

Subject: Art Year 8 Architecture

Previously you have learnt



You will have explored two different rotations of Art and Design in year 7. Within both rotations you will have explored a wide selection of artists including, Yayoi Kusama, David Hockney and Andre Derain in the Colour and Pattern rotation and Antoni Gaudi and Steven Wiltshire in your second rotation. You will have explored media processes including, printmaking, collage, clay, colour theory, tonal drawing, watercolour and poster paint.

In this unit you will learn



The focus of your project in year 8 is Architecture. You will continue to explore a wide selection of media and creative processes, analysing a collection of visually exciting artists. You will learn about collage, modern art concepts, mixed media and a selection of drawing techniques. All skills learnt this project will aim to embed your prior knowledge gained over previous years, allowing you opportunities to creatively express yourself and your own ideas. You will explore architecture artist from both modern times and in ancient cultures widening your understanding and appreciation of the world around us.

Key Vocabulary and Terminology



Tier 2: nature, form, observe

Tier 3: architecture, collage, composition

Further Learning



V&A Exhibition links : V&A Architecture

Museum of architecture: Architecture exhibitions

Hatton Character Qualities

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
Self-Regulation	Courage	Commitment	Team Work	Leadership
Determination	Curiosity	Verbal Confidence	Social Intelligence	Citizenship



Subject: Art Year 8 Portraiture

Previously you have learnt



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In this unit you will learn



This unit you will learn about portraiture and build on the skills from year 7 and from the knowledge gained in your first year 8 project architecture. You will learn how to scaffold the face and apply facial features accurately, how to collage a portrait, explore artists in a personal way and interpret the work of both historical and contemporary portrait artists. You will use a range of media from traditional drawing methods, to dry mono print, painting, collage and photography all based around portraiture. You will learn about a wide range of contemporary artist's as well as some ancient artist works that studied portraitures.

Key Vocabulary and Terminology



Tier 2: Explore, analyse, develop, evaluate

Tier 3: Symmetry, Collage, Fragmenting

Further Learning



The National Portrait Gallery London: www.npg.org.uk

What is a portrait? Tate Gallery definitions and further research: www.tate.org.uk/art/art-terms/p/portrait

Hatton Character Qualities

Resilience	Open Mindedness	<u>Creativity</u>	Responsibility	Empathy
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Subject: Computer Science Year 8 Algorithms

Previously you have learnt



How to build computer programs using the programming language called 'small basic'. You were introduced to key concepts such as how to build a program, how to create and use variables and how to output values on a screen. You should be able to write a program that includes inputs to simple questions from Year 7.

In this unit you will learn



How to find a computer solution to a problem without worrying about a specific programming language like Small Basic or Greenfoot. You will learn how algorithms can be used to help solve problems, to describe processes, to map out the steps necessary to achieve a goal, and the extent to which a problem is actually solvable.

Key Vocabulary and Terminology



Tier 2: Condition, input, output, process.

<u>Tier 3</u>: Flow chart, pseudocode, sequence, selection, iteration, loop, decision.

Further Learning



https://www.geeksforgeeks.org/introduction-to-algorithms/

What is an algorithm?

What is computational thinking?

Hatton Character Qualities

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Subject: Dance Year 8 Performance and Appreciation 1

Previously you have learnt



In year 7 you will have studied dance performance and choreography through 2 or more different styles. You will have performed in front of peers and looked at performance techniques. You will have also explored basic choreography and working in a group.

In this unit you will learn



In this unit you will look at dance performance through appreciation of professional works. For example, learning the choreography inspired by professional repertoire. You will learn where the choreography came from, who choreographed the professional work and why it was made.

In this unit you will also recap performance techniques from year 7 and embed them when performing someone else's work. At the end of this unit, you will evaluate your performance.

Key Vocabulary and Terminology



Tier 2: choreograph, perform, appreciation

Tier 3: Action, space, dynamics, relationship, unison, canon, formations, starting position, addition, projection, focus, posture, alignment, balance, coordination, control, flexibility, mobility, strength, stamina, extension, isolation.

Further Learning



Tier 2: perform, appreciation, stage, audience, dancers

Tier 3: starting position, posture, alignment, balance, coordination, control, strength, stamina, extension, isolation, projection, focus, spatial awareness, facial expression, phrasing

Hatton Character Qualities

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Subject: Drama Year 8 Rotation 1: Anti-social behaviour

Previously you have learnt



Drama skills such as Magic 7 and Performance Rules. You have also developed your understanding of creating tension and atmosphere in performance.

In this unit you will learn



How to use drama techniques to explore the theme of Peer Pressure and Anti-Social Behaviour. You will explore a variety of characters and have an opportunity to create your own Monologue for performance.

Key Vocabulary and Terminology



Tier 2: Voice, Eye Contact, Body Language, Movement, Facial Expression, Gesture, Proxemics, Rehearse, Perform.

Tier 3: Role Play, Still Image, Monologue, Thought Tracking, Hot Seating, Freeze-action-freeze, pitch, pace, pause, volume, emphasis, tone, direct address, characterisation.

