Knowledge Organisers
Year 8
Spring 2022

Knowledge Organisers

Some subjects like Design Technology organise the curriculum on a carousel, as such all the organisers for that subject are in the Spring Term booklet.

Contents

*Some subjects have Knowledge Organisers which last two terms or a year, therefore it will be the same as the Autumn Term.

An Introduction to Knowledge Organisers

What is a Knowledge Organiser?

A knowledge organiser is a document, usually one side of A4, occasionally two, that contains key facts and information that children need to have a basic knowledge and understanding of a topic, or in some cases a series of topics.

Students are expected to bring their Knowledge Organiser Booklet to school every day. Students will be issued with a new booklet to bring each term. However, it is import they keep the old booklets to help with revision for end of year exams.

What are the benefits of knowledge organisers?

The main benefit of knowledge organisers is that they give students and parents the 'bigger picture' of a topic or subject area. Some topics can be complicated, so having the essential knowledge, clear diagrams, explanations and key terms on one document can be really helpful.

Research shows that our brains remember things more efficiently when we know the 'bigger picture' and can see the way that nuggets of knowledge within that subject area link together. Making links, essentially, helps information move into our long-term memory.

How can the students use them?

As mentioned earlier, students are expected to bring their Knowledge Organiser Booklet to school everyday. In lessons they can be used in a number of ways, for example, to look up the meaning of key words, spell words correctly and do some additional work if they have finished classwork.

At home knowledge organisers can be used to support homework, independent work and revise for tests and exams. Two quick and easy ways to do this are:

1. Look, cover write, check – look at part of the knowledge organiser, cover it, write as much as you can remember and then check it
2. Word up – Pick out any words you don't understand. Use a dictionary or thesaurus to find the meaning. If they don't help as your teacher.

The more often you do this the better. YouTube has some clips on them; search 'Mr Garner look, cover, write, and check 'and 'Mr Garner word up'

How can parents use them?

- Read through the organiser with your son/daughter – if you don't understand the content then ask them to explain it to you – 'teaching' you helps them to reinforce their learning.
- Test them regularly on the spellings of key words until they are perfect. Get them to make a glossary (list) of key words with definitions or a list of formulae.
- Read sections out to them, missing out key words or phrases that they have to fill in. Miss out more and more until they are word perfect.

How the booklet is organised

The knowledge organisers are in alphabetical order by subject.

Knowledge Organiser - Term 2 & 3

YEAR 8 ART COLOUR

INDIA	MAORI
AFRICAN	JAPANESE
NATIVE AMERICAN	ABORGINAL
CELTIC	MEXICAN
ISLAMIC	AZTEC
CHINESE	

Cultures around the world

KEY WORDS

- Primary
- Secondary
- Tertiary
- Complementary
- Highlight
- Abstract
- Shadow
- Shade
- Tone
- Cool
- Warm
- Application
- Foreground
- Background

Colour Theory:

The primary colours are the three main colours. They cannot be made but when mixed together they make all other colours.

The secondary colours are made by mixing two primary colours together

The tertiary colours are made by mixing a primary and secondary colour together.

Complementary colours are opposite on the colour wheel. They contrast each other to have a vibrant look.

To make a lighter colour you add white, this is called a tine.

Skills

Pattern and symbolism

Printmaking

Culture understanding/ application

Development of mixed media skills

Artists inspired by colour

Claude Monet

Henri Matisse

Barbara Rae

Georgia O'Keeffe

Mark Rothko

David Hockney

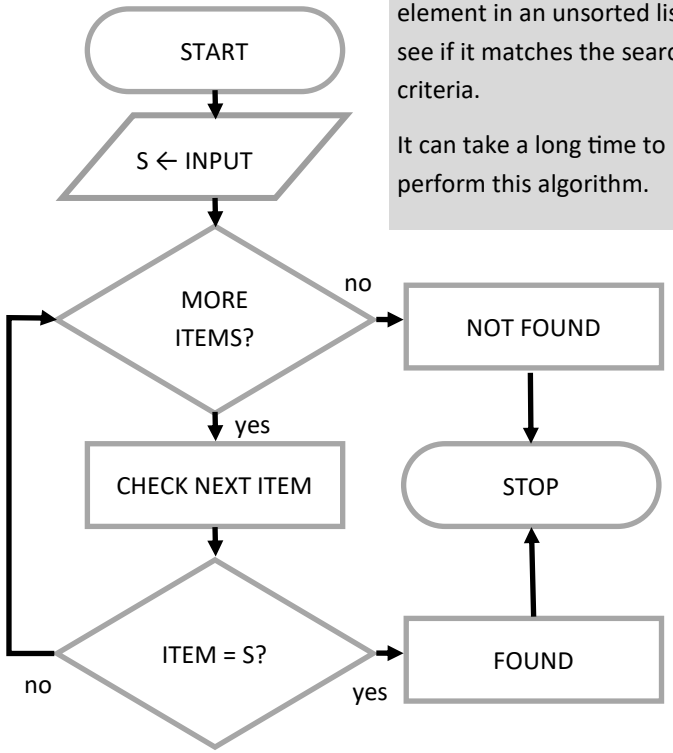
Warm colours - attract attention and are generally perceived as energetic or exciting.

Cool colours– are generally perceived as soothing and

WARM COLOURS	COOL COLOURS
RED	BLUE
ORANGE	GREEN
YELLOW	VIOLET

KS3 Computing: Algorithms

"A step-by-step process to perform a task."



A **linear search** checks each element in an unsorted list to see if it matches the search criteria.

It can take a long time to perform this algorithm.

A **binary search** works by looking for items in an **ordered list**. The middle item is examined and half the list discarded. This happens until there are no items in the list or the item is found. Here is an example:

A. Search for **77**

B. Examine middle element of list (54)

3	29	34	39	54	57	59	63	77	91

C. 77 > 54, so discard 54 and below

3	29	34	39	54	57	59	63	77	91

D. Examine middle element of list (63)

3	29	34	39	54	57	59	63	77	91

E. 77 > 63, so discard 63 and below

3	29	34	39	54	57	59	63	77	91

F. Examine middle element of list (77). Search item found!

3	29	34	39	54	57	59	63	77	91

A binary search is much more *efficient* than a linear search.

A **merge sort** compares the first item in a two lists, removing the lowest and adding it to a new list.

[40]	[88]	[8]	[2]	[1]	[3]	[54]	[36]
[40,88]		[2,8]		[1,3]		[36,54]	
[2,8,40,88]				[1,3,36,54]			
[1,2,3,8,36,40,54,88]							

A **bubble sort** compares the first two items in a list, swapping if they are in the wrong order. It then moves to the next two items, until the end is reached. This happens repeatedly until there are no more items to swap. One pass through the list sends the highest value to the rear.

77	73	95	22
73	77	95	22
73	77	95	22
73	77	22	95
73	77	22	95
73	22	77	95
22	73	77	95

A bubble sort is much less *efficient* than a merge sort. It will take much longer to carry out on larger lists.

```
from turtle import *

down()
fd(50)
rt(90)
fd(50)
rt(90)
fd(50)
rt(90)
fd(50)
rt(90)
up()
```

This program draws a square. The **sequence** of instructions is important. If they are in a different order, the outcome of the program will be different.

down() and up() tell the turtle to start and stop drawing.

fd(50) moves the turtle forward 50 steps.

rt(90) rotates the turtle 90 degrees to the right (clockwise)

```
from turtle import *

down()
for i in range(4):
    fd(50)
    rt(90)
up()
```

This program does exactly the same thing. However, it uses a loop to repeat instructions, making it shorter and therefore easier to edit if necessary. This is known as **iteration**.

`for i in range(4):`

means to repeat the instructions that are indented 4 times.

```
from turtle import *

sides = 4
steps = 50

down()
for i in range(sides):
    fd(steps)
    rt(360/sides)
up()
```

The program has been improved further here. It uses two **variables**, *sides* and *steps*.

This makes the program more flexible, by being able to draw shapes of different number of sides.

The number of degrees to rotate has been calculated by an **arithmetic operation**: 360 ÷ sides. We use '/' as the division operator (instead of ÷) in computing.

Computing: Programming with Python

```
from turtle import *

sides = input("How many sides?")
sides = int(sides)
steps = 50

down()
for i in range(sides):
    fd(steps)
    rt(360/sides)
up()

print("I've drawn a shape with",sides,"sides")
```

This time the program asks the user how many sides the shape should be. This is known as **user input** and the answer is stored in the variable *sides*.

Once the shape has been drawn, the program **outputs** text to the screen.

```
from turtle import *

print("Type r for a red shape, or b for blue")
col = input("")
if col == "r":
    color("red")
else:
    color("blue")
```

Finally, the user is given a choice of colours.

The user enters a colour which is stored as variable 'col'

This part of the program uses a **Boolean expression** to compare col variable with 'r'.

If this is *true* (the users types 'r'), the pen colour is red.

If this is *false* (the user doesn't type 'r'), the pen will be blue. *If... else* statements are known as **selection**.

Drama Knowledge Organiser: Year 8

Blood Brothers

- Willy Russel wrote the play Blood Brothers in the 1970's.
- The main characters are Edward and Mickey; two twins separated by birth.
- Mrs Johnstone and Mrs Lyons demonstrate the class divides in Liverpool at the time. They are both the parents of the boys.
- Linda is both brothers' best friend and Mickey's future wife.
- Prologue – Piece of text before the action explaining what is about to happen.
- Musical theatre- Theatre created with song.

Soap Opera

- Students will understand the basic features of a soap opera.
- Over exaggerated.
- Very dramatic and over the top storylines.
- Understanding/creating setting and plot within a performance.
- Creating and sustaining character using skills such as- Gait, Voice, Facial Expressions and Gesture.
- Identify and explain key elements of soap operas and effectively explain and perform stereotypical characters.
- Exploring new skills such as, Marking the Moment and Cross-Cutting.

Theatre through the ages

- Greek theatre – Chorus, amphitheatre, masks and movement.
- Medieval – trades, biblical stories and guild.
- Commedia – Exaggeration, masks, body language, characterisation,
- Kabuki – Dance, design, set, costume and make-up.
- Victorian theatre – Stock characters, Melodrama, Shakespeare, globe theatre.
- Naturalism – Stanislavsky, emotional memory, relaxation, character building.
- Brecht – Epic theatre, non- naturalism, placards, alienation.

