



# **Year 8 Learning Journal**

## **Learning Cycle 1**

Student Name: \_\_\_\_\_

4 simple steps



## Summarise

Summarise your class notes, handouts and wider reading to **condense and transform** them as **you go along** (saves time and stress closer to exams).

**40%**

## Organise

Organise your notes and revision using **PLCs** (or Exam Specifications) and create **Revision Timetables**, to focus time and effort on **weaknesses**.

**10%**

## Recall

Use **active recall** and **spaced repetition** to **memorise** the information.

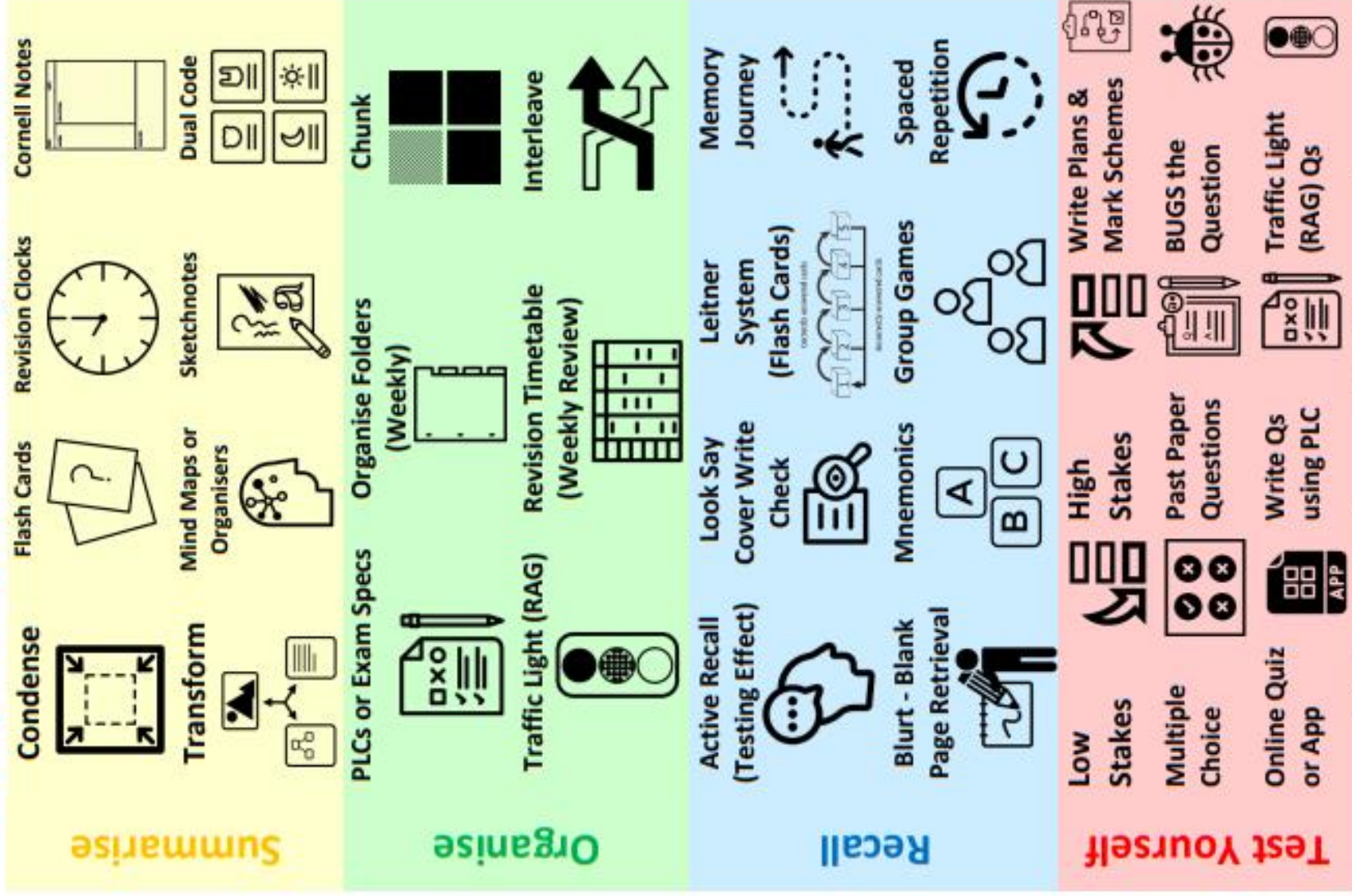
**30%**

## Test Yourself

Test Yourself using **low stakes and high stakes** questions to check you can **apply knowledge and understanding**.

**20%**

# 4 Steps to Success with your Studies





# How to Summarise using ...

## Flash Cards



### How do I make one/use one?

1. Break down topics/subject into different units (you can use different colour cards)
2. Use bullet points (to help readability)
3. Doesn't always have to be question and answer – use variety
4. Don't cram too much on one flash card (or just use one word answers!)
5. Don't keep going over flash cards you know well. The 'Leitner System' is a good way to RECALL flashcards. You can also Quiz-Quiz Trade with others.

### What is the idea?

A card with a key word or question on the front, and the definition or answer on the reverse.

### What is it useful for?

- Learning definitions/meanings
- Learning a language/translations
- Learning short case study/topic facts

### Pros

Useful for revising on the go (easy to carry).

You can test yourself using the front or the back of the card.

You can buy Ready made flashcards or use online flashcards e.g. Quizlet.

### Cons

Simply copying questions and answers/definitions out of textbooks to make the cards, or just reading them over and over, doesn't improve your recall.

You can make them too simple (long question, one word answer.)

Doesn't help your visual memory (unless they have images).

Does not help you make links/apply facts and detail to high tariff questions.





# How to Summarise using ...

## Intelligent Graffiti (Sketchnotes)

How to draw

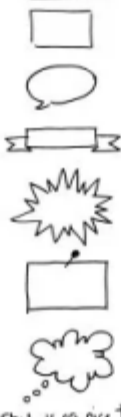
### SKETCHNOTES

Sketchnotes are NOT comics or illustrated text. They are visual guides. Follow these steps to get started.

1. PICK A PATTERN

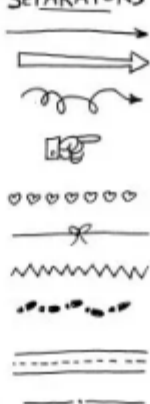


2. CHOOSE SOME FRAMES

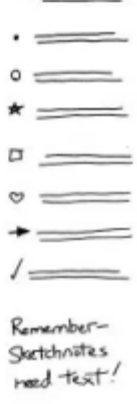


Shapes are nice too!

3. SELECT CONNECTORS AND SEPARATORS



4. PICK SOME BULLETS



Remember - Sketchnotes need text!

5. DECIDE ON FONTS



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### What is the idea?

Filling a page with notes and diagrams about a topic. Making connections between ideas and emphasising important information.

### What is it useful for?

- Case studies/topic overview
- Making links between different parts of a topic and emphasising the importance of information.

### How do I make one/use one?

1. The first rule of intelligent graffiti is THERE ARE NO RULES! (The following are just suggestions)
2. Don't write down everything and use abbreviations.
3. Your notes do not need to be linear – it's up to you how they flow (they only need to make sense to you).
4. Vary handwriting & add emphasise to draw eye to key points.
5. Use connectors and containers to link and organise ideas.
6. Include diagrams and images to represent ideas.

### Pros

- There are no rules (flexible depending on you and the topic you are studying)
- Your notes will be compact, colourful and visual so this makes them easier to review.
- You can make connections between ideas within the topic.
- Converting notes into images and words helps your brain learn as it combines visual and verbal memory (dual coding).

### Cons

- They can be time consuming to create.
- Students do not always include enough detail (not helpful if you need to remember a lot of detail!)
- The notes may be so 'free' they are hard for you to follow again/make sense of.





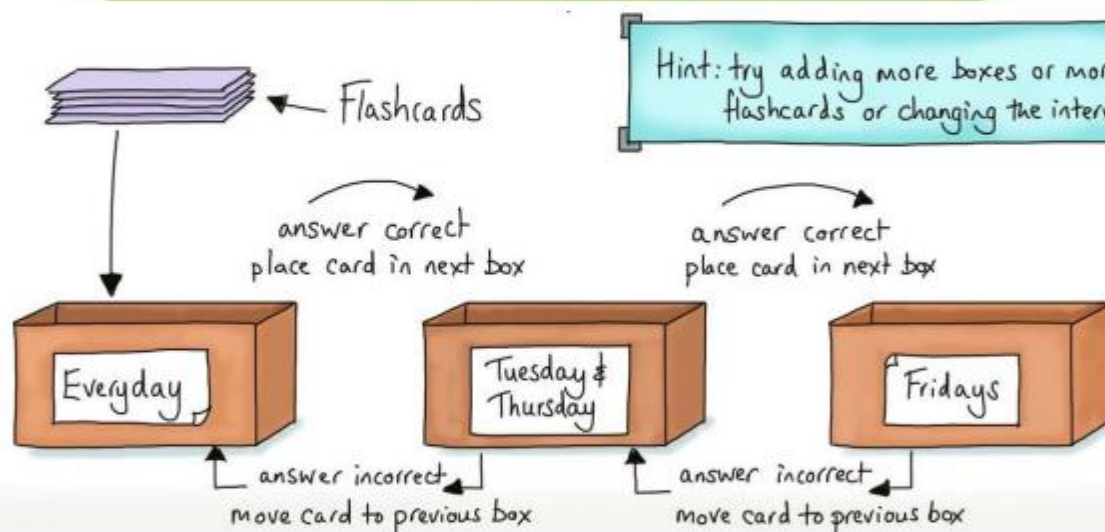
# How to Recall using ...

## Leitner System (For Flash Cards)

### What is the idea?

To revisit flash cards you don't know more frequently and the ones you do know less frequently. Making your revision more efficient.

Hint: try adding more boxes or more flashcards or changing the intervals

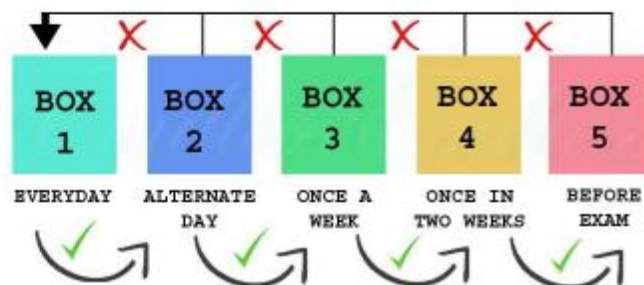


### How do I use this method?

1. Create 3 to 5 boxes, folders or piles.
2. Label them as shown in the diagram below.
3. Put all your flashcards (or a set number) in Box 1
4. On day 1 try to recall the information on the flashcards in Box 1
5. If you get a flashcard correct move it into Box 2
6. If you get a flashcard wrong it stays in Box 1
7. On day 2 go through Box 1 and Box 2.
8. Every time you get a card correct it moves forward one box, every time you get it incorrect it goes all the way back to Box 1!
9. Keep visiting the boxes at the time indicated on the label.
10. You can add more cards to Box 1 at any time.



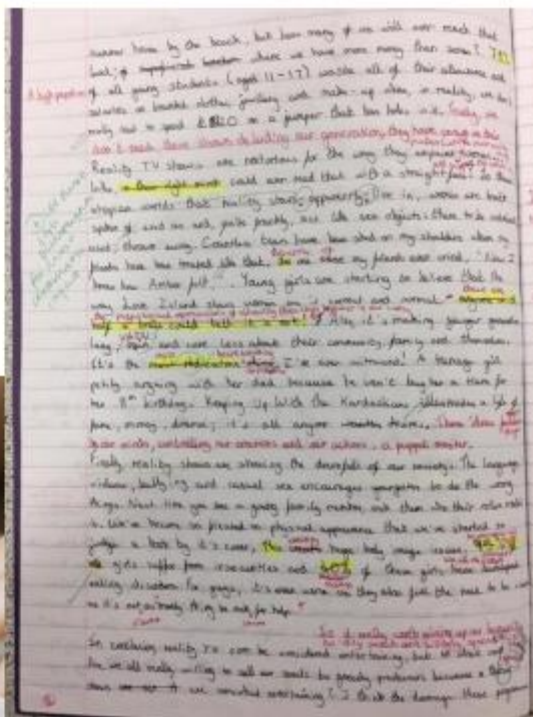
YouTube Tutorial  
Video Link





# How to Recall using ...

## Blurring



### How do I use this method?

1. Revise a topic/sub-topic
2. When you think you know it, put your revision notes away.
3. 'Blurt' what you remember onto a piece of blank/scrap paper or a mini whiteboard.
4. Use any method of organizing your ideas on the paper.
5. Once you have got down everything you remember, get out your notes and see what you missed/got wrong.
6. Make corrections in red pen.
7. Focus on learning the bits you missed/got wrong next time you revise.
8. Repeat! *Always start again from scratch and try to recall everything (don't just try and recall the bits you missed/got wrong), this will strengthen your knowledge of the whole topic.*

### What is the idea?

To write everything you remember on the topic you have been revising. It doesn't matter what form this takes (e.g. notes/mind map etc). Check against your revision notes to see what you got right/wrong and make corrections in a different colour. Repeat.



YouTube Tutorial  
Video Link



# English and Maths Personal Learning Checklists

English Mystery and The Supernatural	S	O	R	T
<u>About His Person and Flannan Isle</u>				
What the purpose of the semantic field in About His Person?				
How does the writer create a sense of mystery in About His Person?				
How do writers create mood and tension in Flannan Isle?				
What do you think happened to the lighthouse keepers in Flannan Isle?				
<u>The Speckled Band</u>				
Explain the difference between a protagonist and an antagonist.				
How does Doyle portray Sherlock's character as unique?				
How is Helen Stoner represented?				
What do you think will happen in the second half of the story?				
What are the conventions of a detective story?				
How is Dr Roylott presented?				
How is the setting of the house used to create mystery?				
How does Doyle adhere to the conventions of a detective story?				