Further Learning



How performers use their body - Physical skills for interpreting a character - Edexcel - GCSE Drama Revision - Edexcel - BBC Bitesize

Hatton Character Qualities

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Subject: Design Technology Year 8 Developing Practical skills (Product Design)

Previously you have learnt



In Year 7 you marked out, cut and finished 3mm acrylic using a range of workshop tools, while learning about health and safety in a workshop environment.

You also learnt how to use 2D design (CAD) to draw out a range of simple shapes and designs and were introduced to the laser cutter (CAM) to manufacture simple projects.

In this unit you will learn



In this unit you will develop your skills using a range of tools. You will also learn how to use the belt sander and pillar drill safely. You will learn about simple circuits and how to join electronic components through soldering. You will learn different methods of shaping and moulding plastics focusing on achieving a high-quality finish in your work.

Key Vocabulary and Terminology



Tier 2: analyse, create, explain, describe, design

<u>Tier 3:</u> soldering, drilling, components, circuit, strip-heater, orthographic projection

Further Learning



BBC Teach Design and Technology Materials and Processing

Technology Student Introduction to Materials Research

Hatton Character Qualities

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Subject: Design Technology Year 8 Developing Textiles Skills

Previously you have learnt



In year 7 you have explored a range of traditional textile techniques from around the world as well as the work of contemporary textile artists such as Liz Payne. You have developed your practical skills, learning how to create repeating patterns using block printing and stencilling as well as a range of hand embroidery stitches.

In this unit you will learn



In this unit you will develop your technical skills and accuracy through use of the sewing machine. A large emphasis will be place on safe working practices, time management and quality control. You will also look at industrial processes and careers in the textiles industry. You will learn how to read patterns, produce technical drawings and join and finish materials to a high standard.

Key Vocabulary and Terminology



Tier 2: Analyse, design, create, explain, identify, accuracy

<u>Tier 3</u>: Fibre, resit dye, grainline, seam

Further Learning



V&A Museum Explore The Collections (vam.ac.uk)

Hobbycraft Tutorials Sewing Different Seams Tutorial | Get Started in Sewing

Scene360 8 Strangely Fascinating and Innovative Fashion Designers

Hatton Character Qualities

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Subject: English, Year 8, Mystery

Previously you have learnt



In year 7 you looked at Oliver Twist and focused on contextual information of Victorian London including crime in the 19th Century and The Poor Law. Through reading Oliver Twist, you also explored 19th Century language. Furthermore, you explored different characters like The Artful Dodger and Bill Sikes and the effect they have on the reader.

In this unit you will learn



You will be transported back to the 19th Century to explore the cases of Sherlock Holmes and his sidekick Watson. You will learn more about the developments of crime including the formation of the police and detecting skills. You will continue practising your analytical paragraphs by using evidence and making inferences, just like Sherlock himself!

You will also develop your grammar skills by recapping sentence type and how they join together through clauses and conjunctions. You will also get the opportunity to write in different genres such as crime and gothic.

Key Vocabulary and Terminology



<u>Tier 2:</u> Metropolitan, periodical, serial, seldom, eccentric, deduction, reasoning, observing, distinction, sufficient, immense, scandal, compromise, reputation, expose, traction, domestic sphere, delicacy, oslters, introspection, curse, desolate

<u>Tier 3:</u> Protagonist, foil, genre, convention, passive, archetype, gothic, subordinate clause, conjunction

Further Learning



BBC How was Sherlock Holmes created?

BBC Victorians Crime

BBC Sherlock Holmes

Hatton Character Qualities

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Subject: Geography Year 8 How does the Earth work?

Previously you have learnt



In the previous year you have gained a foundational understanding of geography and developed essential skills such as map reading, using Ordnance Survey maps, and understanding aerial photos. You learned to locate places worldwide, describe them using geographical vocabulary, and calculate real-world distances using map scales. You also practiced identifying directions with a compass rose, interpreting aerial photographs, and creating maps of your local area. You have considered how animals adapt to environmental threats and have a good understanding of the core principles of geography.

In this unit you will learn



This unit will delve into the Earth's natural systems and processes, exploring the lithosphere, hydrosphere, biosphere, and atmosphere. You will learn about the rock cycle, water cycle, carbon cycle, and the impact of glaciation. The unit will also cover biomes and their distribution, as well as the human impact on Earth's systems, such as deforestation and plastic pollution.

Key Vocabulary and Terminology



<u>Tier 2:</u> Earth, Water, Rock, Cycle, Biomes, Pollution, River, Glaciers, Systems, Natural

<u>Tier 3:</u> Lithosphere, Hydrosphere, Biosphere, Atmosphere, Rock cycle, Water cycle, Carbon cycle, Glaciation, Biomes, Deforestation, Pollution, Natural hazards, Earthquakes, Volcanoes, Floods, Interconnected, Human impact, Resources, Climate change, Atmosphere, Plate tectonics

Further Learning



The Rock Cycle: **BBC Bitesize**

The Water Cycle: National Geographic Water Cycle

Understanding Biomes: <u>Understanding Biomes</u>

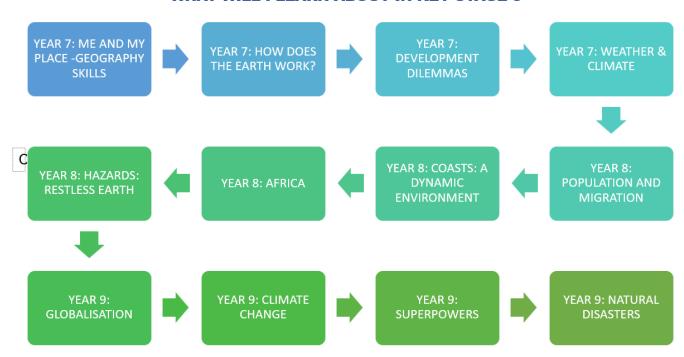
Hatton Character Qualities

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
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How Does the Earth Work?

