EXHALL GRANGE SPECIALIST SCHOOL
Be your best self

Year 8 Curriculum

Study Overview

	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
Art	Mask Making Development of a 2 dimensional image into a three dimensional artwork. Study venetian mask makers	Colour and abstraction Colour mixing and how to develop a piece of abstract art. Artist Study Kandinsky.	Colour and Still Life Record from direct observation and learn effective techniques when exploring elements such as line, tone, shape, pattern, texture and colour.	Abstract landscapes Development of ideas.	Fantasy Architecture Single point and double point perspective.	Harry Potter Wands Research skills, development of ideas
Computing	Media – Vector graphics. Defining vector graphics Creating and editing vector graphics Where can and should they be used?	Computing systems Parts of a computer system Logic in computer systems Sharing data between computers	Developing for the web How to construct a web page How to use the WWW effectively	Representations – from clay to silicon Binary and data representation Storage on computers	Mobile app development Defining apps Designing and implementing an app	Introduction to Python programming Principles behind python From Scratch to Python
English	Baseline Assessment AR Tests (3 weeks) Gothic Horror – study of extracts Mary Shelley (Author Study)	Poetry Portraits Of People (Pre and Post 1900)	Shakespeare Tempest / A Midsummer Night's Dream	Non-Fiction Travels and Tribulations	Science Fiction Study of extracts and short stories	Study of a Novel A Monster Calls Patrick Ness (Author Study) KS3 Year 8 AQA Paper 1 Exam Revision
Food	Eatwell guide Measuring skills Food hygiene and safety	Knife skills Diet and energy needs Food hygiene and safety	Using the cooker safely Knife safety Food labelling, Food hygiene and safety	Sensory evaluation Use of electrical equipment. Food hygiene and safety	Seasonality Food commodities Food hygiene and safety	Food wastage Food provenance Food hygiene and safety
Modern Foreign Languages	Sports and Hobbies using je joue and je fais Talking about the internet using er verbs	Sports and hobbies Talking about what you like doing. TV, film and books	Local Area Places in the town Directions, On peut Invitations	Paris Saying you like doing and can do Tourist information, Describing a visit	School and Education School subjects Opinions, time food	Introduction to holiday and revision Holidays, Daily routine Buying food and drink
Mathematics	Number Times tables, Bidmas, Place value, Short/long multiplication, Add and subtract, Square numbers,Cube numbers Negative numbers on scales	Algebra Simplifying, Recognise next number in a sequence, Substitute numbers into expressions	Fractions, decimals, percentages, ratio	Statistics Draw / Interpret charts and diagrams	Measures Tell time using analogue and digital clocks, Read scales with variety of divisions, Identify standard metric units	Geometry Perimeter of 2D shape lines of symmetry Name 2D and 3D shapes

Geography	Coasts Definition, human and natural features of a coastline Waves, erosions and deposition.	Tourism Advantages and disadvantages National parks Eco Tourism	Weather and Climate What's the difference? What causes weather? Factors that influence climate.	Urbanisation Comparing populations, growth and urbanisation across the world.	Asia. Review continents. Countries within Asia, physical features and biomes.	China Focus on southwest China, human and physical features
History	The Tudors: Richard III: Innocent or Guilty?, Henry VII: Controlling England, Henry VIII's Six Wives, The Reformation, Edward VI: The Boy King, Mary I: Was she really "bloody"?, Elizabeth I: Challenges	The New World: Who discovered the New World?, English Explorers, People of the New World, Aztecs, Native Americans.	The Stuarts: James I: Gunpowder Plot, Witch Hunting Craze, Why did the Civil War start?, Key Battles, The Execution of Charles I, Oliver Cromwell, Charles II, Plague and Fire.	The Slave Trade: Why did Slavery Exist?, The Triangular Trade, The Middle Passage, Slave Auctions, Life as a Slave, The Road to Freedom.	Industry and Reform: The Agricultural Revolution, Urbanisation, Transport, The Industrial Revolution, Richard Arkwright and the Factory System, Brunel.	Industry and Reform Part 2: Poor Law and Workhouses, Victorian Reformers, Victorian Cities, Victorian Schools, Victorian Leisure.
PE	Games and Fitness	Gymnastics, Movement and Trampolining	Games and Fitness	Dance, Movement and Fitness	Athletics and Fitness	Striking and Fielding Activities
Swimming	Front crawl, Back stroke, Breast stroke, push and gliding	Front crawl, Back stroke, breast stroke, push and gliding	Front crawl, Back Stroke, Breast stroke,	Front crawl, Back Stroke, Breast stroke,	Front crawl, back stroke, breast stroke, Life saving language, huddle position, treading water, wading through water	Front crawl, back stroke, breast Stroke, Life saving language – huddle position, treading water, wading through water
PSHE	Drugs and alcohol Alcohol and drug misuse and pressures relating to drug use	Community and careers Equality of opportunity in careers and life choices, and different types and patterns of work	Discrimination including: racism, religion, disability, sexism, homophobia, biphobia and transphobia	Emotional wellbeing Mental health and emotional wellbeing, including body image and coping strategies	Identity and relationships Gender identity, sexual orientation, consent, 'sexting', and an introduction to contraception	Digital literacy Online safety, digital literacy, media reliability, and gambling hooks
Citizenship	Global citizenship	Global Citizenship	Media	Media	Human Rights	Human Rights
RE	Is death the end? (Believing)Exploring, debating and evaluating a number of religious and non religious views.	Who were the Greek Gods? (Believing) Exploring the ancient Greek concept of God and the links between religion and morality.	Does religion help us to be good? (Living) What does the term 'good' mean? Exploring morality and how the term 'good' maybe interpreted.	Does pacifism work? (MLK) (Living) A study of the life and teachings of Martin Luther King Jnr. Exploring the ethical and moral issues which arose from Racial segregation.	Should happiness be the purpose of life? (Living) Exploring religious views on how to live a good life. A study of Buddhism, Christianity and non religious views.	Is our life predetermined? (Expressing)A study of astrology exploration of the notions of fate and determinism.
Science	Health & lifestyle Reactions.	Ecosystem processes. Separation techniques.	Periodic table. Electricity & magnetism.	Acids & alkalis. Motion & pressure.	B1.1/B2.1 GCSE & ELB1 Entry Level taster to determine year 9 Science setting.	Adaptation & inheritance. STEM Adaptations Project
Resistant Materials	Mobile phone project Using research findings Further development of Research skills QS, Product analysis, Future tech and historical change	Development of design skills and use of CAD software. Detailed use of CAD 2D design Prodesktop and Graphic software for GUI	Night Light Project Energy sources. Detailed understanding of components and review of energy sources. Basic sustainability	Electronic Components and Manufacturer.Using components in a circuit, developing independent soldering, manufacture of Nightlight including CAD/ CAM	Trophy Project Design Skills Development independent Design Skills	Trophy Project Manufacturing Skills Development Practical Skills use of CAM independently