Anne Frank

- Exploring a historical event/person(s)
- Utilising Brecht's techniques: Explanatory captions, placards, illustrations, songs, narration, third-person narration, stage directions, breaking the fourth wall, multi-role, split-role
- 'Epic Theatre'
- Bertolt Brecht
- Socio-political issues
- Realism
- Catharsis

Key Words

- Pitch
- Pace
- Pause
- Volume
- Tone
- Diction
- Choral Speaking
- Role on the wall
- Gait
- Body Language
- Facial Expression
- Posture
- Cross – cutting
- Marking the moment
- Direct Address
- Interpretation of text
- Genre
- Style

<u>Important Practitioner:</u>

- Bertolt Brecht

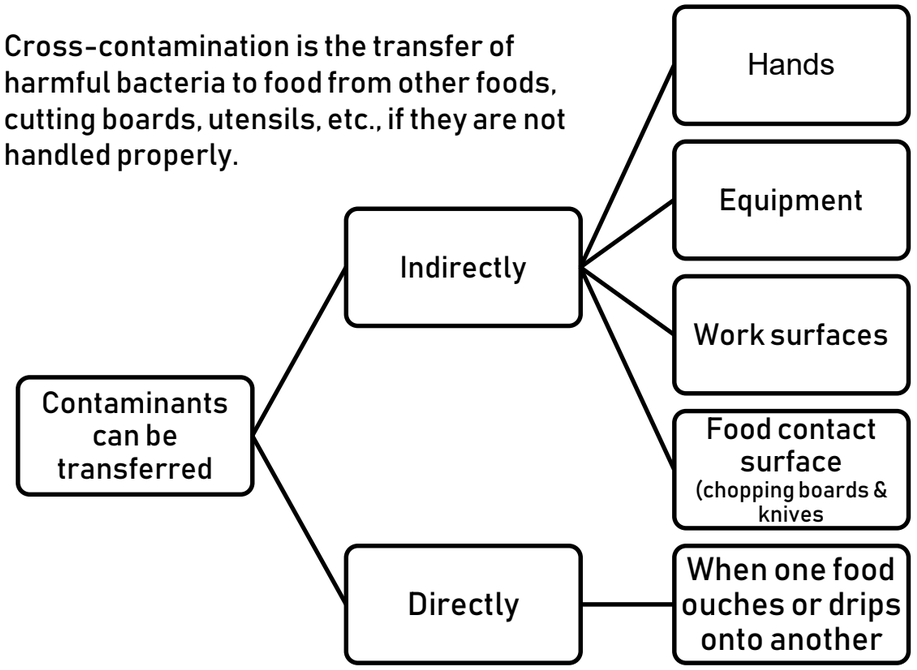
Employability

- Team work
- Collaboration
- Listening Skills
- Creative Thinking
- Leadership
- Focus
- Concentration
- Positivity
- Confidence
- Self-Belief
- Problem solving
- Reflection
- Refining work
- Independence

Year 8 Cooking & Nutrition Mediterranean Cuisine Knowledge Organiser

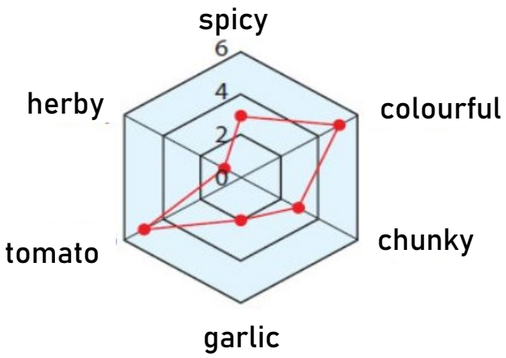
Food Hygiene

Cross-contamination is the transfer of harmful bacteria to food from other foods, cutting boards, utensils, etc., if they are not handled properly.



Sensory Testing/Star Profile Charts

- These kind of tests can be used to find out what people particularly like about a food product to help build up a profile of it according to a range of sensory qualities such as saltiness, smoothness, crispiness, flavour.
- Star profile –This type of test gets testers to describe the appearance, taste and texture of a food product on a star chart.



Hygiene & Safety Rules

Tie up long hair
Wear an apron
Tuck tie in
Wash hands
No running
Use oven gloves when necessary
Clean practical equipment thoroughly

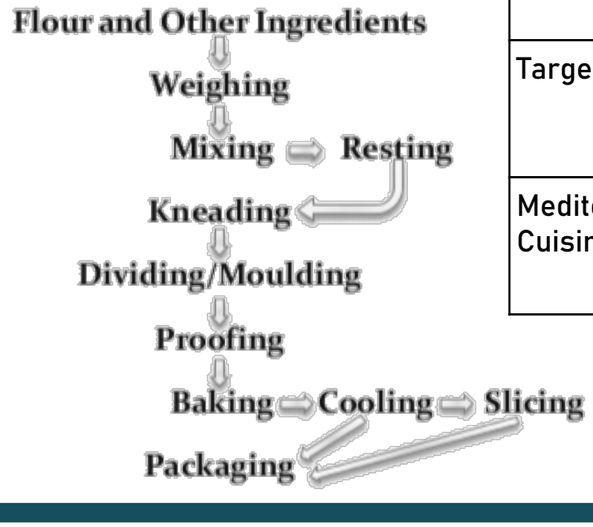
Key abbreviations: Weights and Measurements

L	Litres	
g	Grams	
ml	millilitres	1000ml =1 litre
Kg	kilograms	1000g
Tbsp	tablespoons	15ml
Tsp	teaspoon	5ml
1pt	1 pint	568ml

Example Time Plan

Time	Process	Hygiene & Safety
8:50 – 9:00	Collect all equipment and ingredients. Wash hands.	Is fridge 0°C - 4°C?
9:00 – 9:15	Dice onion, peppers and mushrooms.	Use a green chopping board. Use bridge and claw techniques.
9:15 – 9:30	Thread vegetables onto a skewer. Make dressing.	Ensure skewer has been soaked in cold water.

Bread Production Flow Chart



Key vocabulary

Design Brief	An written outline which explains the aims and objectives and milestones of a design project.
Task Analysis	Breaking a design brief down to understand the requirements of the task.
Target Audience	The person or people most likely to be interested in your design or product.
Mediterranean Cuisine	Food from the countries that surround the Mediterranean Sea.

Year 8 Product Design Knowledge Organiser

Picture Frame Clock Design

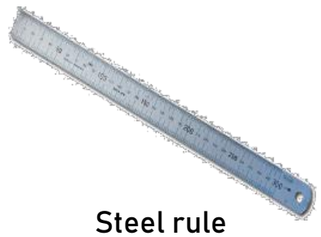
Key Skills

- Responding to a Design Brief & identifying an audience
- Developing CAD skills using 2D Design tools to create a clock face design appropriate for a target audience
- Applying Health & Safety procedures and PPE in the workshop environment
- Identify specific workshop tools and equipment
- Developing practical skills to create lap & rebate joints to join materials
- Knowledge of specific timbers & their origins
- Inserting a clock mechanism
- Prototype modelling including finishing & presentation skills
- Evaluating the manufacturing process

Tools for working with Timber


Try square


Bench vice


Steel rule


Marking gauge


Tenon saw


File


Belt & Disc Sanders


Coping Saw

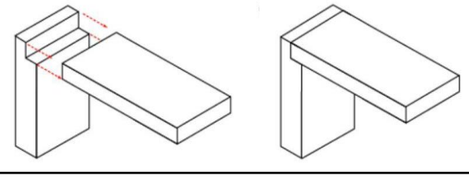

Bench hook


Pillar drill

Joining materials – construction techniques

Lap & Rebate joints

A lap or rebate joint is where two pieces of material overlap. This joint can be used to join wood, plastic, or metal.



Key vocabulary

Function	What a product does, how it works and what it will be used for?
Target Audience	The person or people most likely to be interested in your design or product.
Wood grain	Wood grain is the pattern made by the wood fibres in trees when it grows.
Materials	What something is made from.
Clock mechanism	This is the engine of a watch that makes the clock and its functions work.
Finishing	The process of applying a finish to preserve or protect a material & improve aesthetics.
Modelling	To present ideas in 2D & 3D to the user (target audience) or client.
Prototype	A prototype is a model that is built to test to see if it is successful or whether it needs further modification or improvements.
PPE	Personal protective equipment are items

Timber is a natural material with imperfections, knots and grain – always sand with the grain

Softwood 	From coniferous trees that are evergreen, which are faster to grow and are less expensive than hardwoods. Softwoods are a sustainable material as the resource can be regrown and not depleted. Softwoods are strong and easy to work with.

Manufactured boards are timber produced by gluing wood layers or wood fibres together.

Medium Density Fibreboard 	Medium Density Fibreboard or also known as MDF is made from wood fibres which are glued together. MDF has a smooth even surface which makes it easier to work than natural timber.

Year 8 Product Design Knowledge Organiser

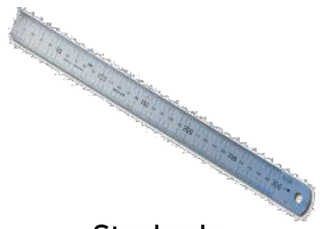
Pizza Cutter Ergonomic Design

Key Skills

- Responding to a Design Brief & identifying an audience
- Applying Health & Safety procedures and PPE in the workshop environment
- Understand the key working properties of acrylic and aluminium
- Investigate temporary and permanent joining methods
- Identify specific workshop tools and equipment
- Developing practical skills to create
- Prototype modelling including finishing & presentation skills
- Evaluating the manufacturing process

Belt & Disc Sanders	Ball Pein Hammer
	

Tools for working with metals and plastics

 Engineers square	 Bench vice
 Steel rule	 Centre Lathe
 Hacksaw	 File
 Wet and Dry Sandpaper	 Pillar drill

Joining materials – construction techniques

Rivets:
Rivets are used to join plates together and they have been used for hundreds of years.
Before the widespread use of welding.

Key vocabulary	
Function	What a product does, how it works and what it will be used for?
Target Audience	The person or people most likely to be interested in your design or product.
Lathe	A lathe is a machining tool that is used primarily for shaping metal or wood. It works by rotating the workpiece around a stationary cutting tool.
Materials	What something is made from.
Ergonomic	Ergonomics is the application of psychological and physiological principles to the engineering and design of products, processes, and systems.
Finishing	The process of applying a finish to preserve or protect a material & improve aesthetics.
Modelling	To present ideas in 2D & 3D to the user (target audience) or client.
Prototype	A prototype is a model that is built to test to see if it is successful or whether it needs further modification or improvements.
PPE	Personal protective equipment are items such as goggles and aprons.

Aluminium 	Aluminium is a silvery-white, lightweight metal. It is soft and malleable. Uses. Aluminium is used in a huge variety of products including cans, foils, kitchen utensils, window frames, beer kegs and aeroplane parts.
Acrylic 	Acrylic is a transparent plastic material with outstanding strength, stiffness, and optical clarity. Acrylic sheet is easy to fabricate, bonds well with adhesives and solvents, and is easy to thermoform.

