

## Year 8 Half Term 4 Curriculum

Subject	Half Term 4 – Topic/Summary of Powerful Knowledge
English	<p><u>Terror and Horror (Gothic Fiction):</u></p> <ul style="list-style-type: none"> <li>• Science vs Nature – develop understanding of social anxiety portrayed in Gothic Literature</li> <li>• Analysis of conceptual metaphor</li> <li>• The outsider archetype</li> <li>• The theme of isolation</li> <li>• Representation of women as absent, seductress or victim</li> </ul> <p>Main text: <i>Frankenstein</i> (Shelley)</p>
Maths	<p><u>Fractions &amp; percentages</u></p> <ul style="list-style-type: none"> <li>• Convert fluently between key fractions decimals and percentages</li> <li>• Calculate key fractions, decimals and percentages of an amount without a calculator</li> <li>• Calculate fractions, decimals and percentages of an amount using calculator methods</li> <li>• Convert between decimals and percentages greater than 100%</li> <li>• Percentage decrease with a multiplier</li> <li>• Calculate percentage increase and decrease using a multiplier</li> <li>• Express one number as a fraction or a percentage of another without a calculator</li> <li>• Express one number as a fraction or a percentage of another using calculator methods</li> <li>• Work with percentage change</li> <li>• Choose appropriate methods to solve percentage problems</li> <li>• Find the original amount given the percentage less than 100%</li> <li>• Find the original amount given the percentage greater than 100%</li> <li>• Choose appropriate methods to solve complex percentage problems</li> </ul> <p><u>Standard index form</u></p> <ul style="list-style-type: none"> <li>• Investigate positive powers of 10</li> <li>• Work with numbers greater than 1 in standard form</li> <li>• Investigate negative powers of 10</li> <li>• Work with numbers between 0 and 1 in standard form</li> <li>• Compare and order numbers in standard form</li> <li>• Mentally calculate with numbers in standard form</li> <li>• Add and subtract numbers in standard form</li> <li>• Multiply and divide numbers in standard form</li> <li>• Use a calculator to work with numbers in standard form</li> <li>• Understand and use negative indices</li> <li>• Understand and use fractional indices</li> </ul> <p><u>Number sense</u></p> <ul style="list-style-type: none"> <li>• Round numbers to powers of 10 and 1 significant figure</li> <li>• Round numbers to a given number of decimal places</li> <li>• Estimate the answer to a calculation</li> <li>• Understand and use error interval notation</li> <li>• Calculate using the order of operations</li> <li>• Calculate with money</li> <li>• Convert metric measures of lengths</li> </ul>

	<ul style="list-style-type: none"> <li>• Convert metric units of weight and capacity</li> <li>• Convert metric units of area</li> <li>• Convert metric units of volume</li> <li>• Solve problems involving time and the calendar</li> </ul>
Science	<u>Energy 2 reactions 2</u> <ul style="list-style-type: none"> <li>• Work energy and machines</li> <li>• Energy and temperature</li> <li>• Energy transfer</li> <li>• Radiation and insulation</li> </ul> <u>Reactions 2</u> <ul style="list-style-type: none"> <li>• Atoms in chemical reactions</li> <li>• Combustion</li> <li>• Thermal decomposition</li> <li>• Conservation of mass</li> <li>• Exothermic and endo thermic</li> <li>• Energy level diagrams</li> <li>• Bond energies</li> </ul>
History	<u>Democracy in Britain,</u> <ul style="list-style-type: none"> <li>• Magna Carta</li> <li>• Peasants Revolt</li> <li>• Civil War,</li> <li>• Peterloo Massacre</li> <li>• Chartists</li> </ul>
Geography	<u>Population:</u> <ul style="list-style-type: none"> <li>• Causes of migration</li> <li>• Effects of migration</li> <li>• The American Dream</li> <li>• Migration and the UK</li> </ul>
Spanish	<u>Las Vacaciones:</u> <ul style="list-style-type: none"> <li>• Talking about a past holiday.</li> <li>• The Preterite tense</li> <li>• Opinions in the past</li> </ul>
Art	<u>Urban Surroundings - Colour and Painting;</u> <ul style="list-style-type: none"> <li>• Developing a composition</li> <li>• Complete a watercolour painting. Improve skills in record tone, texture and form. Include references to complementary / harmonious colours.</li> <li>• Develop skills in press print</li> </ul>
Computing	<u>Animation</u> <ul style="list-style-type: none"> <li>• Learn to use animation software</li> <li>• Basic graphic drawing for animation</li> <li>• Animation techniques</li> <li>• Undertake an animation project</li> </ul>
DT	<u>Key Rings</u> <ul style="list-style-type: none"> <li>• Understand the differences of thermosetting and thermoforming polymers and the environmental impact</li> <li>• Design and manufacturing through computer aided design and computer aided manufacture</li> <li>• Using tools and equipment safely in the workshop environment</li> </ul>

	<ul style="list-style-type: none"> <li>• Understanding working properties of timber and the different joining techniques</li> <li>• Applying different drawing techniques (freehand sketching/perspective/rendering/shading)</li> </ul>
Food Preparation & Nutrition	<u>Factors that affect food choices</u> <ul style="list-style-type: none"> <li>• Hydration</li> <li>• Allergens</li> <li>• Bacteria source and symptoms of E-coli and salmonella, staphylococcus aureus, campylobacter, bacillus, preventing cross contamination/cause of food poisoning</li> <li>• Smoothies</li> <li>• Sesame noodles</li> <li>• Salt and pepper chicken</li> </ul>
Drama	<u>Devising – Explorative Strategies</u> <ul style="list-style-type: none"> <li>• Recognition and conventions of dramatic genres</li> <li>• Development of the techniques</li> <li>• Use and role of narrator</li> <li>• Still Image as a narrative technique and to refine the physicality of a character</li> <li>• Responding to a stimulus</li> </ul>
Music	<u>Composing Using Loops</u> <ul style="list-style-type: none"> <li>• The purpose of a loop.</li> <li>• How a piece of music is constructed using loops.</li> <li>• Creating their own loop patterns.</li> <li>• Using music software to edit, improve and enhance their own music.</li> <li>• Creating music within a given structure.</li> <li>• Adding additional sections to a piece of music to extend and develop their musical ideas.</li> <li>• Critically comment on a composition.</li> <li>• Applying dynamics and tempo to a composition.</li> </ul>
PE	<u>Development of skills and tactics in one of the following sports swimming, gymnastics, softball athletics and badminton.</u> <ul style="list-style-type: none"> <li>• Focus on muscles and muscles movements related to sporting actions.</li> <li>• Participation in an interform competition.</li> <li>• Continual development of fitness levels and knowledge of fartlek training.</li> </ul>
RE/PSHE	<u>Respecting Others:</u> <ul style="list-style-type: none"> <li>• Where do we see faith-based conflict in the world?</li> <li>• Extremism</li> <li>• Racism and faith-based prejudice</li> <li>• How does religion work for peace in our society?</li> </ul>