Topic Statement	(E)	<u>(i)</u>	69
I know the four main parts of the Earth (lithosphere, hydrosphere,			
biosphere, atmosphere).			
I understand the rock cycle and how it shapes the Earth's surface.			
I grasp how the water cycle operates and why it's vital for life.			
I can explain the carbon cycle and its impact on climate change.			
I know the different biomes on Earth and how they adapt to their			
environments.			
I am aware of how human actions, like deforestation and pollution, affect			
Earth's systems.			
I understand the causes and effects of natural hazards like earthquakes,			
volcanoes, and floods.			
I know how glaciers have shaped and continue to shape the landscape.			
I recognize the importance of understanding Earth's systems to manage			
resources and handle natural hazards.			
I understand how Earth's systems are interconnected and how changes in			
one can affect others.			

WHAT WILL I LEARN ABOUT IN KEY STAGE 3





Subject: Geography Year 8 What makes coasts such a dynamic environment?

Previously you have learnt



In the previous unit we delved into the Earth's natural systems and processes, exploring the lithosphere, hydrosphere, biosphere, and atmosphere. You learnt about the rock cycle, water cycle, carbon cycle, and the impact of glaciation. The unit also covered biomes and their distribution, as well as the human impact on Earth's systems, such as deforestation and plastic pollution.

In this unit you will learn



This unit will focus on coastal processes such as erosion, transportation, and deposition. You will learn about landforms created by these processes and the human impact on coasts through tourism, development, and pollution. The unit will also explore coastal management strategies, including both hard and soft engineering approaches.

Key Vocabulary and Terminology



<u>Tier 2:</u> Coasts, Waves, Tides, Erosion, Beaches, Cliffs, Dunes, Pollution, Development, Protection

<u>Tier 3:</u> Erosion, Transportation, Deposition, Landforms, Tourism, Development, Pollution, Coastal management, Hard engineering, Soft engineering, Coastal processes, Coastal landforms, Human impact, Conservation, Rising sea levels, Coastal protection, Natural solutions, Climate impact

Further Learning



Explore coastal processes and landforms from the British Geological Survey

Learn about coastal management strategies from the Environment Agency

Understand the impact of tourism on coasts from the Marine Conservation Society

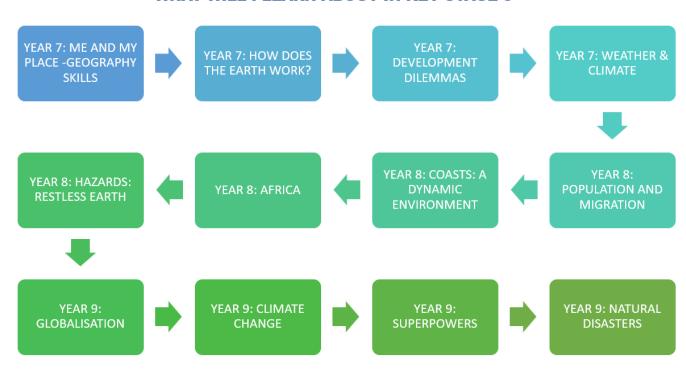
Hatton Character Qualities

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
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Coasts: A Dynamic Environment

Topic Statement	②	<u> </u>	ဖြ
I understand how waves and tides shape coastlines through processes like			
erosion and deposition.			
I can describe different coastal landforms such as beaches, cliffs, and			
dunes.			
I know how human activities, like construction and pollution, impact			
coastal environments.			
I can evaluate different methods for coastal protection, including			
engineered structures and natural solutions.			
I recognize the importance of managing coastlines carefully to balance			
development and conservation.			
I understand how natural features like sand dunes and mangroves help			
protect coastlines.			
I am aware of how climate change, particularly rising sea levels, is			
affecting coastlines.			
I can examine how different places around the world manage their coastal			
areas.			
I understand the need to protect coastlines for economic, social, and			
environmental reasons.			
I can share what I learned from visiting a local coastline and its			
management strategies.			

WHAT WILL I LEARN ABOUT IN KEY STAGE 3





Subject: YEAR 8 German Term 2: Shopping and clothes

Previously you have learnt



Last year we have learnt how to give opinions and justify those opinions, as well as learning adjectives to describe things. Last term we have begun to use the past tense to talk about food. Your phonics knowledge will have improved through reading aloud and speaking activities.

In this unit you will learn



How to talk about clothing and fashion in the present and future tenses. We will use the third person to describe what someone else is wearing using adjectives. We will look at what types of clothes they wear German speaking countries and how that differs from our country.

