

**Subject: Art Year 8 3D sculptural forms** 

#### 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 structural forms. You will continue to explore a wide selection of media and creative processes, analysing the work of William Bunce. You will learn about collage, 3D paper construction, mixed media drawing, photography 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.

## **Key Vocabulary and Terminology**



Tier 2: nature, form, observe

Tier 3: architecture, collage, composition

## **Further Learning**



V&A Exhibition links : <u>V&A Architecture</u>

Museum of architecture: Architecture exhibitions

#### **Hatton Character Qualities**

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



**Subject: Computing Year 8 Video Editing** 

#### Previously you have learnt



About audio editing and how to organise and save your files efficiently. You have learnt about finding accurate sources of information and you have learnt how to edit audio.

### In this unit you will learn



How to create and edit a video using short video clips, pictures and sound files. You will learn how to add background music and narration to a video and how to include special effects at different scenes.

## **Key Vocabulary and Terminology**



Tier 2: research, assets, audio, video

Tier 3: transition, chroma key, annotation, narration, copyright

## **Further Learning**



Learn how to use Premiere Pro

## **Hatton Character Qualities**

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**Subject: Dance Year 8 Appreciation and Choreography** 

#### Previously you have learnt



In your last rotation you learnt how to develop performance skills and techniques when exploring a professional works.

## In this unit you will learn



In this unit you will learn how to choreograph using a stimulus and creating a dance through choreographic devices and creativity.

You will be working in a group and taking on the role of both dancer and choreographer. The skills a choreographer needs when teaching and creating.

### **Key Vocabulary and Terminology**



Tier 2: choreograph, appreciation

**Tier 3**: action (travel, turn, elevation, gesture, stillness, use of different body parts, floor work, transfer of weight). Dynamics (fast/slow, sudden/sustained, acceleration/deceleration, strong/light, direct/indirect, flowing/abrupt). Spatial (pathways, levels, directions, size of movement, patterns, spatial design)

#### **Further Learning**



<u>Motif development GCSE Dance AQA - YouTube</u> – This video is explaining the advanced choreographic device of motif development.

<u>How to develop movements from a stimulus - YouTube</u> – This video is explaining a stimulus and how they are used in dance.

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Subject: Food and Nutrition Year 8 Cooking Skills and Healthy Eating

#### Previously you have learnt



A variety of creative and practical activities and have gained knowledge, understanding and the skills needed to engage in the iterative process of designing and making. You have also have gained subject knowledge in Science and PSHE about healthy eating and healthy lifestyles. In Mathematics you will have learnt to use weights and measurements which will prepare you well when following recipes.

## In this unit you will learn



How to cook and apply the principles of nutrition and healthy eating. You will learn about the eat-well guide and how to maintain a healthy diet as well as the function of different ingredients. You will make a variety of dishes following a recipe to develop your practical cooking skills and you will practice hygiene and safety in the kitchen when preparing and cooking a variety of foods.

## **Key Vocabulary and Terminology**



<u>Tier 2:</u> recognise, explain, select, analyse, evaluate

Tier 3: gluten, yeast, nutrition, diet, hazard, risk assessment, eat-well guide

## **Further Learning**



Oak National: <u>Health and Safety – Preparation and Hygiene</u>

Oak National: Recipe Development

#### **Hatton Character Qualities**

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**Subject: Design Technology Year 8 Materials and Mechanisms** 

#### Previously you have learnt



In year 7 you gained an understanding of different materials and their properties. You explored both natural and synthetic materials and considered how designers use their technical understanding to select the best material for a product to be manufactured in.

#### In this unit you will learn



In this unit you will develop your technical understanding by exploring a range of Smart materials which sense and adapt to the world around them. You will also explore mechanisms and the four types of motion.

## **Key Vocabulary and Terminology**



Tier 2: Motion, Mechanism, Analyse, Describe, Compare

Tier 3: Linear, Rotary, Oscillating, Reciprocating, Smart Materials

## **Further Learning**



**BBC** Inventing Future Fabrics

DT Revision: YouTube Movement and Motion

#### **Hatton Character Qualities**

Resilience	Open Mindedness	<u>Creativity</u>	Responsibility	Empathy
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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 Sustainability and Design skills

#### Previously you have learnt



During your DT lessons in year 7 you completed a range of foundation units, including an introduction to technical skills in Graphics, Textiles, Product Design and Food and Nutrition. You researched the work of significant designers and developed your verbal confidence by presenting your findings. You developed your knowledge of materials and their properties and how this effects their use. As designers you were introduced to working with a brief and designing for a client and well as idea generation strategies.

