



KING'S LYNN ACADEMY

KNOWLEDGE ORGANISER

Year 9 Term 2 2025-26



Name:

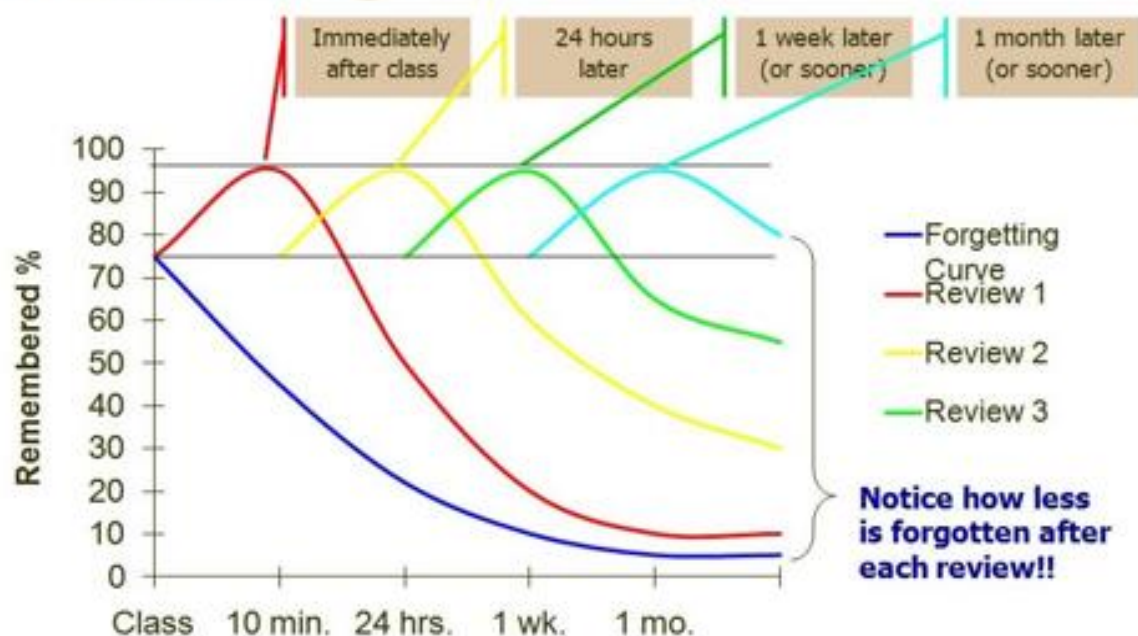
Home Learning

At KLA, we deem it is important to set about making excellent progress in your child's learning by reinforcing crucial knowledge beyond the classroom. To help structure this important aspect of their learning pupils have access to Knowledge Organisers for all subject areas. The Knowledge Organisers will help your son/daughter to learn a wide range of knowledge to prepare them for lessons, low/high stake assessments and GCSE public examinations, and the world of work when used appropriately, consistently and in structured time. Knowledge Organisers encourage pupils to be independent when developing knowledge. Each half term pupils will receive a booklet, which comprises of Knowledge Organisers and the Journey for all subjects in the curriculum. Moreover, this booklet is available on the school website and emailed to parents.

Why Knowledge Organisers?

The GCSE specifications have a greater focus on application, reasoning and evaluation skills. This leaves less time in class to focus on 'the bits they just have to know'. If knowledge retention is improved, this will have a positive impact on levels of attainment and achievement.

Overcoming the Curve



Decay theory states that if learning is not used, revisited or rehearsed it simply fades away.

How to use your Knowledge Organiser

To get the most out of the Knowledge Organisers, your son/daughter should be learning sections and then testing themselves.

Self - Help Apps

Mind Shift



The **Mind Shift** app helps you learn how to relax, to develop more helpful ways of thinking, and identify active steps that will help you take charge of your anxiety. This app includes strategies to deal with everyday anxiety, as well as specific tools to tackle:

Test Anxiety, Perfectionism, Social Anxiety, Performance Anxiety, Worry, Panic and Conflict

Headspace



Headspace teaches you the basics of meditation and mindfulness. As well as guided meditation courses and guides exercises. As well as animations, articles and videos, all in the distinct Headspace style.

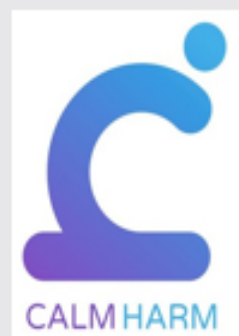
You can try Headspace for yourself and learn the essentials of meditation and mindfulness with their free Basics course

For Me



For Me is an app/website designed by ChildLine to support young people up to the age of 19. The app covers many issues, including self-harm, anxiety, bullying and body image.

Calmharm



Calmharm provides tasks that help you resist or manage the urge to self-harm.

Learn to ride the wave with the free Calm Harm app using these activities:

Comfort, **Distract**, **Express Yourself**, **Release**, **Random** and **Breathe**.

Distract: helps to combat the urge by learning self control

Comfort: helps to care rather than harm

Express Yourself: helps get feelings out in a different way

MyLife



KOOTH is a free, anonymous, confidential, safe, online wellbeing service offering counselling, information and forums for young people.

KOOTH offers access to counsellors 365 days per year 12.00 – 22.00 Monday – Friday 18.00 – 22.00 Saturday and Sunday.

www.kooth.com

Subject Contents



English



Maths



Science



Geography



History



Physical Education



Design Technology



Food



Computing



Personal Development & PDA



Music & Drama



Art



**Are you concerned about yourself or someone else?
Report your concerns to the Safeguarding Team**



**Mrs Goldup, Ms Griffiths-Pugh, Mrs
Roberts, Mrs Germaney & Mrs Webber**

kla.safeguarding@kla.eastern-mat.co.uk

KING'S LYNN ACADEMY

End of Year 9 exams

Creative writing: argument writing

Securing knowledge: grammar & writing skills

Context: tragi-comedy

Class reading: reading for pleasure



Analytical writing: effects on the audience

Analytical writing: modern drama

Context: life in Britain in the 1960-1980s

Study of the play: Blood Brothers



Term 3

Analytical writing: thesis statements

Study of poetry: worlds at war

Class reading: reading for pleasure

Context: war and conflict

Creative writing: article writing

Analytical writing: layering analysis

Context: the dystopian genre

Analytical writing: building what-how-why essays

Term 2

Study of extracts: Dystopian Fiction



Class reading: reading for pleasure

Analytical writing: analysing structure

Context: the Edwardian era

Analytical writing: developing TEAL paragraphs

Context: the gothic genre

Creative writing: descriptive & narrative

Study of the novel: The Woman in Black

Term 1

Welcome to KLA, your journey starts here!

Word:	Definition:
Conventions	The key features of something; the elements you would expect to find in something.
Characterisation	How a writer creates and describes a fictional character.
Conspiracy	A secret plan to do something, usually against another person.
Intertextuality	How texts influence and inspire one another.
Antagonist	The character who is the 'enemy' of the protagonist. Their hostility/rivalry usually drives the plot.
Byronic Hero	A protagonist who is moody, intense and haunted by the past. They often ignore warnings and overstep boundaries.
Impenetrable	Impossible to pass through.
Ominous	An unsettling feeling or sense of negative things to come.
Narrative Hook	A scenario which sparks a reader's curiosity. It is usually positioned at the beginning of a novel.
Monologue	A first-person speech delivered by one individual or character, often revealing their feelings.
Reclusive	Someone who avoids the company of others.
Context	The background and surrounding circumstances in which a text is written and read.
Genre	A style or category of art, music or literature.
Pathetic Fallacy	When the weather and environment is used to help shape the tone or mood of a scene.
Foreshadow	When a writer 'hints' at events which will unfold later in a novel.
Menacing	Hostile and unfriendly, giving off a sense of danger.
Intensifier	Words that strengthen the meaning of other expressions and show emphasis.
Exposition	The beginning of a story or play, where characters and settings are often described.
Character arc	The transformation of a character over the course of a narrative.
Macabre	Strange, horrible and upsetting. Usually involves death.

Year 9 – Term 1: The Woman in Black, by Susan Hill

Context:

Writer's Background	Susan Hill is a popular English author, who was born in 1942. She wrote The Woman in Black in 1983, following many conventions of the gothic genre. Driven by reading ghost stories and partly inspired by the tragic deaths of her fiancé and child, she created the story of someone who haunts others in tremendous pain over her significant loss.
The Edwardian Era	This refers to the reign of King Edward VII, between 1901 and 1910, following the Victorian era. The Edwardians were fascinated by the supernatural, with a strong sense of superstition and different theories about what happened after death. The city of London was full of bustling business activity and heavy industry, which saw terrible pollution fill the skies. By comparison, the countryside was peaceful and disconnected, where communities often spent their entire lives.
The Gothic Genre	This is a category of stories which emerged from the late 1700s. They typically follow characters through an intense plot, where they are placed in extreme, dangerous and highly emotional situations. Gothic stories often include supernatural elements or creatures and are intended to 'excite terror' in their readers.

Key Knowledge

Characters:	
Arthur Kipps	<ul style="list-style-type: none"> The protagonist in the novel. A young lawyer. Now married with children. Haunted by a past memory. Tells us his story of a traumatic case.
Mrs Drablow	<ul style="list-style-type: none"> Recently deceased. The owner of Eel Marsh House. Arthur is sent to sort her estate. Only has two guests at her funeral. Described as reclusive and odd.
Samuel Daily	<ul style="list-style-type: none"> A wealthy, successful landowner. First meets Arthur Kipps on the train. Watches over Arthur & protects him. Owens a dog named Spider. Is generous, kind and wise.
Mr Jerome	<ul style="list-style-type: none"> Mrs Drablow's agent. Looked after her property and land. Conceals information from Arthur. Fearful of the Woman in Black. Refuses to help Arthur any further.
Keckwick	<ul style="list-style-type: none"> Drives a pony and trap. Escorts Arthur to & from the house. Surlly, unemotional, rarely speaks. Knowledgeable about the area. A dependable figure for Arthur.
The Woman in Black	<ul style="list-style-type: none"> A reappearing spirit. Looks sickly and frail. Haunts Eel Marsh House & the town. When seen, a child is killed. Appears menacing and vengeful.

Analytical Writing: TEAL Paragraphs

Topic Sentence	A statement of your view, written in response to the question.
Evidence	A quotation from the text which supports your topic sentence.
Analysis	Identifying the words and methods used by the writer & explaining their effects.
Link to Context	Making connections between your point to the writer, social context or genre.

Descriptive/Story Writing: Our Process

Vocab	Acquiring the best, most precise & suitable words to express your ideas.
Planning	Unfiltered thinking of ideas, which you can then select and sequence.
Writing	Expressing your planned ideas in full sentences and paragraphs.
Editing	Inspecting and improving your work.

Word:	Definition:
Propaganda	Information used to promote a particular cause or point of view.
Patriotism	Support and devotion for your country.
Conscription	Compulsory enlistment in the armed forces.
Juxtaposition	Two opposite or contrasting things placed close to one another.
Extended Metaphor	A metaphor that is continued through a whole text or section of it.
Enjambment	The continuation of a sentence without pause at the end of a line in poetry.
Caesura	A pause in the middle of a line of poetry, usually marked by punctuation.
Dramatic Monologue	A poem in the form of a speech or narrative expressed by an imagined person/character.
Stanza	A group of lines within a poem (a verse).
Imagery	A description that uses vivid language, enabling the reader to visualise it clearly.
Dystopia	An imagined society in the future which has gone wrong, which features significant suffering and injustice.
Utopia	An imagined society that is ideal and perfect.
Tyranny	The leadership of an individual or government which has complete control of an area and is cruel to its citizens.
Patriarchy	A society where men are in power and are considered superior to women.
Surveillance	Close observation of something. Often this refers to using equipment and going to extreme lengths to observe it.
Oppression	The continued cruel and unjust treatment of an individual or group by those in positions of power.
Tropes	A repeated feature or convention.
Conditioning	The process of training someone to behave in a particular way or accept something.
Individualism	The idea of being independent and able to carve your own identity.
Conformity	Following the rules and laws of those in charge without question or resistance.