English Mystery and The Supernatural	S	O	R	T
<u>The Lottery</u>				
What symbolism does Jackson use to create a sense of foreboding?				
How does Jackson explore ideas about patriarchy?				
How does Jackson highlight the futility of tradition?				
What is the significance of Mr Summers?				
<u>Non-Fiction (War)</u>				
What do you remember about the Blitz in World War II?				
Why does Bowen leave the ending ambiguous?				

Maths Ratio & Scale	Sparx Code	S	O	R	T
Understand representations and notation of ratio	M885				
Solve problems involving ratios in the for 1:n, n:1 and m:	M543				
Divide a value into a given ratio	M525, M801				
Express ratios in their simplest form	M885				
Compare ratios and related fractions	Q267				
Understand $\pi$ as the ratio between diameter and circumference	M169				
Understand gradient of a line as a ratio (H)	M544				
Maths Multiplicative Change	Sparx Code	S	O	R	T
Solve problems involving direct proportion	M478, M681				
Explore conversion graphs	M843, M771				
Convert between currencies	M478				
Explore direct proportion graphs (H)	M478, M681				
Explore relationships between similar shapes	M324				
Draw and interpret scale diagrams	M112				
Interpret maps using scale factors and ratio	M112				



## Maths Personal Learning Checklists

<b>Maths</b>	<b>Sparx Code</b>	<b>S</b>	<b>O</b>	<b>R</b>	<b>T</b>
<b>Multiplying and dividing fractions</b>					
Multiply a fraction by an integer and a fraction by a fraction	M157, M197				
Divide an integer by a fraction and a fraction by a fraction	M110, M265				
Multiply and divide improper and mixed fractions (H)	M601, M197				
Multiply and divide algebraic fractions (H)	M336				
<b>Maths</b>	<b>Sparx Code</b>	<b>S</b>	<b>O</b>	<b>R</b>	<b>T</b>
<b>Working in the Cartesian Plane</b>					
Work with coordinates in all four quadrants	M618				
Recognise and draw lines in the form $y = a$ , $x = a$ and $y = x$	M797				
Recognise and use lines in the form $y = kx$					
Explore gradients of lines in the form $y = kx$ , including negative gradients (H)	M544				
Recognise and use lines in the form $y = x + a$					
Link graphs to linear sequences	M381				
Plot graphs in the form $y = mx + c$	M932, M544, M888				
Explore non-linear graphs (H)					
Find the midpoint of a line segment (H)	M622				

<b>Maths</b>	<b>Sparx Code</b>	<b>S</b>	<b>O</b>	<b>R</b>	<b>T</b>
<b>Representing Data</b>					
Draw and interpret scatter graphs including line of best fit					
Understand and describe linear correlation					
Identify types of data					
Represent grouped discrete and continuous data in tables					
Represent data in two-way tables	M899				
Interpret ungrouped and grouped frequency tables	M945				
<b>Maths</b>	<b>Sparx Code</b>	<b>S</b>	<b>O</b>	<b>R</b>	<b>T</b>
<b>Tables and probability</b>					
Find probabilities from sample space diagrams	M718				
Find probabilities from two-way tables					
Find probabilities from Venn diagrams					
Use the product rule for finding the number of possible outcomes.					

## Science Personal Learning Checklists

<b>Science Elements of the periodic table</b>	<b>S</b>	<b>O</b>	<b>R</b>	<b>T</b>
Atomic structure				
Periodic table				
Metals and non-metals				
Reactivity series				
Oxides and combustion				
Alkali metals				

<b>Science Chemical Reactions</b>	<b>S</b>	<b>O</b>	<b>R</b>	<b>T</b>
What is a chemical reaction				
Combustion and thermal decomposition				
Conservation of mass				
Rates of reaction				
Energy changes				
Endo and exo thermic reactions				
Neutralisation				

## Spanish Personal Learning Checklists

Spanish Mis Vacaciones-My holidays	S	O	R	T
talk about a past holiday				
use the preterite tense of <i>ir</i> and <i>ser</i>				
say what you did on holiday				
revise the regular preterite tense				
describe the last day of a holiday				
give opinions about what the holiday was like				
list types of transport				
use comparatives				
describe types of holiday accommodation				
describe a local hotel and its facilities				
book accommodation				
describe the weather				
say what I do on holiday normally (activities)				
find out about a gap year in a Spanish speaking country				
research interesting places to visit in a Spanish speaking country				
write a travel plan using the present tense				
revise days of the week, time phrases and opinions				
Write 40-90 words about a past holiday				
<b>USE YOUR VOCAB BOOKLET TO SORT YOUR LEARNING</b>				

Spanish Todo sobre mi vida- All about my life	S	O	R	T
find out about <i>Día de los Muertos</i>				
give my opinion about different types of tv programmes/films/books				
use adjectives to correctly describe tv programmes/films/books				
compare two different types of tv programme/film/book				
discuss use of mobile phones				
talk about different internet activities that I do online				
use questions to create mini conversations about this topic				
pick out key information in listening and reading tasks				
give more sophisticated opinions				
use the preterite tense to say what I did last weekend				
write at least 40 words on the topic using past present & future tense				
give information about Christmas in Hispanic countries				
<b>USE YOUR VOCAB BOOKLET TO SORT YOUR LEARNING</b>				

## French Personal Learning Checklists

<b>French Mes vacances (My holidays)</b>	<b>S</b>	<b>O</b>	<b>R</b>	<b>T</b>
say what I did on holiday				
understand how to form regular perfect tense verbs				
know a range of transport				
say when I did things using time phrases				
recognise irregular past participles				
give my opinion in the imperfect tense				
understand information about a tourist attraction				
describe types of holiday accommodation				
describe a local hotel and its facilities				
book accommodation				
describe the weather				
say what I normally do on holiday (activities)				
find out about a gap year in Québec				
identify several French-speaking countries				
research interesting places to visit in a French-speaking country				
research interesting places to visit in a French-speaking country				
write 40/90 words using two tenses (the present and the perfect tense)				
<b>USE YOUR VOCAB BOOKLET TO SORT YOUR LEARNING</b>				

<b>French Au Cinéma et sur Internet (At the cinema and on the internet)</b>	<b>S</b>	<b>O</b>	<b>R</b>	<b>T</b>
describe what happens during the French festival la Toussaint				
give my opinion about different types of tv programmes/films/books				
use adjectives to correctly describe tv programmes/films/books				
compare two different types of tv programme/film/book				
discuss use of mobile phones				
talk about different internet activities that I do online				
use questions to create mini conversations about this topic				
pick out key information in listening and reading tasks				
give more sophisticated opinions				
talk about what I did yesterday evening using the past (perfect) tense				
write at least 40 words on the topic using past present & future tense				
understand Christmas traditions in France				
<b>USE YOUR VOCAB BOOKLET TO SORT YOUR LEARNING</b>				

## Geography Personal Learning Checklists

Can the Horn of Africa close the development gap?	S	O	R	T
State at least 3 ways of measuring development.				
Use development indicators to justify which country is more developed.				
State what LIC, LMIC, UMIC and HIC mean.				
Explain how development indicators show us how developed a country is.				
Explain the relationship between development indicators.				
State the four sectors of employment				
Use the Clark-Fisher model to analyse employment change over time.				
Categorise and explain human and physical causes of the development gap.				
Evaluate the main causes of the development gap.				
Give examples of the 17 Sustainable Development Goals.				
State regional differences in development in the Horn of Africa (H of A).				
Explain human causes of underdevelopment in Somalia				
Explain the human causes of underdevelopment in Ethiopia				
State strategies to reduce the development gap				
Explain how aid can reduce the development gap				
Describe what Foreign Direct Investment (FDI) is.				
Explain how FDI can reduce the development gap.				
Explain how Fair Trade can close the development gap.				
Evaluate the effectiveness of Aid, FDI & Fair Trade in reducing the development gap				

How does water shape the land?	S	O	R	T
Label a diagram of a drainage basin correctly.				
State the characteristics of the river channel from the source to the mouth.				
Explain how the river valley, its landforms and processes change from source to mouth.				
Name the key features of a waterfall.				
Define the 4 different types of river transportation.				
Give examples of 4 different types of river erosion.				
Identify the difference between the inside and outside of a meander bend.				
Outline how an oxbow lake is formed.				
Describe how flood plains are formed and how humans use them.				

History Personal Learning Checklists

History	S	O	R	T
Who were the African Americans?				
What was the worst aspect of the Middle Passage?				
Empire: why was it important?				
How do we move from an agrarian to industrial society?				
Cornwall: how important was Cornwall to Britain's growing Empire?				

History	S	O	R	T
Origins of World War One: Diplomacy				
Europe on the Brink of war: how the alliance system worked				
The Spark that changed the world				
The journey and experience of World War One: joining up!				
Life in the trenches: a personal account				

## Computing Personal Learning Checklists

<b>Computing Python Turtle</b>	<b>S</b>	<b>O</b>	<b>R</b>	<b>T</b>
Understand how to use basic commands in Python Turtle				
Understand what iteration is and why it is used in programming				
Explain the use of inputs and outputs in programming				
Understand the need for subroutines and their advantages				
Understand the use of libraries and how they might be used in programming				
Understand how selection is used to alter the output of programs				

<b>Computing First Steps in Small Basic</b>	<b>S</b>	<b>O</b>	<b>R</b>	<b>T</b>
Understand that different programming languages use different syntax				
Write and run programs in Small Basic using For...EndFor loops				
Find and correct logic errors in a program				
Use the graphics window to draw different shapes in random colours				
Take in user input and output text results back				
Use variables effectively to store data				
Use Small basic to complete mathematical calculations				
Create a simple quiz game using selection statements				

## REP & Art Personal Learning Checklists

<b>REP Hinduism</b>	<b>S</b>	<b>O</b>	<b>R</b>	<b>T</b>
Describe how Hindus understand Brahman				
Identify the Trimurti				
Explain the roles of each of the Trimurti				
Describe what an Avatar is and give an example				
State what a Murti is				
Explain what a puja ritual is				
Describe the process of karma				
Explain what caste is and how it is linked to karma				
State what Moksha is				
Describe the roles and responsibilities of each of the Ashramas				
State what a Mandir is				
Explain the importance of shrines				
Explain what Diwali is				
Describe the story of Rama and Sita				
State what meditation is				

<b>Art Mexican Day of the Dead</b>	<b>Evidenced</b>	<b>Refined</b>
<i>I am building on my prior knowledge of.....</i>		
How to analyse artists' styles to influence my own work.		
Proportion and shape to be accurate in my drawing		
Using a variety of tone when shading to create depth in my work.		
Mark making techniques to show texture and detail in my drawings.		
Closely observing and drawing from secondary sources to create realistic drawings.		
<i>I am developing my skills in.....</i>		
Looking at other cultures to influence my own designs and art work		
The use of pattern and composition in my designs and art work		
Developing skills in creating an oil pastel mono print		
Exploring opportunities to develop monoprints by adding detail or further layers.		



## Music Personal Learning Checklists

Heart of the Blues	S	O	R	T
Develop your understanding of the Slave Trade including the geographical movement, historical context and conditions.				
Understand a 12 Bar Blues structure and how it is constructed				
Enhance your understanding of a 12 Bar Blues structure by learning to play in different keys				
Develop your listening skills by listening to traditional Blues Music. Identify the instruments used and key features.				
Be able to construct a chord using the method play one, miss one, play one, miss one				
Be able to play a chord on the keyboard using the method play one, miss one, play one, miss one, using the correct fingers				
Learn to play three different chords following a 12 bar blues pattern, knowing when to change chord.				
Follow traditional notation to play the melody line in 'Jackass Blues'				
Using the Blues scale, have a go at improvising on your instrument.				
Enhance your improvisation skills by varying the rhythm and notes used.				
Play as part of an ensemble to perform the melody, chords and improvised fills in 'Jackass Blues'				
Extend your performance skills by learning to play a walking bass line.				

Video Game Music	S	O	R	T
Describe how a character/motif theme can be adapted by manipulating the elements of music using subject specific vocabulary				
Create an effective character theme for use in different scenarios or atmospheres within a computer or video game.				
Perform and/or create a range of effective computer and video game sound effects				
Perform a range of computer and video game music themes using appropriate sounds, timbres, voices and pitch				
Create, perform and present on GarageBand an original piece of computer or video game music using some characteristic features.				