Subject: ART

"If I could say it in words there would be no reason to paint." Edward Hopper

Year 8	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
Knowledge and Skills	Mask Making Use individual research of a culture to inform a mask design. Use and develop 2D design work to make a 3D piece using appropriate skills to manipulate materials effectively. Use previous knowledge about the proportions of the face to inform my mask design.	Colour and abstraction develop colour mixing skills. Learn about a range of abstract artwork. Further develop understanding of the links between colour, shape and mood. Develop creative skills whilst producing sketch provided by the teacher. Develop analytical ability through group discussion related to the work produced. Continue to develop knowledge of colour use in relation to the development of abstract artwork compositions in response to stimuli .	Colour and Still Life develop and understand colour theory. Pupils will be encouraged to experiment by mixing colours, primary, secondary and tertiary and by making shades and tints of colours, opaque and transparent and complementary colours. Record from direct observation and learn effective techniques when exploring elements such as line, tone, shape, pattern, texture and colour.	Abstract landscapes explore the work of artists who have used and experimented with abstraction and pattern to create landscape paintings. Research and collect examples of landscape scenes, plans and maps typical of the local area which will then inform my own landscape work. develop observational skills. Modify and refine work as it progresses and express ideas and opinions through appropriate use of art vocabulary.	Fantasy Architecture understand the construction of buildings in terms of containers of space. Understand the difference between positive and negative space and be able to demonstrate this in a drawing.	Harry Potter Wands produce a wand that is inspired by Harry Potter and informed by my research. Conduct research independently and as a result of my research adapt my ideas, Modify and refine work as it progresses and express ideas and opinions through appropriate use of art vocabulary. Use direct observation, books, photographs and the Internet to inform my work.
Important literacy and numeracy developed this year	**Literacy:** Written artist study, analysis of artwork. **Numeracy:** Measure					
Wider Skills	Creativity, Confidence, Problem Solving, Perseverance, Focus, Non Verbal Communication, Receiving Constructive Feedback, Collaboration, Dedication.					
How you can help your child at home	Encourage them to draw, paint, sculpt, print and use photography as much as possible, take chance and experiment, the artwork doesn't have to be perfect every time at this point the process is more important.					

Subject: Computing

"Computing is not about computers anymore. It's about living." Nicholas Negroponte

Year 8	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
Knowledge and Skills	Media- Vector graphics Draw basic shapes (rectangle, ellipse, polygon, star) with different properties (fill and stroke, shape-specific attributes). Manipulate individual objects (select, move, resize, rotate, duplicate, flip, z-order). Manipulate groups of objects (select, group/ ungroup, align, distribute). Combine paths by applying operations (union, difference, intersection).	Computing Systems Recall that a general-purpose computing system is a device for executing programs. Recall that a program is a sequence of instructions that specify operations that are to be performed on data. Explain the difference between a general-purpose computing system and a purpose-built device. Describe the function of the hardware components used in computing systems	Developing for the web Describe what HTML is Use HTML to structure static web pages. Modify HTML tags using inline styling to improve the appearance of web pages. Display images within a web page. Apply HTML tags to construct a web page structure from a provided design. Describe what CSS is. Use CSS to style static web pages.	Representations List examples of representations. Recall that representations are used to store, communicate, and process information. Provide examples of how different representations are appropriate for different tasks. Recall that characters can be represented as sequences of symbols and list examples of character coding schemes.	Mobile app development Identify when a problem needs to be broken down. Implement and customise GUI elements to meet the needs of the user. Recognise that events can control the flow of a program. Use user input in an event-driven programming environment Use variables in an event-driven programming environment Develop a partially complete application to include additional functionality. Identify and fix common coding errors.	Introduction to Python Programming Describe what algorithms and programs are and how they differ. Recall that a program written in a programming language needs to be translated in order to be executed by a machine. Write simple Python programs that display messages, assign values to variables, and receive keyboard input. Locate and correct common syntax errors. Describe the semantics of assignment statements. Use simple arithmetic expressions in assignment statements to calculate values. Receive input from the keyboard and convert it to a numerical value.
Key Assessments	End of topic assessments	End of topic assessments	End of topic assessments	End of topic assessments	End of topic assessments	End of topic assessments
Important literacy and numeracy developed this year	**Literacy:** Mastery of Tier 2 and Tier 3 Vocabulary, interpreting and writing instructions **Numeracy:** Chronological steps, interpreting data.					
Wider Skills	Makes pupils aware of the opportunities and limitations of living in a digital world and using them safely and effectively. Allows pupils to understand the core principles of information and computation, how digital systems work and how to put this knowledge to use through programming or product creation. Be equipped to use technology to create programmes, systems and a range of content. Become digitally confident and be able to use computers to express themselves and develop their ideas.					
How you can help your child at home	Guide use of technology at home for online learning platforms such as Seneca and Quizlet, and for productive tasks such as online research. Discuss current issues related to technology to encourage further interest. Encourage students to practice programming and skills learned in class at home. For additional activities go to https://www.thenational.academy/ or BBC Bitesize.					

Subject : English

"Reading is an exercise in empathy; an exercise in walking in someone else's shoes for a while." Malorie Blackman