#### In this unit you will learn



In this unit, you will build on the knowledge you gained in year 7 by exploring the iterative design process in more detail. You will explore user centred design and deepen your analytical skills when examining existing products. You will widen your design development skills, using modelling to explore ideas in 3D. You will gain a greater understanding of the role of DT in society and be introduce to the concept of sustainable design and the social and moral responsibilities of a designer.

### **Key Vocabulary and Terminology**



Tier 2: generate, develop, refine, create, analyse

<u>Tier 3:</u> client, target market, design brief, iterative design, model, sustainable, lifecycle, 6Rs, Built in obsolescence.

### **Further Learning**



Plastic Ocean How We Can Keep Plastics Out of Our Ocean | National Geographic (youtube.com)

BBC Earth Can fashion be sustainable?

Circular economy How can we solve our waste issue with the Circular Economy? - spunout

## **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: Drama Year 8 Rotation 2: The Hunger Games – Exploring Characterisation

#### Previously you have learnt



How to use drama techniques to explore the theme of Peer Pressure and Anti-Social Behaviour.

You explored a variety of characters and had an opportunity to create your own monologue for performance.

## In this unit you will learn



How to use a range of characterisation and physical theatre techniques to explore the narrative of *The Hunger Games*.

You will consider the portrayal of characters in a creative and energetic way, using exciting physical storytelling techniques and staging conventions—such as stage combat and split-staging—and apply the techniques of innovative theatre practitioners *Frantic Assembly*.

### **Key Vocabulary and Terminology**



Tier 2: Voice, Eye Contact, Body Language, Movement, Facial Expression, Gesture

**Tier 3:** Clear the Space, Hymn Hands, Push Hands, Round by Through, Chair Duet, Focus, Trust, Stimulus, split stage, tableaux, stage combat.

## **Further Learning**



Physical theatre techniques - Physical theatre - GCSE Drama Revision - BBC Bitesize

## **Hatton Character Qualities**

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Subject: English, Year 8, Exploration

#### Previously you have learnt



In year 7 you studied A Midsummer Night's Dream where you looked at how Shakespeare presented Power and Control in strict societies such as Ancient Athens. You explored relationships between characters such as father and daughter relationships and requited and unrequited love. You also learnt about Shakespeare's time at school and what he would've learnt.

#### In this unit you will learn



In this unit, you will focus on the theme of Exploration. You will begin by reading a non-fiction book 'Touching the Void' where you will have discussions about explorations gone wrong. You will then begin studying The Tempest by William Shakespeare. You will expand your knowledge of Shakespeare's world looking particularly at travel, the empire and life in Elizabethan society. You will reinforce your knowledge of patriarchy and hierarchy by analysing different relationships in the play. At the same time, you will have the opportunity to create travel writing and practise using prepositional phrases in your work.

## **Key Vocabulary and Terminology**



<u>Tier 2:</u> Exploration, convention, colonisation, patriarchy, hierarchy, tempestuous, status, usurp, naïve, submissive, inferior, superior, manipulate and imperative

<u>Tier 3:</u> Elizabethan, Jacobean, conjunctions, preposition, prepositional, soliloquy, comedy, and tragedy

## **Further Learning**



The Tempest-Story Summary

**Exploration in Elizabethan England** 

Touching the Void- what happened next

## **Hatton Character Qualities**

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Subject: Geography – Year 8, Glacial Coastal Landscapes

#### Previously you have learnt



About **tectonic hazards** giving you a basic understanding of geology including the **rock cycle**. You also studied other aspects of the UK including **river landscapes** and also **development**.

#### In this unit you will learn



About ever changing landscape of the UK. You will look at not just processes of **erosion**, **transportation** and **deposition** but also how the **geology** also plays a role in the shaping of our coastline. You will examine how these key areas, such as **Hunstanton and the Peak District**, have been affected by glacial and coastal processes.

#### **Key Vocabulary and Terminology**



Tier 2: primary effects, protection, secondary effects, economic impact, environmental impact

**Tier 3**: hydrological cycle, geology, hydraulic action, Longshore drift, bedding planes, joints, lithology, concordant, discordant, igneous, metamorphic, glaciation, moraine

## **Further Learning**



Coastal Landscapes - https://www.internetgeography.net/topics/coasts/

Glacial landscapes - <a href="https://www.internetgeography.net/topics/glaciation/">https://www.internetgeography.net/topics/glaciation/</a>

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## **Topic Review**

**Case Study Summary Notes** 



**Subject: German Year 8 Die Ferien (Holidays)** 

#### Previously you have learnt



Last term we learnt how to talk about different forms of travel and how to get to places. In year 7, we learnt different types of activities and used the near future to say what we will do in the summer holidays. At the beginning of Year 8 you learnt to say what foods you like and dislike. You have also learnt how to form the past tense in German to describe what you ate, drank and have worn.