Year 8 Textiles Knowledge Organiser

Sustainable Children's Toy

Key Skills

- Responding to a Design Brief
- Analysing existing products
- Identifying a target audience
- Designing & annotating to include a range of a range of decorative and construction techniques
- Demonstrating ability to complete decorative techniques:
    - Tie dye
    - Appliqué
    - Hand embroidery stitches (running stitch, blanket stitch)
- Using a range of construction techniques:
    - 3D features
    - Inserting wadding
    - Applying buttons & googly eyes
    - Sewing seams on the sewing machine
- Understanding the properties of materials:
    - Natural fibres & organic fabrics

Product features	
Consideration of a specified target market	Appliqué or reverse appliqué
Engaging & stimulating	Creative & individual
Recycled materials & components as decoration	Features are in proportion to the body shape
Organic Cotton fabric	Accurate machine stitches
3D features	Seam allowance
Hand embroidery	Sustainable

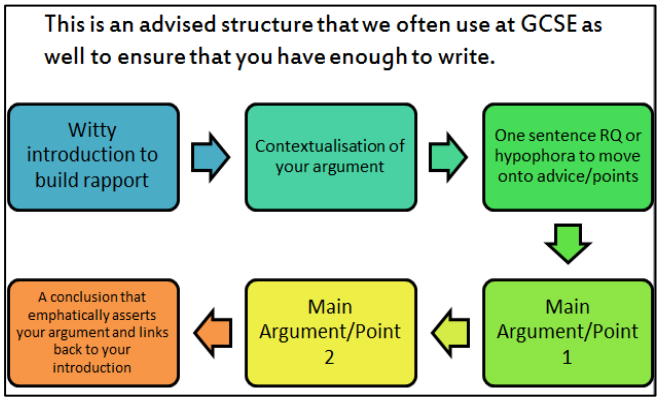
Health & safety
Follow teacher instructions
Move slowly around the room do not run
Tie long hair back
Hold scissors or shears correctly when walking around the room.
Only one person operating a sewing machine at one time
Never use a sewing machine unless supervised by a teacher/ technician
Turn off the sewing machine when not in use.
Report any injuries or breakages to the teacher immediately

Key vocabulary	
Design Context Design Brief	The circumstances, problem or setting in which a product will be used. An written outline which explains the aims and objectives of a project.
Target Audience	The person or people most likely to be interested in your design or product.
Function	What a product does, how it works and what it will be used for? Is it sensory or educational or both?
Sustainable	Conserving an ecological balance by avoiding the depletion of natural resources.
Organic Cotton	Cotton that is produced without the use of chemical fertilizers, pesticides, or other artificial chemicals that cam pollute the environment and be harmful to the producer.
Fairtrade	When producers in developing countries are paid a fair price for their work.
Materials	What the product is made from?
Components	The parts/materials/threads needed to make a product.
Interactive	Components or features that can be attached/detached or have different textures
3D features	Use of wadding to make a feature stand up or raised off the backing fabric
Aesthetics	How a product or design looks .
Embroidery	Even stitch widths and lengths completed by hand sewn stitches
Reverse appliqué	A decorative technique whereby a fabric is sewn on the reverse of the top fabric and is visible from the front
Appliqué	A decorative technique whereby one material is sewn on top of another by machine
Tie dye	Patterns in cloth created by tying parts so its resists the dye.

ENGLISH KNOWLEDGE ORGANISER: OUR SOCIETY

YEAR: 8 UNIT: 3

HOW TO STRUCTURE VIEWPOINT WRITING



ADVANCED SENTENCE STRUCTURES AND PATTERNS

*litotes	Begin with the negative: use 'Nothing…' or 'Never…' for example
*hypohora	A rhetorical question that is answered
*diacope	Repeated use of the same word within/across sentences
*isocolon	Series of phrases or sentences structured in the same way: *Keep fit, keep active, keep healthy!*
*epizeuxis	The repetition of a word or phrase in immediate succession: *Run, run, run!*
*anaphora	Using a phrase to begin more than one clause of sentence, such as 'I Have a dream…' in Martin Luther King's famous speech
*epistrophe	The repetition of a word at the end of successive clauses or sentences

ADVANCED PUNCTUATION

*semi-colon	**Used to replace 'and' in a compound sentence:** *Like an angel, the sun shone; there wasn't a cloud to be seen.*
*colon	**Means 'Here's my evidence' and follows a simple statement:** *Majestically, the princess created a stir: she was beautiful!*
*dash	**Single: Used to emphasise a description at the end of a sentence:** *Happily, the sun shone – its rays reached across the whole land.* **Double: Used to emphasise a description with further emphasis:** *The sun's rays – its burning, radiant rays – shone across the kingdom.*

CONVENTIONS OF DESCRIPTIVE WRITING

simile	Phrase with 'as' or 'like' to suggest similarity
metaphor	Suggesting something is something else
*motif	A metaphor used across a piece of writing
personification	Given an inanimate object human qualities like movement or emotion
alliteration	Repetition of consonant sounds
assonance	Repetition of vowel sounds
sibilance	Repetition of 's' sounds
pathetic fallacy	Where the weather or setting reflects a mood

KEY SPELLINGS FOR THIS SCHEME OF WORK

rhetoric	statistics	epizeuxis	interrogative (sentences)	simile
irony	anaphora	hypophora	imperatives	personification
anecdote	epistrophe	hyperbole	motif	alliteration
tripling	repetition	exclamation	metaphor	assonance

ENGLISH KNOWLEDGE ORGANISER: ROMANTIC POETRY

YEAR: 8 UNIT: 4

ROMANTIC POETRY

- Popular poetry of the late 18th and early 19th century
- The genre was introduced and developed by William Wordsworth and Samuel Taylor-Coleridge
- Wordsworth's *Lyrical Ballads* (1798) is the first major collection of Romantic Poetry
- Romantic poems celebrated the natural world
- Romantics thought we could learn from nature and understand life better from its example
- Romantics were fascinated by the human mind and imagination

FAMOUS ROMANTIC POETS

William Wordsworth (1770-1850)
Samuel Taylor Coleridge (1772-1834)
William Blake (1757-1827)
P.B. Shelley (1792-1822)
Lord Byron (1788-1824)
John Keats (1795-1821)

'JERUSALEM' BY WILLIAM BLAKE

- This poem was written by Blake by 1820
- It celebrates the past beauty of England by comparing it to the Holy land of Jerusalem
- It is a poem that fears the impact of industrial change on beautiful, rural England

KEY QUOTES:

- 'dark satanic mills'
- 'England's green and pleasant land'
- 'Bring me my chariot of fire!'

'OZYMANDIAS' BY P.B. SHELLEY

- This sonnet was written by P.B. Shelley in 1818
- Shelley wrote this poem, inspired by the discovery of the statue of Ramesses II in Egypt. He wrote it before the statue had even arrived in the British Museum in London, where you can still see it today
- Rameses was a tyrant who had immense power in Egypt; he fought many wars and built many monuments to celebrate this power
- Ozymandias is the Greek name for Ramesses II.

KEY QUOTES:

- 'Two vast and trunkless legs'
- 'Look on my works, ye Mighty, and despair!'

'SONGS OF INNOCENCE AND EXPERIENCE' BY WILLIAM BLAKE

- These collections of poems were counterparts to each other: *Songs of Innocence* was published in 1789 and the *Songs of Experience* in 1794.
- Blake explored childhood innocence in his first collection and then explored the adult world of 'experience' and suffering in a time of industrialisation and war. Here are some examples…

'THE LAMB' (INNOCENCE) AND 'THE TYGER' (EXPERIENCE)

These poems use animal symbolism to explore the innocence of childhood (*The Lamb*) compared to the corruption and industrialisation of the Victorian era (*The Tyger*)

KEY QUOTES

The Lamb: 'Little Lamb, God bless thee!'

The Tyger: 'Tyger tiger, burning bright/In the forests of the night'

'THE CHIMNEY SWEEPER' POEMS

These poems explore the experiences of young chimney sweepers. Blake criticises how institutions like the Church would justify this child labour through religion with working be the behaviour of good boys.

KEY QUOTES

The Chimney Sweeper (Innocence): 'If all do their duty they need not fear harm'

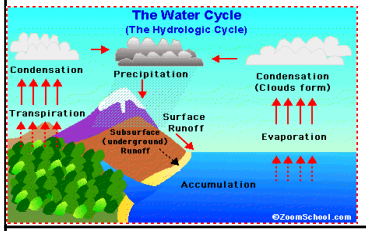
The Chimney Sweeper (Experience): 'They clothed me in the clothes of death'

KEY SPELLINGS FOR THIS SCHEME OF WORK

Romanticism	ballad	symbolism	pastoral
sublime	sonnet	refrain	radical
beautiful	meter	enjambment	persona
awesome	rhyme	caesura	speaker

Year 8 Geography
Unit 2: River Landscapes

Lesson 1-3



The water cycle is the never ending movement of water from the **air** to the **land**, to the **sea** and back to the air again. This continues over and over. Key transfers of water from these three areas are Surface Runoff, Evaporation, Precipitation and Transpiration.

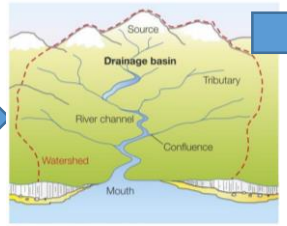
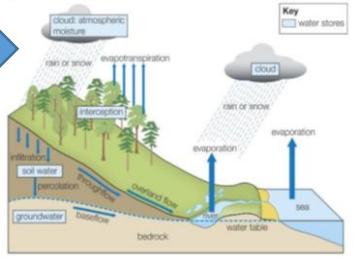
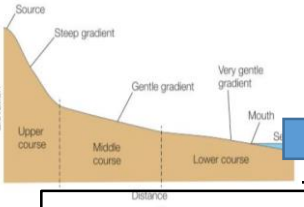


Figure 1 The drainage basin



Lesson 4-6

The **long profile** shows the side view of the river from **source** to **mouth**. It is steepest in the upper course and more gentle in the middle and lower course. However, the river is slower in the upper course – Know why!



Erosion = Abrasion and Hydraulic Action
Transport = Traction Suspension
Deposition = Dropping of material

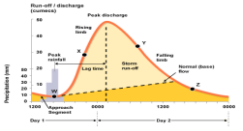
Upper Course landforms like a waterfall is formed when soft rock gets eroded quicker than hard rock and leaves a cliff . Here the soft rock undercuts the hard rock until it collapses into a plunge pool beneath.

Lesson 9-11

Middle course landforms are meanders and sometimes oxbow lakes.
These are bends in a river that get larger to faster moving water and erosion on the outside of the bend.

In the lower course the land is flat on each side of the river, this is where flooding can occur. This is called a floodplain. Farming takes place here and the floods deposit Nutrients which is good for crops.

Flooding can be caused be different features of a drainage basin. Eg steep slopes



Hydrographs!

Lesson 12,14 – 16 HIC FLOODING EXAMPLE

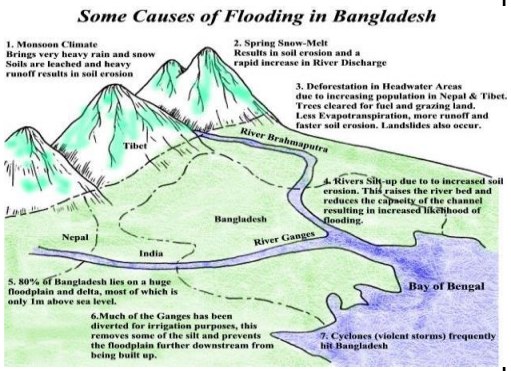
Boscastle floods in 2004 devastated the village in August.
A flash flood caused by natural and human reasons.
The effects were environmental, social and economic.
Since then a number of hard and soft management methods have been used to prevent this happening again.