Year 8 Theme: Monsters, Mayhem, Travel and encounters.	**Autumn Term 1**	**Autumn Term 2**	**Spring Term 1**	**Spring Term 2**	**Summer Term 1**	**Summer Term 2**
Knowledge and Skills	Baseline Assessment AR Tests (3 weeks) Gothic Horror – study of extracts Mary Shelley (Author Study) Appreciation of the influence of social and historical elements on the Pre 1914 novel. Understanding and being able to use the conventions and characteristics of the gothic genre. Analysing language and how it creates a deliberate effect on the reader. Creating tension in the reader through structural and language devices. Creating atmospheric descriptions of setting and vivid descriptions of characters. Understanding the structural techniques writers use in their story telling and using these structural devices in pupils' storytelling. Analysis of gothic poetry.	Poetry Portraits Of People (Pre and Post 1900) Appreciation of Pre and Post 1900 poetry and poets. Revision of key poetic devices and introduction to more advanced poetic devices. Understanding of how poets creates deliberate effects in their readers through their use of language and structural devices. Empathy and understanding of the characters portrayed in the poems and the issues they face. Creative writing opportunities such as monologues, diary entries, factual reports, play scripts. Drama opportunities to dramatise the poems.	Shakespeare Tempest / A Midsummer Night's Dream Appreciation of social and historical context. Revision of the conventions of a Shakespeare play and introduction to new conventions. Understanding how Shakespeare creates characters and plots. Analysing Shakespeare's language. Understanding Shakespeare's stagecraft and how he created specific effects to have an impact on the audience. Drama opportunities to dramatise scenes. Creative writing opportunities News report, letter writing and descriptive writing.	Non-Fiction Travels and Tribulations Communicating ideas clearly. Adapting writing so that it is suitable for a range of audiences and purposes. Using a range of linguistic, literary and structural devices. Using a range of punctuation to promote clarity and to create effect. Identifying language and structural techniques used by the writer. Comparing the viewpoints, perspectives and experiences of different writers and how they are conveyed to the reader.	Science Fiction Study of extracts and short stories Selecting and developing quotations to support statements about the text Identifying, explaining and exploring the writer's linguistic, literary and structural methods. Identifying and using relevant terminology to support and strengthen points. Understanding the characteristics of the genre and how social, historical and cultural context influenced the sci-fi stories and novels. Empathy and understanding of the characters portrayed. Structural features of a story and how this might interest the reader. Evaluating how the writer has deliberately sought to influence the reader through language, structure and form.	Study of a Novel A Monster Calls Patrick Ness (Author Study) KS3 Year 8 AQA Paper 1 Exam Revision Exploring the writer's viewpoints and perspectives when studying the novel as a whole and relating these ideas to the social context. Making inferences and deductions based on textual evidence and showing an understanding of implicit and explicit meanings. Analysing the techniques used by the writer to have an impact on the reader. For example, how the monster works as a metaphor – how the stories actually relate to Conor's feelings and life (an allegory). Understanding, through, characterisation, how empathy for the characters is created by the writer. Using the novel as a basis for writing for a variety of audiences and purposes.
Key Assessments	Gothic Story How does the writer use language to describe the night of creation	Compare two poems Report Writing	How does Shakespeare use language to present a character? Newspaper report writing	How does the writer use language to create drama and tension? Describe a dramatic journey	How does the writer use language to describe a sci-fi character? Write a science fiction story	How does the writer use language to describe the monster? Write a description of a monster as suggested by a picture
Important literacy and numeracy developed this year	**Literacy:** Revision of previous year & adverbs, comparative and superlative adjectives, nouns, plural nouns, apostrophes and contractions TIER 2&3 Vocabulary. Revision of previous year & compound/complex sentences, embedding clauses, conjunctive adverbs and semi colons. Revision of previous year & connections between sentences, proofreading, drafting & rewriting. **Numeracy:** Working with the chronological order of sequencing and events. Calculating how many years ago from the present day some texts were written. Non-Fiction texts interpreting factual language and statistics for meaning, such as speed or temperature.					
Wider Skills	Forming opinions, listening to and empathising with other people's viewpoints and perspectives . Moral questioning. Speaking and listening. Confidence in presenting and contributing to group discussions. Academic resilience in producing extended pieces of writing. Pupils are encouraged to question and evaluate life experiences and understanding of the world around them.					
How you can help your child at home	Seneca learning is a great way to consolidate and enrich grammar skills, encourage independent reading and test newly acquired knowledge. https://senecalearning.com/en-GB/ Accelerated Reader can be accessed via our school website https://ukhosted55.renlearn.co.uk/1918494/ to enable pupils to take comprehension and literacy quizzes on the books they have read. Encourage your child to read widely, as well as fiction and non fiction books, encourage them to read newspapers, magazines and leaflets to expose them to as much new vocabulary and purposes of writing as possible, to give them a sense of the writer's use of methods to have an intended impact on the reader for a specific purpose. Visiting the theatre.					

Subject: Food Technology

"A good cook is like a sorceress who dispenses happiness" **Elsa Schiaporelli**

Year 8	**Autumn Term 1**	**Autumn Term 2**	**Spring Term 1**	**Spring Term 2**	**Summer Term 1**	**Summer Term 2**
Knowledge and Skills	Eatwell Guide Develop knife cutting skills using the bridge and claw method. Understand why we eat food- macro nutrients and micro nutrients. Application of the Eatwell guide in making food choices. Cereals – producing practical outcomes using different cereals.	Knife Skills Applying sills in sauce making through a savoury outcome. Give a definition of what a diet is and how it can vary around the world. Understand that bread is a staple eaten around the world. Range of practical work with bread as the base ingredients. Identify the names of nutrients and their function.	Using the cooker safely Demonstrate how to use the cooker safely and independently. Investigate the functions of ingredients used in pastry making. Understanding the function of fat/aeration and layering in different pastry products. Apply skills in making a range of pastry products.	Sensory Evaluation Safe use of electrical equipment; food processor and hand whisk. Produce a pastry product of their choice with consideration to nutritional value and presentation. Describe sensory characteristics using the correct sensory descriptors. Food labelling- producing a label for a pastry product.	Seasonality Give a definition of food provenance and the process from farm to fork. Identify foods that are grown in the UK in different seasons and apply in practical work. Explain what organic farming is and consider the advantages and disadvantages. Understand the dietary needs of different groups- vegetarians, vegans, lactose intolerant, religions, and cultural choices.	Food Wastage Consider reasons why people buy local produce linking to reducing food miles. Explore how the Eatwell Guide help with food choice. Consideration for how to use the whole ingredient and limit food waste. Produce food labels using nutritional software. Be able to cost a food recipe and understand portion size and adapt recipes accordingly.
Key Assessments	Through practical outcome. Cooker safety assessment. Spelling test of keywords. Half term assessment and feedback.	Practical assessment. Peer assessments of investigation work. End of half term assessment on nutrients.	Practical assessment. Peer assessments. Keyword spelling and meaning test.	Practical assessment on final pastry product. Peer assessments. End of term assessment on nutritional knowledge.	Practical assessment. Peer assessments. Keyword spelling and meaning test.	Practical assessment. Peer assessments. End of half term assessment on food waste
Important literacy and numeracy developed this year	**Literacy:** Using descriptive, sensory specific adjectives as part of the sensory analysis process. **Numeracy:** Measurement of ingredients. Ratio of ingredients in a range of recipes. Fractions and equivalents when weighing, measuring or substituting ingredients. Use of nutritional software.					
Wider Skills	Science: Understanding the functional and chemical properties of fats and oils in pastry making. To understand nutrients and their relationship with diet and health. Geography: To know where foods are grown and when/how they are harvested around the world and to understand staple foods. PSHE: Understand how different cultures and religions have their own rules and etiquettes when making food choices.					
How you can help your child at home	Looking at recipes which are cooked in school and discussing how they could be adapted/ improved. Looking at recipes in books/magazines/online. Discussing ingredients used in home cooked foods and the preparation techniques. Helping to prepare ingredients towards a recipe to support with cooking at home.					