## Drama & DT Personal Learning Checklists

Drama	S	O	R	T
<b>By the end of this topic I will be able to:</b>				
Independently research a real-life story				
Have opinions on how our own situations relate to others around the world				
Create a piece of theatre in education teaching the audience about a young person				
Use narration, imagery and cross cutting to tell their story				
<b>By the end of this topic I will be able to:</b>				
Describe the main characters from the story				
Explore how people and relationships can change when growing up				
Use still image to explore relationships on stage				
Create a scene where the key character is intimidated				
Analyse characters to develop the plot of an issue-based drama				
Create and contribute to a whole class live performance				

Food	S	O	R	T
I will be able to annotate my design in detail				
I will be able to weigh and measure accurately				
I will understand the function of main food groups in the body				
I will know what is meant by food provenance, including seasonality, buying local and reducing food miles				
I will be able to demonstrate the making of basic meals/dishes using the following methods: The reduction method for sauces The rubbing in method for crumble and scones The use of yeast to make bread				

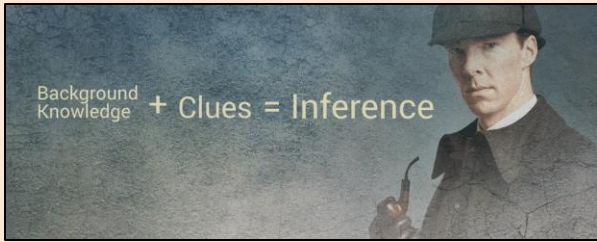
	DT	S	O	R	T
<b>Key Idea: Recognising that different periods of time are linked to different design styles</b>	Understand the meaning of the term 'design movement'				
	Recognise that different periods of time are linked to different design movements				
	Identify popular design movements and describe their principles and features				
	Use a design movement as inspiration for your own ideas				
	Annotate design ideas to justify how they reflect the chosen design movement				
	Present design ideas to a high-quality using drawing pencil and coloured pencil				
	<b>Key Idea: Understand the casting process</b>				
<b>Key Idea: Understanding the casting process</b>	Recognise that many common products are manufactured by the process of casting				
	Understand the principle of the casting process (negative shape will be shape cast)				
	Recognise what constitutes a successful and unsuccessful mould for a cast				
	Understand that heat can cause a solid to become a liquid				
	Identify the risks and safety precautions required for the process				
	Achieve a high-quality finish in your making work				
Evaluate your work objectively to identify strengths and areas for improvement					

# English Knowledge Organiser – Mystery & Supernatural

1 TIER THREE VOCABULARY	
Semantic Field	Words or phrases that can be grouped together under the same category. Writers might use a semantic field to suggest an important idea in their story
Genre	Particular type of literature or story – different genres of literature have different characteristics or conventions
Gothic	Writing or stories that include dark, supernatural or sinister themes. Gothic literature often combines elements of the disturbing with beauty and fascination.
Pathetic Fallacy	When the weather is used to reflect the mood or feeling in a story
Atmosphere	The feeling or mood suggested in a text
Protagonist	The main character, or hero/heroine, of a story
Antagonist	The main villain in a story who challenges the protagonist
Foreshadowing	When the reader is given a hint of something to come later in the story
Caesura	When there is punctuation used in the middle of a line. Usually an interruption or a loss of control of something. It's up to you to work out what.
Enjambment	When there is no punctuation at the end of a line of poetry. It can often reflect that something is out of control, chaotic, or is overflowing. It's up to you to work out what.


2 Inferences

How do poets leave room for readers to make inferences?



3 Conventions of a Detective Story

The Speckled Band by Arthur Conan Doyle – the conventions of a detective story and how to create your own mystery.




4 Semantic Fields

Semantic Fields:

- of colours: *blue, red, yellow, black*, etc.
- of kinship terms: *mother, father, brother, cousin*, etc.
- of pleasurable emotions: *joy, happiness, gaiety, enjoyment*, etc.

A group of words that is linked by meaning, theme or topic

5 Reading To Improve Your Writing



Improve your writing and analysis skills by reading other short stories about Sherlock Holmes by Arthur Conan Doyle.

# English Knowledge Organiser – Mystery & Supernatural

1	TIER THREE VOCABULARY
Inference	The conclusions that you draw about something based on the information that you are given
Human Condition	The state of humankind – why we are the way we are and behave the way we are. Writers often explore an aspect of the human condition in their writing.
Anaphora	The repetition of the same words or phrases at the beginning of more than one sentence
Symbolism	When something, usually a physical item, is used to represent an idea or concept that is important to the story
Narrative Voice	The voice that tells the story. This can sometimes be a character in the story or it can be what is called ‘omniscient’ – separate and unconnected to the story.
Alliteration	When the same sound is repeated at the start of several words.
Rhetorical Question	Questions in a story that are there to establish intrigue or doubt
Motif	An item, usually a physical item, that is referred to throughout a story which represents something. A motif is usually linked to symbolism or theme
Structure	The way the writer has structured or organised their ideas in a text
Tension	The feeling of being anxious or concerned for the events that are to come in a text

## 2 Symbolism

A symbol is using something to represent something else. This could be a universally known symbol, such as a dove for peace. Or it could be a symbol that only applies to that story.

### Types of Symbolism

The diagram illustrates four types of symbolism, each in a yellow circle connected by a dotted line:

- Abstract:** Represented by a hand holding a star.
- Contextual:** Represented by a microscope.
- Universal:** Represented by a dove with a heart.
- Character:** Represented by a person's head.

## 3 Foreboding and The Supernatural

The image shows two black icons on a yellow background: a ghost with a white sheet and two black dots for eyes, and a simple black tombstone.

Learn how the supernatural is used in stories to create a sense of foreboding – the feeling something dark is coming.

## 4 Essay Writing

Begin to explore what makes a good Literature Essay with a Thesis Led approach.

1. A really clear and perceptive argument, driven through a thesis.
2. Analysis of the text – the characters, the structure and the language used in order to support our argument.
3. Demonstrating an understanding of what the writer aimed to achieve with their story.

A black silhouette of a fountain pen nib, pointing towards the top right.

## 5 Non-Fiction and its Influence over Literature

A photograph of a spiral-bound notebook with a red pen resting on it, set against a light blue wooden background.

Read non-fiction accounts of war and see how they can influence stories.

# Maths Knowledge Organiser – Keywords

## VOCABULARY

**Ratio:** a statement of how two numbers compare.

**Equal Parts:** all parts in the same proportion, or a whole shared equally.

**Proportion:** a statement that links two ratios

**Order:** to place a number in a determined sequence

**Part:** a section of a whole Equivalent: of equal value.

**Factors:** integers that multiply together to get the original value.

**Scale:** the comparison of something drawn to its actual size.

**Proportion:** a statement that links two ratios.

**Variable:** a part that the value can be changed.

**Axes:** horizontal and vertical lines that a graph is plotted around.

**Approximation:** an estimate for a value.

**Scale Factor:** the multiple that increases/ decreases a shape in size.

**Currency:** the system of money used in a particular country.

**Conversion:** the process of changing one variable to another.

**Scale:** the comparison of something drawn to its actual.

**Numerator:** the number above the line on a fraction. The top number. Represents how many parts are taken.

**Denominator:** the number below the line on a fraction. The number represent the total number of parts.

**Whole:** a positive number including zero without any decimal or fractional parts.

## VOCABULARY

**Commutative:** an operation is commutative if changing the order does not change the result.

**Unit Fraction:** a fraction where the numerator is one and denominator a positive integer.

**Non-unit Fraction:** a fraction where the numerator is larger than one.

**Dividend :** the amount you want to divide up.

**Divisor:** the number that divides another number.

**Quotient:** the answer after we divide one number by another. e.g.  $\text{dividend} \div \text{divisor} = \text{quotient}$

**Reciprocal:** a pair of numbers that multiply together to give 1.

**Quadrant:** four quarters of the coordinate plane.

**Coordinate:** a set of values that show an exact position.

**Horizontal:** a straight line from left to right (parallel to the x axis).

**Vertical:** a straight line from top to bottom (parallel to the y axis).

**Origin:** (0,0) on a graph. The point the two axes cross.

**Parallel:** Lines that never meet.

**Gradient:** The steepness of a line Intercept: Where lines cross.

**Variable:** a quantity that may change within the context of the problem.

**Relationship:** the link between two variables (items). E.g. Between sunny days and ice cream sales.

**Correlation:** the mathematical definition for the type of relationship.

**Origin:** where two axes meet on a graph.

## VOCABULARY

**Line of best fit:** a straight line on a graph that represents the data on a scatter graph.

**Outlier:** a point that lies outside the trend of graph.

**Quantitative:** numerical data

**Qualitative:** descriptive information, colours, genders, names, emotions etc.

**Continuous:** quantitative data that has an infinite number of possible values within its range.

**Discrete:** quantitative or qualitative data that only takes certain values.

**Frequency:** the number of times a particular data value occurs.

**Outcomes:** the result of an event that depends on probability.

**Probability:** the chance that something will happen. Set: a collection of objects.

**Chance:** the likelihood of a particular outcome.

**Event:** the outcome of a probability – a set of possible outcomes.

**Biased:** a built in error that makes all values wrong by a certain amount.

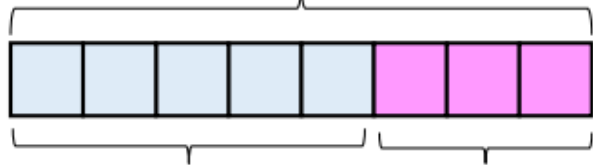
**Union:** Notation 'U' meaning the set made by comparing the elements of two sets.

# Maths Knowledge Organiser – Ratio and Scale

## Representing a ratio

"For every 5 boys there are 3 girls"

This is the "whole" – boys and girls together



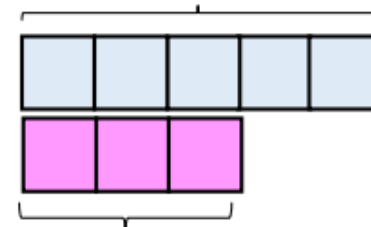
This represents the 5 boys

This represents the 3 girls

5:3

This represents the 5 boys

Double Number Line



This is the "whole" – boys and girls together

This represents the 3 girls

## Simplifying a ratio

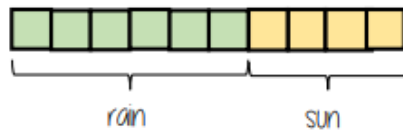
Cancel down the ratio to its lowest form

"For every 6 days of rain there are 4 days of sun"

6:4

+ by 2 ↓

3:2



Find the biggest common factor that goes into all parts of the ratio

For 6 and 4 the biggest factor (number that multiplies into them is 2)

"For every 3 days of rain there are 2 days of sun" – when this happens twice the ratio becomes 6:4.

## Ratio 1:n (or n:1)

This is asking you to cancel down until the part indicated represents 1

Show the ratio 4:20 in the ratio of 1:n

The question states that this part has to be 1 unit. Therefore Divide by 4

4:20  
1:5

This side has to be divided by 4 too – to keep in proportion

\*\*the n part does not have to be an integer for this type of question

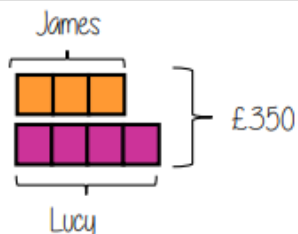
# Maths Knowledge Organiser – Ratio & scale 2

## Sharing a whole into a given ratio

James and Lucy share £350 in the ratio 3:4.  
Work out how much each person earns

### Model the Question

James: Lucy  
3 : 4



### Find the value of one part

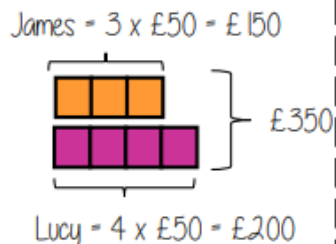
Whole: £350  
7 parts to share between  
(3 James, 4 Lucy)

$$£350 \div 7 = £50$$

□ = one part  
= £50

### Put back into the question

James: Lucy  
(x 50) 3 : 4 (x 50)  
£150 : £200



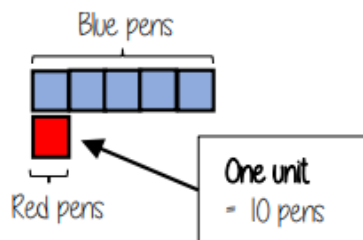
## Finding a value given 1:n (or n:1)

Inside a box are blue and red pens in the ratio 5:1  
If there are 10 red pens how many blue pens are there?

### Model the Question

Blue : Red  
5 : 1

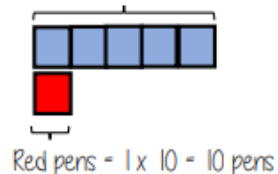
□ = one part  
= 10 pens



### Put back into the question

Blue : Red  
(x 10) 5 : 1 (x 10)  
50 : 10

$$\text{Blue pens} = 5 \times 10 = 50 \text{ pens}$$



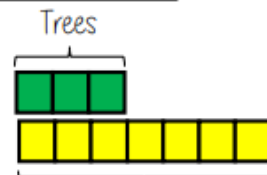
There are 50 Blue Pens

## Ratio as a fraction



Trees: Flowers

3 : 7



Ratio

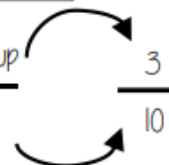
There are 3 parts for trees

Flowers

Fraction of trees

Number of parts of in group

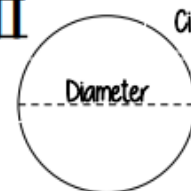
Total number of parts



Fraction

Tree parts 3 + Flower parts 7 = 10

$\pi$



Circumference

The ratio of a circles circumference to its diameter

# Maths Knowledge Organiser – Multiplicative Change 1

## Direct Proportion

As one variable changes the other changes at the same rate.



4 cans of pop = £2.40

4 cans of pop = £2.40  
 $\times 0.5$   
 2 cans of pop = £1.20

This is a multiplicative change

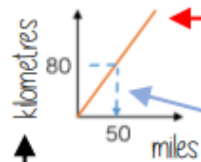
4 cans of pop = £2.40  
 $\times 3$   
 12 cans of pop = £7.20

This multiplier is the same in the same way that this would be for ratio

Sometimes this is easiest if you work out how much one unit is worth first  
 e.g. 1 can of pop = £0.60

## Conversion Graphs

Compare two variables



This is always a straight line because as one variable increases so does the other at the same rate

Labelling of both axes is vital

To make conversions between units you need to find the point to compare – then find the associated point by using your graph.

Using a ruler helps for accuracy

Showing your conversion lines help as a "check" for solutions

## Conversion between currencies



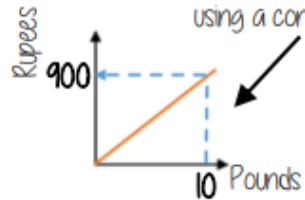
£1 = 90 Rupees

Currency is directly proportional

For every £1 I have 90 Rupees

£1 = 90 Rupees  
 $\times 10$   
 £10 = 900 Rupees

Currency can be converted using a conversion graph



Convert 630 Rupees into Pounds

£1 = 90 Rupees  
 $\times 7$   
 £7 = 630 Rupees

$630 \div 90 = 7$

## Ratio between similar shapes



Angles in similar shapes do not change  
 e.g. if a triangle gets bigger the angles can not go above  $180^\circ$

The two rectangles are similar.