Year 9 – Term 2: War Poetry & Dystopian Extracts

Context:

Writer's Backgrounds	Dystopian stories and war poems have been created by a range of different writers. Many war poems are written by people with first-hand experience of conflict, either as soldiers themselves or individuals affected by war. Dystopian tales are often written by people who have seen particular events and changes in the world which have caused them concern or reason to question our society.
The Dystopian Genre	Dystopian fiction are stories set in an imagined, futuristic vision of society, where something significant has gone wrong. This typically leads to widespread injustice and suffering. This genre is often used to comment on real-life concerns. Writers may send a message about their fears for the future and warnings for society in dystopian stories.
War Poetry	War has been a popular topic in poetry for many years. War poems often tell personal and sensitive stories about people's experience in war. Sometimes, they are intended to deliberately influence someone's attitude towards a specific war or conflict more generally. War poetry became particularly common following the First World War.

Key Knowledge

Reading List:

War Poetry	<ul style="list-style-type: none"> Wilfred Owen Siegfried Sassoon Rupert Brooke Robert Graves Vera Brittain Jessie Pope Philip Larkin Simon Armitage Carol Ann Duffy 	Dystopian Fiction	<ul style="list-style-type: none"> George Orwell Aldous Huxley H.G Wells Philip Reeve Alex Scarrow Lois Lowry Malorie Blackman Suzanne Collins James Dashner
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Links to previous learning:

The Woman in Black	Animal Farm
<ul style="list-style-type: none"> Genre Conventions Characterisation Atmosphere Tension Suspense 	<ul style="list-style-type: none"> Totalitarianism Democracy Dictatorship Opposition Propaganda Corruption
Year 7 Poetry	Creative Writing
<ul style="list-style-type: none"> Metaphor Simile Rhythm Form Rhyme Speaker 	<ul style="list-style-type: none"> Rhetoric Persuasive methods Ethos, pathos, logos Audience Writing process Tier two vocabulary

Analytical Writing: TEAL Paragraphs

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Creative Writing: Our Process

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Writing	Expressing your planned ideas in full sentences and paragraphs.
Editing	Inspecting and improving your work.

Context:	
Writer's Background	
Era	
Genre	

Characters:	

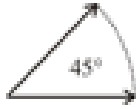
Analytical Writing: TEAL Paragraphs	
<u>T</u> opic Sentence	A statement of your view, written in response to the question.
<u>E</u> vidence	A quotation from the text which supports your topic sentence.
<u>A</u> nalysis	Identifying the words and methods used by the writer & explaining their effects.
<u>L</u> ink to Context	Making connections between your point to the writer, social context or genre.

Descriptive/Story Writing: Our Process	
Vocab	Acquiring the best, most precise & suitable words to express your ideas.
Planning	Unfiltered thinking of ideas, which you can then select and sequence.
Writing	Expressing your planned ideas in full sentences and paragraphs.
Editing	Inspecting and improving your work.

KING'S LYNN ACADEMY

End of Year Exam

Probability



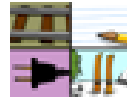
Algebraic representation



Rates



Enlargement and similarity



Solving ratio and proportion problems

Term 3



Rotation and translation

Pythagoras' theorem

Deductions



Maths and money

Mid Term Exam



Using Percentages

Term 2

Numbers

Constructions and congruency



Three dimensional shapes

Forming and solving equations

Testing Conjectures

Straight line graphs

Term 1

Welcome to KLA your Journey starts here

YEAR 9 — REASONING WITH NUMBER...

Using Percentages

@whisto_maths

What do I need to be able to do?

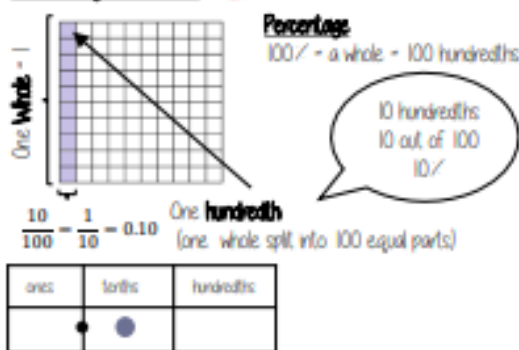
By the end of this unit you should be able to:

- Use FDP equivalence
- Calculate percentage increase and decrease
- Express percentage change
- Solve reverse percentage problems
- Solve percentage problems (calculator and non calculator problems)

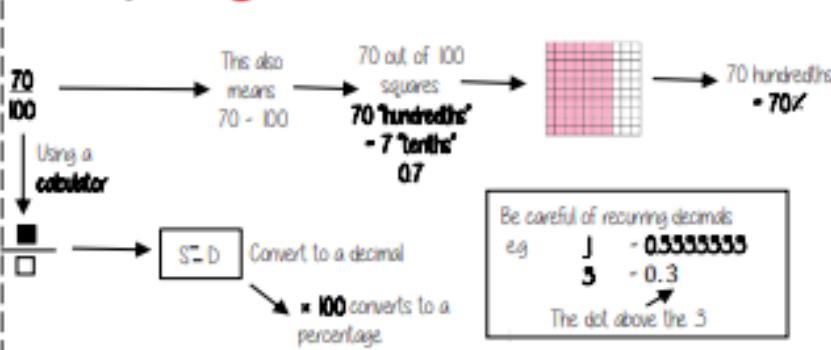
Keywords

- Percent:** parts per 100 — written using the % symbol
Decimal: a number in our base 10 number system. Numbers to the right of the decimal place are called decimals.
Fraction: a fraction represents how many parts of a whole value you have.
Equivalent: of equal value.
Reduce: to make smaller in value.
Growth: to increase/ to grow.
Integer: whole number, can be positive, negative or zero.
Invest: use money with the goal of it increasing in value over time (usually in a bank).
Multiplier: the number you are multiplying by.
Profit: the income take away any expenses/ costs.

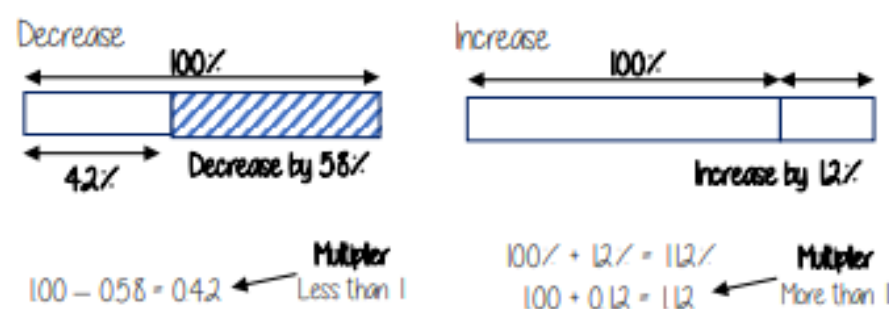
FDP Equivalence



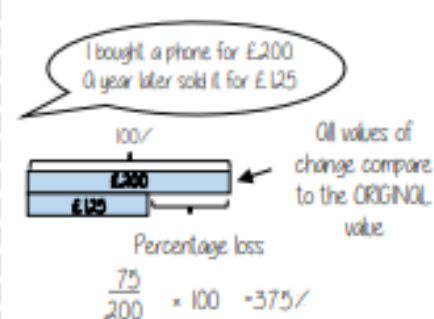
Converting FDP



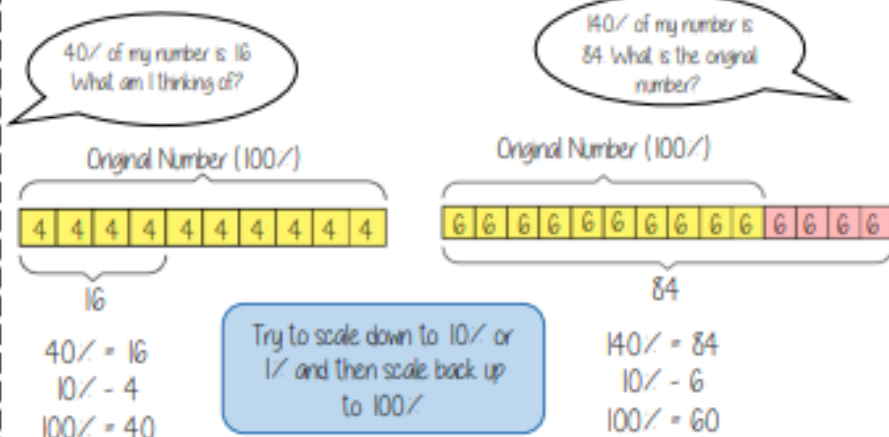
Percentage Increase/ Decrease



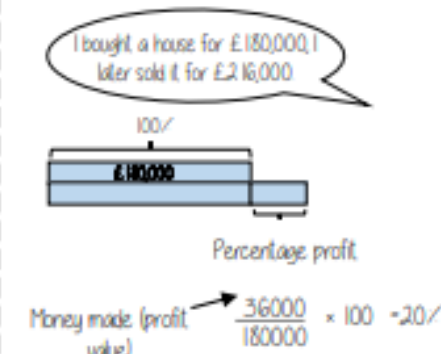
Percentage change



Reverse Percentages



$$\frac{\text{Difference in values}}{\text{Original value}} \times 100$$



YEAR 9 — REASONING WITH NUMBER...

Maths & Money

@whisto_maths

What do I need to be able to do?

By the end of this unit you should be able to:

- Solve problems with bills and bank statements
- Calculate simple interest
- Calculate compound interest
- Calculate wages and taxes
- Solve problems with exchange rates
- Solve unit pricing problems

Keywords

- Credit:** money being placed into a bank account
Debit: money that leaves a bank account
Balance: the amount of money in a bank account
Expense: a cost/ outgoing
Deposit: an initial payment (often a way of securing an item you will later pay for)
Multiplier: a number you are multiplying by (Multiplier more than 1 - increasing, less than 1 - decreasing)
Per Annum: each year
Currency: the type of money a country uses
Unitary: one - the cost of one.

Bills and Bank Statements

Bills - tell you the amount items cost and can show how much money you need to pay

Menu	Price
Milk	89p
Tea	£1.50

Some can include a total
 Look for different units (is it in pence or pounds)

Bank Statements

Bank statement can have negative balances if the money spent is higher than the money coming into the account

Date	Description	Credit	Debit	Balance
1 st Sept	Salary	£1500		£1500
1 st Sept	Mortgage		£600	£900
20 th Sep	Bank Money	£15		£915

Simple Interest

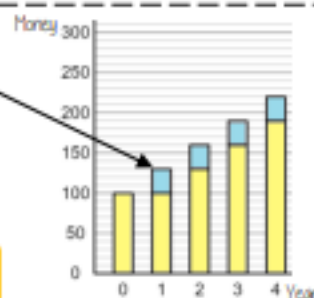
For each year of investment the interest remains the same

$$\frac{\text{Principal amount} \times \text{Interest Rate} \times \text{Years}}{100}$$

Principal amount is the amount invested in the account
 eg invest £100 at 30% simple interest for 4 years

$$\frac{100 \times 30 \times 4}{100} = £120$$

This account earned £120 interest. At the end of year 4 they have £220



Compound Interest

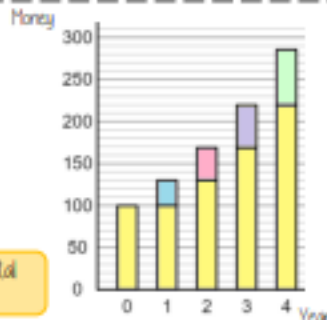
Interest is added to the current value of investment at the end of each year so the next year's interest is greater

$$\text{Principal amount} \times \text{Multiplier}^{\text{Years}}$$

eg invest £100 at 30% compound interest for 4 years

$$100 \times 1.3^4 = £285.61$$

This account has £285.61 in total at the end of the 4 years



Value Added Tax (VAT)

VAT is payable to the government by a business in the UK VAT is 20% and added to items that are bought.

Essential items such as food do not include VAT.