Key Vocabulary and Terminology

Tier 2: past perfect, future tense, infinitive verb, reflexive verb, word order, adjectives



Tier 3

You will be able to answer questions like: Was trägst du zur Schule? Was wirst du tragen?

Further Learning



Please look at our department Padlet under Y8 Unit 2. Here you can find all the vocabulary on the knowledge organisers.

Padlet for KS3 German

Hatton Character Qualities

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
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Subject: History Year 8 What caused the Witch Craze?

Previously you have learnt



About the English Civil War and how it changed Britain. You will see that the 'witch craze' took a significant turn for the worse during the English Civil War so you should be able to explain why this was and how the English Civil War and Witchcraft are linked. Previously you may have only learnt about witches and witchcraft through popular stories like Roald Dahl's 'The Witches' or television programmes. This unit will give you an understanding of the history of witchcraft in the UK and to a lesser extent, Europe.

In this unit you will learn



What witchcraft was and how and why it died out. You will touch on the 'witch craze' in Europe and what were the factors that made witch hunts happen so regularly before focusing your investigations into Northampton. Through source analysis you will learn about the Northampton Witch Trials and see what they can teach us about witchcraft. We will practice the character skill of empathy to look at people's emotional experience when accusing others or being accused.

Key Vocabulary and Terminology



<u>Tier 2</u>: Witchcraft, similarities, differences, outcast, sources

<u>Tier 3</u>: Heresy, Monarch, interpretations, Malleus Maleficarum, Daemonologie, and Assizes.

Further Learning



Seventeenth Century Witch Hunts

Witches of Northampton

Hatton Character Qualities

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Lifeskills - Year 8, Term 2: Ethics in Careers - Finance

Previously you have learnt



In year 7 you learned about the skills that you will need in the world of work and why it is important to develop those skills. You will have learned about the Hatton Character Qualities and should be able to identify what they are and why they are important to you now and in the future.

In this unit you will learn



What money is and that people have different attitudes towards debt and savings. You will learn about some different types of savings and borrowings and also consider how monetary choices will change as you grow up. You will look at some case study scenarios and consider what might be the best choices for those individuals and try and justify your answers. You will learn about financial peer pressure and why it is important that you are wary of how others may pressure you to spend your money. You will also learn that there a wrong way to make money. You will then consider how you can make a more employable you and action plan how you can enhance your employability skills

Key Vocabulary and Terminology



Tier 2: Finance, money, dilemma, peer pressure, core competencies, Hatton Character Qualities, audit.

Tier 3: Credit cards, overdrafts, car finance, mortgage, drug mules, money mules, online scams

Further Learning



Finance - BBC Bitesize

Money Games and Online Financial Resources | MoneySense (mymoneysense.com)

Home | Practical Money Skills

Hatton Character Qualities

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Lifeskills - Year 8, Term 1: Health and WellBeing - Managing my Influences

Previously you have learnt



Some mindfulness and regulation strategies to help you with your transition into secondary school. You will address the topic of grief and understand that grief can be caused by a change or loss of someone or something that you love. You will also learn about emotional intelligence and create an action plan which will help you to identify your emotional strengths and weaknesses. As your bodies are changing you will also learn about personal hygiene and how to look after yourself as well as how to be safe on roads, bikes, rail, and in water when out experiencing your freedom for what may be the first time.

In this unit you will learn



About Emotional Well-being and what we mean by the term mental health so you are able to access sources of support at school, and learn how you can support yourself and others in developing strategies to support good mental health. Lessons will cover Self Esteem; Managing Emotions and we will use the DOVE Confidence Me-Appearance ideals lesson content to support with learning about self-esteem. You will also learn about the risks associated with tobacco, drugs, alcohol and caffeine.

Key Vocabulary and Terminology



Tier 2: Emotions, self-regulation, self-esteem, personal safety, vigilance, drugs, habits, addiction, caffeine, social, and dependence.

Tier 3: Appearance ideals, mental health, psychological.

Further Learning



https://www.bbc.co.uk/teach/class-clips-video/pshe-ks3-ks4-time-to-talk-about-self-esteem-with-zara-mcdermott/zpgmtrd

https://www.childnet.com/young-people/

Drug and Alcohol Support | WithYou (wearewithyou.org.uk)

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Term 1



Subject: Mathematics Year 8 Number Sense 1

Previously you have learnt



To consolidate your learning of number from primary school to deepen your understanding and develop it further through the use of reasoning and problem solving. You have learnt how to express a number as a product of primes and use a calculator effectively.

In this unit you will learn



To use the prime factor decomposition of numbers to derive associated facts, find the highest common factor and lowest common multiple. You will consolidate your learning of number and apply it to financial contexts.

Key Vocabulary and Terminology



<u>Tier 2:</u> order, estimate, multiple, factor, ascending, descending, product, operations, compare, statement, balance, finance

Tier 3: integer, decimal, prime, hundred, thousand, million, multiplication, division

Further Learning



<u>Largest Product, NRich Puzzle</u> <u>Gabriel's Problem, NRich Puzzle</u> American Billions, NRich Puzzle

UKMT Maths Challenge Junior questions are a great source to deepen your understanding.