Corresponding sides

$\frac{3\text{m}}{1\text{m}} = \frac{4.5\text{m}}{1.5\text{m}}$

$\times 8$   
 $\frac{8\text{m}}{1\text{m}} = \frac{12\text{m}}{1.5\text{m}}$

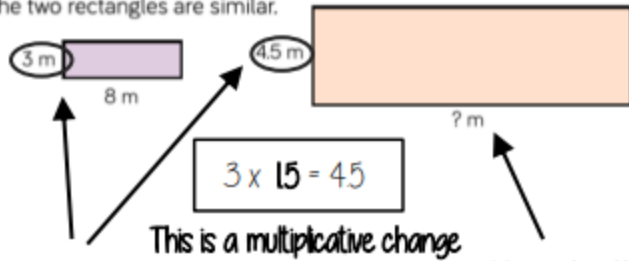
Note  
 Simplify to the same ratio



# Maths Knowledge Organiser – Multiplicative Change 2

## Understand Scale Factor

The two rectangles are similar.

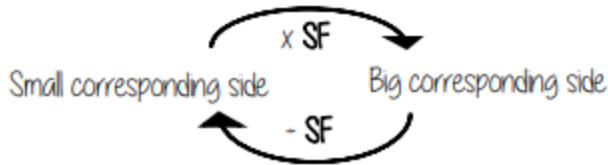


Use **corresponding** sides to calculate a scale factor

Missing length  
 $8 \times 15 = 12m$

Scale factor can also be calculated by:

Bigger corresponding side  
Smaller corresponding side

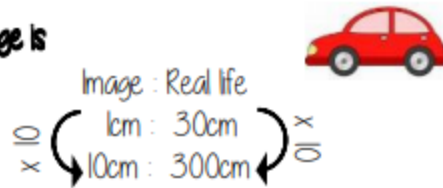


## Draw and interpret scale diagrams

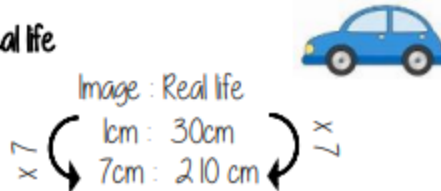
A picture of a car is drawn with a scale of 1:30

For every 1cm on my image is 30cm in real life

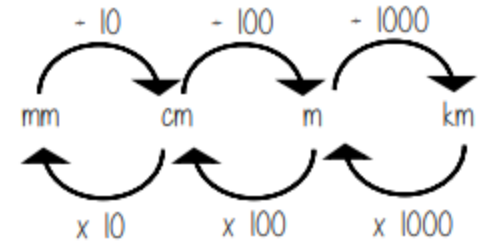
The car image is 10cm



The car in real life is 210cm



## Interpret maps with scale factors



1 cm : 250 m

Ratios need to be in the same units

1 cm : 250m

1 cm : 25000cm

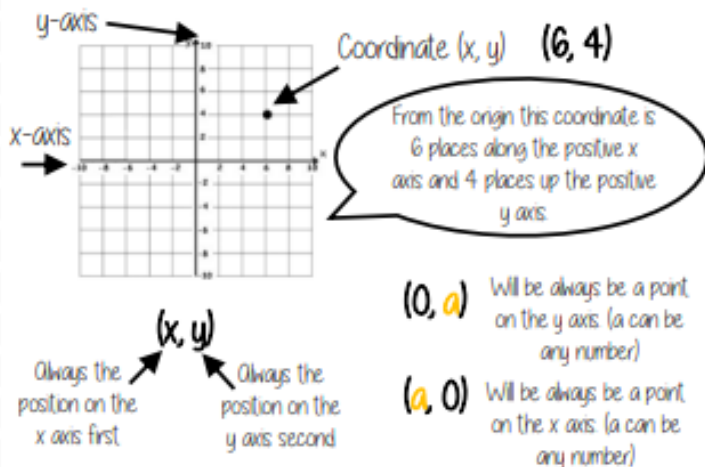
$250 \times 100 = 25000$

For every 1cm on my map is 25000cm in real life.

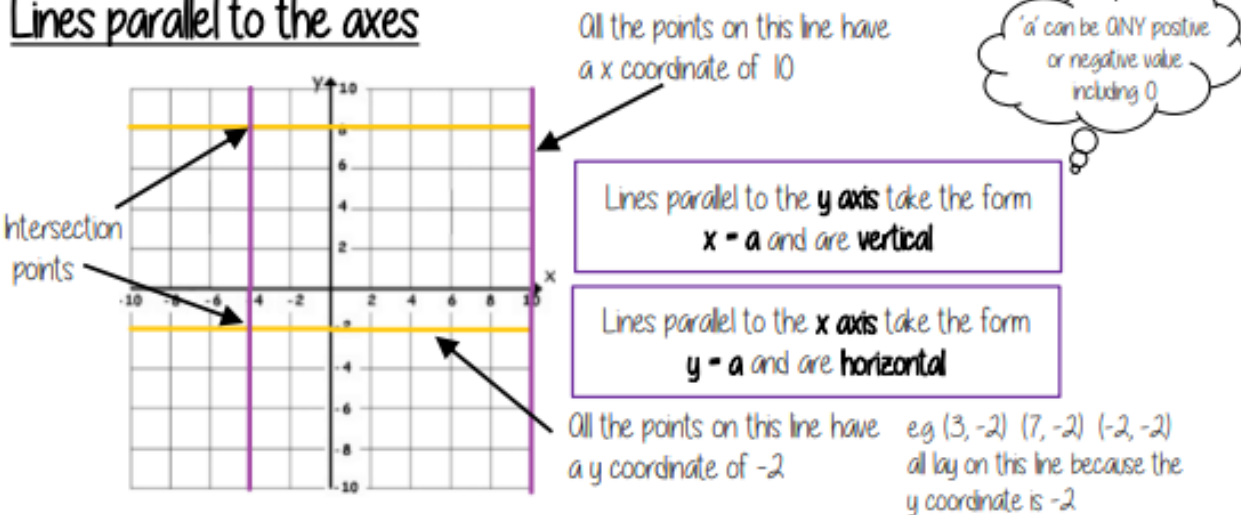


# Maths Knowledge Organiser – Working in the Cartesian Plane 1

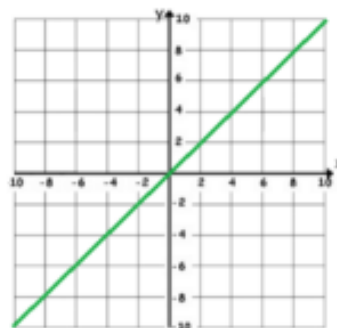
## Coordinates in four quadrants



## Lines parallel to the axes



## Recognise and use the line $y=x$

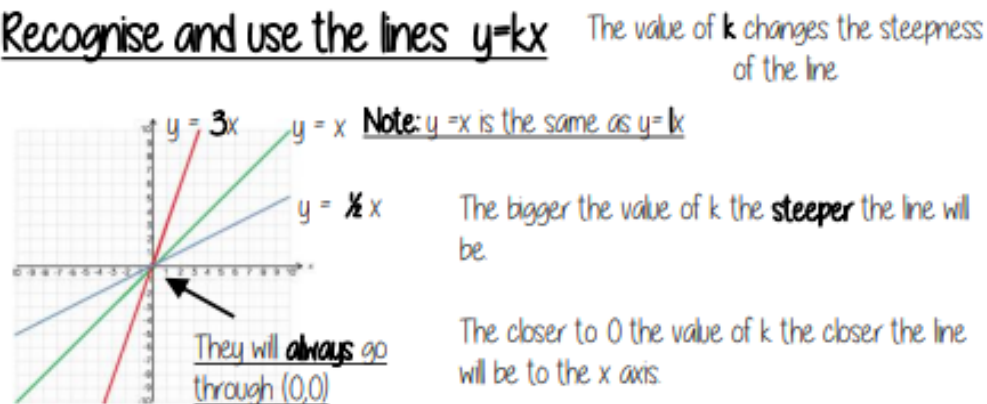


This means the x and the y coordinate have the same value

Examples of coordinates on this line:  $(0, 0)$   $(-3, -3)$   $(8, 8)$

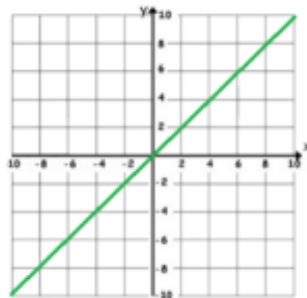
The axes **scale is important** – if the scale is the same  $y = x$  will be a straight line at  $45^\circ$

## Recognise and use the lines $y=kx$



# Maths Knowledge Organiser – Working in the Cartesian Plane 2

## Recognise and use the line $y=x$



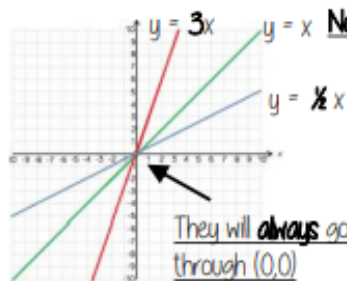
This means the x and the y coordinate have the same value

Examples of coordinates on this line: (0, 0) (-3, -3) (8, 8)

The axes **scale is important** – if the scale is the same  $y = x$  will be a straight line at  $45^\circ$

## Recognise and use the lines $y=kx$

The value of  $k$  changes the steepness of the line

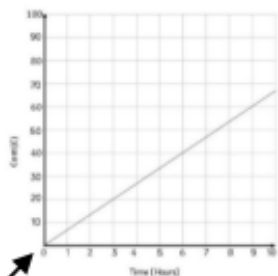


Note:  $y=x$  is the same as  $y=1x$

The bigger the value of  $k$  the **steeper** the line will be

The closer to 0 the value of  $k$  the closer the line will be to the x axis

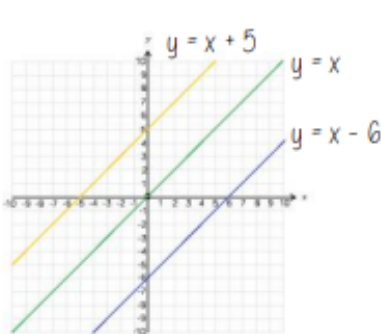
## Direct Proportion using $y=kx$



The line must be straight to be directly proportional – variables increase at the same rate  $k$

Direct proportion graphs always start at (0,0) as they are describing relationships between two variables

## Lines in the form $y = x + a$



All the lines are **parallel** because the gradients are the same

$$y = x + a$$

This is the line  $y=x$  when the y and x coordinate are the same

This shows the translation of that line  
eg  $y = x + 5$   
is the line  $y=x$  moved 5 places up the graph

5 has been added to each of the x coordinates

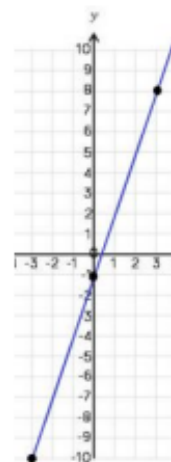
## Plotting $y = mx + c$ graphs

$y = 3x - 1$  → 3 x the x coordinate then - 1

x	-3	0	3
y	-10	-1	8

Draw a table to display this information

This represents a coordinate pair (-3, -10)

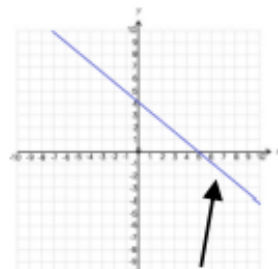


You only need two points to form a straight line

Plotting more points helps you decide if your calculations are correct (if they do make a straight line)

Remember to join the points to make a line

## Lines with negative gradients



Any straight-line graph with a negative x value has a negative gradient

$$\begin{aligned} \text{Eg } y &= -2x \\ y &= -x \quad y + x = 12 \end{aligned}$$

Direction of all negative gradients

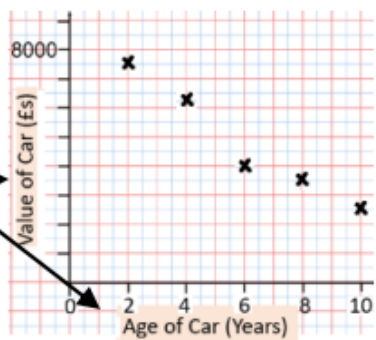
# Maths Knowledge Organiser – Representing Data 1

## Draw and interpret a scatter graph

Age of Car (Years)	2	4	6	8	10
Value of Car (£s)	7500	6250	4000	3500	2500

- This data may not be given in size order
- The data forms information pairs for the scatter graph
- Not all data has a relationship

All axes should be labelled

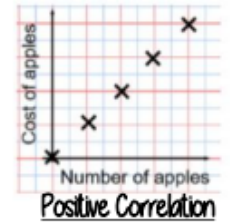


The axis should fit all the values on and be equally spread out

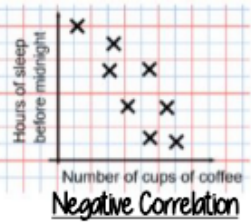
"This scatter graph show as the age of a car increases the value decreases"

The link between the data can be explained verbally

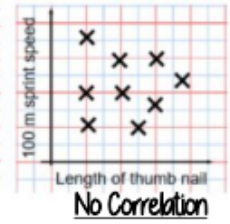
## Linear Correlation



As one variable increases so does the other variable



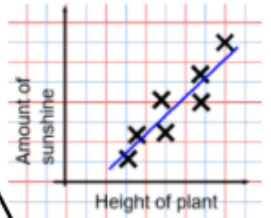
As one variable increases the other variable decreases



There is no relationship between the two variables

## The line of best fit

The Line of best fit is used to make estimates about the information in your scatter graph



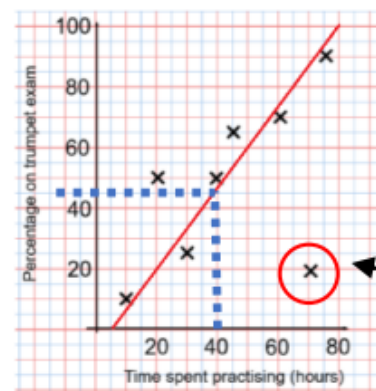
It is only an estimate because the line is designed to be an average representation of the data  
It is always a straight line.