#### In this unit you will learn



How to talk about holidays in the past tense. We will understand and talk about the food, activities and transport on a holiday. We will look at destinations in Germany, and what one can do there.

You will be able to answer questions like:

Wo fähst du hin?

Was machst du dort?

### **Key Vocabulary and Terminology**



<u>Tier 2</u> imperfect tense, perfect tense irregular verbs, perfect tense with sein/haben

<u>Tier 3</u>: Vocabulary to be able to answers questions like: Wo fähst du hin?

Was machst du dort?

## **Further Learning**



Please look at our department Padlet under Y8

**KS3 German** 

#### **Hatton Character Qualities**

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**Subject: History Year 8 African Kingdoms** 

#### Previously you have learnt



About the Industrial Revolution and how Britain and the world developed, including the highs of inventions and the lows of poverty and crime. This unit will help you apply knowledge to many future topics of British history from the British Empire and the two world wars to development in medicine and public health.

#### In this unit you will learn



About the African Kingdoms and their advanced civilisations that often get ignored in history due to the dominance of European Empires and in particular the white supremacy and past ignorances of Britain. You will compare the ways of living in areas like Benin and Mali, as well as explore India and how it was exploited through empire. In the end we hope you will be able to make up your own mind on what impact the British Empire had around the world.

### **Key Vocabulary and Terminology**



#### Tier 2

Industry trade resources stereotypes slavery exploitation

#### <u> Tier 3</u>

Colonialism East India Company merchant native protest independence

### **Further Learning**



Benin and other West African kingdoms - BBC Bitesize

British colonialism in India - The British Empire - KS3 History

The British Empire - KS3 History - BBC Bitesize

#### **Hatton Character Qualities**

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**Subject: Life Skills Year 8 Personal Safety and Influences** 

#### Previously you have learnt



In Year 7, you have learnt about safe and positive relationships, criminal law and citizenship. Earlier this year, you learnt about financial capability and how to avoid debt. You have also covered human rights, foreign aid and the responsibilities we have as a society.

### In this unit you will learn



About personal safety and understanding the impact of drugs, both legal and illegal (vaping, caffeine, nicotine and alcohol). You will also cover the misuse of drugs as well as the importance of looking after your diet and exercise.

### **Key Vocabulary and Terminology**



<u>Tier 2:</u> vigilance, personal safety, medicinal and recreational drugs, addiction, misuse, physical health, diet

Tier 3: Intoxication

#### **Further Learning**



**Young Minds** 

https://www.talktofrank.com/

alcoholchange.org.uk

#### **Hatton Character Qualities**

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**Subject: Mathematics Year 8 Number System** 

#### 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 Directed Numbers** 

#### 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>

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**Subject: Mathematics Year 8 Fractions & Percentages** 

#### 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>

#### **Hatton Character Qualities**

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**Subject: Mathematics Year 8 Algebraic Notation** 

#### 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 will then be extended to substituting in values in order to evaluate expressions. You will also learn 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 extending into multiplying a single term over a bracket and collect 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, as well as factorising a quadratic expression.

## **Key Vocabulary and Terminology**



Tier 2: 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.

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Subject: Mathematics Year 8 2D/3D Shapes

#### Previously you have learnt



In primary school you will have converted between metric units, for example, 1cm = 10mm, 1m = 100cm.

You will also have converted some imperial units, for example,

1 foot = 12 inches, 1 pound = 16 ounces, 1 stone = 14 pounds, 1 gallon is equal to 8 pints

## In this unit you will learn



To record estimates and readings from scales to a suitable degree of accuracy, including use of units of measure, including both metric and imperial. You will estimate, calculate and solve problems in everyday contexts involving perimeter and area for specific polygons. You will work with 2-D & 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 convert between their units.

### **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 Angle Properties** 

#### 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 also 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

### In this unit you will learn



To extend your knowledge to derive and apply angle facts including angles in parallel lines. You will find the interior and exterior angles of polygons and solve problems involving angle properties. You will also learn 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 Algebraic Equations** 

#### Previously you have learnt



In Year 7 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. 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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**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

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**Subject: Mathematics Year 8 Sequences** 

#### 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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**Subject: Mathematics Year 8 Linear Graphs** 

#### Previously you have learnt



In Year 7 to extend your knowledge of coordinate to solve geometry problems. Identify and draw lines that are parallel to the axes. You will 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**

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



**Subject: Mathematics Year 8 Scale Drawing** 

#### 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

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

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**Subject: Mathematics Year 8 Transformations** 

#### 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**



Attractive Rotations - Nrich Puzzle

<u>Transformation Game – Nrich Puzzle</u>

Who is the fairest of them all? - Nrich Puzzle

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

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**Subject: Mathematics Year 8 Probability** 

#### Previously you have learnt



Nothing specifically on probability in Primary school or Year 7. You will however 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

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# Student journey map

Subject: RE, Does Buddhism have the answer to life's challenges?