Hatton Character Qualities

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Subject: Mathematics Year 8 Number Sense 2

Previously you have learnt



In Primary School to recognise numbers below zero and link to real life contexts, compare and order negative numbers and count forwards and backwards through zero. In Year 7 you deepened your understanding on adding, subtracting and multiplying directed numbers via pictorial and abstract contexts.

In this unit you will learn



To consolidate your understanding on adding, subtracting and multiplying directed numbers via pictorial and abstract contexts and solve complex calculations involving directed numbers and interleaving order of operations.

Key Vocabulary and Terminology



<u>Tier 2:</u> Order, compare, positive, negative, calculate, patterns, greater than, less than, temperature

<u>Tier 3:</u> Addition, subtraction, multiplication, division, directed number, order of operation, square, square root

Further Learning



<u>Practice Makes Perfect 2, Puzzle</u> <u>Radiating Directed Numbers, Puzzle</u>

UKMT Maths Challenge Junior questions are a great source to deepen your understanding.

Hatton Character Qualities

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Subject: Mathematics Year 8 Representing Numbers

Previously you have learnt



To fluently perform addition, subtraction and multiplication with mixed numbers and to increase/decrease by a fractional amount. You have learnt how to articulate the definition of percentages, how to represent them using diagrams and find a percentage of an amount

In this unit you will learn



To fluently perform all operations with mixed numbers, combining them to include the order of operations. You will learn to calculate a percentage change and use multipliers to calculate percentages, including increases and decreases.

Key Vocabulary and Terminology



Tier 2: subtract, quantity, express, multiples, compare, profit, depreciation

Tier 3: represent, convert, denominator, numerator, improper, multiplier, percentage

Further Learning



<u>Peaches Today, Peaches Tomorrow.. NRich</u> <u>Terminating or Not? NRich</u>

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Term 2



Subject: Mathematics Year 8 Intro to Algebra

Previously you have learnt



To understand the difference between an expression, equation, formula, term, function and identity. Use and interpret algebraic notation leading to simplifying and manipulating algebraic expressions. This was then extended to substituting in values in order to evaluate expressions. You have learnt how to multiply a single term over a bracket.

In this unit you will learn



To use index notation and apply basic index laws. This will be extended into multiplying a single term over a bracket and collecting like-terms, multiplying two brackets together and simplify, all whilst including the use of index laws. You will also learn how to factorise algebraic expressions by taking out single term common factors.

Key Vocabulary and Terminology



<u>Tier 2:</u> interpret, evaluate, notation, equivalence

<u>Tier 3:</u> expression, equation, formula, term, function, identity, coefficients, brackets, simplify, manipulate, expressions, addition, subtraction, multiply, divide, integers, formulae, substitute

Further Learning



The <u>UKMT Maths Challenge</u> questions are a great source to deepen the understanding of the above topics.

Hatton Character Qualities

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Subject: Mathematics Year 8 2D Shapes

Previously you have learnt



In primary school to draw and measure lines and angles accurately. Understand the notation used for equal angles and lines and applying it to properties of triangles and quadrilaterals. You will have learnt in Year 7 to describe, sketch and accurately draw using conventional terms and notations. Classify quadrilaterals and triangles by knowing their properties including lines of symmetry and rotational symmetry and angles in polygons

In this unit you will learn



To extend your knowledge to derive and apply angle facts including angles in parallel lines. You will solve problems involving angle properties and how to form and solve equations using angle facts.

Key Vocabulary and Terminology



<u>Tier 2:</u> Estimate, measures, calculate, accuracy, regular, triangle, recognise, parallel, derive, adjacent, classify, interior, exterior

<u>Tier 3:</u> polygons, vertices, perpendicular, rotational symmetry, quadrilateral, alternate angles, corresponding angles, co-interior angles, transversal

Further Learning



Don Steward Tangram Activity

Open Middle, Interior and Exterior Angles

Oak National Academy Lessons

Hatton Character Qualities

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Subject: Mathematics Year 8 Algebra in Context

Previously you have learnt



In Year 7 to find the area and perimeter of basic shapes and write them as expressions. You have learnt to construct and solve simple linear equations using inverse operations.

In this unit you will learn



To construct and solve complex linear equations, including variables on both sides of the equations. You will learn to interleave your knowledge of angles facts and perimeter/area of 2D shapes to solve complex equations. This will extend beyond the shapes you have previously learnt to include the area and circumference of circle . You will also learn to change the subject of a formula and it's applications in other subjects.

Key Vocabulary and Terminology



Tier 2: construct, solve, addition, subtraction, variable

Tier 3: equation, inverse, multiplication, division, coefficient, formula

Further Learning



Open Middle, 'solving one step, positive and negative solutions'

Don Steward, challenging solving equations with variable on one side

Oak National Academy Lessons

<u>UKMT Maths Challenge Junior</u> questions are a great source to deepen your understanding.

Hatton Character Qualities

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Term 3



Subject: Mathematics Year 8 3D Shapes

Previously you have learnt



In primary school to recognise 3D shapes from their nets, understand what volume is, used cubes to count it and calculate the volume of a cuboid.

In Year 7 you learnt to convert between area and volume measures, to apply your knowledge of solving equations to calculate missing lengths and/or area when given the volume of prisms.