- Things to know:**
- The line of best fit **DOES NOT** need to go through the origin (The point the axes cross)
  - There should be approximately the same number of points above and below the line (It may not go through any points)
  - The line extends across the whole graph

## Using a line of best fit

**Interpolation** is using the line of best fit to estimate values inside our data point

e.g 40 hours revising predicts a percentage of 45



**Extrapolation** is where we use our line of best fit to predict information outside of our data  
\*\*This is not always useful – in this example you cannot score more than 100%. So revising for longer can not be estimated\*\*

This point is an "outlier"  
It is an outlier because it doesn't fit this model and stands apart from the data

# Maths Knowledge Organiser – Representing Data 2

## Ungrouped Data

The table shows the number of siblings students have. The answers were  
3, 1, 2, 2, 0, 3, 4, 1, 1, 2, 0, 2

The number of times an event happened

2 people had 0 siblings. This means there are 0 siblings to be counted here

Number of siblings	Frequency
0	2
1	3
2	4
3	2
4	1

0  
3  
4

$2 + 2 + 2 + 2$  OR  $2 \times 4 = 8$

$3 + 3$  OR  $3 \times 2 = 6$

2 people have 3 siblings so there are 6 siblings in total

**OVERALL there are**  
 $0 + 3 + 8 + 6 + 4$   
**Siblings = 21 siblings**

Best represented by discrete data (Not always a number)

## Grouped Data

If we have a large spread of data it is better to group it. This is so it is easier to look for a trend. Form groups of equal size to make comparison more valid and spread the groups out from the smallest to the largest value.

**Discrete Data**  
The groups do not overlap

Cost of TV (£)	Tally	Frequency
101 - 150		7
151 - 200		11
201 - 250		5
251 - 300		3

We do not know the exact value of each item in a group – so an estimate would be used to calculate the overall total (Midpoint)

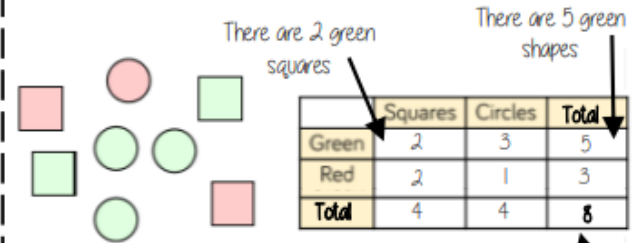
**Continuous Data**  
To make sure all values are included inequalities represent the subgroups

x	Frequency
Weight(g)	
$40 < x \leq 50$	1
$50 < x \leq 60$	3
$60 < x \leq 70$	5

eg this group includes every weight bigger than 60kg, up to and including 70kg

## Representing data in two-way tables

Two-way tables represent discrete information in a visual way that allows you to make conclusions, find probability or find totals of sub groups



Using your two-way table

To find a fraction  
eg What fraction of the items are red? **3 red items**  
but **8 items in total** =  $\frac{3}{8}$

**Interleaving:** Use your fraction, decimal percentage equivalence knowledge

# Maths Knowledge Organiser – Tables and probability 1

## Construct sample space diagrams



Sample space diagrams provide a systematic way to display outcomes from events

The possible outcomes from tossing a coin

The possible outcomes from rolling a dice

	1	2	3	4	5	6
H	1H	2H	3H	4H	5H	6H
T	1T	2T	3T	4T	5T	6T

This is the set notation to list the outcomes  $S =$

In between the  $\{ \}$  are a; the possible outcomes

$$S = \{ 1H, 2H, 3H, 4H, 5H, 6H, 1T, 2T, 3T, 4T, 5T, 6T \}$$

## Probability from sample space

The possible outcomes from rolling a dice

The possible outcomes from tossing a coin

	1	2	3	4	5	6
H	1H	2H	3H	4H	5H	6H
T	1T	2T	3T	4T	5T	6T

What is the probability that an outcome has an even number and a tails?

This is the set notation that represents the question  $P$

$P$  (Even number and Tails)

In between the  $( )$  is the event asked for

There are three even numbers with tails

Numerator: the event

Denominator: the total number of outcomes possible

$$P = \frac{3}{12}$$

There are twelve possible outcomes

# Maths Knowledge Organiser – Tables and probability 2

## Probability from two-way tables

	Car	Bus	Walk	Total
Boys	15	24	14	53
Girls	6	20	21	47
Total	21	44	35	100

$$P(\text{Girl walk to school}) = \frac{21}{100}$$

The event

The total in the set

The total number of items

## Product Rule

The number of items in event a

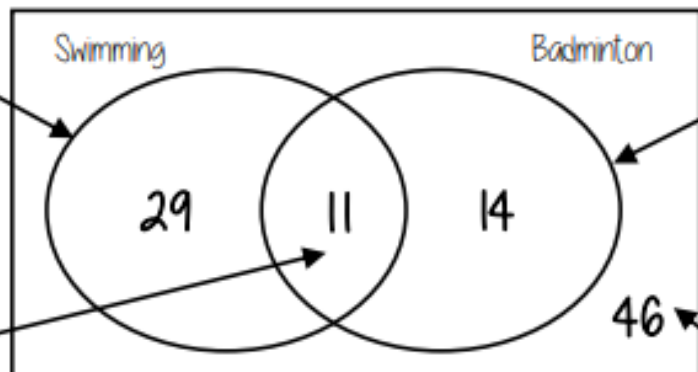
x

The number of items in event b

## Probability from Venn diagrams

100 students were questioned if they played badminton or went to swimming club  
40 went swimming, 25 went to badminton and 11 went to both

This whole curve includes everyone that went swimming  
Because 11 did both we calculate **just** swimming by 40 - 11



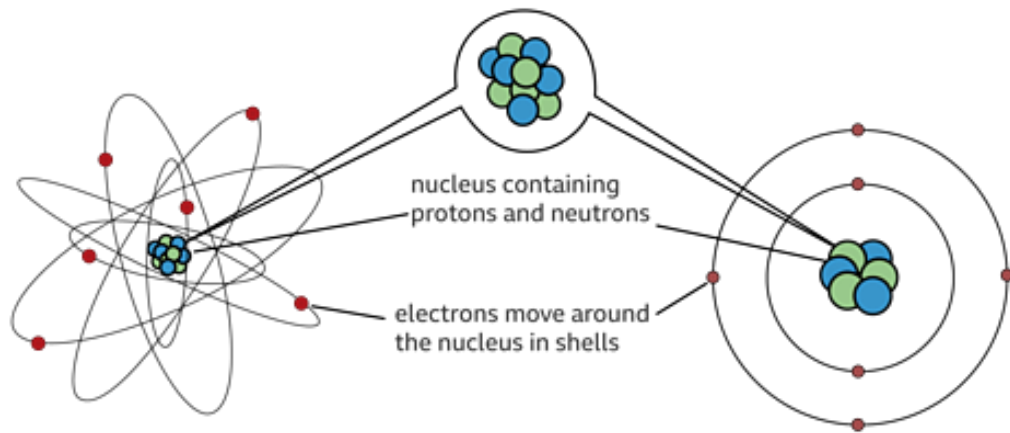
This whole curve includes everyone that went to badminton  
Because 11 did both we calculate **just** badminton by 25 - 11

$$P(\text{Just swimming}) = \frac{29}{100}$$

The intersection represents both  
Swimming **AND** badminton

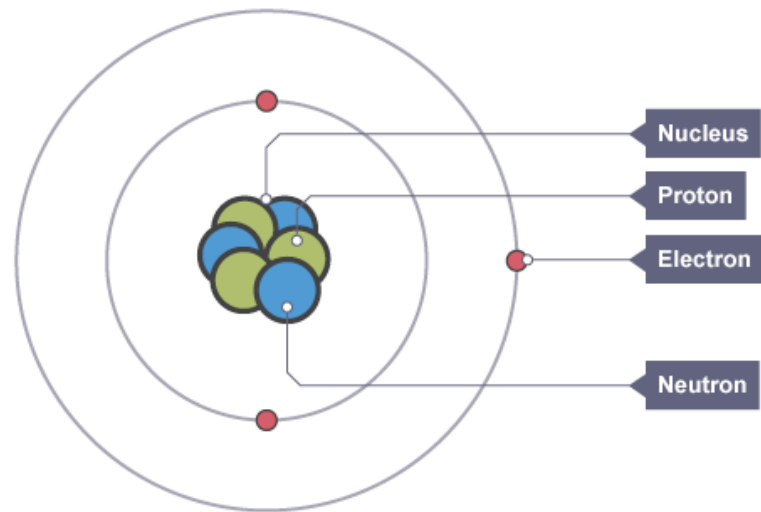
The number outside represents those that did **neither** badminton or swimming  
 $100 - 29 - 11 - 14$

# Science Knowledge Organiser



3-dimensional diagram

2-dimensional diagram



## Groups

1 | 2

																		0
																		1
																		2
																		3
																		4
																		5
																		6
																		7

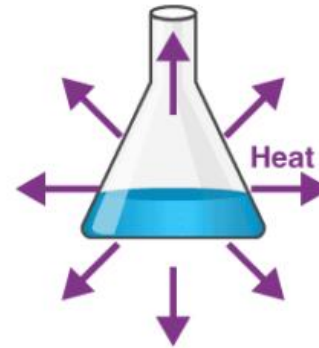
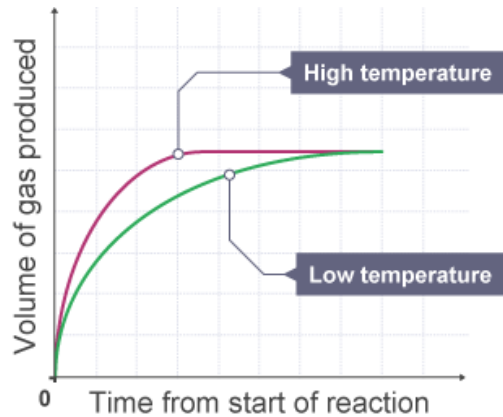
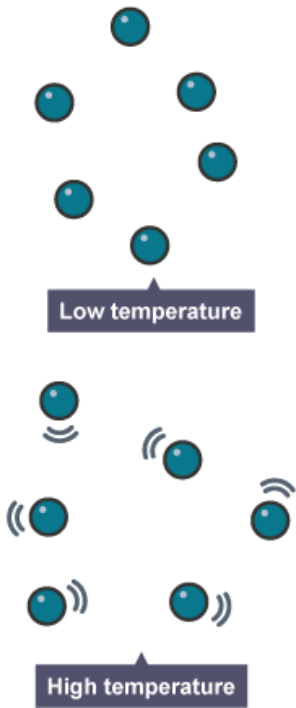
## Periods

**Metals**  
 **Non-metals**

Metal	Reaction with dilute acids
Potassium	Violent reaction
Sodium	
Calcium	
Magnesium	Rapid bubbling
Aluminium	Rapid bubbling but slow at first
Zinc	Slow bubbling
Iron	
Tin	Very slow bubbling
Lead	
Copper	No reaction
Silver	
Gold	
Platinum	
Least reactive	

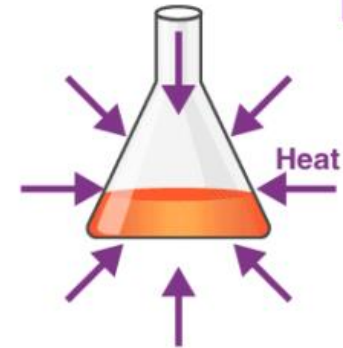


# Science Knowledge Organiser



**Exothermic Reactions**

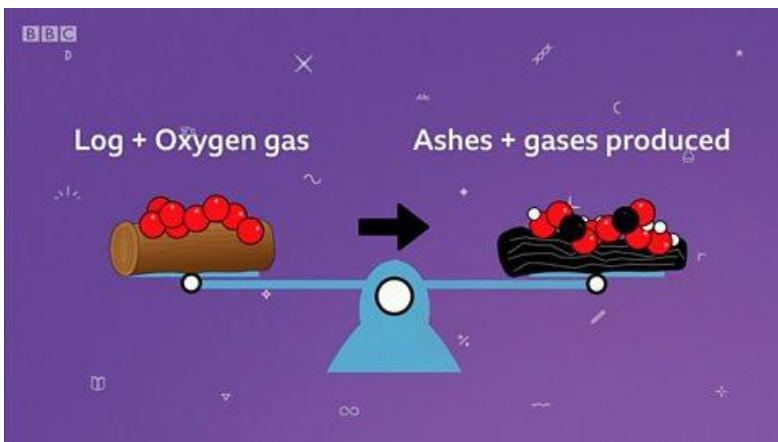
A reaction that releases energy from the system in the form of heat.



**Endothermic Reaction**

A reaction that the system absorbs energy from its surrounding in the form of heat.