Wages and Taxes

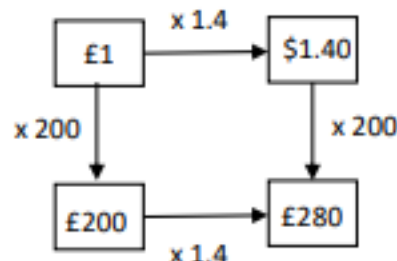
Salaries fall into tax brackets - which means they pay this much each month from their salary

Taxable Income	Tax Rate
£12 501 to £50 000	20%
£50 001 to £150 000	40%
over £150 000	45%

Over time:

Time and a half - means 1.5 times their hourly rate
 Double - 2 times their hourly rate

Exchange Rates



When making estimates it is also useful to use estimates to check if our solution is reasonable

Use inverse operations to reverse the exchange process

Common Currencies

United Kingdom	£	Pounds
United States of America	\$	Dollars
Europe	€	Euros

Unit Pricing

To calculate unit per cost you divide by the cost

Cupcakes are the best value as one item has the cheapest value

There is a directly proportional relationship between the cost and number of units

4 Oranges £1	5 cupcakes £1.20
4 = £1.00	5 = £1.20
2 = £0.50	
1 = £0.25	1 = £0.20
Cost per Unit	

YEAR 9 — REASONING WITH GEOMETRY... Deduction

@whisto_maths

What do I need to be able to do?

By the end of this unit you should be able to:

- Identify angles in parallel lines
- Solve angle problems
- Make conjectures with angles
- Make conjectures with shapes

Keywords

Parallel: two straight lines that never meet with the same gradient

Perpendicular: two straight lines that meet at 90°

Transversal: a line that crosses at least two other lines

Sum: the result of adding two or more numbers

Conjecture: a statement that might be true but is not proven

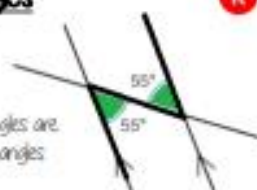
Equation: a statement that says two things are equal

Polygon: a 2D shape made from straight edges

Counterexample: an example that disproves a statement

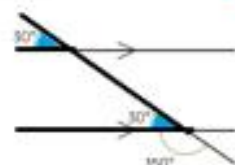
Alternate angles

Because alternate angles are equal the highlighted angles are the same size.



Corresponding angles

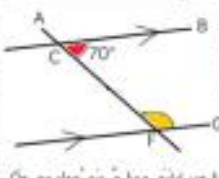
Because corresponding angles are equal the highlighted angles are the same size.



Co-interior angles

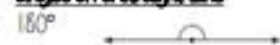
Because co-interior angles have a sum of 180° the highlighted angle is 110°

As angles on a line add up to 180° co-interior angles can also be calculated from applying alternate/ corresponding rules first.



Solving angle problems

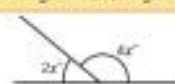
Angles on a straight line



Vertically opposite angles
Equal

Angles around a point
 360°

Link angle facts to algebra



Form an equation

$$2x + 4x = 180^\circ$$

State the reason

The sum of angles on a straight line is 180°

Solve

$$\begin{aligned} 2x + 4x &= 180^\circ \\ 6x &= 180^\circ \\ x &= 30^\circ \end{aligned}$$



Triangles

Sum of angles is 180°

Isosceles have the same base angles

Interior Angles

The angles enclosed by the polygon



$$(\text{number of sides} - 2) \times 180$$

Making conjectures with angles

True

Always

Never

False

Sometimes

Proving a conjecture

A pattern is noticed for many cases



Disproving a conjecture

Only one counterexample is needed to disprove a conjecture.



Apply the angle rules

The sum of angles in a triangle is 180°

Test the theory

$$\begin{aligned} 180 - 70 - 20 &= 90 \\ 180 - 85 - 5 &= 90 \\ 180 - 45 - 45 &= 90 \end{aligned}$$

Make conjecture

The angle that meets the circumference in a semi circle is 90°

Making conjectures with shapes

Keywords and facts to recall with shape

Area: the amount of space inside a shape

Perimeter: the length around a shape

Regular Polygons: All sides and angles are equal

Quadrilateral Facts



Square

All sides equal size
All angles 90°
Opposite sides are parallel



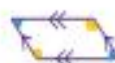
Rectangle

All angles 90°
Opposite sides are parallel



Rhombus

All sides equal size
Opposite angles are equal



Parallelogram

Opposite sides are parallel
Opposite angles are equal
Co-interior angles



Kite

No parallel lines
Equal lengths on top sides
Equal lengths on bottom sides
One pair of equal angles

YEAR 9 — REASONING WITH GEOMETRY...

Rotation & Translation

@whisto_maths

What do I need to be able to do?

By the end of this unit you should be able to:

- Identify the order of rotational symmetry
- Rotate a shape about a point on the shape
- Rotate a shape about a point not on a shape
- Translate by a given vector
- Compare rotations and reflections

Keywords

Rotate: a rotation is a circular movement

Symmetry: when two or more parts are identical after a transformation

Regular: a regular shape has angles and sides of equal lengths

Invariant: a point that does not move after a transformation

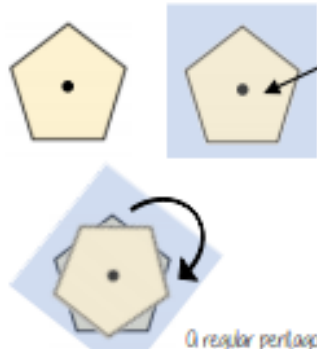
Vertex: a point two edges meet

Horizontal: from side to side

Vertical: from up to down

Rotational Symmetry

Tracing paper helps check rotational symmetry



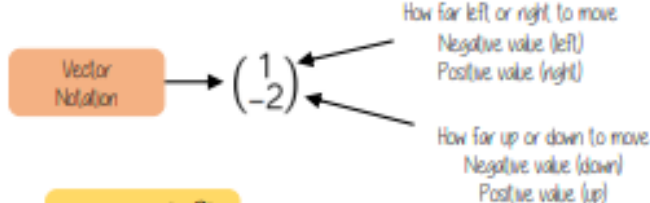
1 Trace your shape (mark the centre point)

2 Rotate your tracing paper on top of the original through 360°

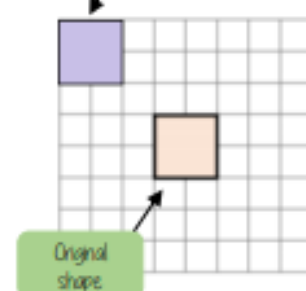
3 Count the times it fits back into itself

A regular pentagon has rotational symmetry of order 5

Translation and vector notation

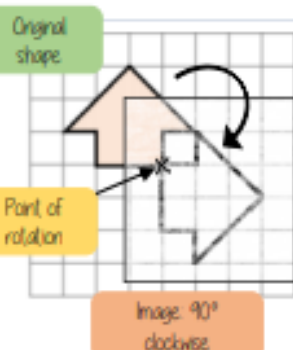


Translation $\begin{pmatrix} -3 \\ 3 \end{pmatrix}$



Every vertex has been translated by the same amount

Rotate from a point (in a shape)



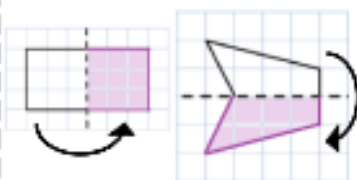
1 Trace the original shape (mark the point of rotation)

2 Keep the point in the same place and turn the tracing paper

3 Draw the new shape



Compare rotations and reflections

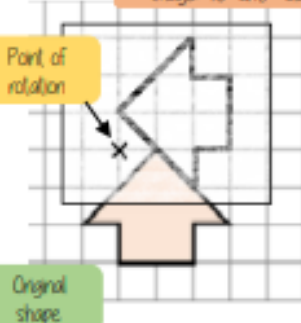


R Reflections are a mirror image of the original shape.

Information needed to perform a reflection
- Line of reflection (Mirror line)

Rotate from a point (outside a shape)

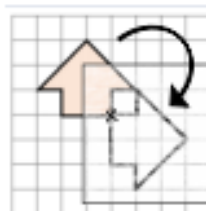
Image: 90° anti-clockwise



1 Trace the original shape (mark the point of rotation)

2 Keep the point in the same place and turn the tracing paper

3 Draw the new shape



Rotations are the movement of a shape in a circular motion

Information needed to perform a rotation

- Point of rotation
- Direction of rotation
- Degrees of rotation

Science

Year 9

Year 10

KING'S LYNN ACADEMY

Term 6

Physics
Waves

Biology
Human interaction

Term 5

Experimental Science
Standard Procedures
Enquiry
Understanding

Physics
Heating

Chemistry
Using Resources

Term 4

Biology
Organ systems

Chemistry
Matter and Energy

Term 3

Experimental Science
Standard Procedures
Enquiry
Understanding

Physics
Acceleration

Term 2

Chemistry
Periodic Table

Biology
Growth

Term 1

Welcome back to KLA your Journey continues





Matter

Periodic Table: Big ideas

What expert understanding do we want after 5 years?

Structure determines properties

Big idea

The properties of a substance depend upon the type of atoms it contains and the strength of the bonds holding them together. The properties determine the uses the substance is suitable for.

How does the unit develop this?

Periodic Patterns Key Concept

The periodic table provides chemists with a structured organisation of the known chemical elements from which they can make sense of their physical and chemical properties. The historical development of the periodic table provide a good example of how scientific ideas and explanations develop over time as new evidence emerges.

Sub-concepts

Groups and Periods

Facts

- Reactions of group 1, 7, 0
- Transition Metals (Chemistry only)

Subatomic Particles Key Concept

Key Concept

The arrangement of elements in the modern periodic table can be explained in terms of atomic structure which provides evidence for the model of a nuclear atom with electrons in energy levels. The model of the atom used by scientists has changed over time.

Sub-concepts

Different models of the atom
Atomic and Electronic structure

Facts

- Subatomic particles are the proton, neutron and electron.
- Atomic Number and Mass Number



Growth and Differentiation: Big ideas

Organisms

What expert understanding do we want after 5 years?

Cells are alive Big idea

Organisms are made of cells which themselves have parts that carry out different functions. Organisms exist as single cells (unicellular) or many cells (multicellular). In multicellular organisms, cell division is essential for growth, development, and repair. Cells differentiate to form specialised cells that perform diverse functions. All living systems need matter and energy. Matter fuels respiration, the energy-releasing chemical reaction that provides energy for life functions and provides the material for growth and repair of tissue. Plants and algae use sunlight, water, and carbon dioxide to facilitate photosynthesis, which stores energy, forms plant matter, releases oxygen, and maintains plants' activities.

How does the unit develop this?

Cell Transport Key Concept

There are three processes that transfer matter into and out of cells. These movements allow life processes to take place

Sub-concepts

Diffusion, Osmosis, Active Transport, cell specialisation

Facts

Surface Area, volume, ratio, specific examples of cell specialisation.

Cell Division Key Concept

In multicellular organisms, cell division is essential for growth, development, and repair. Cells differentiate to form specialised cells that perform diverse functions. Stem cells can be used to treat medical conditions

Sub-concepts

Differentiation, Uses of stem cells, cell cycle

Facts

Culturing microorganisms, mitosis, stem cells



Heating: Big ideas

Energy

What expert understanding do we want after 5 years?

Energy is conserved

Big idea

Energy is a property that objects must have to do work. It exists in different stores and can move between them. These stores can be kinetic or potential (based on the position in a field), or radiation. During an energy transfer, the total quantity is always constant but useful energy is wasted. This allows us to predict what can or cannot happen, using formulae.

How does the unit develop this?

Thermal transfer Key Concept

Energy moves from warmer objects to cooler objects, until both reach the same temperature

Sub-concepts

Energy stores, thermal conductivity, thermal insulation, temperature time graph, thermal equilibrium.

Facts

- Total energy is same before and after
- Energy is measured in Joules (J)
- Energy is dissipated – this is often described as wasted energy

Specific and Latent Heat Key Concept

Latent heat is the energy used to change the state of a substance. Specific heat is the energy needed to raise the temperature of a substance.

Sub-concepts

Specific Heat Capacity, Latent Heat Capacity, thermal energy, use of equations

Facts

- Heat is a movement of energy between objects
- Temperature measured in $^{\circ}\text{C}$

Pressure Key Concept

Pressure in gases is caused by particles. Temperature, mass and volume effect the pressure of a gas.

Sub-concepts

Kinetic Energy.

Facts

- Pressure is measured in Pascals
- Pressure \times Volume = constant



Matter and Energy: Big ideas

Matter

What expert understanding do we want after 5 years?

Reactions rearrange matter

Big idea

During a chemical reaction, bonds are broken and the atoms of the reacting substances rearrange to form new bonds. The products have different properties to the reactants. In physical changes the molecules do not change, but their positions and their motion may.