Subject: MFL

"One language sets you in a corridor for life. Two languages open every door along the way." Frank Smith

Year 8	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
Knowledge and Skills	Sports and Hobbies Naming sports and hobbies To be able to use jouer + à with sports in the present tense To be able to use faire + de with sports and hobbies in the present tense To be able to describe what sports and hobbies other people do using il and elle and ils and elles. To be able to say what you use the internet for using regular er verbs To be able to use adverbs of frequency eg quelquefois, souvent, tous les jours	Sports and Hobbies To be able to say which sports and hobbies you like using j'aime + infinitive Distinguishing between verb forms eg j'aime jouer, je fais To be able to say what you use the internet for using regular er verbs To be able to use adverbs of frequency eg quelquefois, souvent, tous les jours To be able to name different types of TV programmes To be able to use regarder with je, tu, il and elle to say what different people watch To be able to say what you like and why on the TV using intensifiers and connectives To be able to give different opinions about different types of films using intensifiers and connectives. To be able to talk about reading and to name different types of books. To give opinions using intensifiers and connectives.	My Local Area To be able to name places in the town To be able to say what there is in your town using il y a + definite article To be able to say what there isn't in your town using il n'y a pas de To be able to give an opinon about your town using c'est + adjective To be able to give direction using tu and vous To be able to ask for directions. To be able to say where you go at the weekend using aller + à and adverbs of frequency and opinions to extend sentences. To be able to ask someone to go somewhere and to respond using je veux/ tu veux + infinitive	Paris To be able to say what you can do in Paris on peut and to be able to give an opinion using c'est To be able to say what you like doing in Paris using j'aime plus infinitive To be able to ask for tourist information using question words. To be able to use the perfect tense of visiter to say where you visited. To be able to use c'était to say what it was like To be able to use the perfect tense of er verbs to say what you did	School To be able to name school subjects and to be able to give an opinion. To be able to give an opinion about school subjects with a reason using intensifiers and qualifiers To be able to tell the time and say what time something happens To use the present tense of er verbs with on to describe the school day To understand how to talk about food using the partitive article	Introduction to holidays plus revision To use nous to talk about where you go on holiday To be able to use reflexive verbs to talk about daily routine To be able to buy food and drink at the café To be able to use the near future tense to talk about what you are going to do on holiday
Key Assessments	Reading and writing	Speaking and listening	Reading and writing	Speaking and listening	Reading and Writing	Speaking and listening
Important literacy and numeracy developed this year	**Literacy** Knowledge of verbs. Understanding what a subject pronoun is. Spelling. Different tenses. **Numerac**y Numbers and counting. Time.					
Wider Skills	Knowledge and appreciation of another culture and country's customs and traditions.					
How you can help your child at home	Use linguascope to practice key vocabulary. Watch Netflix, youtube in French Change phone language to French					

Subject: Maths

"Mathematics knows no races or geographic boundaries; for mathematics, the cultural world is one country." David Hilbert

Year 8	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
Knowledge and Skills	Number Recall Times tables Bidmas Place value Multiply numbers by single digit Add and subtract numbers with up to 4 digits Square numbers Cube numbers Negative numbers on scales 4 rules with negatives Short division Factors Long multiplication and division Rounding Prime numbers Multiply and divide by powers of 10	Algebra Simplifying Recognise next number in a sequence Substitute numbers into expressions plot coordinates in all 4 quadrants Give next value in sequence and describe how sequence built up Solve linear equation involving one operation Collect like terms Multiply terms Solve linear equations involving more than one operation Draw linear graph from table of values	Fractions, Decimals, Percentages and Ratio Shade in fraction of shape and identify fraction shaded Add and subtract fractions with same denominator Recognise equivalent fractions Cancel fractions Find a fraction of an integer Identify equivalent fractions, percentages, decimals for ¼, ½, ¾, tenths and fifths Add fractions with different denominators Order and compare fractions Find % of quantity Simplify a ratio Compare prices to find best buy	Statistics Data Cycle Draw charts and diagrams Interpret charts and diagrams Measures of average Plot coordinates Work out frequency from frequency table Probability scale Conversion graphs Calculate probability List outcomes of 2 events Correlation Speed, distance, time	Measures Tell time using analogue and digital clocks Read scales with variety of divisions Identify standard metric units Measure and draw line accurately Round decimal numbers to 1,2,3 places Use four operations with decimals Convert from one metric unit to another Convert metric to imperial given conversion	Geometry Perimeter of 2D shape lines of symmetry Name 2D and 3D shapes Circle terminology Draw circle ; given radius/d Nets of 3D shapes Area of rectangle Rotational symmetry Measure and draw angles and lines Use fact angles at a point angles on a straight line Angles in triangles Angles in quadrilateral Area of triangle Reflection in a mirror line Volume of a cuboid Angles in parallel lines Area of parallelogram Area of trapezium Area and circumference of circles Translation Rotation Enlargement
Key Assessments	End of topic assessments Baseline Assessment Y8	End of topic assessments	End of topic assessments	End of topic assessments	End of topic assessments	End of topic assessments
Important literacy and numeracy developed this year	**Literacy:** Key Words / vocabulary, comprehension, reading, writing explanations and comparisons. **Key vocabulary.** Literacy in mathematics means developing a pupil's structured speaking, vocabulary, writing, and reading to help them solve mathematical problems and present their results and findings. **Numeracy:** Develop the ability to reason and to apply numerical concepts. Recognise and understand the role of mathematics in the world and develop the ability and skills to to reason and to apply numerical concepts use mathematical knowledge and skills purposefully.					
Wider Skills	Resilience, application to real life, explaining, communication skills, problem solving, perseverance.					
How you can help your child at home	Handling money. Using 12 and 24 hour clock times, Reading scales and dials – Cooking from recipes, weighing. Reading tables and charts, using maps, using scales and measures, reading news items, encouraging revision of concepts. Using online resources. Planning journeys and reading transport timetables.					