In this unit you will learn



To consolidate and extend your knowledge of 3-D shapes, recognise their properties, and be able to describe them in words and by drawing. You will be able calculate the volume and surface area of cubes and cuboids and more complex prisms.

Key Vocabulary and Terminology



<u>Tier 2:</u> Estimate, scales, area, shaded, volume, measures, metric, record, units, calculate, context, accuracy, imperial, regular, abbreviations, triangle, trapezium, recognise,

Tier 3: formulae, fraction, perimeter, polygons, vertices, surface area

Further Learning



NRich Short Problems, Perimeter, Area and Volume

NRich Short Problems, 3D Shapes

NRich Cuboid Challenge

NRich Can they be equal Problem

Hatton Character Qualities

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Subject: Mathematics Year 8 Ratio and Proportion

Previously you have learnt



In Year 7 to read, write and interpret ratios including the relationship between ratios and fractions. You learnt how to write and use ratios in unitary form and share quantities in a given ratio. You have also learnt to solve problems involving direct proportion such as best buy problems.

In this unit you will learn



To solve ratio problems involving being given the difference, finding the whole or other part(s). You will also learn to solve problems involving direct proportion such as exchange rates, recipe problems and extend into solving inverse proportion problems.

Key Vocabulary and Terminology



Tier 2: simplify, quantity, express, equivalent, part, whole, difference, exchange, inverse

Tier 3: ratio, unitary form, proportion, fraction, scale factor

Further Learning



Don Steward, What's the question

Dr Frost, Ratio and Proportion Problems

Oak National Academy Lessons

<u>UKMT Maths Challenge Junior</u> questions are a great source to deepen your understanding.

Hatton Character Qualities

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
Self-Regulation	Courage	Commitment	Team Work	Leadership
Determination	Curiosity	Verbal Confidence	Social Intelligence	Citizenship

Term 4



Subject: Mathematics Year 8 Sequences and Graphs 1

Previously you have learnt



In Year 7 to describe and continue pictorial, fractional and decimal sequences. Understand key vocabulary such as position and term of a sequence. You have learnt to generate and describe integer sequences, using the term to term rule and the position to term rule.

In this unit you will learn



To explore and identify different types of sequences such as Fibonacci, Geometric, Arithmetic and Quadratic. You will learn to determine whether a term is in a sequence and justify your reasoning.

Key Vocabulary and Terminology



<u>Tier 2:</u> generate, describe, represent, pictorial, sequence, determine

<u>Tier 3:</u> linear, integer, term to term, position to term, triangular, square, odd, even, quadratic, arithmetic, Fibonacci, geometric

Further Learning



Nth Term Overlap, Don Steward

Nth Term Cupcakes, Don Steward

Oak National Academy Lessons

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Hatton Character Qualities

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Subject: Mathematics Year 8 Sequences and Graphs 2

Previously you have learnt



In Year 7 to extend your knowledge of coordinates to solve geometry problems. Identify and draw lines that are parallel to the axes. You have learnt to recognise lines in the form y = kx, explore the gradient in y = kx and link to problems involving direct proportion.

In this unit you will learn



To recognise and use lines in the form y = x + a, and extend to plotting graphs in the form y = mx + c. You will learn to explain what the m and c represent in linear graphs, explain what a graph will look like and find m and c by looking at a graph. You will learn to link graphs to linear sequences and construct linear functions from real life graphs.

Key Vocabulary and Terminology



<u>Tier 2:</u> sequence, rule, positive, negative, relationship, graph, intercept, graph, calculate, functions, interpretation, context

Tier 3: linear, co-ordinate, gradient, equation, quadrant, axis

Further Learning



y=mx+c in a real life context

y=mx+c in a real life context, Don Steward

Oak National Academy Lessons

UKMT Maths Challenge Junior questions are a great source to deepen your understanding.

Hatton Character Qualities

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Term 5



Subject: Mathematics Year 8 Probability

Previously you have learnt



How to convert between fractions decimals and percentages. You have not been taught Probability before however you will already understand risk and chance of something occurring.

In this unit you will learn



The concept of probability, the vocabulary used and how probability can be represented. You will learn to compare theoretical probabilities with experimental probabilities and be able to comment on the differences.

Key Vocabulary and Terminology



<u>Tier 2:</u> scale, likelihood, certain, impossible, likely, unlikely, theoretical, experimental, chance, bias

Tier 3: probability, Venn diagram, relative frequency, sample space diagram

Further Learning



Could it be a probability? – Variation Theory

Simple probability in words – Variation Theory

Probability: Venn Diagrams and Two-Way Tables – Variation Theory

<u>UKMT Maths Challenge Junior</u> questions are a great source to deepen your understanding.

Hatton Character Qualities

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Term 6



Subject: Mathematics Year 8 Representing Movements 1

Previously you have learnt



To construct and interpret scale drawings and maps. You will have learnt to construct circles and triangles using a pair of compasses. You will have gained an understanding of bearings and how to represent them.

In this unit you will learn



To extend your knowledge on constructions to incorporate perpendicular bisectors, angle bisectors and solve loci problems. You will further develop your understanding on bearings to be able to specify direction with bearings and calculate bearings using angle facts, including angles in parallel lines.