How does the unit develop this?

Atom Conservation
Key Concept

Atoms are not created or destroyed in chemical reactions. Chemical equations provide a means of representing chemical reactions and are a key way for chemists to communicate chemically.

Sub-concepts

Chemical measurements, conservation of mass and the quantitative interpretation of chemical equations. Use of amount of substance in relation to masses of pure substances, gases and solutions.

Facts

- Reactant
- Product
- Mass and conservation of mass

Reaction Energy
Key Concept

In a chemical reaction there is an energy change. This energy change is related to bonds breaking and bonds being made.

Sub-concepts

Exothermic and Endothermic Reactions. Batteries and Fuel Cells.

Facts

- System
- Surroundings
- Exothermic
- Endothermic



Organ Systems: Big Ideas

Organisms

What expert understanding do we want after 5 years?

Bodies are Systems

Big idea

In multicellular organisms, different groups of large numbers of cells work together to form systems of tissues and organs. Life processes require the interaction of many different organ systems. Because of this, when something goes wrong in one tissue or organ, this has an impact on the whole system, which causes illness.

How does the unit develop this?

Circulatory System

Key Concept

The heart is an organ that pumps blood around the body in a double circulatory system. The right ventricle pumps blood to the lungs where gas exchange takes place. The left ventricle pumps blood around the rest of the body.

Sub-concepts

Diffusion, The heart, blood vessels, composition of the blood

Facts

Types of blood vessels, anatomy of the heart, composition of the blood

System Damage

Key Concept

In multicellular organisms, damage to any organ system can be debilitating if not fatal. Although there has been huge progress in surgical techniques, especially with regard to coronary heart disease, many interventions would not be necessary if individuals reduced their risks through improved diet and lifestyle.

Sub-concepts

Coronary Heart Disease, effect of lifestyle on health, Cancer,

Facts

CHD, Cancer, Risk Factors

Immune System

Key Concept

In multicellular organisms, the immune system is capable of identifying and removing foreign threats to the organism.

Sub-concepts

Human Defense Systems, Vaccination, Communicable diseases, Antibiotics & painkillers, development of drugs

Facts

Role of White Blood Cells, Infectious diseases, Antibiotics & Painkillers, Discovery & Development of Drugs



Waves and EM radiation: Big ideas

Energy

What expert understanding do we want after 5 years?

Radiation transfers energy Big idea

Radiation is the emission of waves or subatomic particles, from a source, which spread through space and through materials. Waves transfer energy without the material moving, and travel as longitudinal vibrations, or as transverse electromagnetic oscillations. Waves have characteristic properties when they meet boundaries, and pass into different materials. High energy waves cause ionisation.

How does the unit develop this?

Longitudinal and Transverse Key Concept

Waves can be either longitudinal or transverse.

Sub-concepts

wavelength, amplitude, frequency, compression, rarefaction

Facts

- The ripples on a water surface are an example of a transverse wave.
- Longitudinal waves show areas of compression and rarefaction. Sound waves travelling through air are longitudinal.
- The properties of sound.
- Hearing and frequency
- Sound waves can be detected using a microphone.

Wave Model Key Concept

Waves can be described, and their key properties calculated.

Sub-concepts

Experimental methods to calculate wave properties

Facts

- wave speed = frequency \times wavelength



Waves and EM radiation: Big ideas

Energy

What expert understanding do we want after 5 years?

Radiation transfers energy

Big idea

Radiation is the emission of waves or subatomic particles, from a source, which spread through space and through materials. Waves transfer energy without the material moving, and travel as longitudinal vibrations, or as transverse electromagnetic oscillations. Waves have characteristic properties when they meet boundaries, and pass into different materials. High energy waves cause ionisation.

How does the unit develop this?

Electromagnetic Spectrum

Key Concept

Light is an example of an electromagnetic wave. There are other electromagnetic waves, and these form the electromagnetic spectrum.

Sub-concepts

Transfer of energy by electromagnetic wave

Facts

- The electromagnetic spectrum

Wave Behavior

Key Concept

The electromagnetic spectrum has a range of uses that depend on the properties and energy of the wave.

Sub-concepts

Electromagnetic waves as ionising radiation
Reflection, Refraction, Absorption
Black Body Radiation

Facts

- Definition of radiation dose.
- Uses for waves in the electromagnetic spectrum

Geography

Year 9

Year 10

KING'S LYNN ACADEMY

Tectonics



Hazards

Half Term 6

Renewable energy



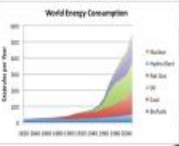
Energy production



Use of fossil fuels



Energy consumption



Resources

Half Term 5

Economy



Population



Monsoons



Overview

Mountain biome

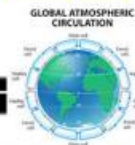
Asia

Half Term 4

Typhoon Haiyan



Global circulation



Hurricane effects



Hurricane responses

Effects of climate change

Atmospheric hazards

Half Term 3

Evidence of climate change

Natural causes



Human causes



Climate change

Flooding in York and Kerala



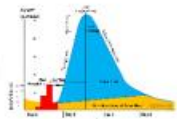
Half Term 2

Lower course features



Floods

Storm hydrographs



Meanders



Waterfalls



Rivers and floods



Welcome back to KLA. Your journey continues.

Tropical Storm: Hurricane Sandy, October 2012

A Recent Extreme Weather Event in UK: Cumbria Floods 2015

Primary Effects (Immediate Impacts)	Secondary Effects (Happened Afterwards)
<ul style="list-style-type: none"> 6700 national guards deployed. 80% of New York school damaged. Storm surge travelled down the entire eastern USA coast, killing 41 people. 650 000 homes damaged in USA. 59 deaths from flooding in Haiti. 8.5 million people lost electricity. 11 million commuters were without service and public transport was cancelled. 	<ul style="list-style-type: none"> Millions left without electricity for several weeks. New York Bellevue Hospital was evacuated two days after the storm due to extensive damage. 82 deaths resulted from a lack of electricity, e.g. from hyperthermia or emissions from unsafe heaters. Monitoring/prediction/warnings improved.
Immediate Responses	Long-Term Responses
<ul style="list-style-type: none"> Rescue teams search for survivors/recover bodies. Treat injuries. Provide shelter, food, water and medical supplies. 9000 people spent the night in a New York shelter. Companies donated \$33 million. Gas was rationed for several weeks. 	<ul style="list-style-type: none"> Rebuild/repair damage. Restore utilities. Promote economic recovery. Rehome homeless people. The government approved \$137 million for repair and restoration.

Keywords

Economic impact, environmental impact, extreme weather, global atmospheric circulation, immediate responses, long-term responses, management strategies, monitoring, planning, prediction, primary effects, protection, secondary effects, social impact, tropical storm

Causes	Social and Economic Impacts	Environmental Impacts	Management Strategies
<ul style="list-style-type: none"> Storm Desmond (5-6th December) Deep atmospheric low pressure formed over Atlantic Ocean. Ground already saturated by second wettest November since 1910. 347.4mm rainfall at Honister Pass, Cumbria in 24 hours (a UK rainfall record). December 2015 was the wettest month on record. 	<ul style="list-style-type: none"> Thousands of homes/business flooded. Tens of thousands of homes without power. Many bridges swept away. One death. Road/rail links cut. Schools and hospitals closed. Over 1000 people evacuated. 	<ul style="list-style-type: none"> Millions of tonnes of sediment were transported and deposited downstream. Thousands of trees ripped from riverbanks. Saturated land resulted in landslides. Large areas severely eroded. 	<ul style="list-style-type: none"> The government announced a £50million rebuilding scheme. National Flood Resilience Review to protect the UK from future flooding and extreme weather events. Cumbrian Floods Partnership Group will investigate flood defences.



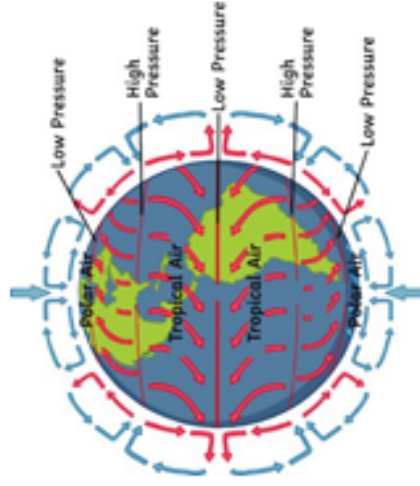
FLOOD ALERT

FLOODING IS POSSIBLE, BE PREPARED.

Atmospheric Hazards Knowledge Organiser

- Natural hazards pose major risks to people and property.
- Natural hazards are natural processes which cause damage, **injury** and death.
- Meteorology hazards are caused by the weather and climate.
- **Different factors** affect hazard risk including the severity of the natural hazard, the ability of a place to cope with the hazard and the likelihood that a hazard will occur.

Global Atmospheric Circulation



Global atmospheric circulation causes tropical storms to develop in the tropics and depressions to develop in the UK.

Monitoring Tropical Storms

Scientists use computer models, which use satellite and aircraft data, to predict a path for storms.

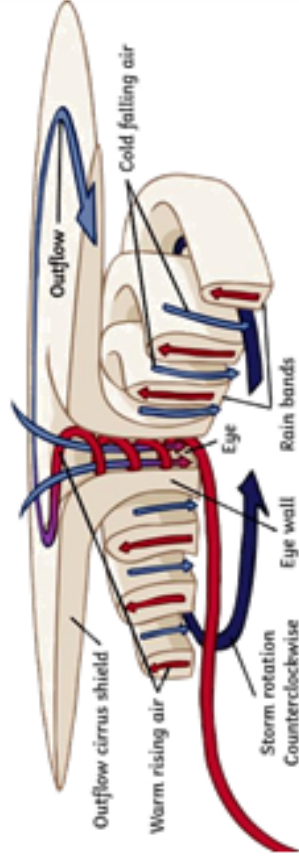
People use this information to prepare for the coming storm (e.g. boarding up windows and evacuating).

Planning for future storms means that building in certain areas may be **avoided**. Also, governments may plan and prepare for disaster scenarios with emergency services as well as plan evacuation routes from disaster-prone areas.

Future buildings can be **protected** from future storms by using reinforced concrete or by building on stilts. Flood defences and sea walls may also protect homes from future storms.

Tropical Storms (hurricanes/cyclones/typhoons)

Hurricane Structure In the Northern Hemisphere



- Tropical storms form in the tropics when warm air rises rapidly over warm seas (over 27°C). This creates an area of low pressure on the Earth's surface causing strong surface winds. These winds rotate anticlockwise in the northern hemisphere and clockwise in the southern hemisphere due to the Coriolis effect.
- Energy from the warm sea causes the storm to become more powerful.
- They can last for **7-14 days**.
- Tropical storms **travel west** due to the easterly winds that blow from the equator (global atmospheric circulation).
- Tropical storms are circular (100-2 000km in diameter).
- The eye is an area of **very low pressure** (sinking air) in the centre of the storm. It can be 30-300km wide.
- The **eyewall** consists of tall clouds that surround the eye of the storm. Here the air rises most rapidly, and the windrain is most severe.
- Tropical storms are less powerful towards their edges.
- Tropical storms lose energy as they travel over land or cooler water.

Key words

Natural hazard A natural event that threatens people or has the potential to cause damage, **destruction** and death.

Global atmospheric circulation the worldwide system of winds, which transports heat from tropical to polar latitudes.

Primary effects the initial impact of an event on people, caused directly by it.

Secondary effects the after-effects that occur as indirect impacts of a natural event, sometimes on a longer timescale

Tropical storm an area of low pressure with winds moving in a spiral around the calm, **central point** called the eye of the storm.

Air pressure the weight of the air on the ground



Geography Knowledge Organiser

Spring (term 4): Asia

Have you ever wondered about the world's largest and most diverse continent? Why is it the world's most populous continent? Or how urbanisation is changing lives in some of the countries? How is it becoming an important global economic region?

Keywords

Silicon Valley

Region in California where many technology company headquarters are located.

Slum

Poor area of a city that is overcrowded and often lacking in basic services such as water and electricity.

Diverse

Showing a great deal of variety, very different.

Monsoon

A seasonal prevailing wind in the region of South and SE Asia.