Subject:Geography

"Geography is a living breathing subject constantly adapting itself to change. It is dynamic and relevant." Michael Palin

Year 8	**Autumn Term 1**	**Autumn Term 2**	**Spring Term 1**	**Spring Term 2**	**Summer Term 1**	**Summer Term 2**
Knowledge and skills	Coasts Give examples of human and physical processes that shape the coastline. Know that waves are caused by wind. That wind strength, duration and fetch affect the size of waves. Know that coastal erosion is a problem. Define key terms. Use evidence to draw conclusions. Use a map to become familiar with the coastline of the UK.	Tourism Understand that tourism is a valuable industry. Appreciate the benefits and problems of tourism. Name some UK National Parks and their function. Understand what sustainable tourism is. Work in pairs and small groups to compile lists (jobs related to tourism) and present arguments for and against tourism.	Weather and Climate Know the difference between weather and climate. Know that the world is divided into different climate regions. Define key terms. Analyse and describe photos. Use a weather map to describe weather conditions at a particular place.	Urbanisation Know that the Industrial Revolution is key to urbanisation. Understand push and pull factors. How cities are attempting to become more sustainable. Sequence the process of urbanisation. Use key information to write a newspaper report about life for workers during the Industrial Revolution.	Asia Know the difference between a continent and a country. Recall key information about Asia's past. Know some physical and human features of Asia. Be able to explain Asia's biomes. Interpret bar and pie charts. Analyse and interpret maps. Write definitions of key terms.	China Know facts about why China is important. Describe China's location, human and physical features, climate and population densities. Understand the terms biodiversity and endangered. Know about life in Chongqing and Tibet. Describe patterns of relief. Calculate distances. Analyse information to reach a conclusion. Use knowledge to produce a reasoned explanation.
Key Assessments	Write a persuasive letter either for or against coastal defences.	Research how to be an ecotourist and present as a class poster.	Compare and contrast two climate graphs.	Identify three benefits and three disadvantages of living in a city.	Write a short summary using text books and exercise books to explain what Asia is like.	Use a spider diagram to summarise what they have learned.
Important literacy and numeracy developed this year	**Literacy**: Presenting an argument for or against, research to extrapolate key information to present, write a news paper report, compare and contrast two areas. **Numeracy:** Analyse and interpret data presented in tables, graphs and pie charts, population and percentages relating to urbanisation, calculate distances in km.					
Wider Skills	Links to Maths and Science.					
How you can help your child at home	Use maps with children to show and talk about places they visit. Support your child with the short weekly homework tasks. Watch documentaries together about the world, anything by David Attenborough. Discuss relevant news items related to the topics being covered. Post cards of places you visit with your child make great points of class discussion.					

Subject: History

"History never repeats itself, but it rhymes." Mark Twain

Year 8	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
Knowledge and skills	The Tudors How the Henry Tudor came to power and kept control after Richard III. Henry VIII's personality and his impact upon the Church. How each of Henry's children ruled England. Evaluate and compare sources and interpretations. Explain the place of the Tudors in British history. Explain the impact of the Reformation on Britain.	The New World The debates over who discovered the "New World". The history of the Aztecs in the Americas. How discovery impacted Europe and the Americas, specifically the Aztecs. Make evaluative comparisons through writing. Understand the chronology of the Aztecs in relation to Europe.	The Stuarts The origins, key battles and impact of the English Civil War. How England went from a monarchy, to a republic, to a new form of monarchy. Significant cultural events (E.g. The Gunpowder Plot) and their impact on Britain to this day. Explain historical cause and consequence. Understand the chronology from Tudor times into the C17th.	The Slave Trade The origins and function of the Transatlantic Slave Trade. The lives of slaves from capture, including the Middle Passage, auction and everyday experiences. The factors that led to abolition. Use descriptive and evaluative writing to explain history. Understand slavery in the context of British history.	Industry and Reform The origins of the industrial revolution. Its impact on cities, transport and everyday jobs. How key individuals such as Brunel impacted Britain through their work. Describe and explain the significance of historical events and key people. Understand socioeconomic factors in history.	Industry and Reform Part 2 The social and cultural impact of industrialisation. How reform impacted the health, wellbeing and education of everyday people. The life of Queen Victoria. How Britain came to control India. Understand continuity and change in historical writing. Continue to develop understanding of causation in historical writing.
Key Assessments	A Factual knowledge assessment on Tudor history along with source questions.	An essay-style question comparing the Tudors to the Aztecs or a more accessible version for pupils who need it	Assessment paper covering general knowledge and interpretation questions.	An essay-style question about the history of the Slave Trade.	An essay style question regarding Isambard Kingdom Brunel.	Assessment paper covering general knowledge and source/interpretation questions.
Important literacy and numeracy developed this year	**Literacy:** Pupils will continue to develop their historical writing skills regarding comparison, causation and evaluation, with the use of historical sources and interpretation. **Numeracy:** Pupils will continue to develop their understanding of chronology. They will also start to use historical data such as statistics in historical analysis.					
Wider Skills	Pupils will have an appreciation of the context for the religious, social and political institutions of modern Britain.					
How you can help your child at home	Encouragement of historical reading as part of their wider reading. Encouragement of the use of BBC Bitesize for homework and revision. Discuss news stories regarding recent historical discoveries or where history plays a significant role. Share family history.					