HARD

SOFT

Lesson 17-18 LIC FLOODING EXAMPLE

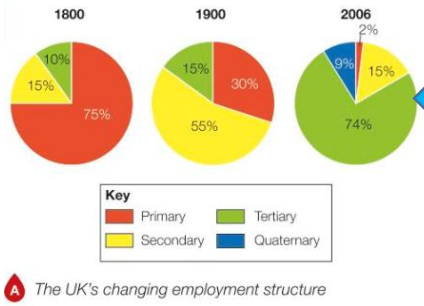
Bangladesh flooding in 2012 devastated large parts of this very flat country. Natural and human causes are responsible for this. However, the effects are often a lot more serious – For example people rely on crops for food. Also flood water contaminates well water and cholera spreads.
Despite being a LIC Bangladesh has installed a number of basic but often effective flood protection methods – E.g. Earth Embankments, Stilt houses, Flood shelters and basic warning systems. Each has advantages and disadvantages. Which is best? Which are given by Aid?



KEYWORDS

	Definition
Drainage Basin	An area of land drained by a main river channel and it's tributaries.
Water Cycle	Where water is moved from the Air to the Land and then to the Sea in a never ending cycle.
Long Profile	The side view of a river from source to mouth. Then it enters the sea.
Meander	This is a bend in a river in the middle section usually.
Hard Engineering	Where expensive methods using concrete and steel are used to stop flooding.
Soft Engineering	Less expensive natural ways are used to cope with floods.

Year 8 Geography
Unit 3: Economic Activities



The UK's changing employment structure

Lesson 1-2: Economic activities are split into 4 categories, primary, secondary, tertiary, quaternary.

Lesson 17:

- In the past, the UKs economy was based on farming. Two types- arable and pastoral farming
- During industrialisation, the UK moved to the secondary sector
- De-industrialisation (factories and industry moving to elsewhere)
- The UK then moved into tertiary and quaternary sectors

Lesson 2-4: When choosing a site for a factory to locate, the following factors need to be considered:

Raw materials-These are the things that are made into something

Labour- These are the workers who work at the factory

Power- This is the energy used to make the factory work

Transport-This is how the natural resources and finished products are moved

Market-This is the place where the finished products are sold

Site-This is where the factory is located

Lesson 5-6: 'Made in China' China now produces goods for the world. This has given China much more money, but has harmed the environment

Lessons 10-15: Shopping patterns, high street change and Altrincham fieldwork.

Out of town shopping centres (like the TC) led to a decline in UK high streets, especially Altrincham, resulting in many empty shops. Altrincham has changed its high street to attract more people back to it.

Methodologies carried out during Alt. fieldwork. These were presented as a **bi-polar graph** and **bar chart.**

	HOW?	WH	POSITIVES?	NEGATIVES?
Land Use Mapping				
Environmental Quality				
Pedestrian Counts				

	Definition
Primary	collecting or producing raw materials e.g coal miner, farmer
Secondary	making something using the processed raw materials. Manufacturing products. e.g a joiner
Tertiary	Selling services or skills. e.g banking or retail jobs
Quaternary	Providing information services. E.g. research and development jobs, government

Lesson 16: High tech industries:
These are advanced industries, that develop new things. They are located near business/science parks and Universities so they can recruit a highly skilled workforce.

The M4 corridor is the most famous UK EG

Lesson 18: Modern industries, like quarries, can be made more sustainable. This means that the damage they do to the environment can be reduced. One way to do this is by turning old quarries into nature reserves.

Wellington History
Year 8 HT 3 Knowledge Organiser

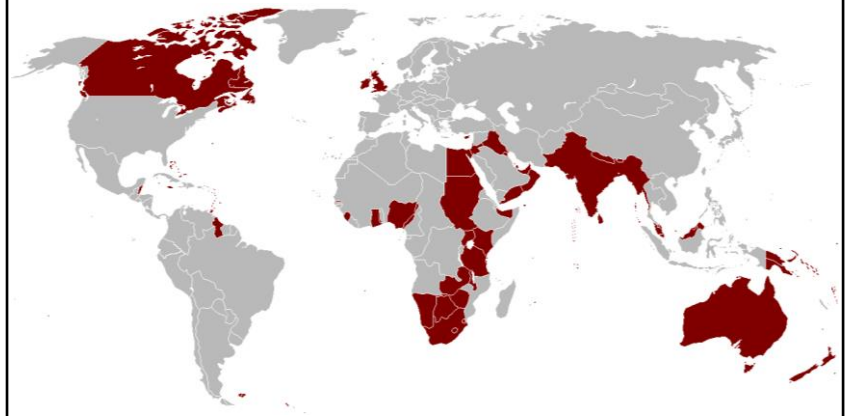
Why were the British so keen to build an Empire?
Disease, massacres and the taking of land? How did the British Empire change the World?

- ✓ What and why? You will learn about why the British began to conquer colonies and our legacy on the modern world.
- ○ Stop, think and link: The Roman Empire.
- ❖ Causation Assessment – Why did the British want an Empire?

❖ **Want to explore further?**

Book: The rise and fall of the British Empire by Aaron Wilkes
Book: We need to talk about the British Empire by Afua Hirsch
Book: Barmy British Empire by Terry Deary

Websites:
https://www.natgeokids.com/uk/discover/history/general-history/british-empire-facts/
https://www.bbc.co.uk/bitesize/guides/zf7fr82/revision/1



Key Questions

- What do we know about Empires?
- Why did the British want an Empire?
- Where and when did the Empire grow?
- What was life like in British colonies?
- How did the British keep control of their Empire in the 18 and 19th Centuries?
- How should we remember the Empire?

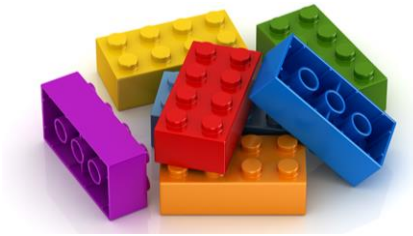
Key events and Key People

1600 East India Company granted a royal charter
1606 Virginia Company granted a royal charter
1627 Barbados Company granted a royal charter
1756 The beginning of the Seven Years' War
1757 The Battle of Plassey
1759 Britain wins the Battle of Quebec
1763 End of the Seven Years' War
1765 Treaty of Allahabad
1770 Captain Cook claims Australia for Britain
1788 The first fleet of 11 convict ships reaches Australia

Keywords

Empire
When one country rules land outside of it's own borders
Colony
Lands belonging to an Empire
Trade
The exchange of money and goods
Nationalism
Thinking your country is better than all others
Indigenous
People who originally live in a land
Independence
Being free to run your own affairs
Missionary
Someone who wishes to convert others to their religion
Imperial
An adjective for anything to do with an Empire
Legacy
What you leave behind for future generations
Multi-Cultural
A society made up of different peoples
Atrocity
A terrible crime

Wellington History
Year 8 HT 4 Knowledge Organiser
What did the French Revolution achieve?



- ✓ What and why? You will learn about how the French Monarchy was overthrown by unhappy citizens and the change created by this event. You will also consider the impact that this event created around the world.
- ○ Stop, think and link: Why was the Monarchy restored after Cromwell's death? How did English Monarchs avoid revolution in the Middle Ages? What stopped the Peasants' Revolt?

Want to explore further?
Book: In the Reign of Terror: A Story of the French Revolution by G.A. Henty
YouTube: https://www.youtube.com/watch?v=PBn7iWzrKoI
YouTube: https://www.youtube.com/watch?v=zBTKGf1nFlA

Key Questions

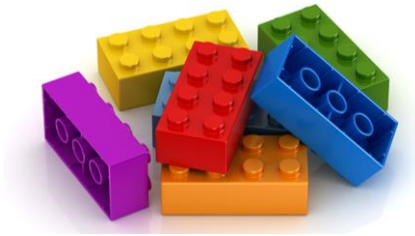
- Why were the French so angry by the end of the 18th Century?
- Why did the French revolution last for a decade?
- Was Emperor Napoleon that different to the French Kings that ruled before him?
- Were the people that fought for revolution really happy with its outcomes?
- Did the French Revolution improve the lives of French people?

Key events and Key People

1789 June 17th - The Third Estate (commoners) declares the National Assembly.
July 14th - The French Revolution begins with the Storming of the Bastille.
August 26th - The National Assembly adopts the Declaration of the Rights of man and of the Citizen.
1792 September 22nd – First French Republic founded.
1793 January 21st - King Louis XVI is executed by guillotine.
1799 November 9th – Napoleon establishes the French Consulate with Napoleon as leader of France. This brings an end to the French Revolution.
Louis XVI – King of France and believer in absolute power.
Maximilien Robespierre – Radical leader of the revolution.
Napoleon – Prominent military leader, statesman and leader of the revolution.

Keywords	
Aristocracy	The highest class in certain societies, normally people of noble birth
Clergy	People ordained for religious duties, such as priests
Third Estate	The working class people in the French society
Revolution	Overthrowing a government or social order, in favour of a new system, often by force
Monarchy	A country or state which has a royal family at its head
Republic	A country or state with no monarchy
Absolutist	A person who holds complete control
Democracy	A system of government voted for by the people
Terror	Extreme fear

Wellington History
Year 8 HT 4 Knowledge Organiser
What was the impact of the slave trade?
How significant was the Haitian Revolution?



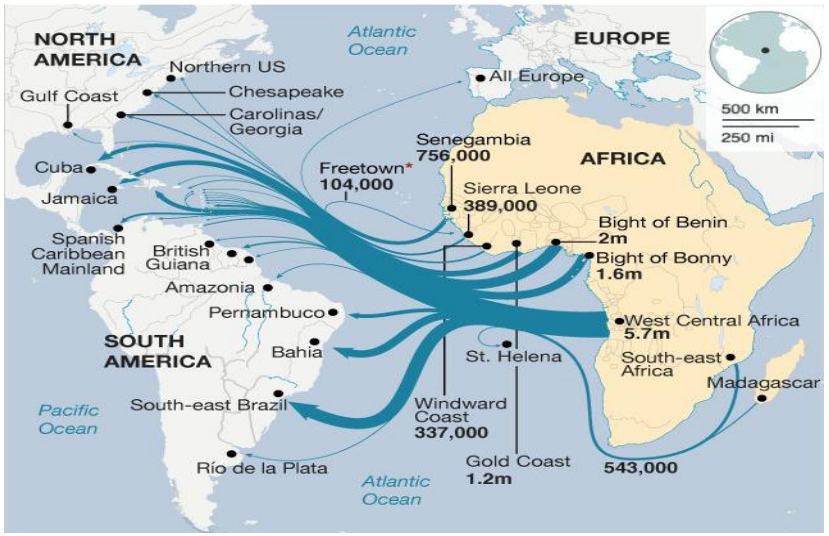
- ✓ What and why? You will learn how the transatlantic slave trade began, how Britain came to dominate it, what it was like to be enslaved and resistance to enslavement
- ○ Stop, think and link: Why were the British so keen to build an empire? How did the British Empire change the world? How significant was Mansa Musa?
- ❖ Consequence Assessment: What was the impact of the slave trade?

Want to explore further?