Mountain (alpine) biome

A biome found in mountain regions, usually at an altitude of 10,000 feet or more and just below the snow line of a mountain.

Dynamic

Characterized by constant change, activity, or progress.

Bottom-up approach

Where the lowest levels make the decisions. For example, locals making decisions, not the government.

Interdependent

Two or more people or things are dependent on each other.

Infrastructure

The basic systems and services, such as transport and power supplies, that a country or organization uses in order to work effectively.

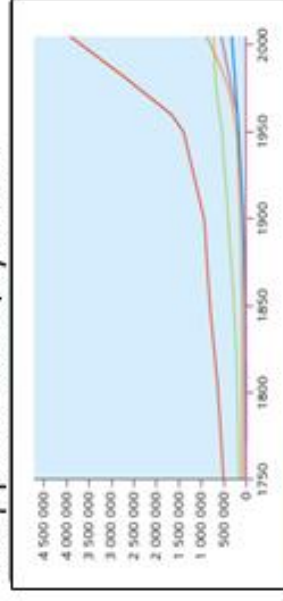
Export

Send (goods or services) to another country for sale.

Political map of Asia



World population increase, by continent



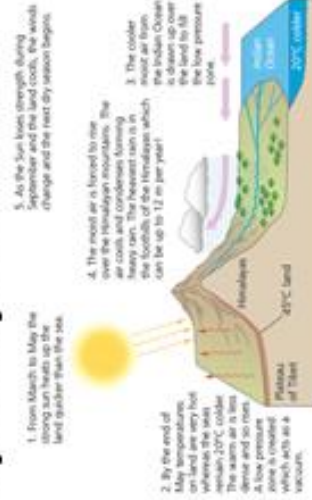
Life in a slum: ugly face of India

Slum can be defined as 'A residential area where dwellings are unfit for human habitation by reasons of dilapidation [disrepair], overcrowding, lack of ventilation or sanitation facility and having drinking water facilities in unhygienic conditions'.

Following problems are plaguing our slums:

- 1 Garbage and filth: We could see dumps of garbage everywhere. The dumped waste emanate [produce] foul odour and at the same time becomes breeding ground for flies and mosquitoes which carry several diseases with them.
- 2 Miserable toilets: The community toilets were in pathetic conditions. Plenty of them had no doors and the ones that had doors had no latches. Toilets were full of filth and human excreta as water supply through pipes was not working.
- 3 Deplorable condition of school: As there was no water and electricity in school, toilet was not working.
- 4 Cramped houses: It's difficult to even imagine the living conditions of the houses there unless and until you actually experience this nightmare. Six to eight people share a cramped room and only they know as to how so many people fit in such a small room. The streets are narrow and the sewage water stagnates in open surface drains, which emit bad smell.

Diagram showing the monsoon season



1. From March to May, the monsoon sun heats the land faster than the sea.

2. By the end of May temperatures over the land are very hot and the air above the land is very dense and so rises. The warm air is less dense and so rises. A low pressure area which acts as a vacuum.

3. As the sun has strength during September and the land cools, the wind change and the wet dry season begins.

4. The moist air is forced to rise over the Himalayan mountains. The air cools and condenses forming heavy rain. The heaviest rain is in the foothills of the Himalayas which can be up to 12 m per year!

5. The cooler air sinks and the Indian Ocean is drawn up over the land to fill the low pressure zone.

Monsoon fact file

- Monsoon months: June to September
- It brings three-quarters of India's yearly rain, which is vital for life and food production
- Over 50 per cent of people are employed in agriculture
- 1.4 billion people rely directly on agriculture
- India grows 100 million tons of rice and grain each year
- India has more land for growing rice than any other country
- Agriculture produces 15 per cent of India's \$1.83 trillion GDP.

History

1760 - 1949

Year 9

Year 10

KING'S LYNN ACADEMY

9/11

Half Term 6

Windrush and Civil Rights

Hiroshima

Titanic

The Holocaust

Antisemitism

Pre-war Jewish life

Half Term 5

The Rise of the Nazis

Life in Nazi Germany

The Suffragettes

Treaty of Versailles

Half Term 4

Trench Warfare

Battle of the Somme

End of World War One

Outbreak of World War One

Political Reform

Half Term 3

Iron and coal

Transport

The Railway Age

Urbanisation
Factory Life

Social Reform

The steam engine

Cotton Textiles

The Industrial Revolution

Half Term 2

Life as a slave

Transatlantic Slave Trade

Abolition

Legacy of empire

Welcome back to KLA. Your journey continues.

Half Term 1

The American Revolution and war of independence

British Empire case studies



Year 7 History Knowledge Organiser Spring Term

Medieval Life and Medieval Kingship



Medieval Life

Tier 2 Vocabulary

Armour: metal covering worn by Knights protect themselves in battle.
Breach: a gap in a wall or line of defence made by attacking army.
Cathedral: a large and impressive church that contains the seat of a Bishop.
Clergy: officials of the Christian Church ordained to lead church services.
Croft: an area of land surrounded the peasants dwelling used to grow crops or keep livestock.

Duel: a fight often to the death between two people that is used to settle an argument.
Manor: the house at the centre of a mediaeval Lords lands.
Monastery: a building housing a religious communion of monks or nuns.
Pope: leader of the Catholic Church he lives in Rome and is believed to be God's representative on earth.
Siege: surrounding the enemy Castle allowing nobody to go in or come out.
Superstition the belief in supernatural powers in place of rational explanation.

Tier 3 Vocabulary

Benefits of clergy: the privilege enjoyed by clergyman's be tried in church courts.
Chivalry: a code of behaviour for mediaeval Knights emphasising bravery and good manners.
Crenellations: gaps running along the top of the wall of a mediaeval castle.
Doom painting: a painting showing people being sent to heaven or hell on the day of judgement.
Demesne: land kept by Lord which peasants were obliged to farm on his behalf.
Heraldic Crest: symbol designed to show the identity of a Knight on the battlefield.
Pilgrimage: a religious journey typically taken to a shrine or a site of religious importance.
Pottage: a stew of vegetables and grains eaten by peasants for their main meal.
Tithe: a mediaeval tax paying 1/10th of all farm produce to the church.
Trebuchet: advanced form of catapult using a counterweight and a sling.

Medieval Kingship 1154 - 1422

Tier 2 Vocabulary

Calais: French port town which for two centuries was an English territory.
Depose: to suddenly or forcefully remove a monarch from power.
Dysentery: an infection of the intestines that causes severe diarrhoea.
Martyr: a person who is killed for their beliefs often religious.
Parliament: a collection of people representing all of England who approve or refuse laws.
Prince of Wales: a title granted since the reign of Edward I to the heir to the English throne.
Regent: someone who was appointed to rule on behalf of a monarch, when the monarch is too young, infirm or absent to rule.
Treason: a crime against your own people, nation or monarch.
Tyrant: a ruler who refuses to share their power and governs in a cruel and oppressive way.

Tier 3 Vocabulary

Angevine Empire: an empire ruled by Henry the second stretching from Scotland to the Pyrenees.
Aquitaine: large mediaeval Duchy covering SW France ruled by Queen Eleanor.
Excommunication: expulsion from the Catholic Church by the Pope.
Habeas Corpus: the principle that no person should be imprisoned without first having a fair trial.
Homage: the practice of giving an annual payment your law to show that you are their vassal.
Interdict: a law ruled by the Pope which temporarily shuts down the church in a country or area.
Magna Carta: a series of promises that King John made to limit his power, meaning 'the Great Charter'.
Palings: a barrier made from pointed wooden or metal poles to defend against cavalry charges.
Stone of Destiny: large block of sandstone historically used for the Coronation of Scottish monarchs.

Year 8 History Knowledge Organiser Spring Term

The Later Tudors and The English Civil War



The Later Tudors 1553-1603

Tier 2 Vocabulary

Armada: fleet of warships, often used to describe Spanish force sent to invade England in 1588.

Counter reformation: Catholic fight back against the spread of Protestantism in Europe.

Galleon: a large sailing ship, particularly from Spain.

Gentleman: someone who earns enough money from land and investments not to work for a living.

Gentry: class of wealthy landowners without Noble titles, position just below the nobility.

Martyr: a person who is killed for their beliefs, often religious.

Poor Laws: laws passed during the Tudor period making local parishes raise money to help the poor.

Propaganda: a piece of art or information used to promote a particular cause or point of view.

Stately Home: a large country house at the centre of a gentleman or noble's estate.

Vagrant: a person with no job, who travels from place to place begging.

Tier 3 Vocabulary

Burning at the stake: a slow and painful execution, usually reserved for religious heretics.

Deserving Poor: category developed by the Tudor's for those amongst the poor in genuine need of help.

Fox's Book of Martyrs: a work of Protestant propaganda against Mary the first, published in 1563.

Gloriana: a name given to Elizabeth towards the end of her reign, from the Latin for glorious.

Golden Age: a period of flourishing in the history of a nation or an art form.

Papal Bull: a formal and important announcement, issued by the Pope.

Rack: torture device you slowly to stretch a person's body until all their joints dislocate.

Royal Progress: a summer journey taken by monarch, visiting the stately homes of court favourites.

Ruff: an elaborate lace collar encircling the neck, fashionably during the Elizabethan.

Wars of Religion: a series of European wars fought between Catholics and Protestants between 1524-1648.

The English Civil War 1625 - 1649

Tier 2 Vocabulary

Absolutist: a ruler who has absolute power over his or her people.

cavalier: the nickname for royalist cavalry meant during the English Civil War.

Civil war: a war between two sides from the same nation.

Member of parliament: someone elected to sit in the House of Commons, often abbreviated to 'MP'.

Parliament: a collection of people representing all of England, who approve or refuse laws.

Parliamentarians: those who are loyal to parliament, often during dispute with the King.

Royalist Callum those who are loyal to the King, often during dispute with parliament.

State opening of parliament: the ceremony where England's monarch opens a session of parliament.

Treason: a crime against your own people, nation, or monarch.

Tier 3 Vocabulary

Bishop's war: an uprising against Charles the first the religious reforms which began in Scotland.

Divine Right of Kings: the theory that a monarch is appointed by God and should have absolute power.

Levellers: radical group during the civil war who demanded equal legal and political rights.

New Model Army: a full time, professional army formed by Oliver Cromwell during the civil war.

Puritan: a group of radical Protestants who wore plain clothes and tried to live without sin.

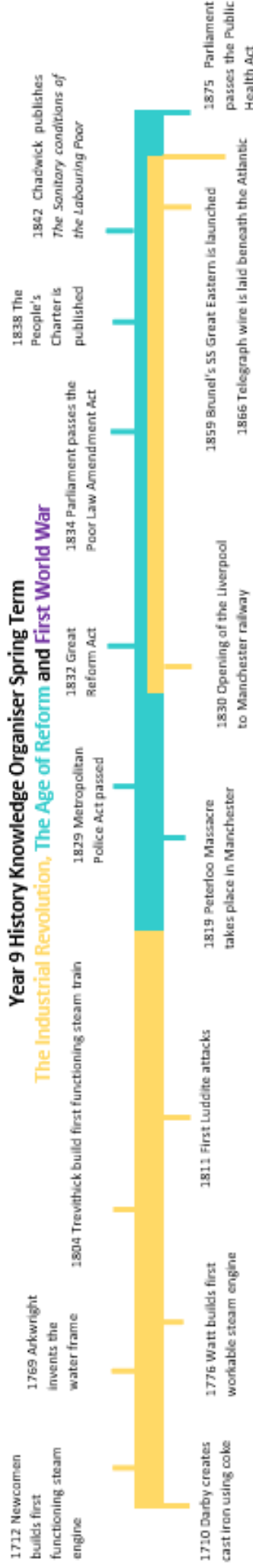
Roundhead: the nickname for Parliamentarian soldiers during the English civil war.

Star Chamber: the English monarchs personal court, which did not have to give defendants a fair trial.

Eleven Years Tyranny: a period from 1629 during which Charles the first ruled without calling Parliament.