Particles at low temperatures move more slowly than those at high temperatures



**H<sup>+</sup>** (hydrogen ions)

low pH/ many hydrogen ions

**ACIDS**

**OH<sup>-</sup>** (hydroxide ions)

high pH/ many hydroxide ions

**ALKALIS**

**ACID**

Hydrochloric acid

**ALKALI**

Sodium Hydroxide Alkali

Acid			Neutral		Alkali									
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
Battery Acid	Grafc Acid	Hydrochloric Acid	Soda	Acid Rain	Black Coffee	Urine/Saliva	*Pure Water	Sea Water	Baking Soda	Milk of Magnesium	Ammonia	Soapy Water	Bleach	Drain Cleaner

**NEUTRAL**

H<sub>2</sub>O + Sodium Chloride (salt)

# Geography Knowledge Organiser – Can the Horn of Africa close the development gap?

1	TIER THREE VOCABULARY
Development	The study of how wealthy the economy of a country is and how high the quality of life and services are.
Development Indicators	Data which shows us whether a country is MORE or LESS Developed
Human Development Index (HDI)	A measure used globally to rank countries in order of development. The 3 indicators to measure a countries HDI are: Adult literacy, life expectancy and GNI per capita.
Life Expectancy	The average age a person lives to within a country.
Adult Literacy	The percentage of the population, above the age of 15, that can read and write.
Gross National Income (GNI)	The average money a person earns per year in a country.
Development Gap	The difference in development between HICs and LICs
Child Mortality	The number of babies dying before they reach the <u>age of 5</u> within a country.
Infant mortality	The number of babies dying before they reach the <u>age of 1</u> within a country.
Poverty	The amount of people living on less than US\$1.90 and not having the basic needs to live.
Maternal Health	The health of a women and baby before, during and after a pregnancy.
Upper Middle income Country	UMIC – The average earnings per person range from \$4 000 to \$12 000 Examples are China Brazil and Mexico
Lower Middle Income Country	LMIC - The average earnings per person range from \$1 250 to \$4 000 Examples are India Kenya Indonesia

2	Development indicators and wealth	
Indicator of Development	HIC	LIC
Death rate	LOW	HIGH
Birth rate	LOW	HIGH
GNI per capita	>\$12 696	<\$1045
Adult Literacy Rate	HIGH	LOW
Examples	UK / Japan / USA / South Korea	Ethiopia Bangladesh DRC / Nepal

3	The Clarke Fisher Model	
---	-------------------------	--

4	Reasons for a widening development gap	
	Human	Physical
	Low adult literacy rates	Extreme climate
	Low prices for cash crops	Natural disasters e.g., earthquakes, tropical storms.
	Civil war	Mountainous
	Industry owned by HICs	Landlocked
	Debt	Unreliable rainfall
	Historically ruled by another country	
	Lack of infrastructure	

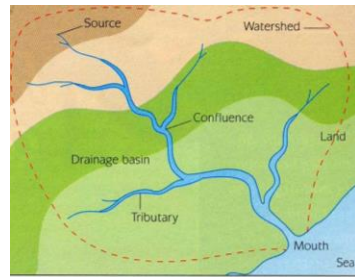
4	Types of Industry and jobs
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Industry sectors	Definition & Examples
Primary	<b>TAKE IT</b> - Using Earths natural resources Farming, fishing, forestry, mining.
Secondary	<b>MAKE IT</b> - Manufacturing (making products) Construction, factory work, utilities (gas)
Tertiary	<b>SELL/SERVICE IT</b> - Providing a service Retail, health care, hospitality, leisure, emergency services, education services.
Quaternary	<b>DESIGN/DEVELOP IT</b> – Researching in technology, designing buildings (architect), developing medicine.

# Geography Knowledge Organiser – How do rivers shape the land?

1	TIER THREE VOCABULARY
<b>Drainage Basin</b>	An area of land drained by a river and its tributaries (smaller channels which feed into a main channel)
<b>Abrasion</b>	Erosion caused by friction which occurs when a river carries sand, gravel or pebbles and uses them to wear away the landscape.
<b>Traction</b>	Large material rolled along the bed of the river (Bed Load)
<b>Deposition</b>	The laying down of material in the landscape. Deposition occurs when the force that was carrying the sediment is reduced.
<b>Upper Course</b>	The upland stage of a river with a steep gradient and erosion is the most important process.
<b>Gorge</b>	A steep sided, narrow valley often found below a waterfall, where the waterfall has retreated.
<b>Hydraulic action</b>	Erosion caused when water and air are forced into gaps in rock or soil.
<b>Lower Course</b>	The lowland section of the river, near the sea, where deposition is the most important process and the valley becomes wider and flatter.
<b>Meander</b>	A sweeping curve or bend in the river's course.
<b>Middle Course</b>	The section of the river between the uplands and the lowland, where transport of eroded material is the most important process and the river begins to cut sideways.
<b>Mouth</b>	The end point of a river (usually where it meets the sea).
<b>Oxbow lake</b>	The loop of an old meander that is no longer connected to the river channel by flowing water.
<b>Plunge pool</b>	The pool of water found at the base of a waterfall. Plunge pools are erosional features created by abrasion and hydraulic action of the plunging water.

## 2 The drainage basin and river valley cross sections



### Cross Section of a River valley

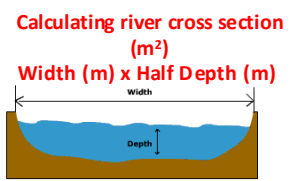
**Upper Valley:** Steep, V shaped, igneous rock, pastoral farming.



**Middle Valley:** Wider valley floor, lateral erosion, flatter land, urbanisation, transport links.

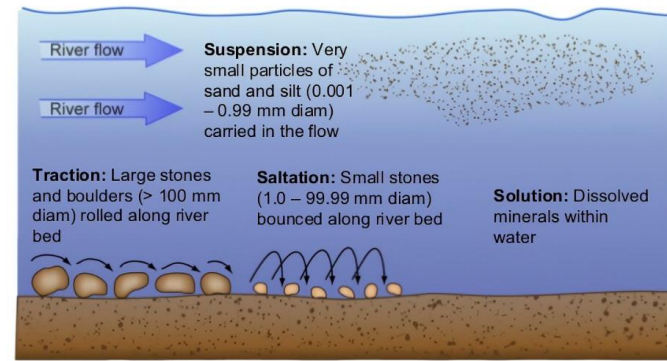


**Lower Valley:** Flat, flood plains, deposition, industry, trade.



## 3 Four types of transportation in a river

The movement of material as it is carried by a river through the landscape.



## 4 Four types of erosion in a river

<p><b>Hydraulic action:</b> The power of the water forces air into cracks on the riverbed, making the cracks bigger and loosening bits of soil and rock.</p>	<p><b>Abrasion:</b> Rocks are dragged along the riverbed, cutting into the ground below and making the channel deeper</p>
<p><b>Attrition:</b> In the river, rocks are thrown together. This makes them become smaller and smoother.</p>	<p><b>Solution:</b> Tiny particles in the river are dissolved in the water. Minerals and salt are an example of this.</p>

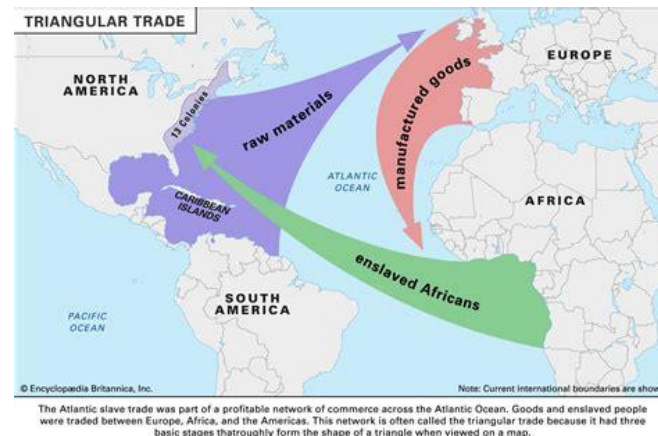
## 4 Three types of weathering

<p><b>Freeze-thaw</b></p>	<p>When it rains, water enters the cracks in rocks. On cold nights, the water freezes. This makes it expand by 9% and wedge the rock apart, breaking it.</p>
<p><b>Biological</b></p>	<p>Tree roots can get very thick and strong underground. They make their way into the cracks in a rock and can force it to break. Animals burrow and scratch and burrow into the rock.</p>
<p><b>Chemical</b></p>	<p>Chemical reactions can break down the bonds that hold rocks together. This can take place in all kinds of rocks and eventually causes them to fall apart.</p>

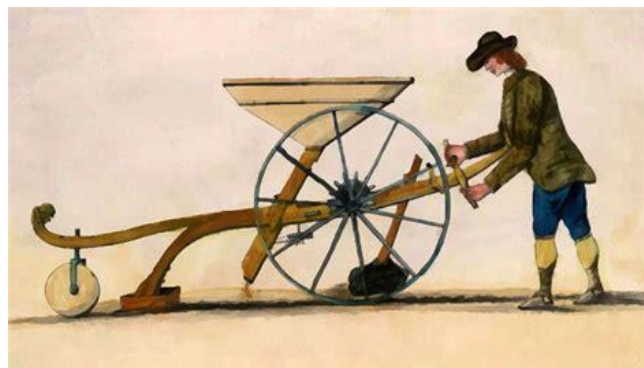
# History Knowledge Organiser

1 TIER THREE VOCABULARY	
<b>Agrarian Revolution</b>	Development in farming techniques for produce more food for the population
<b>Industrial Revolution</b>	Mechanisation of process to make goods on mass
<b>Mass production</b>	Large scale production of products – made by machines
<b>Mechanisation</b>	The introduction of machines to mass produce products
<b>Alliance systems</b>	A network of treaties and agreements between countries
<b>Expansion</b>	The political strategy of extending a state's territory by encroaching on that of other nations.
<b>Middle passage</b>	The second stage of the triangular slave trade
<b>Plantation</b>	A large farm that produces cotton and sugar and worked by slaves in the Americas
<b>Trevithick</b>	Cornish inventor of the steam engine
<b>Arms race</b>	A race between two or more countries to build weapons
<b>Trade</b>	The buying and selling of goods for profit
<b>Empire</b>	An empire is a political unit made up of several territories, military outposts, and peoples,
<b>Immigration</b>	The arrival of people into a country

## 2 The triangular slave trade

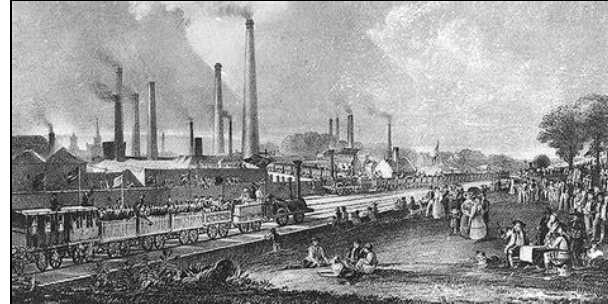


## 3 Agrarian revolution



Farmers were able to use mechanical tools to speed up farming jobs and grow more food.

## 4 Cromford and the first factories



The formation of Arkwright's spinning frame and the growth of factories from Cromford to the world. Machines made products cheaply but changed how we lived. From the country to the town, all lives changed.

## 4 LINKS & FURTHER READING

<https://www.bbc.co.uk/bitesize/topics/z2qj6sg> BBC bitesize: Transatlantic slave trade

<https://www.bbc.co.uk/bitesize/topics/z7kvf82> BBC Bitesize: the British Empire

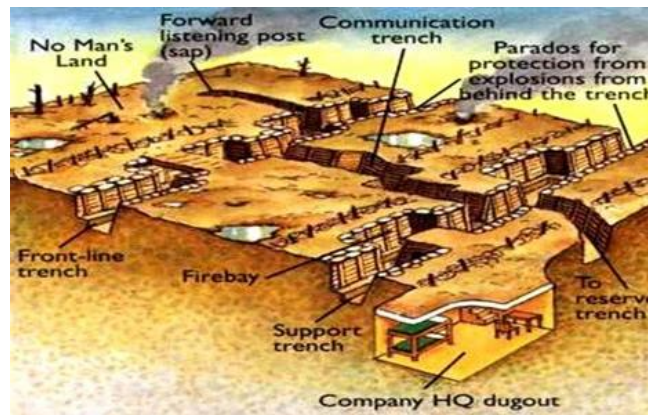
# History Knowledge Organiser

1	TIER THREE VOCABULARY
<b>Gavrilo Princip</b>	Assassin of Archduke Franz Ferdinand and Sophie
<b>Propaganda</b>	Information, especially of a biased or misleading nature, used to promote a political cause or point of view.
<b>Recruitment</b>	Getting people to join the armed forces
<b>Conscription</b>	Compulsory joining of the armed forces
<b>Enlisting</b>	The action of joining the armed forces
<b>Battle of the Somme</b>	Biggest first day allied defeat: 1 <sup>st</sup> July 1916
<b>Triple Entente</b>	Britain, France and Russian alliance at the start of World War One
<b>Triple Alliance</b>	Germany, Austria-Hungary and Italy – alliance at the start of World War One
<b>Sarajevo</b>	Bosnian capital: Archduke Franz Ferdinand assassinated there
<b>Trench system</b>	World War One system of trenches in the French landscape
<b>White feathers</b>	Given to men who refused to fight in World War One
<b>HMS Dreadnought</b>	Britain's battleship (emulated by Germany)
<b>Kaiser Wilhelm</b>	The German leader at the start of World War One

## 2 The Alliance System: World War One



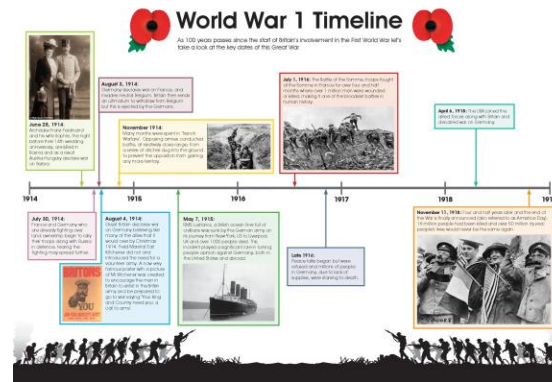
## 3 World War One trench system



## 4 LINKS & FURTHER READING

<https://www.bbc.co.uk/bitesize/topics/z4crd2p/articles/z9cvf82#zw8rbqt> Causes of World War One

## 4 Timeline



### The Road to World War I:

- Naval Arms Race:** Fueled by imperial ambitions and fears of encirclement, Britain and Germany engaged in a competition to build larger and more advanced fleets. This race contributed to tensions between the two powers and heightened the overall atmosphere of militarism in Europe.
- Kaiser Wilhelm II:** As the ruler of Germany from 1888 to 1918, Wilhelm II pursued an aggressive foreign policy aimed at asserting Germany's status as a global power. His bellicose rhetoric and expansionist ambitions antagonized other European nations, exacerbating existing rivalries.
- Alsace-Lorraine:** Following the Franco-Prussian War of 1870-1871, Alsace-Lorraine was annexed by the newly unified German Empire. This annexation fuelled French resentment and desire for revenge, creating a longstanding source of tension between France and Germany.
- Alliance System:** European powers formed intricate networks of alliances to safeguard their interests and maintain a balance of power. The Triple Entente (Britain, France, Russia) and the Triple Alliance (Germany, Austria-Hungary, Italy) were the principal alliances, but shifting alliances and secret agreements added complexity to the diplomatic landscape.