Subject: Physical Education

"Persistence can change failure into extraordinary achievement." Marv Levy

Year 8	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
Knowledge and Skills	Games and Fitness Pupils will further develop the fundamental principles of play when selecting and applying tactics for defending and attacking. passing, receiving, outwitting defenders and shooting will be developed through small sided games and conditional situations. Demonstrating high quality performances and accurate replication will be assessed. Pupils will be able to perform and develop an understanding of the following skills: Passing, Pivoting, Shooting, Defending, Jumping, Outwitting opponents, Attacking strategies and Tactics.	Gymnastics and Trampoline Pupils will develop the skills necessary to develop fluent routines. Body tension, control, counter balance and aesthetics will be developed through compositional ideas. Demonstrate high quality performances, techniques and routines. Students should be able to link each of the methods of travel learned during the scheme into individual and partner sequences both on the floor and on low apparatus. In trampoline, pupils will develop the skills necessary to develop fluent routines. Body tension, control, body extension and aesthetics will be developed through compositional ideas. Pupils will be able to perform and develop an understanding of the following skills: Gymnastics - Jumping, Rotating, Rolling (forward, backward), Balances (individual, paired, and group), Introducing to Vaulting, Trampoline - Pike, Straddle, Tuck, Seat landing, Swivel hips.	Games and Fitness Pupils will learn to use basic principles of play when selecting and applying tactics for to produce a successful outcome. Pupils will further develop the skills necessary to outwit opponents. Forehand, backhand, serve, volley, short and deep shots will be developed through games and conditional situations. Demonstrating high quality performances and accurate replication will be assessed. Pupils will be able to perform and develop an understanding of the following skills: Develop and create strategies and tactics in competitive games, Developing different shots/strokes (serving, dig, set, spike) Develop and create strategies and tactics in competitive games, Develop different shots (serving, hitting the ball), Moving around the court.	Dance and Movement Pupils will develop the skills and use creativity to develop a fluent dance sequence. Pupils will learn to select and develop a range of compositional principles of their own. To perform a dance sequence showing an understanding of style, artistic intention and accompaniment. Body language, concept & movement will be developed through compositional ideas. Demonstrate high quality performances, techniques and sequences. Pupils will be able to perform and develop an understanding of the following skills: Using steps Gestures Formations Body shape Being able to create own small motif.	Athletics and Fitness Pupils will develop the skills necessary to compete and achieve in a number of athletic events. To gain further experience at jumping events, aiming for height/ distance. Throwing events, aiming for distance. Running disciplines, the time taken to cover a set distance. In all events, demonstration of accurate technique and related performances will be assessed. Pupils will be able to perform and develop an understanding of the following skills: Develop sprint and pace running Developing throwing techniques in Javelin, Shot Put, Discuss and Hammer throw. Developing jumping technique within long jump and triple jump.	Striking and Fielding Games Pupils will learn to use principles of play when selecting and applying tactics to produce a successful outcome. Pupils will continue to develop the skills necessary to outwit opponents. Batting, bowling and fielding will be further developed through games and conditional situations. Demonstrating high quality performances and accurate replication will be assessed. Pupils will be able to perform and develop an understanding of the following skills: Developing throwing, catching, batting, striking and fielding skills. To develop and create different strategies that can be used in different game scenarios.
Key Assessments	Use of AFL to check knowledge, understanding and performance.	• Use of AFL to check knowledge, understanding and performance.	• Use of AFL to check knowledge, understanding and performance.	• Use of AFL to check knowledge, understanding and performance.	• Use of AFL to check knowledge, understanding and performance.	• Use of AFL to check knowledge, understanding and performance.
Important literacy and numeracy developed this year	Literacy: Developed literacy by giving written feedback to others in the group and written feedback on the lesson. Numeracy: Developed numeracy by counting points, scores and times. Also by measuring accuracy and recording times.					
Wider Skills	Pupils will have an context and an appreciation of the various sporting events that have shaped modern Britain and the world. They will learn the importance of different perspectives and viewpoints with regards to sport and physical activity.					
How you can help your child at home	Encourage your child to undertake sport and physical activity outside of school. Look at joining different sports clubs in your local area. Access internet, including YouTube to take part in different activities (Yoga, Pilates, Home workout's). Encourage healthy eating, and active lifestyle.					

Subject: Swimming

"Don't be afraid of failure. It is the way we succeed." LeBron James

Year 8	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
Knowledge and Skills	Swimming – Front crawl, Back stroke, Breastroke, Body action, Leg action, Arm action, Breathing, Timing, push and gliding. Pupils will learn these skills to develop performance of different swimming strokes.	Swimming – Front crawl, Back stroke, Breast Stroke, Body action, Leg action, Arm action, Breathing, Timing, push and gliding. Pupils will learn these skills to develop performance of different swimming strokes.	Swimming – Front crawl, Back stroke, Breast Stroke, Body action, Leg action, Arm action, Breathing, Timing, push and gliding. Pupils will learn these skills to develop performance of different swimming strokes.	Swimming – Front crawl, Back Stroke, Breast Stroke, Body action, Leg action, Arm action, Breathing, Timing, push and gliding. Pupils will learn these skills to develop performance of different swimming strokes. Pupils to develop knowledge of different life saving techniques.	Swimming – Front crawl, Back Stroke, Breast Stroke, Body action, Leg action, Arm action, Breathing, Timing, push and gliding. Life saving language – huddle position, treading water, wading through water. Pupils to develop knowledge of different life saving techniques.	Swimming – Front crawl, Back Stroke, Breast Stroke, Body action,Leg action,Arm action, Breathing, Timing,push and gliding. Life saving language – huddle position, treading water, wading through water. Pupils to develop knowledge of different life saving techniques. Water Polo skills Passing Shooting Dribbling Moving with the ball Tactics Tackling
Key Assessments	Use of AFL to check knowledge, understanding and performance.	Use of AFL to check knowledge, understanding and performance.	Use of AFL to check knowledge, understanding and performance.	Use of AFL to check knowledge, understanding and performance.	Use of AFL to check knowledge, understanding and performance.	Use of AFL to check knowledge, understanding and performance.
Important literacy and numeracy developed this year	**Literacy**: Pupils will developing understanding activity and sport related language throughout the year **Numeracy:** Pupils will develop an understanding of how to count points, scores and times in a wide range of activities throughout the year					
Wider Skills	Team-work skills					
How you can help your child at home	Extra-curricular clubs YouTube – (PE with Joe Wicks) Netflex Encourage to undertake physical activity – attending swimming lessons, or swimming sessions					