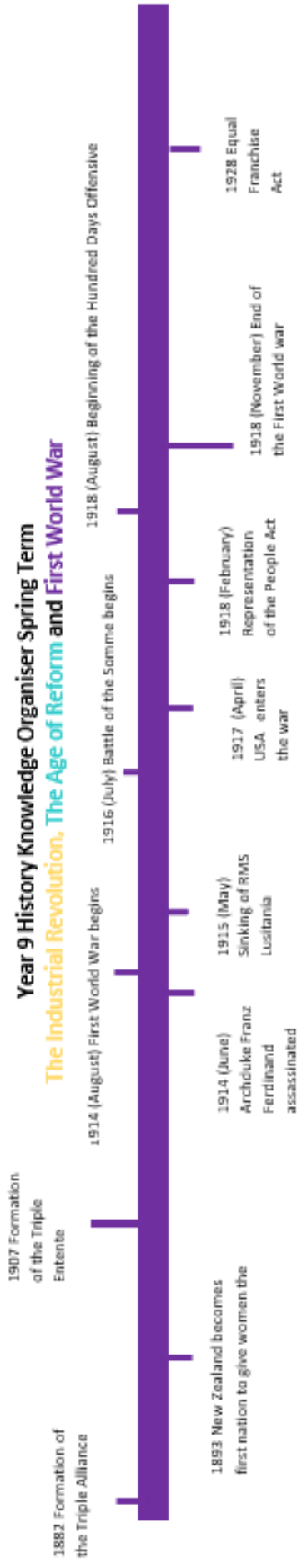
Year 9 History Knowledge Organiser Spring Term

The Industrial Revolution, The Age of Reform and First World War



The Industrial Revolution		The Age of Reform	
<p>Tier 2 Vocabulary</p> <p>Blast Furnace: brick or stone tower which iron ore is heated with coke to create cast iron.</p> <p>Canal: man-made waterway often built to transport heavy goods.</p> <p>Efficiency: achieving maximum productivity with minimum wasted energy or expense.</p> <p>Exponential: a growth that becomes increasingly rapid as it grows.</p> <p>Factory System: form of work that involves large workforces, large buildings and machinery.</p> <p>Industry: the process of raw materials into manufactured or consumable goods.</p> <p>Mechanisation: introduce machines to process to make it more efficient.</p> <p>Piston: a disc fitted into a cylinder moving up and down. A crucial component of a steam engine.</p> <p>Spinning: process of twisting and winding raw cotton fibers to create thread.</p> <p>Weaving: process of interleaving threads such as cotton, wool, linen or silk to make textiles.</p>	<p>Tier 3 Vocabulary</p> <p>Birmingham: West Midlands industrial hub, known as the 'city of one thousand trades.'</p> <p>Coke: a fossil fuel with high carbon content and fewer impurities, created by heating coal.</p> <p>Cold Condenser: key component the Watt steam engine which greatly improves its efficiency.</p> <p>Cottage Industry: small scale business or manufacturing taking place in people's homes.</p> <p>Cromford Mill: cotton mill white by Richard Arkwright, said to be the first factory in Britain.</p> <p>Crompton Mule: invention that combined the spinning Jenny in the water frame to spin cotton.</p> <p>Manchester: center of Britain's cotton industry, nicknamed 'Cottonopolis'.</p> <p>Nawvies: 19th century labor is involved in the construction of road, railway or canal. 1840s in Britain.</p> <p>Rocket: steam train built by George Stephenson to travel between Liverpool and Manchester.</p>	<p>Tier 2 Vocabulary</p> <p>Back to Back: cheaply built terraced house with no backyard and little natural light.</p> <p>Constable: first rank in the British police force.</p> <p>Electoral system: set a route for which represents is related to Parliament.</p> <p>Electorate: all the people in a country or state entitled to vote in an election.</p> <p>Labourer: someone who performs unskilled manual work for a wage.</p> <p>Philanthropist: a person who works or gives money to improve the lives of others.</p> <p>Secret ballot: an election in which votes are not costing public.</p> <p>Suffrage: the right to vote in political elections.</p> <p>Union: an association of workers formed to pursue collective rights in interest.</p> <p>Urbanisation: growth in the population of urban areas, often caused by inward rural migration.</p>	<p>Tier 3 Vocabulary</p> <p>Chartism: working class movement for equal political rights that began in 1838.</p> <p>Climbing Boy: child labor made to climb chimneys and sweep away the soot.</p> <p>Friendly Society: an association of workers designed for helping one another.</p> <p>Great Reform Act: landmark political act that began the reform of the British Parliament.</p> <p>Great Stink: long hot summer in 1858, which caused attempts to smell so badly that Parliament had to be suspended.</p> <p>Laissez Faire: government policy of leaving society to function with little intervention.</p> <p>Luddite: textile weavers and artisans who attacked factories and destroyed machines.</p> <p>Rookery: Victorian city slum, often inhabited by criminals.</p>

Year 9 History Knowledge Organiser Spring Term The Industrial Revolution, The Age of Reform and First World War



First World War

Tier 2 Vocabulary

Abdication: the act of giving up the throne.

Armistice: end of the fighting in the war so that discussions can begin which then leads to a peace treaty.

Assassinated: killed for political religious reasons.

Attrition: wearing down the opposition through continuous sustained pressure.

Conscription: a system whereby people are forced to join the army or Navy.

Democratic: a system of government in which order lots have the right to vote for the government they want.

Munitions: the equipment and ammunition of an army and Navy.

Proportional representation: column a system of elections in which the number of people elected for a party is in proportion to the number of votes for that party.

Artillery: Heavy, wheeled guns that fire large explosive shells.

Austria-Hungary: Central European empire that disintegrated after the First World War.

Balance of power: situation in which peace is preserved because opposing nations have roughly equal power.

Balkans: South-eastern region of Europe with a complex mixture of national and ethnic groups.

Blockade: use of warships or other military force to stop a nation from trading by preventing ships from delivery and collecting supplies.

Isolationism: national policy of avoiding becoming involved in other nations' problems of conflicts.

Suffrage: the right to vote.

War of attrition: Warfare focused on forcing the enemy to use up their man and resources until they can no longer fight.

Tier 3 Vocabulary

League of Nations: set up in 1919 for the promotion of international peace and security.

Naval race: competition between two countries to build the best navy e.g. before 1914.

Reparations: compensation to be paid by Germany to France, Belgium, Britain and other states as a result of the First World War.

Schlieffen Plan: plan drawn up in 1905 to provide a rapid invasion of France. Used in 1914.

European economies, especially that of Germany.

Treaty of Versailles: agreement detailing the consequences for Germany after their defeat in World War One.

Equal Franchise Act: law that gave British women full equal voting rights with men.

Great War: alternative name for the First World War.

Hundred Days Offensive: allied offensive that ended the war in 1918.

Lusitania (RMS): British passenger ship (carrying some American passengers) sunk by a German U-boat in 1915 with the loss of 1198 lives.

Schlieffen Plan: German plan to avoid fighting France and Russia at the same time by attacking France first and later Russia.

Battle of the Somme: long an destructive battle fought in 1916 by the British on the Western Front along the River Somme.

Western Front: area of battle during the First World War in Belgium and France, consisting of Allied and German trench systems facing each other.

Battle of Verdun: German assault on the French in 1916 named after a small city in Northern France.

U-boat: German term for a submarine.

Triple Alliance: defensive pact formed in 1882 between Germany, Italy and Austria-Hungary.



Rules – Confidence – Solving

Leadership Qualities

Term 6



Analysis – Resilience – Competitive

Leadership Qualities

Term 5



Responsibility – Leadership - Tactics

Analysis of Performance

Term 4



Feedback – Respect - Technique

Analysis of Performance

Term 3



Understanding – Communication - Ability

Training Methods

Term 2



Knowledge - Effort - Fitness Levels

Training methods

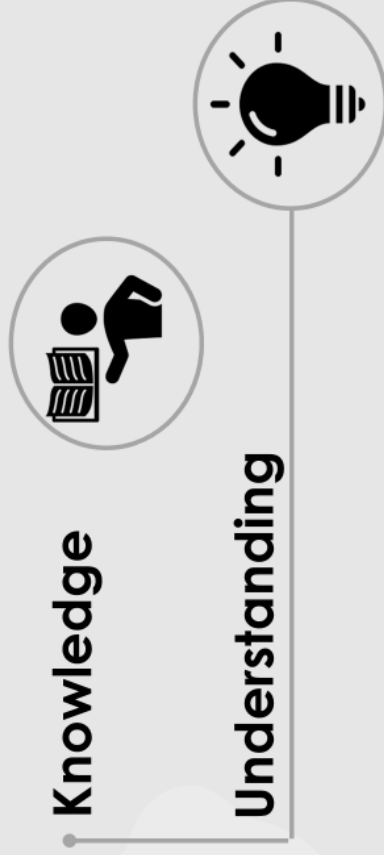
Term 1



PE
Yr 9

Year 9 Refinement & Readiness

HEAD



HEART



Students refine their application of the model in more advanced game situations and physical challenges, developing leadership, strategy, and readiness for KS4 pathways.

HANDS



Physical Education Specific Learning Content

Training methods:

Circuit
Fartlek
Continuous
Interval
Weight
Plyometrics
Training intensity

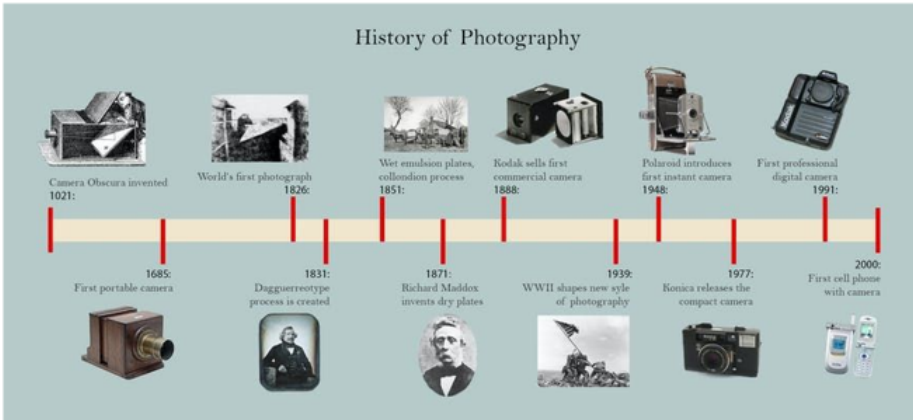
Knowledge of the Rules



Over the year students rotate through areas of departmental specialism, experiencing specialist teaching to develop knowledge and understanding of key creative skills.

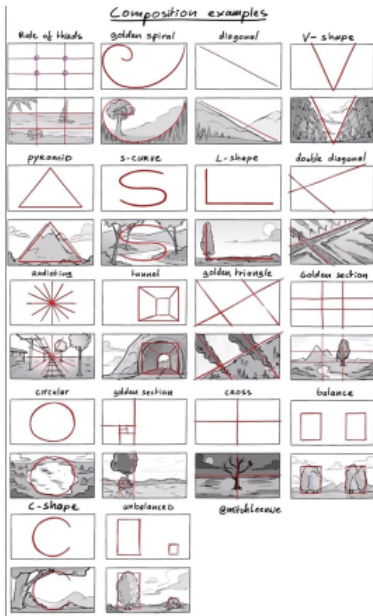
Specialism	Project	Core content					Assessment
3D Design	Body Adornmen	Health and Safety in 3D	Plastics	Use of Tools & equipment	Design Movements	Presentation box	 End of topic tests for each specialism What went well? / Even better if?
	Nutrition Developing Skills						
Textiles	Core Textile Skills	Health and Safety in Textiles	Problem analysis	Hand sewing skills	Design ideas	Making products	 Assessment of outcome
Graphics	Photograp hy skills	The formal elements of Photography	Leading lines	Pattern	Reflection	Lighting	 Assessment of outcome

Year 9 Photography Knowledge Organiser



- First recorded photograph -1826
- Invention of film -1889
- Instant cameras -1948
- Invention of internet -1989
- First professional digital camera -1991
- First mobile phone camera -2000

Photography Keywords



- Composition, Leading lines
- Foreground, Middleground
- Background, Rule of thirds
- Digital Photography
- Analogue Photography
- Instant Photography
- Selecting, Editing
- Hand manipulation
- Cropping, stretching, weaving

Photography Key Players

- Landscape photography - Ansel Adams - Yann Arthus-Bertrand - Andreas Gursky
- Portrait Photography - Diane Arbus - Yousuf Karsch
- Documentary Photography - Walker Evans - Martin Parr - Douglas Duncan
- Fashion Photography - Irving Penn - David Bailey - Annie Leibowitz
- Street Photography - Elliott Erwitt - Henri Cartier-Bresson - Helen Levitt
- Hand manipulation: David Hockney - Greg Sands - John Stezaker

Year 9 Textiles Knowledge Organiser

What is a brief?