# Computing Knowledge Organiser

1	TIER THREE VOCABULARY
<b>Casting</b>	Converting a variable from one data type to another.
<b>Concatenating</b>	To put things together as a connected series
<b>Data type</b>	Each variable in a program must have a data type. The data type determines what type of value the variable will hold.
<b>For Loop</b>	to iterate steps a specific number of times
<b>IDE (Integrated Development Environment)</b>	A piece of software that are designed to make coding easier for developers
<b>Input</b>	Taking data from the user to use in computer programs
<b>Integer</b>	A data type used to store positive and negative whole numbers.
<b>Iteration</b>	where a set of instructions is executed repeatedly.
<b>Libraries</b>	A collection of prewritten code that programmers can use
<b>Logic Error</b>	Where a result is not logically correct, but is not reported as an error.
<b>Output</b>	Data that is displayed to the user
<b>Programming</b>	the process or activity of writing computer programs.
<b>Selection</b>	Instructions which can branch the code to one or more alternatives paths
<b>Sequence</b>	Instructions happening one after the other in order is sequence
<b>String</b>	A sequence of alphanumeric characters and or symbols. e.g. a word or sentence.
<b>Sub programs</b>	A block of code given a unique identifiable name within a program. Supports code reuse and good programming technique.
<b>Syntax</b>	The set of rules that determine the structure and format of a programming language
<b>Syntax error</b>	An error that goes against the syntax of a programming language.
<b>Variables</b>	A named location where the computer stores the data

2	Comparisons
<b>Python Comparisons</b>	
==	equal to
!=	Not equal to
<	Less than
<=	less than or equal to
>	greater than
>=	greater than or equal to

Small Basic Comparisons	
=	equal to
<>	Not equal to
<	Less than
<=	less than or equal to
>	greater than
>=	greater than or equal to

## 3 Basic Turtle instructions

turtle.forward	Go forward
turtle.backward	Go backward
turtle.right	Turn right
turtle.left	Turn left
turtle.penup()	Lifts the pen up so you can move the turtle without drawing
turtle.pendown()	Drops the pen back onto the screen so you can draw
turtle.fillcolor("Brown")	Changes the fill colour to brown(or other colour)
turtle.pencolor("Red")	Changes the pen colour to red (or other colour)
turtle.begin_fill()	Begins to fill the shape
turtle.end_fill()	End the filling sequence

4	Selection & Iteration
<b>Iteration</b>	
<pre>import turtle for i in range(4):     turtle.forward(100)     turtle.right(90)</pre>	Repeating of code
<b>Selection</b>	
<p>Selecting different pieces of code to run</p>	<pre>if colnum == 1:     pc = "Red" elif colnum == 2:     pc = "Blue"</pre>

5	Small basic instructions
Syntax/Keyword	Definition
TextWindow.WriteLine()	Displays text on the screen and moves to the next line.
TextWindow.Write()	Displays text on the screen without moving to the next line.
TextWindow.Read()	Reads a single character from the user input.
TextWindow.ReadLine()	Reads a line of text from the user input.
If...Then...Else	Conditional statement that executes code based on whether a condition is true or false.
Turtle.Move()	Moves the turtle forward by a specified distance.
Turtle.Turn()	Turns the turtle by a specified angle.
GraphicsWindow.DrawRectangle()	Draws a rectangle in the graphics window.

# REP Knowledge Organiser – Hinduism

## Lesson 1 - Brahman and the Trimurti

### How Hindus Understand Brahman:

The supreme God and ultimate reality, responsible for the creation of the universe. Brahman is present in all things at all times and is represented in different ways.

### Trimurti:

The three divine manifestations of Brahman and the principle gods of Hinduism.

#### Brahma

The Creator, responsible for the creation of life

#### Vishnu

The Preserver, responsible for maintaining existing life and helping it flourish

#### Shiva

The Destroyer, responsible for the death and destruction necessary for new life

## Lesson 2 - Avatars, Murti and Puja

### Avatars:

Manifestations of the Trimurti into different aspects. Each of the Trimurti has thousands of Avatars that exemplify particular aspects of that god. E.g. Ganesh, the Elephant headed god of prosperity and wisdom is an Avatar of Shiva.

### Murti:

Statues used to house the Avatars. Used in temples and at home as a focal point of Hindu Worship. Murti are treated with great reverence and respect.

### Puja:

Ritual offerings made to Murti statues where each offered item carries particular meaning and significance. E.g. Flowers represent life and beauty.

## Lesson 3 - Karma, Caste and Moksha

### Karma:

The Hindu belief in the cosmic recording of our good and bad actions in life.

Karma affects the state of your soul's rebirth.

### Caste:

The Hindu cultural class system which is divided into multiple levels. Your caste is determined by your karma and so there are very strict rules around marriage and employment.

### Moksha:

The end to the cycle of rebirth where a Hindu's soul becomes one with Brahman. This is the goal of all Hindus.

## Lesson 4 - Ashramas

The four stages of life as understood by Hindus, each contains certain roles and responsibilities.

### Brahmacharya: The Student

Young Hindus must learn skills and develop into good people.

### Grhastha: The Householder

Hindus work and start their own families.

### Vanaprastha: The Elder

Stepping back from running the household, offering support to their children.

### Sannyasa: Renunciation

Hindus leave their families for the remainder of their lives to focus on God.

## Lesson 5 - Mandir

### Key features of the Hindu temple:

**Murti** - statues of deities used in devotional worship.

**Shrines** - alcoves and altars where the Murtis are placed.

**Arti Lamps** - lit butter lamps used as part of ritual practices.

**Bells** - used to awaken the deities.

**Prayer Hall** - gathering space for Hindu worship.

**Vedas** - Sacred texts of Hinduism.

## Lesson 6 - Diwali

### The Hindu festival of Light

One of the principle religious festival in Hinduism that is also observed by other Eastern religions too.

### Purpose:

Diwali retells the mythical story of the hero Rama rescuing the princess Sita from the demon king Ravana.

### Practices:

Hindus decorate their homes with lights and colours, exchange new clothes, give sweet treats to neighbours and gather as families to pray at the temple. Firework displays are often used to celebrate Diwali.

## Lesson 7 - Yoga and Meditation

### Meditation:

The practice of mindfulness aimed at helping a Hindu gain a better understanding of God and creating a deeper connection with the universe.

### Yoga:

More than just stretching! Yoga practices use posture and endurance to encourage meditative states of mind.

### Westernisation:

The act of making things acceptable for Western audiences.

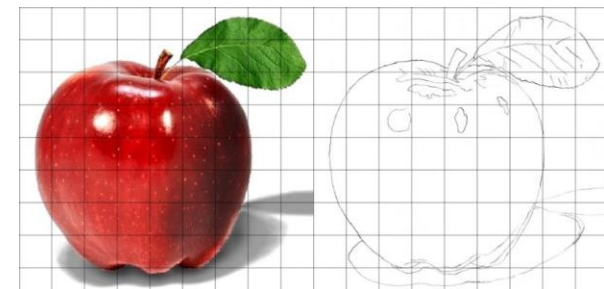
# Art Knowledge Organiser

1	TIER THREE VOCABULARY
Analyse	Analyse is to examine (something) methodically and in detail, typically in order to explain and interpret it.
Composition	Composition is the arrangement of elements within a work of art
Contemporary Art	The term contemporary art is loosely used to refer to art of the present day and of the relatively recent past, of an innovatory or avant-garde nature
Designs	Designs are plans to explain your ideas in a visual way.
Expression	Expression is something that expresses or communicates ideas or feelings.
Form	In relation to art the term form has two meanings: it can refer to the overall form taken by the work – its physical nature; or within a work of art it can refer to the element of shape among the various elements that make up a work.
Influence	To be inspired by the style of art styles and movements.
Low Relief	A low relief is a projecting image with a shallow overall depth
Mark making	Mark making describes the different lines, dots, marks, patterns and textures created in a drawing. It can apply to any drawing materials.

## 2 Skills and Techniques: Drawing and Monoprinting

**TONAL SCALES**

H F HB B 2B 3B 4B 5B 6B 7B 8B 9B  
 HARD ↑ SOFT SOFTER VERY SOFT  
 REGULAR

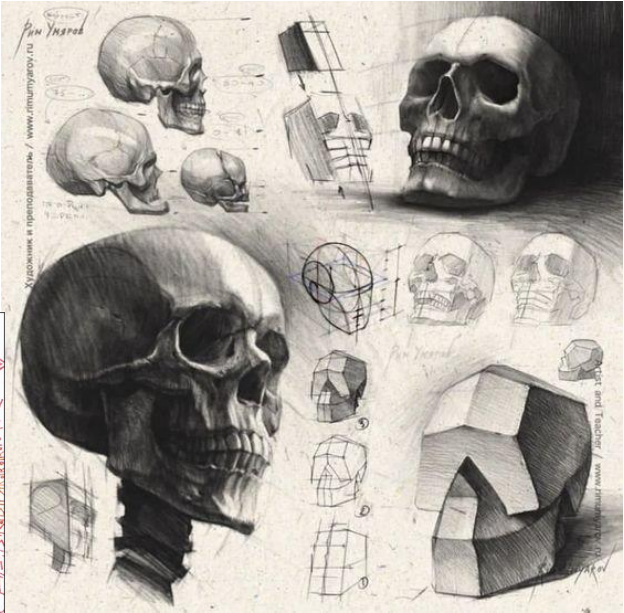
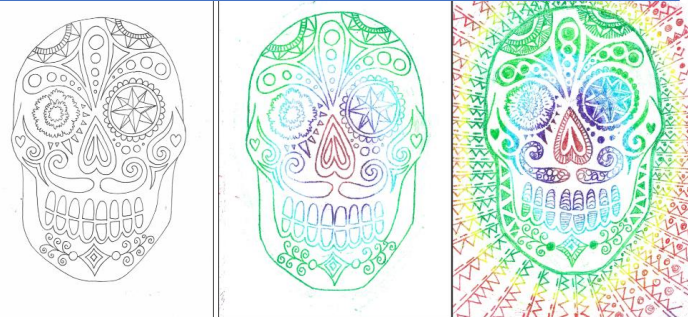


The use of a grid to help accuracy when observing.

Observation and development of patterns.

Development of tonal skills and observation of light direction

The process of using oil pastel to create a mono print – exploring colour and pattern.





# Art Knowledge Organiser

3

Artists and Artwork-

1 Continued	TIER THREE VOCABULARY
Tone	The lightness or darkness of something – this could be a shade, or how dark or light a colour appears.
Printmaking	A print is an impression made by any method involving transfer from one surface to another.
Papel Picado	Papel picado ("perforated paper," "pecked paper") is a decorative craft made by cutting elaborate designs into sheets of tissue paper.
Pattern	A pattern is a design in which lines, shapes, forms or colours are repeated. The part that is repeated is called a motif. Patterns can be regular or irregular.
Proportion	Proportion is the relationship of one part of a whole to other parts.
Record	If you record something, you keep an account of it through drawing or photography so that it can be referred to later.
Medium	Medium can refer to both to the type of art (e.g. painting, sculpture, printmaking), as well as the materials an artwork is made from.
Pen	Pen is used for creating fine linear drawings and expressive textural drawings.
Texture -	Texture means how something feels. There are two types of texture: actual texture and visual texture.
Refine	Refine is to improve your artwork.



Papel Picado- paper cutting



Parades and costume



Decoration and rituals

## 2 Extension tasks to develop skills & ideas



Watch one of the animations- Book of life or Coco looking specifically at the use of pattern and design.



Draw using a grid but distort the gride to challenge yourself further.

## 4 LINKS & FURTHER READING



National Geographic Kids- Mexican Day of the Dead



What are patterns? Info and video BBC Bitesize

# Music Knowledge Organiser

## Computer and Video Game Music



### Early Computer and Video Game Music



Early video game music consisted primarily of **SOUND EFFECTS** (an artificially created or enhanced sound used to emphasize certain actions within computer and video games), **CHIPTUNES** or **8-BIT MUSIC** (a style of electronic music which used simple melodies made for programmable sound generator (PSG) sound chips in

vintage computers, consoles and arcade machines) and early sound **SYNTHESISER** technology (an electronic musical instrument that generates audio signals that may be converted to sound). **SAMPLING** (the technique of digitally encoding music or sound and reusing it as part of a composition or recording) began in the 1980's allowing sound to be played during the game, making it more realistic and less "synthetic-sounding".



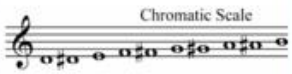
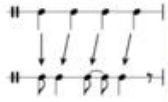
### How Computer and Video Game Music is used within a Game



Music within a computer or video game is often used for **CUES** (knowing when a significant event was about to occur).

Video game music is often heard over a game's title screen (called the **GROUND THEME**), options menu and bonus content as well as during the entire gameplay. Music can be used to **INCREASE TENSION AND SUSPENSE** e.g. during battles and chases, when the player must make a decision within the game (a **DECISION MOTIF**) and can change, depending on a player's actions or situation e.g. indicating missing actions or "pick-ups".

### Musical Features of Computer and Video Game Music

<u>JUMPING BASS LINE</u>	<u>STACCATO ARTICULATION</u>	<u>CHROMATIC MOVEMENT</u>	<u>SYNCOPIATION</u>
Where the bass line often moves by <b>LEAP (DISJUNCT MOVEMENT)</b> leaving 'gaps' between notes	Performing each note sharply and detached from the others. Shown by a dot.	Melodies and bass lines that ascend or descend by semitones.	Accenting the weaker beats of the bar to give an "offbeat" "jumpy feel to the music."
			