Book: Black and British: A short, essential history by David Olusoga
Book: A Short History of Slavery by James Walvin
Book: David Richardson, 'The British Empire and the Atlantic Slave Trade, 1660-1807' in *The Oxford History of the British Empire, Volume II - The Eighteenth Century,* edited by P.J.Marshall
Websites: http://www.understandingslavery.com/
https://www.liverpoolmuseums.org.uk/history-of-slavery/europe
https://www.liverpoolmuseums.org.uk/history-of-slavery/west-africa

Key Questions

- What was Africa like before the slave trade?
- What was Europe like before the slave trade?
- How & why did the slave trade begin?
- How did people in Britain benefit from slavery?
- How were slaves caught and transported?
- What were conditions for slaves like?
- Should the slave trade be called the triangular slave trade?
- Should we use the term 'The Middle Passage'?
- How did the captured resist slavery?
- Where were slaves taken?
- What was an auction like?
- What was work on a plantation like?
- What was the legacy of slavery?



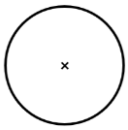
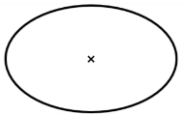
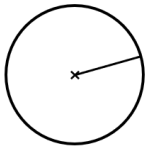
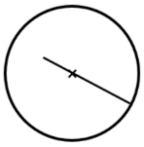
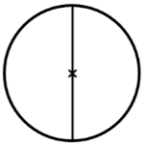
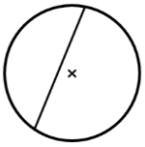
Key events and Key People

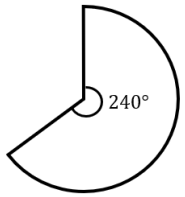
1555: A group of Africans help the English break the monopoly that the Portuguese have over the African trade
1562-9: John Hawkins becomes the first Englishman definitely known to have traded in Africans
1672: The Royal African Company is formed in order to regulate the English slave trade
1698: The trade is opened to private traders
1760: Slave revolts in Jamaica last for several months
1783: 133 Africans are thrown overboard alive from the slave ship Zong so that the owners can claim compensation
1784: Cotton from America was first imported into Britain
1791: A slave uprising triggers the Haitian Revolution
1804: St Domingue declared the Republic of Haiti, the first independent black state outside of Africa.

Keywords

Captive
A person who has been taken prisoner
Sub-Saharan Africa
African countries south of the Saharan desert
Merchant
Person/company who trades with foreign countries
Commodity
A raw material or product than can be bought or sold
Triangular
Eurocentric view of the slave trade
Enslaved
The action of taking someone prisoner
Colonists
Foreign inhabitant of a country
Plantation
Estate where crops are grown e.g. sugar
Auction
Public sale of goods/property
Transatlantic
Crossing the Atlantic Ocean
Yoke
Wooden stick to tie captives together

Key Stage 3 Topic 11: Circles

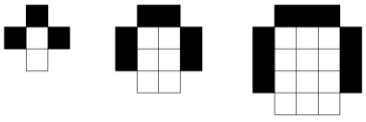
Topic/Skill	Definition/Tips	Example	Non-example
1. Labelling Circles	A circle is the set of points that are a fixed distance from a centre.		
	The circumference of a circle is the distance around the outside of the shape (the perimeter).		
	The radius of a circle is the distance from the centre of the circle to any point on the circumference.		
	The diameter of a circle is the distance from one point of the circumference to another. It must go through the centre.		
2. Circumference	Pi (π) is the number of times that the diameter fits around the circumference. $\pi \approx 3.14159 \ldots$		
	Answers can be left in terms of pi. This is the final step before a calculator is needed.	30π $\frac{1}{5}\pi$ -0.5π	43.726 (3 d.p.) $67.23 \ldots$ (2 d.p.) 0.0488 (3 s.f.)
	The length of the circumference is calculated by using the formula: $C = \pi d$	$C = \pi d$ $C = \pi \times 6$ $C = 6\pi$ (in terms of pi) $C = 18.8$ (3 s.f.)	

3. Area	The area of a circle is calculated by using the formula: $A = \pi r^2$	$A = \pi r^2$ $A = \pi \times 3^2$ $A = 9\pi$ (in terms of pi) $A = 28.2$ (3 s.f.)	$A = \pi r^2$ $A = \pi \times 5^2$ $A \neq 10\pi$
4. Fractions of Circles	Areas and perimeters can be calculated for fractions of a circle. There are 360° in a full turn. To find the fraction of a circle, the angle given is the numerator of a fraction over 360.	 $\frac{240}{360} = \frac{2}{3}$	

Key Stage 3 Topic 10: Fractions, Decimals and Percentages

Topic/Skill	Definition/Tips	Example	Non-example
1. Fractions to decimals	Some conversions should be known.	$\frac{1}{2} = 0.5, \frac{1}{4} = 0.25, \frac{3}{4} = 0.75$	
	Harder fractions can be written using place value. (Denominators of 10, 100, 1000 etc.)	$0.67 = \frac{67}{100}$ $0.009 = \frac{9}{1000}$	$0.28 \neq \frac{1}{28}$
	Some fractions can't easily be converted using place value. In that instance, division needs to be utilised.	$7\overline{)1.0^{1}0^{3}0^{2}0^{6}0^{4}0^{5}0^{1}0}$ 0.1428571	
2. Fractions to decimals to percentages	Percent means 'out of one hundred'. To convert a fraction or decimal to a percentage, write it as a fraction with a denominator of 100.	$0.8 = \frac{8}{10} = \frac{80}{100} = 80\%$ $\frac{5}{8} = \frac{625}{1000} = \frac{62.5}{100} = 62.5\%$	$0.4 \neq 4\%$
3. Percentages to decimals to fractions	To convert a percentage to a fraction or decimal, write the percentage as a fraction with a denominator of 100.	$30\% = \frac{30}{100} = \frac{3}{10}$ $2.4\% = \frac{2.4}{100} = \frac{24}{1000} = 0.024$	$50\% \neq \frac{1}{50}$
4. Using a calculator	Familiarity with your calculator is essential. The S⇔D button will convert between fractions and decimals for you.		

Key Stage 3 Topic 12: Sequences

Topic/Skill	Definition/Tips	Example	Non-example
1. Describing types of sequences	An arithmetic/linear sequence involves adding/subtracting the same number to get from one term to the next.	$7, 13, 19, 25, \ldots$ $4, -1, -6, -11, \ldots$	$4, 6, 9, 11, \ldots$
	A geometric sequence involves multiplying/dividing by the same number to get from one term to the next.	$3, 6, 12, 24, \ldots$ $60, 30, 15, \frac{15}{2}, \ldots$	$4, 12, 24, 72 \ldots$
	A Fibonacci sequence involves adding the two previous terms to get the next term.	$1, 1, 2, 3, 5, 8, \ldots$	$1,2,3,4, \ldots$
	A quadratic sequence has a constant second difference.	$4, 5, 8, 13, 20, \ldots$	$2, 4, 8, 16, \ldots$
2. Position to term	Substitution is used to determine the value of a term in a sequence.	The 20th term of the sequence $5n - 1$ is: $5 \times 20 - 1 = 99$	The 6th term of the sequence $4n + 3$ is 6.
3. nth term of a linear sequence	The nth term describes the value of any term within that sequence.		
	The common difference determines the coefficient of n in the sequence.	The nth term of $5, 8, 11, 14, \ldots$ is: $3n + 2$	The nth term of $3, 9, 15, 21, \ldots$ is not $n + 6$.
4. Sequences from patterns	Pictorial sequences can be converted to numerical ones so that calculations can take place.	The number of black squares in the sequence is $3n$. 	

5. Plotting sequences	The terms of a linear sequence can plotted on a set of axes.	For the sequence $3n - 2$, the following table of values can be drawn. The coordinates (1, 1), (2, 4), (3, 7), (4, 10) and (5, 13) can be plotted on a set of axes. The line that connects those points is given by $y = 3x - 2$.	

Term number (x)	1	2	3	4	5
Value of term (y)	1	4	7	10	13

Year 8 French
Knowledge Organiser HT3
La technologie

une maison	a house
un appartement	a flat
la rue	the street
à la campagne	in the country
dans un village	in a village
dans une ville	in a town

Rooms in a house

chez moi	in my home
la chambre	the bedroom
la cuisine	the kithcen
le jardin	the garden
la salle à manger	the dining room
la salle de bains	the bathroom
le salon	the living room

Prepositions

devant	in front of
derrière	behind
en face de	opposite
sur	on
sous	under

Intensifiers

vraiment	really
très	very
assez	quite
trop	too
un peu	a bit

Giving an opinion

je pense que	I think that
à mon avis	in my opinion
je préfère	I prefer
je trouve ça	I find it
je sui s fan de	I am a fan of
j'ai horreur de	I hate
ça me fait rire	it makes me laugh
ça me fait pleurer	it makes me cry

Present tense key verbs

Je regarde	I watch
Tu regardes	you watch
il/elle regarde	he/she watches
nous regardons	we watch
vous regardez	you (formal) watch
ils/elles regardent	they watch
je vais	I go
tu vas	you go
il/elle va	he /she goes
nous allons	we go
vous allez	you go
ils /elles vont	they go
je fais	I do
tu fais	you do
il/elle fait	he/she does
nous faisons	we do
vous faites	you do
ils/elles font	they do

Weather

Il fait beau	it is nice
Il pleut	it is raining
Il fait chaud	it is hot
Il fait froid	it is cold

On TV

les dessins animés	cartoons
les infos	the news
les jeux télévisés	game shows
la météo	the weather
les séries	series
les documentaires	
les émissions de sport	
les émissions de télé-réalité	

Internet

Je fais des achats en ligne	I do online shopping
Je fais des recherches	I do searches
J'envoie	I send
Je mets à jour	I update
Je joue à des jeux en ligne	I play games on line

Time phrases: When?

le weekend	at the weekend
le matin	in the morning
l'après midi	in the afternoon
le soir	in the evening/at night
samedi matin	on Saturday morning
dimanche après-midi	on Sunday afternoon

Past tense

J'ai discuté	I discussed
J'ai écouté	I listened
J'ai envoyé	I sent
J'ai joué	I played
J'ai posté	I posted
J'ai regardé	I watched
J'ai surfé	I surfed
J'ai tchatté	I chatted
J'ai téléchargé	I downloaded

Connectives and sequencers

cependant	however
aussi	also
puis	then
d'abord	firstly
ensuite	next
après	after
avant	before

Adjectives

ennuyeux	boring
rasant	boring
barbant	boring
passionnant	exciting
amusant	fun/funny
confortable	comfortable
douillet	cosy
assez bien	quite good
chouette	excellent
effrayant	frightening
émouvant	moving
passionnant	exciting
pratique	practical

Year 8 French Knowledge Organiser HT4

Intensifiers	
vraiment	really
très	very
assez	quite
trop	too
un peu	a bit
Giving an opinion	
je pense que	I think that
à mon avis	in my opinion
je préfère	I prefer
je trouve ça	I find it
je suis d'accord	I agree
je ne suis pas d'accord	I don't agree

Relationships	
On s'amuse	We have fun
On se chamaille	We squabble
On se confie des secrets	We tell each other secrets
On se dit	We tell each other
On se dispute	We argue
On s'entend	We get on
On se fâche	We get angry