Key Vocabulary and Terminology



Tier 2: scale drawing, interpret, construct, angles, parallel

<u>Tier 3:</u> cardinal, congruent, bearing, co-interior

Further Learning



Scale Drawings, Pitches, Don Steward

Find the Bearing, Variation Theory

Challenging Bearings Questions, Don Steward

UKMT Maths Challenge Junior questions are a great source to deepen your understanding.

Hatton Character Qualities

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
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Subject: Mathematics Year 8 Representing Movements 2

Previously you have learnt



To recognise lines of symmetry and the order of rotational symmetry of shapes. You have will learnt to identify whether a shape has been reflected, rotated or enlarged and perform these transformations.

In this unit you will learn



To extend your knowledge on transformations to include describing and performing translations using vector notation.

Key Vocabulary and Terminology



<u>Tier 2:</u> recognise, transformation, reflect, enlarge, rotate, horizontal, vertical, clockwise, anticlockwise, translate

Tier 3: rotational symmetry, degree, column vector

Further Learning



<u>Attractive Rotations – Nrich Puzzle</u>

Transformation Game - Nrich Puzzle

Who is the fairest of them all? - Nrich Puzzle

<u>UKMT Maths Challenge Junior</u> questions are a great source to deepen your understanding.

Hatton Character Qualities

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
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Subject: Music Year 8 Rotation 1

Previously you have learnt



In Year 7 you learnt about music notation for **rhythm** and **pitch**, how to compose a melody using the **Pentatonic Scale**, and how to create a series of **variations** using **Texture**, **Timbre**, **Pitch**, **Rhythm** and **Dynamics**.

You developed your listening and analysis skills through **Gamelan** music, and listening to music from the **Western Classical Tradition**

In this unit you will learn



You are going to develop your **listening and appraising** skills, and **performance** skills through the 12 Bar Blues, and will **compose** music for film clips in a variety of genres.

You will also develop your ensemble performance skills by **rehearsing** and **performing** a popular song within a small group environment

Key Vocabulary and Terminology



<u>Tier 2:</u> compose, contrast, improve, develop, variation, evaluate, texture, structure, dynamics, tempo

<u>Tier 3:</u> monophonic, homophonic, polyphonic, verse-chorus, strophoic, rondo, straight rhythm, syncopated rhythm, Through-composed, leitmotif

Further Learning



Focus On Sound

<u>12 Bar Blues</u> <u>Pop Song Structure</u> <u>Dynamics</u>

Hatton Character Qualities

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Subject: PE Year 8 Basketball

Previously you have learnt



The principles of ball familiarisation and passing

The skills of dribbling and pivoting when in possession of the ball.

The ability to pass and move off of the ball.

The correct technique for shooting a set shot.

The correct technique for shooting lay-up.

How to outwit an opponent in a competitive game situation.

In this unit you will learn



How to develop the triple threat strategy of shooting, pivoting /passing or dribbling.

How to use attacking strategies to outwit an opponent

A range of techniques and skills to use when defending

The correct technique to perform a set shot, jump shot and lay up in a game situation.

Methods for outwitting opponents in a competitive game situation

Key Vocabulary and Terminology



Tier 2

outwitting, offense

Tier 3

rebound, jump shot, lay up, pivoting.

Further Learning

Scan these QR codes for information







Triple Threat

Jump Shot

Defending Stance

Hatton Character Qualities

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
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Subject: PE Year 8 Football

Previously you have learnt



Students have learnt to dribble using both feet, when they are unopposed with a defender. The students have also worked on receiving and turning with the ball, then worked on pass and moving around the defenders. The students will have learnt how to shoot with the correct technique.

In this unit you will learn



The students are dribbling and turning against defenders which will help support there attacking instincts and creativity. The students will learn to work as a team in their defensive structure to stop the opposition from scoring.

Key Vocabulary and Terminology



Tier 2 Communication, Tackle

Tier 3 Technique, Tactics, Positioning

Further Learning

Turning Drill

Passing and Moving

Hatton Character Qualities

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Subject: Physical Education Year 8 & 9 Rowing

Previously you have learnt



How to be safe whilst using and setting up machine. An awareness of all the machine parts. Demonstrate the correct rowing technique. Knowledge of the muscle groups used in rowing and controlling strokes per minute.

In this unit you will learn



You will learn to improve fitness for rowing whilst performing a safe and effective rowing technique to maximise power output. You will learn if you better suited to aerobic or anaerobic work. You will continue to demonstrate and maintain a steady pace and power output whilst Circuit training using a rower.

Key Vocabulary and Terminology



Tier 1: Start (catch), Drive, Finish, Recovery

Tier 2: Aerobic and anaerobic, power output, strokes, flywheel

Further Learning



Indoor rowing technique

Hatton Character Qualities

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
Self-Regulation	Courage	Commitment	Team Work	Leadership
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Subject: Physical Education Year 8 Netball

Previously you have learnt



In year 7, you learnt about movement, space, passing and receiving. You looked at how to outwit an opponent by defending and attacking. Shooting, defending and attacking using dodging. Before moving onto a competitive game situation with positions, looked at potential awareness and movement on the netball court.