Subject: PSHE

' Be the change you want to see in the world.' Mahatma Gandhi

Year 8	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
Knowledge and Skills	Drugs and Alcohol Learn about medicinal and recreational drugs. Learn about the over-consumption of energy drinks. Learn about the relationship between habit and dependence. Learn how to use over the counter and prescription medications safely. Learn how to assess the risks of alcohol, tobacco, nicotine and e-cigarettes. Learn how to manage influences in relation to substance use.	Community and Careers Learn about equality of opportunity in life and work. Learn how to challenge stereotypes and discrimination in relation to work and pay. Learn about employment, self-employment and voluntary work.	Discrimination Learn how to manage influences on beliefs and decisions. Learn about group-think and persuasion and how to develop self-worth and confidence. Learn how to manage influences on beliefs and decisions and about group-think and persuasion. Learn how to develop self-worth and confidence. Learn about gender identity, transphobia and gender-based discrimination. Learn how to recognise and challenge homophobia and biphobia. Learn how to recognise and challenge racism and religious discrimination.	Emotional Wellbeing Learn about attitudes towards mental health. Learn how to challenge myths and stigma. Learn about maintaining healthy wellbeing. Understand how to manage emotions and how to develop digital resilience. Learn about unhealthy coping strategies (e.g. self-harm and eating disorders). Learn about healthy coping strategies.	Identity and Relationships Learn about the qualities of positive, healthy relationships. Understand how to demonstrate positive behaviours in healthy relationships. Understand about gender identity and sexual orientation about forming new partnerships and developing relationships. Learn about the law in relation to consent that the legal and moral duty is with the seeker of consent. Learn how to effectively communicate about consent in relationships about the risks of 'sexting' and how to manage requests or pressure to send an image. Learn about basic forms of contraception, e.g. condom and pill.	Digital Literacy Learn about online communication how to use social networking sites safely. Understand how to recognise online grooming in different forms, e.g. in relation to sexual or financial exploitation, extremism and radicalisation. Learn how to respond and seek support in cases of online grooming. Understand how to recognise biased or misleading information online how to critically assess different media sources. Learn how to distinguish between content which is publicly and privately shared about age restrictions when accessing different forms of media and how to make responsible decisions. Understand how to protect financial security online. Understand how to assess and manage risks in relation to gambling and chance-based transactions.
Key Assessments	End of topic assessments	End of topic assessments	End of topic assessments	End of topic assessments	End of topic assessments	End of topic assessments
Important literacy and numeracy developed this year	**Literacy**: Reading of texts/ poems/ scenarios Written responses , Looking at appropriate language for different situations. **Numeracy:** Money skills					
Wider Skills	Knowledge and appreciation of another culture and country's customs and traditions. Communication skills.					
How you can help your child at home	Use linguascope Watch you tube/ Netflix in French Switch phone language to French					

Subject: Citizenship

"Citizenship education can transform society; more thoughtful and engaged citizens lead to a stronger and more just society." Ali Berry

Year 8	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
Knowledge and Skills	Global citizenship What are Global issues? Can we influence Global issues? What are the different views about Global issues?	Global citizenship Deforestation of the Rainforest (case study) What is sustainability? What is our role in a sustainable future?	Media What types of stories make the news locally, nationally and globally? How does the media affect public opinion? How is the media used to promote good causes?	Media Is the media's treatment of celebrities acceptable? What is the relationship between sport and the media?	Human Rights What are rights and responsibilities ? What basic human rights do people have? What charters are in place to protect human rights?	Human Rights How and why do people's rights sometimes come into conflict? What happens when peoples basic human rights are denied?
Key Assessments		End of topic assessment		End of topic assessment		End of topic assessment
Important literacy and numeracy developed this year	**Literacy:** Tier 2 and 3 vocabulary, speaking and listening in debates and discussions **Numeracy:** Understanding chronology through ordering key dates in history and government policies and legislation. Understanding data.					
Wider Skills	General knowledge, know what is happening in their local area, nationally and globally.					
How you can help your child at home	Watch and discuss relevant news items locally, nationally and globally.					

Subject : RE

"If you would be a real seeker after truth, it is necessary that at least once in your life you doubt, as far as possible, all things" Rene Descartes

Year 8	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
Knowledge and Skills	Is death the end? To consider a number of different views and present their own both verbally and in writing. To understand beliefs and teachings. Present the key teachings and beliefs of the religions studied.	Who were the Greek Gods? To explore historical origins of religion and the notion of "God". To understand why society "needs" a God figure. To consider how religion has evolved since ancient Greece.	Does Religion help us be good? To explore how religion can be a source for good and a moral compass. To consider why religion can be viewed as "bad".	Does pacifism work? To reflect on the actions of MLK and understand the historical context of his actions. To compare key figures in the fight for civil rights. To compare how different reactions lead to different outcomes – MLK Vs Malcolm X Nelson Mandela and terrorism.	Should happiness be the purpose of life? To explore the notion of happiness. Is it achievable? What values do religions hold dear? What do religions consider the goal of life. Religions/ views studied. Buddhism Christianity Humanism	Is our life predetermined? To understand what we mean by the term "predetermined". To consider alternative theories such as astrology and reincarnation. To explore the themes whilst looking at their own lives. (Self reflection) Religions/ views studied Christianity Hinduism Atheism
Key Assessments	End of topic assessment – GCSE style question with a writing frame.	Class discussions Extended writing	GCSE style question with writing frame. Debate / presentation	End of topic assessment – Speech or presentation on a key figure.	End of topic assessment – GCSE style question with an optional writing frame.	Pupils create a timeline.
Important literacy and numeracy developed this year	**Literacy:** Writing in full paragraphs and using writing frames to help structure GCSE style answers. Opportunities for group work and class debates to enhance speaking and listening skills. Push on skills of justification and reasoning. **Numeracy:** Times and dates in RE context. Application of exam timings.					
Wider Skills	Considering others opinions and beliefs. Sharing own ideas. Speaking and listening,					
How you can help your child at home	https://www.natre.org.uk/resources BBC bite sized – BBC RE					