Mon caractère	
Je suis	I am
Je pense que je suis	I think that I am
Je ne suis pas	I am not
Je ne suis pas du tout	I am not at all
Mon meilleur ami/Ma meilleure amie est…	My best friend is
Adorable	adorable
Arrogant(e)	arrogant
Amusant(e)	funny
Casse-pieds	annoying
Curieux/se	curious
Débrouillard(e)	resourceful
Drôle	funny
égoïste	selfish
gentil(le)	nice
intelligent(e)	intelligent
optimiste	optimistic
paresseux/se	lazy
patient(e)	patient
pessimiste	pessimistic
rigolo(te)	funny
sociable	sociable
sympa	nice

les vêtements	**Clothes**
Normalement, je porte…	Normally, I wear
Des baskets	traiers
Des bottes	boots
Des chaussures	shoes
Une chemise	a shirt
Un chapeau	a hat
Un jean	jeans
Une jupe	a skirt
Un pantalon	trousers
Un pull	a jumper
un sweat à capuche	a hoodie
un tee-shirt	a T-shirt
une veste	a jacket

Verbes essentiels	**Key verbs**
Je vais	I am going/I go
Tu vas	You go/You are going
Il/elle va	He/She is going/He/She goes
On va	We are going/we go

Using the past tense	
Hier	Yesterday
La semaine dernière	Last week
Je suis allé(e)	I went
J'ai regardé	I watched
J'ai dansé	I danced
C'était	It was…

Using the present tense	
Normalement	Normally
D'habitude	Usually
Je vais	I go
Je regarde	I watch
Je danse	I dance
C'est	It is

Using the future tense	
Ce weekend	This weekend
Cet été	This summer
Je vais aller	I'm going to go
Je vais regarder	I'm going to watch
Je vais danser	I'm going to danse
Ça va être	It's going to be

Les couleurs	
Beige	beige
Blanc(he)	white
Bleu turquoise	turquoise
Gris(e)	grey
Marron chocolat	chocolate brown
Noir(e)	black
Orange	orange
Vert kaki	khaki

Les mots essentiels High frequency words	
Avec	with
Bien	well
Comme d'hab	as usual
En général	in general
En plus	in addition
Ensemble	together
Même	same
Ou	or
Partout	everywhere
Plutôt	rather
Quand	when
Sinon	otherwise
Surtout	especially
Souvent	often
Tout(e)	all,every
Tout le temps	all the time
Vraiment	really

Year 8 Spanish Knowledge Organiser

HT3 Food and eating out

Las comidas	Meals
¿Qué desayunas?	What do you eat for breakfast?
¿Qué comes?	What do you eat?
¿Qué meriendas?	What do you eat for tea?
¿Qué cenas?	What do you eat for dinner?
Desayuno…	For breakfast I have…
Como…	For lunch I eat…
Meriendo…	For tea I eat…
Ceno…	For dinner I eat…
carne con verduras	meat with vegetables
cereales	cereals
fruta	fruit
galletas	biscuits
magdalenas	fairy cakes
pasta	pasta
patatas fritas	chips
pescado con ensalada	fish with salad
pollo	chicken
tostadas	toast
un bocadillo	a sandwich

¿Qué bebes?	What do you drink?
Bebo…	I drink…
Cola Cao	Cola Cao (drinking chocolate)
té	tea
zumo de naranja	orange juice
No meriendo.	I don't have tea
No desayuno nada	I don't have anything for breakfast
¿A qué hora desayunas?	What time do you have breakfast?
Desayuno a las ocho	I eat breakfast at eight
Como a mediodía	I have lunch/eat at midday

¿Con qué frecuencia?	How often?
siempre	always
generalmente	generally
a veces	sometimes

En el mercado

¿Qué quieres?	What would you like?
Un kilo de…	A kilo of…
dos kilos de…	2 kilos of…
medio kilo de…	half a kilo of…
quinientos gramos de…	500g of
jamón	ham
manzanas	apples
peras	pears
queso	cheese
tomates	tomatoes
uvas	grapes
zanahorias	carrots
un cartón de leche	a carton of milk
un chorizo	a chorizo (spicy Spanish sausage)
una barra de pan	a baguette/loaf of bread
una botella de agua	a bottle of water
una lechuga	a lettuce
¿Algo más?	Anything else?
Sí, quiero…	Yes, I'd like…
por favor	please

Nada más, gracias. Nothing else, thank you.

¿Cuánto cuesta?	How much is it?
Un euro	One euro.

Dos euros y veinte céntimos. €2,20

Ochenta céntimos. Eighty cents

En el restaurante

¿Qué vas a tomar?	What are you going to have?
De primer plato…	As a starter…
De segundo plato…	As a main course..
De postre…	As a dessert
quiero	I want…/I'd lie…
fruta	fruit
pescado	fish
pollo	chicken
un flan	a crème caramel
un helado (de chocolate)	a (chocolate) ice cream
una ensalada	a salad
una paella (de mariscos)	a (seafood) paella
una sopa	a soup
unas gambas	some prawns
¿Para beber?	And to drink?
(Quiero)… por favor	I want/I'd like…please
agua	water
una Coca Cola	a Coke
una limonada	a lemonade
Tengo hambre	I'm hungry
No tengo hambre	I'm not hungry
Tengo sed	I'm thirsty
La cuenta por favor	The bill, please

Los números

cien	100
ciento diez	110
doscientos	200
trescientos	300
cuatrocientos	400
quinientos	500
seiscientos	600
setecientos	700
ochocientos	800
novecientos	900
mil	1000

Palabras muy útiles
Very useful words

normalmente
de
nada
nunca
algo
mucho/a/os/as

Una cena especial

El fin de semana pasado…	Last weekend…
salí con…	I went out with…
Fui a…	I went to…
un restaurante español	a Spanish restaurant
un restaurante muy caro	a very expensive restaurant
Comí una ensalada.	I ate a salad

Mi amigo/a comió gambas. My friend ate prawns

Compartimos una paella	We shared a paella
Bebimos agua	We drank water
Hablamos de música	We talked about music
¡Fue genial!	It was brilliant!

¿Qué te gusta comer?

Me gusta (mucho) comer…	I (really) like eating…
No me gusta (nada) comer…	I (really (don't) like eating…
A veces como…	Sometimes I eat…
Nunca como…	I never eat…
Me gusta beber…	I like drinking…
Nunca bebo…	I never drink…
Normalmente como…	Normally I eat…
Nunca bebo…	I never drink…
Normalmente bebo…	Normally I drink…
Normalmente como…	Normally I eat…
El fin de semana pasado…	last weekend…
comí…	I ate…
bebí…	I drank…
Mañana voy a comer…	Tomorrow I'm going to eat…

Year 8 Spanish Knowledge Organiser

HT4 Healthy lifestyle

¿Llevas una dieta sana?	***Do you have a healthy diet?***
Llevo una dieta (bastante) sana.	*I have (quite) a healthy diet.*
¿Qué comes?	*What do you eat?*
Como…	*I eat…*
caramelos	*sweets*
pan	*bread*
pasteles	*cakes*
verduras	*vegetables*
¿Qué bebes?	*What do you drink?*
Bebo…	*I drink…*
agua	*water*
café	*coffee*
leche	*milk*

Es sano/a.	*It's healthy.*
Son sanos/as.	*They are healthy.*
Es rico/a.	*It's delicious.*
Es asqueroso/a.	*It's disgusting.*
Soy vegetariano/a.	*I am a vegetarian.*
Soy alérgico/a.	*I am allergic.*

¿Qué le pasa?	***What's wrong?***
¿Qué te duele(n)?	***What hurts?***
Me duele el brazo.	*My arm hurts.*
Me duele el cuello.	*My neck hurts*
Me duele el estómago.	*My stomach hurts.*
Me duele el hombro	*My shoulder hurts*
Me duele el pie.	*My foot hurts.*
Me duele la cabeza.	*My head hurts.*
Me duele la espalda.	*My back hurts.*
Me duele la garganta.	*My throat hurts.*
Me duele la pierna.	*My leg hurts.*
Me duelen los dientes.	*My teeth hurt.*
Me duelen los oídos.	*My ears hurt.*
Me duelen los ojos.	*My eyes hurt.*

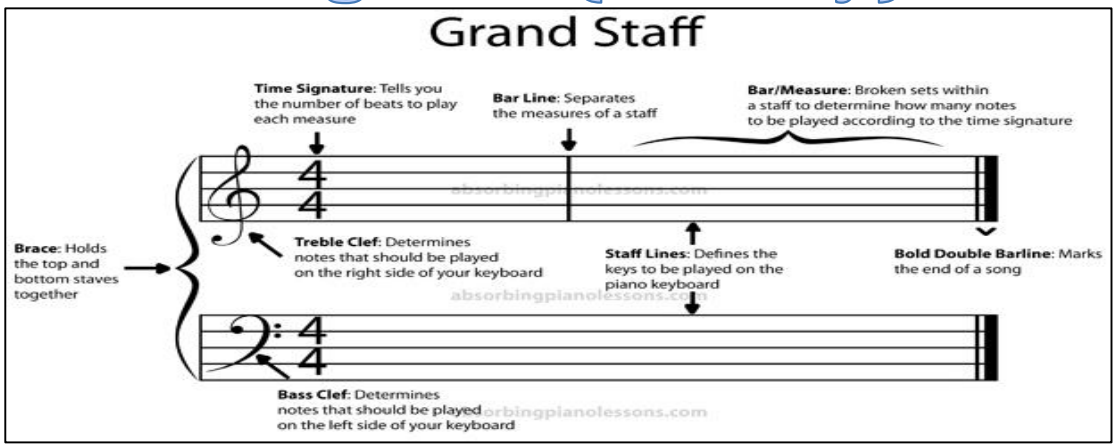
Hay que + inf	*You have to + inf*
Es importante que +	*It's important + inf*
Es necesario que +	*Its necessary +*
dormir ocho horas al día	*To sleep 8 hours a night*
hacer deporte frecuentemente	*To do sport regularly*
beber agua	*To drink water*
comer más fruta y verduras	*To eat more fruit and veg*

Consejos para estar en forma	***Advice for keeping fit / in shape***
Para estar en forma…	*To keep fit*
Se debe…	*You/One must…*
beber agua frecuentemente	*drink water frequently*
comer más fruta y verduras	*eat more fruit and vegetables*
entrenar una hora al día	*exercise for one hour a day*
No se debe…	*You/One must not…*
beber alcohol	*drink alcohol*
beber muchos refrescos	*drink lots of fizzy drinks*
comer comida basura	*eat junk food*
fumar	*smoke*

