trampolining Children will demonstrate skills and abilities individually and combined. Fluent routines showing good tension, control, along with appropriate aesthetics will be demonstrated on both the floor and trampoline. Aerial shapes / turns will be combined to produce sequences. Children will learn how to do front and back somersaults and how to tarrif / judge a routine.
	Interval Training (HIIT) Children will be challenged to push themselves through a range of interval type tasks and challenges including: pyramid training, walk jog run, HIIT. Encouraging children to show resilience and understand that in order to improve fitness, the body needs to be pushed beyond its comfortable state.
	Indoor Rowing Children will develop their use of indoor rowing machines by extending to participating in a variety of relay styles challenges. All pupils will partake in the '3 minute challenge' in order to make selections for school teams. An understanding of how beneficial this activity is for long term heart health.
PSHCE	**Being Me in my World** Including: appreciating that identities are complex and can change over time; understanding individual identities and cultural identities; understanding that identity is affected by a range of factors, such as family; understanding that where they live can influence their identity and how we can make assumptions about other identities; understanding and respecting that there are a range of beliefs within any community and how it can affect their identity; and understand that they are a unique individual and can also have a range of group identities.
	Celebrating Difference Including: recognise, appreciate and understand that the similarities among all humans are greater than the differences; challenging social injustice and inequality, such as race; challenging social injustice and inequality, such as religion; arguing effectively and contributing assertively and supportively to current issues; making a positive contribution to their community and recognise the choices they make will impact on their ability to be socially mobile; and knowing how they can make a difference and take responsibility for their lives.
Religious Education	**Moral Issues** In this module, pupils will be looking at how people make moral decisions. They will consider how one decides what is right and wrong and then will examine the sources of moral guidance for Christians. Pupils will be expected to give their own opinions on the topics being studied, justify them and listen carefully to the views of others. This unit will start to

	prepare pupils for GCSE style questions where they will also be able to develop their essay writing skills. They will compare different Christian (and other religions, if time) beliefs about certain moral issues using biblical references. Pupils will explore personal beliefs about the death penalty or animal testing. In addition, they will sensitively challenge and try to understand other people's point of view through use of questioning.