



Cranborne Middle School

Curriculum Overview

Y8 Spring Term

Core subjects

English

Prejudice and Discrimination

The Spring term in Year 8 focuses on prejudice and discrimination and links in with their RE curriculum.

We begin by reading 'The Boy in the Striped Pyjamas', looking at how fiction is influenced by the world around it. We look closely at how a novel is structured, examining narrative viewpoint, foreshadowing, authorial perspective and themes. We make comparisons between this story and others with similar themes and pupils are encouraged to extend their independent reading, making links and connections.

The term continues with 'Romeo and Juliet' as we build on our Year 7 knowledge of Shakespeare and examine the play in depth, reading and understanding the language with greater independence. Themes of prejudice and discrimination are once again picked up as we look at the roles of women and the feud between the families. We investigate who was to blame for the deaths of Romeo and Juliet and use evidence from the play alongside our understanding of cultural expectations to form and justify our judgements. Once again, we make comparisons with other stories, including Malorie Blackman's 'Noughts and Crosses'.

Maths

Brackets, Equations and Inequalities

Building on their understanding of equivalence from KS2 and year 7, students will explore expanding over a single bracket and factorising by taking out common factors. We may also look at expanding two binomials. A core part of this unit will also involve students revisiting and extending their knowledge of solving equation, including where brackets are involved and potentially also when there are unknowns on both sides. Bar models will be used as a tool to help students make sense of the underlying concepts. Students will also learn to solve formal inequalities, learning the meaning of a solution set and exploring similarities and differences compared to solving equations. Emphasis will be placed on both forming and solving solutions rather than just looking at procedural methods of finding solutions.

Sequences

This short block builds upon pupils' prior learning, extending this to look at sequences with more complex algebraic rules now that students are more familiar with a wider range of notation. The higher strand includes finding a rule for the n^{th} term for a linear sequence, using objects and images as necessary to understand the meaning of the rule.

Indices

Before exploring the ideas behind the addition and subtraction laws of indices (which will be revisited when standard for is studied next term), the groundwork is laid by making sure students are comfortable with expressions involving powers, simplifying e.g. $3x^2y \times 5xy^3$. We will also look at finding powers of powers.

FDP

This block focuses on the relationship between fractions and percentages, including decimal equivalents, and using these to work out percentage increase and decrease. Students also explore expressing one number as a fraction and percentage of another. We will also look at finding the original value given a percentage or after a percentage change. Both calculator and non-calculator methods will be developed throughout to support students in choosing efficient methods. Financial maths may be developed in this unit through looking at concepts such as profit/loss/interest.

Standard Index Form

This unit builds on the work on indices from the previous term. The use of context is important to help students make sense of the need for the notation and its uses. Negative and fractional indices will also be introduced.

Number Sense

If needed, we will take this time to revisit a range of basic skills in a wide variety of contexts: estimation, mental strategies, metric conversion with \times and \div by 10, 100, 1000 in context. We could also look at solving problems using time and calendars. We may also look at the use of error notation and the conversion of area and volume units.

Science

Types of Reaction & Chemical Energy

Chemical reactions are vital to life. We depend on chemical reactions – including the products they make and the energy they transfer – for everything we do. In this 'Big Idea', pupils learn:

- what happens to atoms in chemical reactions
- how chemical reactions transfer energy
- why chemical reactions are important

Respiration & Photosynthesis

How do we get energy from food? In this 'Big Idea', pupils learn:

- how the body transfers energy from food so it can be used for movement, growth, and repair by the process of respiration
- how anaerobic respiration in micro-organisms can be used to make bread
- how plants produce food by the process of photosynthesis
- the structure of a leaf
- why minerals are required for healthy growth

Heating & Cooling

Athletes can use energy in chemical stores to run, jump or throw. Where does this energy end up? There are many different ways of transferring energy between stores. In this 'Big Idea', pupils learn:

- how energy is transferred with radiation and particles
- how energy transfer can be reduced