Subject: Science

"The science of today is the technology of tomorrow." Edward Teller

Year 8	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
Knowledge and Skills	Health and Lifestyle Describe nutrients and their roles in the body. Carry out chemical food tests. Describe the structure and function of the digestive system. Describe the role of enzymes in digestion. Describe the effects on health of drugs, alcohol and smoking. Describe what happens in chemical reaction. Use word equations to show a reaction. Describe combustion, thermal decomposition and exothermic/endothermic reactions.	Ecosystem Processes Describe the process of photosynthesis. Describe the structure and function of leaves. Describe how a plant uses minerals. Describe the processes of aerobic and anaerobic respiration. Describe food chains, food webs and ecosystems. Compare pure substances to mixtures. Describe solutions and investigate solubility. Explain how filtration, distillation and chromatography work.	Periodic Table Describe the properties of metals and non metals. Use patterns to predict the properties of group 1 and group 7 elements. Describe the physical and chemical properties of group 0 elements. Explain how objects become charged. Describe what is meant by current and potential difference. Compare series and parallel circuits. Calculate resistance. Describe how magnets and electromagnets work.	Acids and Alkalis Compare the properties of acids and alkalis. Use the pH scale to measure acidity and alkalinity. Describe neutralisation reactions. Describe how to make a salt. Calculate speed. Interpret distance-time graphs. Describe pressure in gases and liquids. Calculate pressure and moments.	B1.1/B2.1GCSE & ELB1 Describe the function of subcellular structures. Describe the features of prokaryotic cells. Describe how to use a light microscope and calculate magnification. Compare light and electron microscopes. Calculate surface area: volume ratio. Describe the processes of diffusion, osmosis and active transport. Describe mitosis. State what cell differentiation is. Describe the function of stem cells.	Adaptation & Inheritance Describe the resources plants and animals compete for. Describe how organisms adapt to environmental changes. Describe how environmental and inherited variation occurs. Describe the difference between continuous and discontinuous variation. Describe how characteristics are inherited. Describe the process of natural selection. State some factors that may lead to extinction.
Key Assessments	Health & lifestyle topic assessment. Reactions topic assessment. "Food tests" 6 mark question; "The digestive system" extended writing. "Alcohol and reaction times"	Ecosystem processes topic assessment. Separation techniques topic assessment. "Who stole the money?" crime report writing.	Periodic table topic assessment. Electricity & magnetism topic assessment. Metals and non-metals" 6 mark question; "Electromagnets" 6 mark question. Calculate the Resistance of a wire" - "Trends in noble gases" – Plotting a bar chart.	Acids & alkalis topic assessment. Motion & pressure topic assessment. Making salts " – 6 mark question. • Calculating speed; Using distance-time graphs; calculating pressure; calculating moments.	B1.1/B2.1 GCSE and ELB1 assessments. "Investigating arm span" –	Adaptation & inheritance topic assessment.
Important literacy and numeracy developed this year	**Literacy:** Use scientific vocabulary and definitions throughout written work. Label simple diagrams effectively and give definitions where appropriate. Begin to be able to use small paragraphs to explain findings and demonstrate understanding. **Numeracy:** Calculate means form experimental data and start to evaluate the quality of the data. Draw bar and scatter charts, labelling axes and lines of best fit. Start to use formulae with help to calculate resistance and pressure.					
Wider Skills	Use the correct apparatus to follow a method with help. State a simple conclusion from a scientific observation. State any difficulties encountered carrying out a method. Describe simple observations made during an experiment, and explain with simple Science. Follow safety procedures.					
How you can help your child at home	Support with encouraging home learning tasks set on www.kerboodle.com – pupils have their login details in their planner.					

Subject: Resistant Materials

"Design is not just what it looks like and feels like. Design is how it works." Steve Jobs

Year 8	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
Knowledge and Skills Knowledge of materials and ingredients KU To Master Practical Skills MP To Design and Evaluate D&E Take Inspiration from other sources INSP	Mobile Phone Project Design To use research and exploration, such as the study of different cultures, to identify and understand user needs. D&E To identify and solve their own design problems. D&E To develop specifications to inform the design of innovative, functional, appealing products that respond to needs in a variety of situations.D&E To use a variety of approaches to generate creative ideas and avoid stereotypical responses .D&E To analyse the work of past and present professionals and others to develop and broaden their understanding. INSP To investigate new and emerging technologies. INSP To understand developments in design and technology, its impact on individuals, society and the environment, and the responsibilities of designers, engineers and technologists. INSP	Mobile Phone Project Manufacturing using CAD/CAM To select from and use specialist tools, techniques, processes, equipment and machinery precisely, including computer-aided manufacture. KU, MP To develop and communicate design ideas using annotated sketches, 3-D and mathematical modelling, and computer-based tools. MP	Nightlight Design To identify and solve their own design problems. D&E To develop specifications to inform the design of innovative, functional, appealing products that respond to needs in a variety of situations. D&E To develop and communicate design ideas using annotated sketches and computer-based tools. D&E Analyse the work of past and present professionals and others to develop and broaden their understanding. INSP To investigate new and emerging technologies · test. INSP To evaluate and refine their ideas and products against a specification. D&E	Electronics components and manufacture including CAD/CAM To select from and use specialist tools, techniques, processes, equipment and machinery precisely, including computer-aided manufacture. KU,MP To select from and use a wider, more complex range of materials, components. KU, MP To understand how more advanced electrical and electronic systems can be powered and used in their products. KU To use electronics to embed intelligence in products that respond to inputs. KU, MP	Trophy Project Design Process To use research and exploration, such as the study of different cultures, to identify and understand users'needs. D&E To identify and solve their own design problems and understand how to reformulate problems given to them. D&E To develop specifications to inform the design of appealing products that respond to needs in a variety of situations. D&E To develop and communicate design ideas using annotated sketches and computer-based tools.D&E To analyse the work of past and present professionals and others to develop and broaden their understanding. INSP	Trophy Project Manufacture To select from and use specialist tools, techniques, processes, equipment and machinery precisely, including computer-aided manufacture. KU, MP To select from and use a wider, more complex range of materials, components, taking into account their properties. KU, MP
Key Assessments	Questionnaire Existing ideas Future Products Specification Design drawings	Use of CAD Use of ICT for GUI work Final outcome	Understanding of electronic components Questionnaire Existing Ideas 2D design work	2D Design work Accuracy and confidence in practical. Final Outcome	Questionnaire Existing ideas Specification	2D design work Practical accuracy and skill Final outcome
Important literacy and numeracy developed this year	**Literacy:** Pupils will mainly develop their subject knowledge and understanding of keywords in order to appreciate aesthetic and physical properties as well as technical principles. In addition pupils will need to develop evaluative and descriptive skills in order to review their own and others work and justify opinions. **Numeracy:** Pupils will need to develop elements of accuracy and measure in work including units of measure, estimation, sizing, ratio, % and scaling work. Students will use graphical techniques and spreadsheets in their research activities.					
Wider Skills	Pupils will continue to develop skills in research and design as well as their ICT skills in Word, Publisher, Excel, 2D Design and PowerPoint, they will become more independent in their use of this software. They will improve their techniques in order to review their own work and the work of others and consider sustainability and the understanding of trademark, registered design, patent and copyright in their work.					
How you can help your child at home	You can encourage your child by supporting them in their personal study. There a number of websites listed below that support further study in the subject but more importantly by praising their practical work that they bring home you will help develop their self worth and confidence. It is hoped you will see their growing ability and range of skills develop in the products they bring home usually towards the end of each term. Web sites: https://www.technologystudent.com/ https://www.bbc.co.uk/bitesize/subjects/zfr9wmn https://www.stem.org.uk/gcse-design-and-technology-resources https://www.theschoolrun.com/best-design-and-technology-home-schooling-resources https://design-technology.org/					