#### Previously you have learnt



Knowledge of key concepts of stewardship, authority and nature of God, with examples from previous two units to each category. Developed knowledge of stewardship from the environment unit. Also knowledge of dominion. Basic knowledge of Buddhism and early life of Buddha, Jesus' crucifixion and resurrection and knowledge of what humanism is from year 7 founders unit.

#### What you will learn in this unit



Detailed knowledge of specific aspects of Buddhism including the four noble truths, five precepts, kamma and the noble eightfold path. Application of the declaration of human rights. This investigative unit is designed to apply religious beliefs to contemporary issues. We are looking to get students considering the world around them and how they can use what they learn for the betterment of themselves and others.

#### **Examples of Tier 2-3 Vocabulary that you may come across**



Tier 2: Challenge, meditation, suffering, lotus flower, truth

Tier 3: Kamma, moral/natural suffering, ascetic, precepts, eightfold path

## **Further Links and Associated Reading/Subjects**



Life of Buddha (reading)

Examples of videos used in topic:

<u>Buddhist beliefs about suffering - Higher Religious, moral and philosophical studies - BBC</u> Bitesize











#### **Hatton Characteristics**

Social intelligence/empathy

## Does Buddhism have the answer to life's challenges?

Yes	No
Glos	sary



**Subject: Science Year 8 Biology 8B3 Organism Processes** 

## Previously you have learnt



In <u>primary school</u>, you identified the different parts of flowering plants and explored what plants need to grow and reproduce.

## In this unit you will learn



To describe what is needed for photosynthesis, investigate the effect of light on photosynthesis, describe how plants reproduce, describe the process of aerobic respiration and compare aerobic and anaerobic respiration.

## **Key Vocabulary and Terminology**



<u>Tier 2:</u> Describe, investigate, reproduce, process, compare.

<u>Tier 3:</u> Photosynthesis, chloroplast, respiration, aerobic, anaerobic.

## **Further Learning**



BBC Bitesize – Respiration and Photosynthesis Notes

#### **Hatton Character Qualities**

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Subject: Science Year 8 Biology 8Bi Seed dispersal

#### Previously you have learnt



In <u>primary school</u>, you learnt to take measurements using a range of equipment, record data, make predictions, present findings and form conclusions to answer scientific questions.

## In this unit you will learn



To describe the differences between types of seed dispersal in plants, plan an investigation into parachuting seeds, investigate how seed surface area and size affects the dispersal of seeds and conclude and evaluate your investigations.

### **Key Vocabulary and Terminology**



Tier 2: Describe, plan, investigate, conclude, evaluate

<u>Tier 3:</u> Hypothesis, independent variable, dependent variable, control variable, precise, accurate, reliable, conclusion, evaluation, anomaly.

## **Further Learning**



BBC Bitesize – Seed Notes

BBC Biteszie – Planning an Experiment

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**Subject: Science Year 8 Physics 8P3 More on Forces** 

#### Previously you have learnt



In Year 7, you learnt about contact and non-contact forces.

## In this unit you will learn



To describe balanced and unbalanced forces, identify action-reaction pairs of forces, calculate pressure, describe how pressure changes with depth in a fluid and describe how gases exert pressure.

## **Key Vocabulary and Terminology**



Tier 2: Describe, balance, identify, calculate.

<u>Tier 3:</u> Forces, action-reaction, pressure, gases.

## **Further Learning**



**BBC Bitesize – Forces Notes** 

BBC Bitesize - Pressure Notes

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Subject: Spanish Year 8: Holidays (las vacaciones)

#### Previously you have learnt



Last term, we learnt how to talk about different forms of travel and how to get to different places. In Year 7, we learnt different types of activities and used the near future to say what we will do in the summer holidays.

#### In this unit you will learn



How to talk about holiday times in the past tense. We will understand and talk about the food, activities and transport on a holiday. We will look at destinations in Spain, and what one can do there.

## **Key Vocabulary and Terminology**



Tier 1: Transactional language, las vacaciones, near future tense, preterite tense

Tier 2: ¿Cómo vas a alojarse?, ¿Cómo es el hotel? ¿Cómo fue el camping?

### **Further Learning**



Please look at our department Padlet under Y8 Unit 1

KS3 Spanish (padlet.com)

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