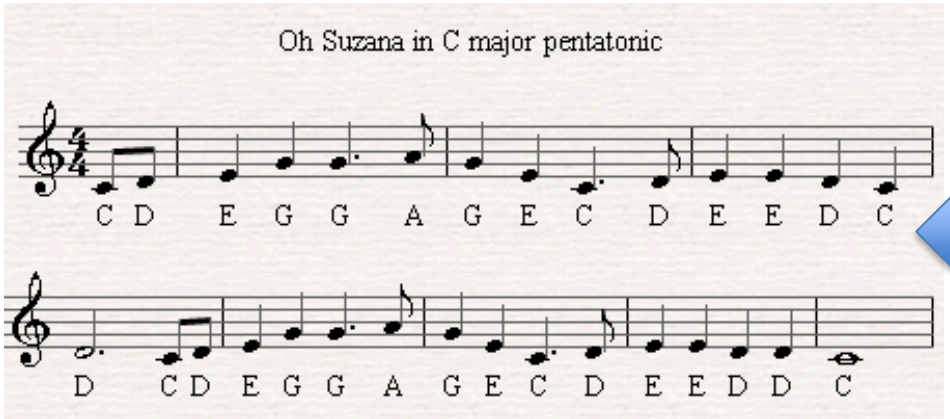
casi	*almost, nearly*
cada	*each, every*
todo / toda / todos / todas	*all*
luego	*then*
ahora	*now*
ayer	*yesterday*
creo que	*I think / believe that*
sin embargo	*however*

Year 8 Music – Composer's Logbook (melody)

KEYWORDS
1- Time Signature: to specify how many beats are to be contained in each bar and which note value is equivalent to one beat.
2- Bar: Each bar usually has the same number of beats in it. Music that feels like 1-2-3-4 will be divided into bars with four beats worth of music in each bar.
3- Barline: The bar line is a vertical line written in the music which separates the **bars**.
4- Rest: an interval of silence in a piece of music, marked by a symbol that corresponds to a particular note value.
5- Melody: the main tune of a song.
6- Phrase: a short musical passage; a musical sentence.
7- Pentatonic: 5-notes. A pentatonic scale is a series of 5-notes used to create a piece.
8- Call and Response: 2 phrases that occur in different parts one after another. Often a solo part then repeated by a chorus (African music).
9- Question and Answer: 2 phrases that occur one after another, the second in direct response, and complimentary to the first.
10- Ostinato: a persistent phrase or motif repeated over several bars or more.
11- Dorian mode: a medieval **mode** whose scale pattern is that of playing d to d on the white keys of a piano (T-s-T-T-T-s-T).
12- Drone: an accompaniment where a note is continuously heard/played throughout a piece
13- Harmony: parts that play together simultaneously create harmony. Often accompanying or secondary parts to a melody.
14- Dictation: the ability to hear a piece of music and quickly write it down.



Note	Name	Beats	Rest	Note	Name	Beats	Rest
𝅝	Semibreve, Whole Note	4 beats	𝄻	𝅝.	Dotted Semibreve, Dotted Whole Note	6 beats	𝄻.
𝅗𝅥	Minim, Half Note	2 beats	𝄼	𝅗𝅥.	Dotted Minim, Dotted Half Note	3 beats	𝄼.
♩	Crotchet, Quarter Note	1 beat	𝄽	♩.	Dotted Crotchet, Dotted Quarter Note	1½ beats	𝄽.
♪	Quaver, Eighth Note	1/2 beat	𝄾	♪.	Dotted Quaver, Dotted Eighth Note	3/4 beat	𝄾.
𝅘𝅥𝅯	Semiquaver, Sixteenth Note	1/4 beat	𝄿	𝅘𝅥𝅯.	Dotted Semiquaver, Dotted Sixteenth Note	3/8 beat	𝄿.



5 characteristics of a good melody

A Good Melody…

1. Starts and ends on the same note (C)
2. Moves mainly by step
3. Has a smooth contour/shape
4. Has 2 or 4 bar phrases
5. Uses similar short motifs to give it a clear character

Annotate the melody above to identify its use of the '5 characteristics of a good melody'.

Unit 2: Animal Rights
Year 8

Skills

- Engage with and reflect on different ideas, opinions and beliefs to help develop personal opinion.
- Express and explain opinions through discussion and written assessments.
- Reflect on the knowledge and skills needed for setting realistic targets and personal goals.
- Work individually and with others to negotiate, plan and take action.
- Analyse and reflect upon action taken and progress made.

Knowledge

Learn and understand about Animal Rights & the law related to animals

Understand what is Battery farming & the law on battery farming

Appreciate why animals are used in research

Personal Social Health Education

Unit 3: Sex Education
Year 8

Skills

- Engage with and reflect on different ideas, opinions and beliefs to help develop personal opinion.
- Can express and explain opinions through discussion and written assessments.
- Develop empathy with the situations others may find themselves in

Knowledge

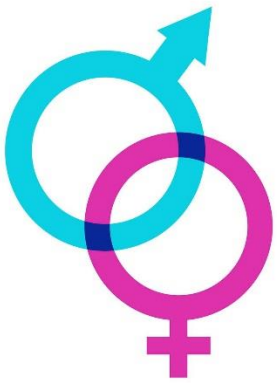
Be aware of current teenage pregnancy statistics

Develop awareness of the different methods of contraceptives

Gain knowledge and understanding about STIs and the dangers of them

Eliminate myths about STIs

Gain knowledge and understanding about HIV & AIDS



pshe

Personal Social Health Education

Y8: Unit 2 Hinduism

Hinduism is the third biggest religion in the world, existing for around 4000 years. Hinduism is made up of a variety of different religious beliefs and practices which originated near the river Indus in India. In this unit of work, you will learn about the Hindu religion, analyse and understand ethical ideas such as potential consequences of actions and equality among all. Alongside this, you will consider philosophical questions surrounding human existence, considering a variety of different Hindu beliefs and ideas.

Knowledge Organiser

Religions

Lesson 1

Hinduism: What is it all about?

How and where did Hinduism originate?

Can you compare and contrast the basic beliefs & practices of Hinduism with your previous learning about Judaism?

Lesson 4

Hindu festivals: What is celebrated?

What is the story behind Diwali?

Can you explain the traditions behind Diwali and other Hindu festivals?

Lesson 7

Samskaras: What are significant events in the life of a Hindu?

What does the term samskara mean?

Can you explain 5 different samskaras?

Can you compare these samskaras with goals you have in your own life?

Ethics

Lesson 2

Karma, samsara and rebirth: How does it work?

Can you explain key Hindu beliefs about life after death including; karma, the cycle of samsara and the goal of moksha?

Is the Hindu idea of rebirth realistic?

Lesson 5

Equality P4C: Are some people more important than others?

What is the difference between equality and fairness?

What are the 9 protected characteristics of the Equality Act 2010?

Some people say that we don't need a law to tell us that we're all equal – do you agree or disagree? Explain your view.

Lesson 8

Should we all have goals that benefit others? Or just ourselves?

What are the 4 key goals in a Hindu's life?

Do you think that you are achieving your dharma in life?

"Money doesn't bring happiness" – what would a Hindu say to this?

Philosophy

Lesson 3

How do Hindus understand God?

Explain the difference between monotheism and polytheism. Which is Hinduism?

Explain how the Trimurti represents Brahman.

How might a Hindu's belief in God influence their daily lives?

Lesson 6

The Caste System: What is the perfect way to organise society?

The Caste System existed to place Indian people into different classes or castes. How did it work?

What decides the caste that someone is in?

"Life is easier if everyone knows their place." Can you give reasons to agree and disagree?

Lesson 9

Is this whole world an illusion? What is real?

Explain the terms Maya and Moksha.

Could a Hindu still be a scientist?

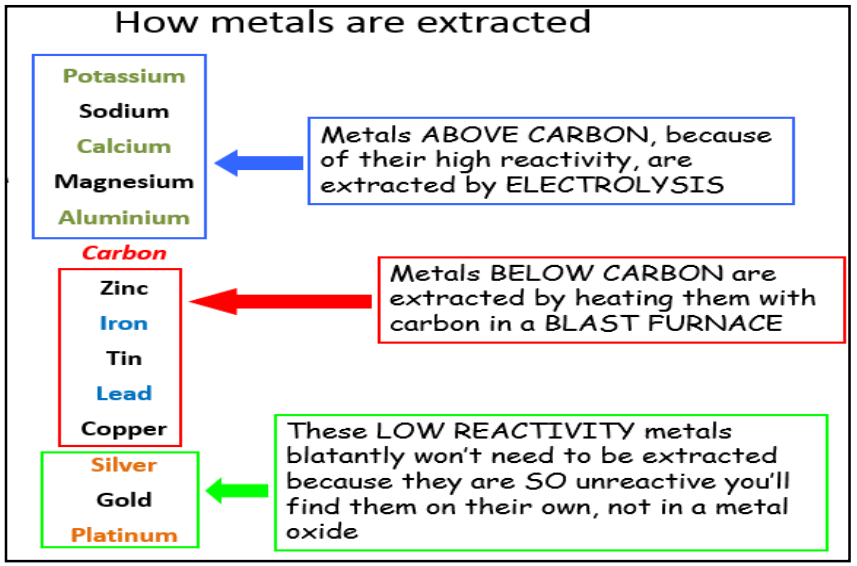
How could the belief in Maya influence a Hindu's daily life?

Following these 9 lessons pupils will be assessed and feedback will be given in exercise books.

8C2 Metals

Properties of metals and non-metals

Property	Metals	Non-metals
Appearance	Shiny	Dull
State at room temp	Solid (except mercury)	Half are solids, half are gases, one is liquid (bromine)
Density	High	Low
Strength	Strong	Weak
Malleable or brittle	Malleable (can bend without breaking)	Brittle (will shatter when hammered)
Conduction (heat/electricity)	Conduct both well	Poor (graphite only non-metal conductor)
Magnetic	Only iron, cobalt and nickel	None



Metal		Reaction with AIR	Reaction with WATER	Reaction with ACIDS
Potassium	K	Burn vigorously to form metal oxides	React with **cold water H_2O (l)** to form $H_{2\,(g)}$ and (metal)$OH_{(aq)}$	Strong reaction with **diluted acid (aq)** to form $H_{2\,(g)}$. Metal replaces H in compound to form a salt.
Sodium	Na			
Calcium	Ca	Burn with decreasing vigour down the series to form metal oxides	Only reacts with **steam H_2O(g)** to form $H_{2\,(g)}$ and metal oxide	
Magnesium	Mg			
Aluminium	Al			
Zinc	Zn			
Iron	Fe			
Lead	Pb	React slowly (when heated) to form an oxide layer	No reaction	React with **concentrated acid (l)**. Metal replaces H to make a salt. Some of the acid decomposes into $NO_{2\,(g)}$ and $H_2O_{\,(l)}$.
Copper	Cu			
Mercury	Hg			
Silver	Ag	No reaction		No reaction
Gold	Au			

General Equations for metal reactions

Metal + Oxygen → Metal Oxide
Metal + Water → Metal Hydroxide +Hydrogen
Metal + Acid → Salt + Hydrogen

Displacement- When a more reactive metal will displace a less reactive metal from solutions of its compounds

. Sodium + Zinc Carbonate → Sodium Carbonate + Zinc

. Magnesium + Iron Oxide → Magnesium Oxide + Iron

Advantages of Recycling	Disadvantages of Recycling
Conserves raw materials. Less energy is used so less fossil fuels are used. Reduces waste in landfill. Avoids the use of mining for ores. Less damage to habitats. Less energy needed to melt and reform metals than to extract them. Produces less carbon dioxide.	Carbon dioxide is a greenhouse gas. Greenhouse gases cause global warming. Electricity for electrolysis is expensive and usually comes from fossil fuels.