Foundation subjects	
Art	Animation: a Journey through Time The aims of this project are to learn about and explore techniques from a variety of early animation devices, culminating in a simple stop motion animation challenge using our Chromebooks.
Computing	Developing for the web Using HTML and CSS to create webpages.
	Representations - from clay to silicon Representing numbers and text using binary digits.
Design Technology	Product Design: Gumball Machines Pupils will build upon previous workshop skills learning to fine tune their precision in measuring and cutting by creating finger joints using a chisel. They will also have an introduction into mechanisms and create a functional gumball machine to house their favourite sweets.
French	How can I feel good about myself? - Comment puis-je me sentir bien? Students describe what they eat that is healthy & unhealthy, then revise transport, sports and frequency adverbs to say how often they do sports and how healthy that is, using 'il faut', devoir, imperatives+infinitive to encourage healthy behaviours. Students also revise clothing and BAGs adjectives to say what they wear to look good.
	What are the environmental problems? - Quels sont les problèmes environnementaux? Students learn names for biomes, pollution sources and solutions to describe environmental problems here and abroad. They use the past and future tenses to describe environmental changes. Extension opportunities include defending points of view, giving commands, and making simple recommendations. Students learn about Easter traditions in Francophone countries.
Geography	China Pupils will use China as a case study to learn about population, location, climate, culture, wealth and health. They will discover how a rapidly changing culture is interacting with its environment.
History	The English Civil War Pupils will study the lead up to Charles I's execution and consider whether Cromwell can be seen as a villain or hero.
	The British Empire In this unit, pupils will be introduced to what the British Empire was and will look at why Britain wanted an Empire.
Music	Canon Pupils will explore the key musical features of Baroque Music, through performing, composing and listening. They will focus of studying Pachelbel's Canon and will learn to perform it both individually and as an ensemble.
Physical Education	Dance Based on the theme of 'Ghostly Tales', students will learn a motif set to the Thriller song by Michael Jackson. In groups they will choreograph two further dance routines to famous horror film soundtracks. One based upon zombies, whilst the other, a more open ended task, is about suspense and fear. Peer assessment will be included within the sessions, and children will help devise and lead an appropriate warm up and cool down.
	Football 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.
	Circuit Training A continuation of the activity of circuit training. Allowing children to experience setting their own activities and exercises. Becoming familiar with sets and reps and understanding how to adapt these in order to improve fitness. Children will know and understand the difference between strength circuits and cardiovascular circuits and the reasons why people might do both.
	Box Fit A development of the activity of Box Fit. Children will recap the different techniques associated with the sport of boxing including a range of punch and kick techniques, using the gloves and pads before starting to link movements together. Knowledge and understanding of the short and long term effects of exercise on our bodies, extending up to GCSE level with high level activity appropriate use of vocabulary such as vasodilation, vasoconstriction, heart-rate training zones and radial and carotid pulse points.
PSHCE	Healthy Me Including: understanding how health can be affected by emotions and know a range of ways to keep themselves well and happy; knowing how to perform basic CPR and how different substances can affect the body; and understanding the role of medicines and explaining the differing views on this.
	YGAM unit: Including: recognise how gambling might impact health and wellbeing; understand why some young people may gamble and the risks; research topics and share information in a suitable manner; recognise how gaming might impact health and wellbeing; understand why some young people may game and some risks associated with gaming; understand the rules of probability and how it relates to gambling; understand how the gambling industry works and the financial risks of gambling; and to use researching skills to find information and share findings and opinion.
	Dreams and Goals Including: knowing what some of their short and medium-term goals are and how they can achieve them; knowing what some of their long-term goals are and how they can achieve them; knowing about different types of business, how they are organised and financed; explaining why it is important to keep track of spending; making reasoned judgements about spending; and understanding some of the positive and negative roles that money can play in society.

Religious Education	<p>Prejudice and Discrimination</p> <p>This unit is designed to get pupils reflecting on how they look at and treat others, encouraging them to re-evaluate preconceptions they might hold. They will learn the key terms prejudice and discrimination and the difference between them as well as exploring the different types of prejudice and discrimination: Sexism, Ageism and Racism (including discrimination against the Traveller and Gypsy communities.)</p>
	<p>The Holocaust</p> <p>Pupils also examine a specific example of religious racism in history through the Holocaust. They will attend an event to hear a survivor of the Holocaust speak and produce a creative project based on their response to what they have learnt. This unit also helps to inform the 'The Boy in the Striped Pyjamas' novel studied in English.</p>