Brief - A brief set of instructions given to a person about a job or task.

What is a specification?

A list of rules that a product must fit to when being made and designed. Precise detail.

Natural materials

Textiles made from natural fibres are known as natural fabrics. Used for hundreds and even thousands of years.

Some natural textiles include:

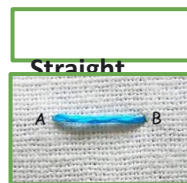
Linen – Cotton – Hemp – Silk – Cashmere – Wool – Jute – Bamboo – Mohair –Leather

Synthetic materials

Synthetic fibres (man-made fibres) are produced by joining chemical monomers into polymers using a chemical reaction called polymerisation. Some synthetic materials include:

Acetate - Acrylic - Microfiber - Nylon - Polyester - Polyvinyl-chloride (PVC) - Spandex

Embroidery Stitches:



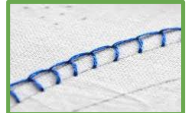
Stem



Star



Blanket



Possible research methods

Market Research

Questionnaires or interviews can be used to find out people's likes/dislikes and so on. This helps the designer understand what the target group wants from a product.

Product Analysis

Designers analyse and evaluate similar existing products to what they plan on designing to highlight positive and negative aspects and help them in what they design.

Designer/Artist research

Designers may look to designers/artist to help them decide on visual information in their design and help them to understand how something is made using design/artistic processes.

H&S Rules:

- Listen to the Teacher at all times and follow instructions INSTANTLY
- All tripping hazards removed – Stools tucked under work stations, bags/coats away
- Equipment put away neatly where found after use
- Focus on your own work – not a chatting opportunity

Felt

Embroidery thread

Textile scissors

Embroidery needle



Food KS3 Learning Journey

YEAR 9

Students on rotation with DT

Food Technology - Theory: Focusing on theory ready for KS4 -Health and Safety, Food allergies/intolerances, consumer awareness and food waste. Practical: A range of dishes using higher level cooking skills with presentation.



9



YEAR 8

Students on rotation with DT

Food Technology Theory - Health and Safety, Nutrition- focusing on dairy, protein, fats and oils, carbohydrates and fruits and vegetables. Practical - A range of dishes building on cooking skills with dishes that incorporates the following - fermentation, coagulation, aeration and gelatinisation.



8



7

YEAR 7

Students on rotation with DT

Food Technology - Theory - Health and Safety, personal hygiene and the Eatwell Guide. Sensory Analysis. Practical - A range of dishes building cooking skills, such as learning about knife skills, different cooking methods and presentation.

Knowledge organiser

Year 9 KS3 Cooking and Nutrition

Prior Learning / Context:

Prior learning includes the Eatwell Guide and the principles of healthy eating. Medium cooking skills, including sauce making, bread and pastry making, also completed.

Assessment:

- Retrieval Practice – quizzing, starter/plenary tasks
- Formal knowledge assessments – delivered in time with reporting
- Food preparation skills assessed after practical

Themes:

- Nutrition
- Food Poisoning
- Allergies
- Intolerances
- Food preparation
- Food safety
- Seasonal Foods
- Cooking Methods
- Food choice

Context: Lessons

- Practical lessons
- Macro / Micro nutrients
- Food Allergies
- Food intolerances
- Cooking Methods
- Factors that affect food choice
- Key Temperatures
- Food labels
- Assessment

Food Allergies



An allergen – when the body's immune system has a mild or severe reaction to a specific food.

An intolerance – when a substance in the food is difficult for the body to digest.

Food Choice

Many factors influence what we choose to eat including our personal preferences and the factors below:



Consumer Awareness

Food labelling is required by law. It helps consumers make food choices.

Food waste in the home occurs because we make too much food or we don't use it before it goes off. Food we waste the most includes fresh fruit and salad.

Future Learning:

KS4: Hospitality and Catering – This is a vocational award that is split into 60% Coursework and 40% exam. You are awarded either Level 1 or Level 2, these can be Pass, Merit, Distinction and Distinction*.

Key Vocabulary

Allergy, Intolerance, Contamination, Anaphylactic Shock, EpiPen, Religion and Culture, Recommended Daily Amounts (RDA), Lactose, Coeliac, Diarrhoea, Celebration, Cuisine, Food spoilage, high risk foods, Dietary Fibre Traditions, Food Waste, Labelling.

Year 10 –
Level 1/2
Vocational
award -
Hospitality
and
Catering

Year 9 Computing Learning Journey

Binary & Algorithms

Binary Maths
Linear Search
Binary Search
Flowcharts



Animation

Create a party monkey
Build a snowman
Animation project



Python Programming

Input/Output Challenges
Sequence Challenges
Selection Challenges
Iteration



KEY VOCABULARY

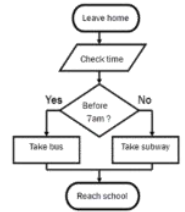
Term One - Animation with Blender

- **Blender:** An open-source 3D graphics software used for creating animations and models.
- **Object Mode:** The mode in Blender where you can move, scale, and rotate whole objects.
- **Keyframe:** A marker that stores the value of an object's property at a specific time in animation.
- **Timeline:** The area in Blender where animation frames are set and keyframes are placed.
- **Parenting:** Linking one object to another so they move together (e.g., head to body).



Term Two - Binary & Algorithms

- **Binary:** A number system using only 0s and 1s used by computers to store data.
- **Linear Search:** An algorithm that checks each item in a list one by one.
- **Binary Search:** An efficient algorithm that splits the list and checks the middle item.
- **Flowchart:** A diagram that represents a process using standard symbols.
- **Decision:** A flowchart shape used when a choice must be made (usually a diamond).



Term Three - Programming with Python

- **Input:** Used to take data from the user (e.g., `input("What is your name?")`).
- **Print:** Displays text or output on the screen.
- **Sequence:** Instructions executed in order, line by line.
- **If Statement:** Used to make decisions in a program (selection).
- **Loop:** Used to repeat a set of instructions (e.g., `for` or `while`).



Quick Recap Questions



1. What is Blender used for in Computing lessons?
2. What is a keyframe and what is it used for?
3. How does binary search differ from linear search?
4. What is the purpose of a flowchart?
5. In Python, how do you repeat instructions multiple times?

End of Year Exams



KING'S LYNN ACADEMY



PD & PDA

Year 9

Spirited Arts
CSE & Grooming

What religion thinks about Money & Wealth

Half Term 6

Contraception

What religion thinks about poverty

Online Safety

What religion thinks about Environment



Unhealthy Relationships

What religion thinks about celebrity & social media

What religion thinks about war



What religion thinks about Gender & Sexuality

Religion & Music

Half Term 5

Consent & Law

Drugs & consequence

Religion & Sport



Gambling

Religion & Art

Religion & STEM

Consequences of war/victims of war

Half Term 4

Pacifism



Holy & Just War

Conflict & Reasons for war



Protest & Terrorism



Nuclear War

GCSEs

Options



First Aid

Half Term 3

Where can GCSE's take you

Life after Death



When does life start

Mental Health



Animal Rights



Different types of support

Euthanasia

Neurodiversity



Half Term 2



Sikhism



Creation Stories & Evolution

UDHR

Islam

Prejudice & Discrimination



Christianity & MLK



Buddhism & Dalai Lama



Hinduism & Gandhi

Human Rights

Half Term 1

Religious & Important figures

Welcome to your Personal Development Journey

Judaism, Anne Frank, Elie Wiesel

YR9 KNOWLEDGE ORGANISER - PD



PEACE AND CONFLICT

THINGS YOU NEED TO BE ABLE TO DO:

- UNDERSTAND WHY WARS HAPPEN
- UNDERSTAND THE DIFFERENCE BETWEEN PROTEST AND TERRORISM
 - KNOW WHAT WEAPONS OF MASS DESTRUCTION ARE
- UNDERSTAND WHAT PACIFISM IS AND WHY SOMEONE WOULD BE A PACIFIST
 - DESCRIBE THE CONSEQUENCES OF WAR
 - DESCRIBE THE IMPACT ON VICTIMS OF WAR

KEY QUESTIONS

- WHY DOES WAR OCCUR?
- WHAT IS THE DIFFERENCE BETWEEN PROTEST AND TERRORISM?
 - WHY ARE SOME PEOPLE PACIFIST?
 - WHAT ARE THE CONSEQUENCES OF WAR?

TIER 2 VOCAB

WAR – A STATE OF ARMED CONFLICT BETWEEN COUNTRIES OR GROUPS WITHIN A COUNTRY

TERRORISM – THE UNLAWFUL USE OF VIOLENCE OR THREAT OF VIOLENCE, GENERALLY AGAINST INNOCENT CIVILIANS, TO

ACHIEVE A POLITICAL GOAL

PACIFISM – THE BELIEF THAT WAR AND VIOLENCE ARE UNJUSTIFIABLE AND DISPUTES SHOULD BE SETTLED BY PEACEFUL

MEANS

YR9 KNOWLEDGE ORGANISER - PDA

HEALTHY LIFESTYLE & WELLBEING

THINGS YOU NEED TO BE ABLE TO DO:

- UNDERSTAND WHAT FIRST AID IS
- UNDERSTAND THE IMPORTANCE OF RECOVERY POSITION & CPR
- IMPORTANCE OF PERSONAL HYGIENE
- IMPACT OF SMOKING & VAPING
- THE IMPORTANCE OF EXERCISE



KEY QUESTIONS:

WHAT IS FIRST AID?

WHY IS PERSONAL HYGIENE IMPORTANT?

WHAT EFFECT DOES SMOKING AND VAPING HAVE ON THE BODY?

WHY IS EXERCISE IMPORTANT?

TIER 2 VOCABULARY

FIRST AID – HELP GIVEN TO A SICK OR INJURED PERSON UNTIL FULL

MEDICAL TREATMENT IS AVAILABLE

PERSONAL HYGIENE - THE PRACTICE OF KEEPING YOUR BODY CLEAN AND GROOMED TO PROMOTE YOUR HEALTH AND THE HEALTH OF OTHERS



DRUGS

THINGS YOU NEED TO BE ABLE TO DO:

- TO UNDERSTAND THE IMPACT OF DRUGS ON THE BODY
- TO UNDERSTAND THE CONSEQUENCES OF DRUGS
 - THE IMPACT OF GAMBLING
 - WHAT IS CSE

KEY QUESTIONS:

WHAT IS THE IMPACT OF DRUGS ON THE BODY?

WHAT IS THE LAW AND DRUGS?

WHAT IMPACT CAN GAMBLING HAVE?

WHAT IS CSE?

TIER 2 VOCABULARY

DRUG – A MEDICINE OR OTHER SUBSTANCE WHICH HAS AN EFFECT ON THE BRAIN WHEN INTRODUCED TO THE BODY

GAMBLING – PLAYING A GAME IN THE CHANCE OF WINNING SOMETHING

CSE - CHILD SEXUAL EXPLOITATION IS A FORM OF CHILD SEXUAL ABUSE. IT OCCURS WHERE AN INDIVIDUAL OR GROUP TAKES ADVANTAGE OF AN IMBALANCE OF POWER TO COERCE, MANIPULATE OR DECEIVE A CHILD OR YOUNG PERSON UNDER THE AGE OF 18 INTO SEXUAL ACTIVITY (A) IN EXCHANGE FOR SOMETHING THE VICTIM NEEDS OR WANTS, AND/OR (B) FOR THE FINANCIAL ADVANTAGE OR INCREASED STATUS OF THE PERPETRATOR OR FACILITATOR

Drama (Performing Arts)

Year 9

Year 10 KING'S LYNN ACADEMY Technical Theatre Topic 4

Set Design
Lighting Design
Hair and Makeup Design



Styles of Theatre
Creating a Performance



Costume Design
What is Devised Theatre?