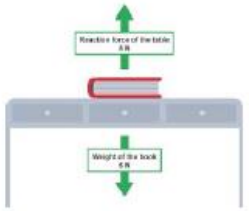
8P1 Knowledge organiser: Forces and Motion

Force Diagrams

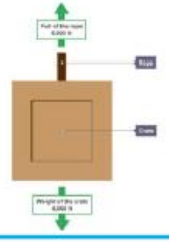
To show the forces acting on a body we use a free body force diagram. A **free body force diagram** shows all of the forces that are acting on the body. It has arrows that show the direction the force acts, the larger the arrow, the larger the force. A free body fore diagram should always have labelled arrows.

A boat floating

A book on a desk



A crate held up by a rope



Unbalanced Forces

If the forces are unbalanced on an object there are two things that could happen:

1. If the object is stationary then it will move in the direction of the resultant force
2. If the object is moving, then the object will speed up or slow down in the direction of the resultant force.

For example, what is the resultant force on the lorry below?

100N-60N= 40N (to the right)

Remember the resultant force does not tell you what direction the lorry is moving in.

- If the resultant force is in the same direction as the movement of the lorry then the lorry will speed up
- If it is in the opposite direction the lorry will slow down

The larger the resultant force the larger the change in movement.

When a force is applied to an object it can lead to a change in the objects

- **Speed**
- **Direction of movement**
- **Shape (think about a rubber band)**

Forces can also be divided into 2 types, contact forces and non contact forces.

1. Contact forces for example friction, are caused when two objects are in contact.
2. Other forces for example gravity, are non contact forces. The two objects do not need to be in contact for the force to occur.

Balanced Forces

When we talk about the total force acting on object we call this the **resultant force**. When the forces acting in opposite directions are the same size we say the forces are **balanced**. This means one of two things:

1. The object is stationary (not moving)
2. The object is moving at a constant speed

This is known as Newton's first law.

For example, the resultant force acting on this object is 5N-5N=0N

$$Speed = \frac{Distance}{Time}$$

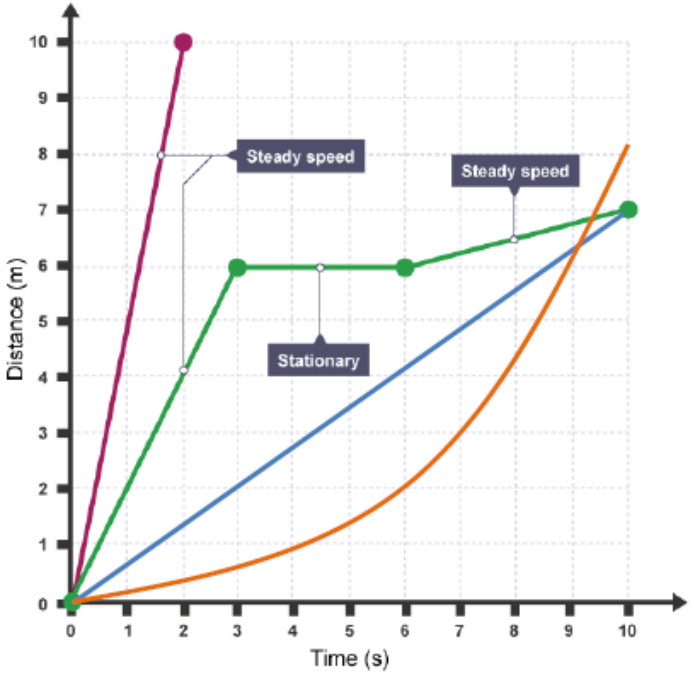
$$Weight = Mass \times GFS$$

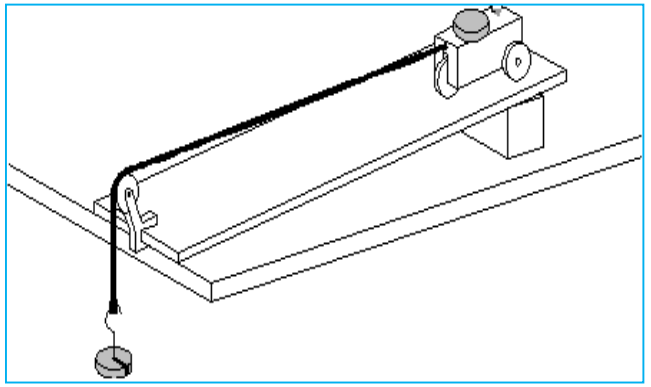
$$F = m \times a$$

Gravity	The force of attraction between two objects with mass
Electrostatic	The force between two charged objects
Magnetic	The force that enables a compass to work
Air resistance/ Drag	The force when a material travels through a fluid
Friction	The force when two materials rub together
Upthrust	The upwards force felt by an object in a fluid
Normal contact force	The force that acts at the point of contact between two objects
Tension	The force that is transmitted through a string, rope, cable or wire when it is pulled tight by forces acting from opposite ends.
Elastic	Force exerted by a compressed or stretched spring upon any object that is attached to it

Interpreting Distance-time graphs

- A straight diagonal line of a distance-time graph shows that the object is travelling at a steady/constant speed.
- A straight horizontal line on a distance-time graph shows that the object is not moving (stationary)
- If a curved line were to appear on a distance-time graph (orange line) this shows the object is accelerating.

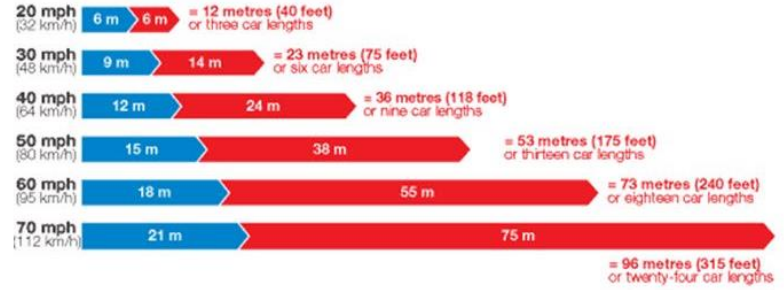




F=ma practical

Independent variable: Mass of trolley
Dependant variable: Acceleration of trolley
Control variable: Height of ramp, surface of ramp, force on pulley, trolley.

Results: As the mass of the car increases the acceleration of the trolley decreases.



Thinking distance
Distance travelled from seeing the hazard to the moment you react to it

Braking distance
Distance travelled from when the brakes are applied to when the car comes to a stop.

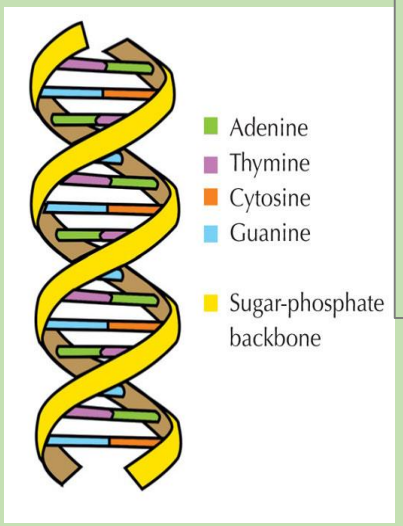
Factors that increase stopping distance:

- Alcohol/Drugs
- Mobile phones
- Distractions
- High mass car
- High starting speed
- Worn brakes and tyres
- Icy/wet roads

Mass	Weight
The amount of **matter** in an object	The **force** acting on an object, due to gravity
Never changes	Changes depending on the **strength of gravity**
Measured in **kg**	Measured in **N**

Newton's 1st Law: Motion will not change unless there is a balanced force acting on an object.
Newton's 2nd Law: The bigger the size of the resultant force on an object, the more the object will accelerate.
Newton's 3rd Law: If object A pushes on object B, then object B pushes on A with the same force but in the opposite direction.

Year 8 Knowledge Organiser : 8A – Genes and inheritance



In DNA, the complementary base pairs are held together by hydrogen bonds.

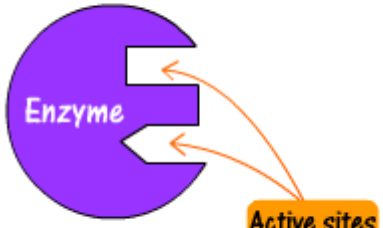
DNA is the molecule which controls our characteristics. It makes up 'genes' which code for proteins

carbohydrase =	breaks carbohydrate into sugar molecules
lipase =	breaks fat into glycerol and fatty acids
protease =	breaks protein into amino acids

Enzymes

Enzymes are biological catalysts. They speed up chemical reactions within the cell.

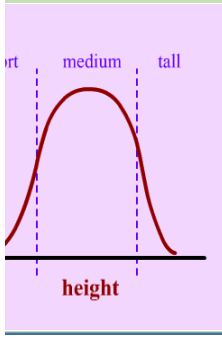
Play

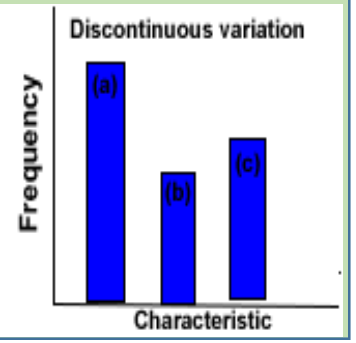


Enzymes are found in the cells of all living things

They are protein machines.

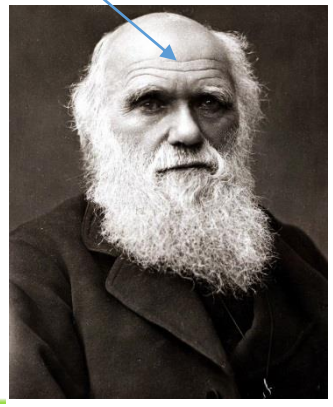
Variation is the difference between members of the same species. It can be caused by environmental or genetic factors.

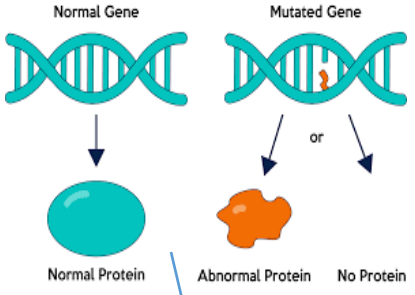




Term	Description
Species	A group of individuals that are physically similar that can produce fertile offspring
Variation	The presence of differences between living things of the same species
Competition	Interaction between groups of organisms seeking to access limited supplies of factors required for life e.g. light, space, food
Natural selection	A process that causes populations to change over time.
Evolution	The change in species over long periods of time
Gene	The basic units of genetic material inherited from our parents. A gene is a section of DNA which controls part of a cell's chemistry - particularly protein production.

Charles Darwin proposed the theory of 'natural selection' to explain evolution





Mutation is the change in the base sequence of DNA.

Punnett squares are used to help you determine what genes the child of two parents will have. Everyone has 2 copies of a certain gene (called an **allele**): 1 copy comes from your mum and 1 copy comes from your dad. But since your mum and dad each have 2 copies, how do you know which ones you will get?