In this unit you will learn



In Year 8 you will recap passing skills and fundamental rules, be able to identify which pass is used when on a netball court. Progressing your attacking, defending and shooting skills before moving onto game situations using all the new skills you have developed. You will develop your overall knowledge of a netball game looking at positions. As well as knowing basic netball rules

Key Vocabulary and Terminology



Tier 2: passing, shooting, communication and teamwork

<u>Tier 3:</u> footwork, pivoting, obstruction, outwitting, intercepting, receiving, ball handling, marking, and dodging.

Further Learning



Passing basics
Defending principles
Creating space

Hatton Character Qualities

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
Self-Regulation	Courage	Commitment	Team Work	Leadership
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Subject: Religious Education Year 8 Does it matter of the northern white rhino becomes extinct?

Previously you have learnt



You understand how different religions begin, and ideas of what it means to be religious. You can identify what an atheist perspective is, and understand the key principles of Humanism. You have studied ideas about social justice at length, and understand some religious responses to charity. You can explain why art is such an important part of religious and spiritual self-expression.

In this unit you will learn



You will be considering your role and the role of others in caring for the environment. You will be questioning whether or not humans should have dominance over animals, and all of the ethical dilemmas surrounding the different ways in which we use animals. You will learn about different religious attitudes to animals, including using them for work, entertainment and meat. You will consider how religious views link to ideas of creation. You will then be able to consider all of these things when planning and designing an ethical zoo.

Key Vocabulary and Terminology



<u>Tier 2:</u> Belief, Teachings, Quotations, Evidence, Enquiry, Animals, Zoo, Vegan, Vegetarian, Testing

Tier 3: Ahimsa, Stewardship, Dominion, Fundamentalist, Liberalist, Creationist

Further Learning



This Is The ONLY Northern White Rhino Left On Earth | Extraordinary Animals | Our World

Hatton Character Qualities

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
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Subject: Science Year 8 Biology 8B2 Health and Disease

Previously you have learnt



In <u>primary school</u>, you learnt to recognise the impact of diet, exercise, drugs and lifestyle on the way our bodies function. You learnt how to keep your body healthy and how your body might be damaged. In <u>Year 7</u>, you learnt about a variety of organ systems and their functions.

In this unit you will learn



To describe the key components that make up a healthy lifestyle, describe results of different food tests, describe differences between infectious and lifestyle diseases, describe how diseases are spread and describe causes of lifestyle diseases and organ systems they affect.

Key Vocabulary and Terminology



<u>Tier 2:</u> Describe, components, healthy, disease.

<u>Tier 3:</u> Balanced, carbohydrates, energy, lipids, protein, fibre, vitamins, minerals, communicable, non-communicable, pathogen.

Further Learning



BBC Bitesize - Health and Disease Notes

Hatton Character Qualities

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
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Subject: Science Year 8 Chemistry 8C2 Acids and Alkalis

Previously you have learnt



In <u>Year 7</u>, you learnt how to classify chemical reactions, name chemical formulae and write word and symbol equations. Earlier <u>this year</u>, you learnt to differentiate between elements, compounds and mixtures and carried out experimental techniques to separate mixtures.

In this unit you will learn



To describe what is meant by acids and bases, describe the use of indicators to determine pH, describe what is meant by neutralisation, write balanced symbol equations for neutralisation reactions and experimentally synthesise soluble salts.

Key Vocabulary and Terminology



<u>Tier 2:</u> Dilute, concentrated, synthesise, soluble.

Tier 3: Acid, base, alkali, indicators, pH, neutralisation, salt.

Further Learning



BBC Bitesize - Acids and Alkalis Notes

Hatton Character Qualities

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
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Subject: Science Year 8 Physics 8P2 Energy

Previously you have learnt



In <u>primary school</u>, you may not have learnt about energy in physics, but we often use the word. What do you know about energy so far? Let your teacher know.

In this unit you will learn



To explain how energy is stored and transferred, explain how energy is transferred in solids, liquids, gases and vacuums, explain where we find energy in the home and discuss the advantages and disadvantages of renewable and non-renewable energy resources.

Key Vocabulary and Terminology



Tier 2: Compare, calculate, discuss.

<u>Tier 3:</u> Energy, kinetic, gravitational potential, elastic potential, thermal, chemical, conduction, convection, radiation, renewable, non-renewable.

Further Learning



BBC Bitesize - Energy Notes

Hatton Character Qualities

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
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Subject: Spanish Y8 Term 2 La Ropa

Previously you have learnt



Last year we have learnt how to give opinions and justify those opinions and vocabulary. Last term we have begun to use the past tense to talk about food. Your phonics knowledge will have improved through reading aloud and speaking activities.

In this unit you will learn



How to talk about clothing and fashion in the present and future tenses. We will use the third person to describe what someone else is wearing using adjectives. We will look at what types of clothes they wear Spanish speaking countries and how that differs from our country.

Key Vocabulary and Terminology



Tier 2 Time adverbs, superlatives, opinion, prepositions, name of clothing items.

Tier 3 ¿Que llevas? ¿Que vas a llevar este fin de semana?

Further Learning



Please look at our department Padlet under 'La ropa (clothes)'

KS3 Spanish Padlet

Hatton Character Qualities

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
Self-Regulation	Courage	Commitment	Team Work	Leadership
Determination	Curiosity	Verbal Confidence	Social Intelligence	Citizenship