Devised Theatre Process

DEVISING TECHNIQUES	
BRAINS/TORM	Starting to create your own style of theatre
CHARACTERS	IMPROVE
FREEZE FRAME	REFLECT
MUSIC	
MONOLOGUE	

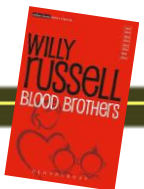


Devised Theatre Topic 3



Evaluating

Script Work



Creating a Performance



Performing



Identifying Brecht Devices in Blood Brothers

Topic 2 Continued

Themes and Ideas

Themes
Class divide
Family
Growing up
Superstition and Fate
Hope and Dreams
Human versus Machine
Love and Marriage

Epic Theatre

Verfremdungseffekt

Recognising Brecht Devices

Bertolt Brecht/Blood Brothers

Topic 2

Macbeth and Lady Macbeth



Creating a performance

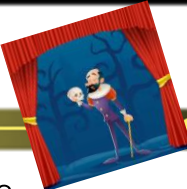


Exploring Characters

Bertolt Brecht



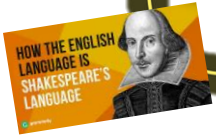
Performing



Blood Brothers



Exploring Characters



Exploring Language

Creative Writing

Topic 1 Continued

Comedy

Different Plays



Exploring Characters

Chorus



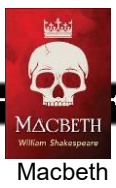
Elizabethan Theatre



William Shakespeare

Macbeth

Topic 1



Macbeth

Witches



Welcome back to KLA your Journey continues



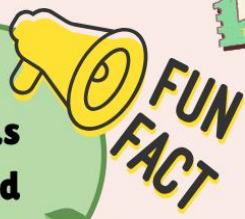
MACBETH



William Shakespeare



Shakespeare invented thousands of words such as arch-villain, birthplace and downstairs.



Shakespeare - Types of Plays

Comedy



Historical



Tragedy



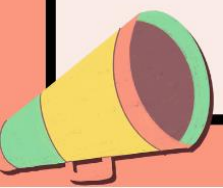
Romance



Keywords

Aside – A short comment or speech a character delivers directly to the audience, or to themselves, whilst other characters appear not to hear.

Eavesdropping – A character strategically overhears others on stage, informing themselves and the audience of details. The characters being overhead do not know they have been listened to.



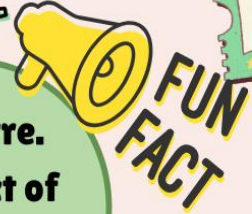
EPIC THEATRE/BLOOD

BROTHERS

Bertolt Brecht



Bertolt Brecht created Epic Theatre. His verfremdungseffekt is the act of distancing the audience from emotional involvement.



Verfremdungseffekt

Multi-roling

Montage

Direct Address

Placards

Changes in Time

Blood Brothers - Themes

Social Class and Inequality – Contrasts the lives of two twins who are separated at birth. They show different social classes and economic backgrounds.

Nature versus Nurture – Contrast between Mickey and Edward's lives challenges whether a person's destiny is determined by genetics or their environment.

Friendship and Loyalty – Bond between Mickey and Edward.

Superstition and Fate – The central theme driven by a fabricated prophecy and the Narrator.



Year 10

Music

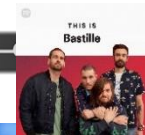
Year 9

KING'S LYNN ACADEMY

Topic 4 Continued

Rehearsing and Performing a Cover Version

A 'Good' Cover Version



Analysing Cover Versions

Topic 4

Cover Versions Project

What is a Cover Version?



Tone of Instruments



Leitmotifs

Foley Sound

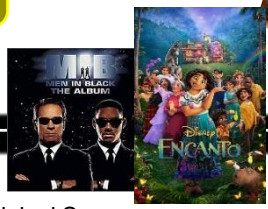
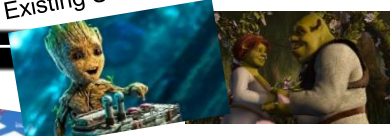
Topic 3 Continued

Diegetic/ Non-Diegetic Sounds

Existing Song

Original Score

MAKING MOVIE SOUND EFFECTS



Topic 3

Film Music

Power of Music in Film

Arranging your track

BEAT DROP

BASS LINE

Making a Beat
Adding the Bassline

HOUSE MUSIC

Styles of Dance Music

DRUM & BASS

Sound/Beat Experimenting



Topic 2

Electronic Dance Music

Becoming the Maestro di Bateria

TECHNO

Typical Features

Samba Rhythms

Performing Samba

Samba Instruments

Topic 1

Samba

Context and culture

Welcome back to KLA your Journey continues



Year 9 Topic 1 & 2

Samba & Dance Music

Samba Instruments:

Apito



Agogo Bells



Tamborim



Surdo Drums



Ganza



Dance Music:

HOUSE

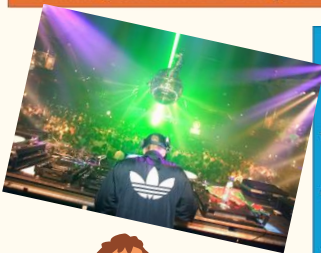
- **Four-to-the-floor** bass drum
- Drum rolls and **off-beat** hi-hat patterns
- Looped **samples** and **Synthesiser** riffs
- Sometimes has vocals and piano chords
- Usually around **120 bpm**

TECHNO

- Similar drum patterns to house music
- Purely **electronic** sounds
- Few or no vocals
- Usually around **120-140 bpm**

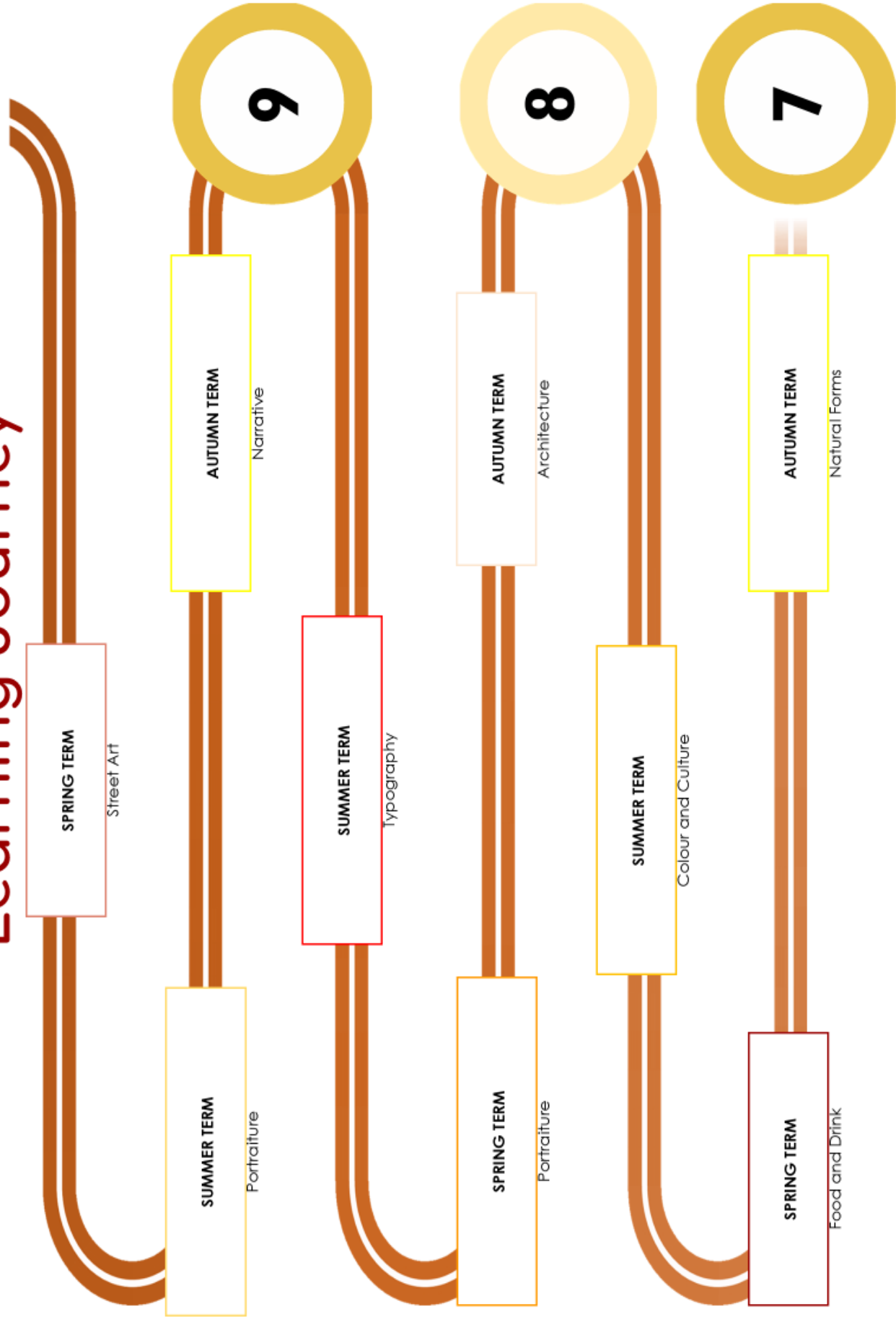
DRUM 'N' BASS

- **Fast complex** drum patterns
- **Heavy** bass line
- Usually around **170 bpm**



KS3 Art

Learning Journey



Year 9 Spring/Summer Term Knowledge Organiser



Lucy McLauchlan

British born Lucy McLauchlan makes site-responsive, large scale paintings prints. Drawing inspiration from her immediate environment she allows it to inform and direct what is an intuitive, explorative process. Her monochromatic murals cover houses and multi-stories throughout Europe, gigantic billboards in Guangzhou, galleries of Japan, buildings in The Gambia, public gardens of London / Rome / Moscow, Italian water towers, Norwegian lighthouse, Detroit parking lot and abandoned NYC subway tunnels.

Shepard Fairey

Frank Shepard Fairey is an American contemporary artist, activist and founder of OBEY Clothing who emerged from the skateboarding scene. Born in South Carolina on 15 February 1970, he is well known for designing the "Andre the Giant Has a Posse" sticker campaign while attending the Rhode Island School of Design in 1989.



Art Specific Language and Terms

Layering	Applying paint in stages, starting with lighter base colours and adding darker tones later over the top. Often there can be multiple layers to a painting.	Mixed Media	Refers to the use of a combination of materials and techniques by an artist in a piece of art.
Portraiture	The art of painting or taking portraits.	Research	The creation of new knowledge and/or the use of existing knowledge in a new and creative way to generate new concepts, methods and gain inspiration.
Street Art	Artwork that is created in a public space, typically without official permission.	Graffiti	writing or drawings scribbled, scratched, or sprayed illicitly on a wall or other surface in a public place.

Year 9 Spring/Summer Term Knowledge Organiser

Illustration as a form of art:

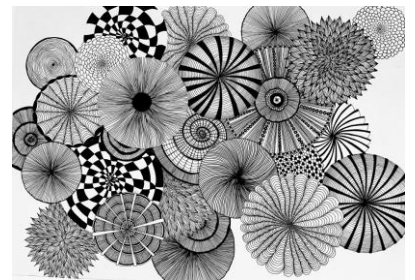
An illustration is a drawing, painting or printed work of art which explains or visually represents something or a particular story. Historically, book illustration and magazine/newspaper illustrations have been the predominant forms of this type of visual art, although illustrators have also used their graphic skills in the fields of poster art, advertisements, comic books, animation, greeting cards & cartoon-strips.



Automatic Drawing: A drawing technique developed by surrealists as a way of expressing the subconscious. In automatic drawing, the hand can move randomly and freely across the paper.



Screen printing: a printing technique where a mesh or screen is used to transfer ink onto a surface, except in areas made impermeable to the ink by a blocking stencil.



Art Specific Language and Terms

Contemporary Art	Contemporary art is the art of today, produced in the second half of the 20th century or in the 21st century.	Composition	Where you place objects / imagery on the page or in a space.
Control	How carefully you work with a specific media.	Illustrator	A person who draws or creates pictures for magazines, books, advertising, etc.
Extended Drawing	When you are given a starting point for a drawing and then complete the drawing using your own creative imagination.	Mono-chromatic	When something only contains one colour or is black and white.
Doodle	Random, thoughtless drawings on whatever topics happen to be flowing through the artist's' head.	Murals	A mural is a painting or illustration applied directly onto a wall, ceiling or other permanent surfaces.