### How Computer and Video Game Music is Produced



Fully-orchestrated **SOUNDTRACKS** (video game music scores) are now popular – technology is used in their creation but less in their performance. The composer uses **MUSIC TECHNOLOGY** to create the score, it is then played by an **ORCHESTRA** and then digitally converted and integrated into the game. Video game **SOUNDTRACKS** have become popular and are now commercially sold and performed in concert with

some radio stations featuring entire shows dedicated to video game music.

### Character Themes in Computer and Video Game Music



Characters within a video game can also have their own **CHARACTER THEMES** or **CHARACTER MOTIFS** – like **LEITMOTIFS** within Film Music. These can be manipulated, altered and changed – adapting the elements of music – **ORCHESTRATION** (the act of arranging a piece of music for an orchestra and assigning parts to the different musical instruments), **TIMBRE, SONORITY, TEXTURE, PITCH, TEMPO, DYNAMICS** – depending on the character's situation or different places they travel to within the game.

### Famous Computer and Video Game Music Composers and their Soundtracks



**Koji Kondo**  
Super Mario Bros. (1985)  
The Legend of Zelda (1986)



**Michael Giacchino**  
The Lost World: Jurassic Park (1997)  
Medal of Honour (1999)  
Call of Duty (2003)



**Mieko Ishikawa**  
Dragon Slayer (1993)



**Martin O'Donnell and Michael Salvatori**  
Halo (2002)



**Daniel Rosenfield**  
Minecraft (2011)



**Rom Di Prisco**  
Fortnite (2017)

# Music Knowledge Organiser – Heart of The Blues

1	TIER THREE VOCABULARY
<b>Slave Triangle</b>	The three-legged route that made up the Atlantic slave trade
<b>Slave Trade</b>	The capturing, selling, and buying of enslaved persons
<b>12 Bar Blues</b>	A chord progression that lasts for 12 bars
<b>Structure</b>	The order the different sections of a song or piece of music are played in
<b>Chord</b>	Two or more single pitches heard simultaneously to create the harmony
<b>Roman Numerals</b>	Musicians use Roman numerals to identify chords within the context of key signatures
<b>Improvisation</b>	To create/make up music on the spot
<b>Fill</b>	A short musical passage to play during a break between the phrases of a melody.
<b>Blues Scale</b>	A musical scale having intervals between major and minor and used especially in jazz
<b>Sharp #</b>	The sharp symbol, #, indicates that the <u>note</u> is played a <u>semitone</u> higher
<b>Flat b</b>	The flat symbol is b indicates that the <u>note</u> is played a <u>semitone</u> lower
<b>Walking Bass Line</b>	A bassline that drives the rhythmic motion forward, stepwise and one note per beat

**2**

- Many blues musicians **improvise** their parts. **Improvisation** means to make something up as you go along.
- Originally, slaves made music with whatever instruments they could find or make.
- Instruments associated with The Blues are; guitar, double bass, piano, trumpet, harmonica, drum kit.

**4**

I	I	I	I
IV	IV	I	I
V	IV	I	I

**3**



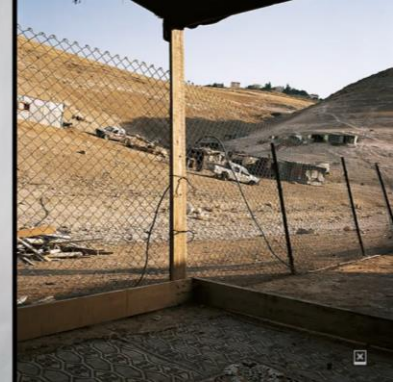
**4**

- Blues is folk music of the African-Americans.
- It originated from slaves who worked on the plantations of southern USA and who sang about their feelings and problems.
- Rhythms** and **melodies** were brought by slaves from Africa on slave ships.
- Many blues songs are about the struggle of slavery.

# Drama Knowledge Organiser

Watch this clip of where a range of children sleep around the world...

[Click here to watch the video](#)



Where would you most like to sleep? Where would you least like to sleep?

# Drama Knowledge Organiser

## An example of the research you might do

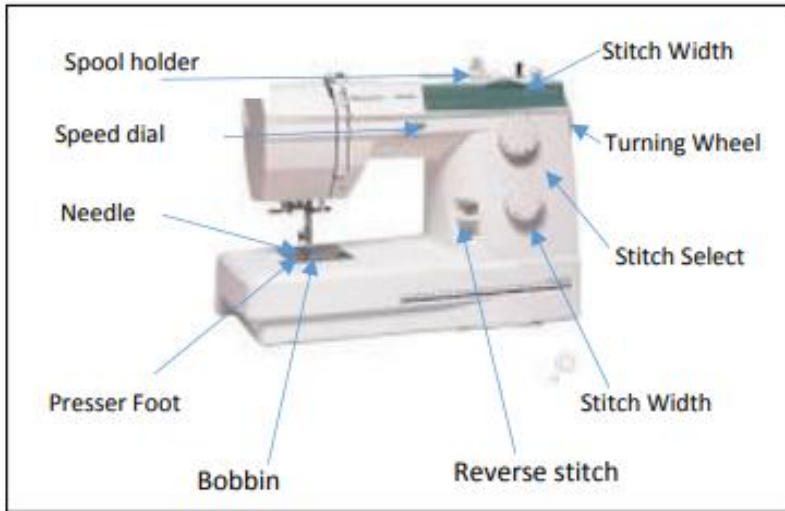
### Malala Yousafzai

- As a young girl, Malala Yousafzai lived in Pakistan. Welcoming a baby girl is not always cause for celebration in Pakistan — but her father, Ziauddin Yousafzai, was determined to give Malala every opportunity a boy would have. Her father was a teacher and ran a girls' school in the village.
- Malala loved school. But everything changed when the Taliban took control of her town in Swat Valley. The extremists banned many things — like owning a television and playing music — and enforced harsh punishments for those who defied their orders; they said girls could no longer go to school.
- In January 2008 when Malala was just 11 years old, she said goodbye to her classmates, not knowing when — if ever — she would see them again. Because of this, she spoke out publicly on behalf of girls and their right to learn. This made Malala a target.
- In October 2012, on her way home from school, a masked gunman boarded her school bus and asked, “Who is Malala?” He shot her on the left side of her head. Malala woke up 10 days later in a hospital in Birmingham, England.
- After months of surgeries and rehabilitation, she joined her family in their new home in the U.K. It was then she knew she had a choice: live a quiet life or make the most of this new life she had been given. She was determined to continue her fight until every girl could go to school.
- With her father, who has always been her inspiration, she established the Malala Fund, a charity dedicated to giving every girl an opportunity to achieve a future she chooses. In recognition of their work, Malala received the Nobel Peace Prize in December 2014 and became the youngest-ever Nobel laureate.
- **Quotes:**
  - *“The extremists were, and they are, afraid of books and pens. The power of education frightens them. They are afraid of women... Let us pick up our books and pens. They are our most powerful weapons.”*
  - *“My goal is to get peace and my goal is to see the education of every child.”*

# Drama Knowledge Organiser

DRAMA KEY WORDS		ADJECTIVES		
<b>VOCAL SKILLS</b>		<ul style="list-style-type: none"> <li>• abrupt</li> <li>• angry</li> <li>• anxious</li> <li>• assured</li> <li>• cold</li> <li>• controlled</li> <li>• deep</li> </ul>	<ul style="list-style-type: none"> <li>• enthusiastic</li> <li>• firm</li> <li>• forceful</li> <li>• gentle</li> <li>• harsh</li> <li>• hesitant</li> <li>• loud</li> </ul>	<ul style="list-style-type: none"> <li>• sarcastic</li> <li>• sly</li> <li>• soft</li> <li>• stutter</li> <li>• timid</li> <li>• trusting</li> </ul>
Tone Pitch Pace Intonation Silence	Pause Projection Inflection Accent Emphasis			
<b>PHYSICAL SKILLS</b>		<ul style="list-style-type: none"> <li>• aggressive</li> <li>• defiant</li> <li>• dismissive</li> <li>• distraught</li> <li>• distressed</li> <li>• eager</li> </ul>	<ul style="list-style-type: none"> <li>• eye contact: direct, focused, avoiding, accusing</li> <li>• fearful</li> <li>• gentle</li> <li>• rapid</li> </ul>	<ul style="list-style-type: none"> <li>• relaxed</li> <li>• slow</li> <li>• sluggish</li> <li>• smooth</li> <li>• smug</li> <li>• strong</li> <li>• thoughtful</li> </ul>
Body Language Facial Expressions Gestures Stillness Eye-Contact	Posture Movement Gait Stage Presence Interaction			
<b>SPACE PERFORMANCE CONVENTIONS</b>		<ul style="list-style-type: none"> <li>• anger</li> <li>• anti-climax</li> <li>• appreciation</li> <li>• believable</li> <li>• delight</li> <li>• development</li> <li>• disappointment</li> </ul>	<ul style="list-style-type: none"> <li>• emotional response</li> <li>• empathy</li> <li>• emphasis</li> <li>• engagement</li> <li>• feeling</li> <li>• focal point</li> <li>• horror</li> </ul>	<ul style="list-style-type: none"> <li>• interest</li> <li>• intrigue</li> <li>• irritation</li> <li>• light-relief</li> <li>• realistic</li> <li>• sympathy</li> <li>• understanding</li> </ul>
Levels Proxemics Stage Left/Right Centre Stage Transition Blocking Cannon Duologue	Freeze- Frame Narration Split Scene Thought-Track Mime Improvisation Physical Theatre Unison Monologue	<b>Other Useful Vocabulary:</b> Hot-seating Character Motivation Warm-Up Role-on-the-Wall Genre	<b>Other Useful Vocabulary:</b> Rehearsal Sound Effects Naturalistic Abstract Minimalistic	

# DT Knowledge Organiser – Textiles Dumpy Doorsteps



## Key Words and Definitions:

<b>Pins</b>	a piece of metal with a point at one end for holding fabric together	<b>Stitch</b>	A thread that passes through fabric	<b>Tie dye</b>	Resist method of dyeing- created by tying string/ elastic bands around areas of the fabric.
<b>Scissors/shears</b>	Used for cutting fabric	<b>Sew/Sewing</b>	Done by machine or hand to join fabric or add decoration	<b>Applique</b>	Applying 1 fabric to another to create a design
<b>Sewing Machine</b>	A machine used to produce stitches in fabric	<b>Tacking</b>	Temporary stitching to hold fabric in place	<b>Reverse Applique</b>	cutting away a layer of fabric to reveal a shape appliquéd underneath
<b>Needle</b>	a piece of metal with a point at one end and a hole or eye for thread at the other, used in sewing	<b>Hem</b>	The finishing off at the edge of fabric	<b>Embroidery</b>	Decorative stitching by hand or machine
<b>Thread</b>	a strand of cotton, used in sewing or weaving	<b>Seam</b>	Joining two fabrics together	<b>Design</b>	A drawing to show the look of your idea
<b>Tailors chalk</b>	Chalk used to mark fabric	<b>Seam Allowance</b>	Distance between the edge of fabric and the stitching line (1.5 cm)	<b>Annotation</b>	Labelling to explain your design
<b>Fabric</b>	Cloth produced by weaving or knitting textile fibres.	<b>Pattern</b>	A template used to cut out the fabric	<b>Evaluation</b>	Making a judgement about your product
<b>Unpicker</b>	A small piece of equipment with a sharp pointy end used to unpick stitches	<b>Components</b>	Buttons, zips, sequins	<b>Specification</b>	A list of requirements that a product must meet

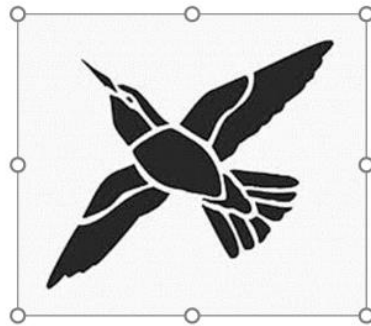


# DT Knowledge Organiser – Textiles



Key vocabulary	
Tie dye	Tie-dye is a colorful pattern used on clothing. It is made by tying a piece of clothing into a tight bundle and then dyeing it with various colours made from liquids.
Spiral technique	Swirling mixture of colours on a material.
Bullseye technique	Each banded section can be a different colour.
Horizontal stripes technique	The material is folded vertically and then tied off into sections. Each banded section is like a stripe.
Needle	A piece of metal with a point at one end and a hole on the other to put through the thread.
Thread	A fine piece of material used to put through a needle, to use when sewing and holding fabric parts together.

## Colouring fabrics



## Construction of a fabric container

- Drawstring bag



## Wrap



## Gadget case










# DT Knowledge Organiser – Pewter Casting

## The work of others

Researching designers and products provides a greater understanding of the materials and processes they used. It can also help inspire new ideas, which is what we are going to do in this project.

Designer	Facts about them	Examples of their work
Kusheda Mensah	A designer of furniture and lifestyle pieces, Mensah's work explores how to put fun into a functional environment, creating curvy and tactile pieces.	
William Morris	Significant contributor to the British Arts and Crafts Movement, Morris is renowned for his block printed fabrics and wallpapers. His designs were influenced by nature with patterns of intertwined flowers, leaves and birds.	
Zaha Hadid	Once described as the 'Queen of the curve' Hadid was inspired by undulating and sinuous shapes found in nature to create stunning architecture.	
Louis Comfort Tiffany	American decorative arts designer, renowned for his highly decorated, stained-glass lamp designs which became an icon of the Art Nouveau movement.	
Charles Rennie Mackintosh	Architect and designer who played an important role in the Art Nouveau movement. He was commissioned to design a new building for the Glasgow School of Art which became his masterpiece.	

## What is casting?



Casting involves heating a metal (in this case pewter) to a temperature of Between 170 and 230°C, until it becomes a liquid. It is then poured using a ladle into an MDF mould which has been laser cut. The molten pewter fills the negative shape within the mould.



On the left is an image of the pewter being poured, on the right an image of the casting once it has cooled. Once cooled, the casting is removed from the mould. Often the mould can be re-used, meaning that identical products can be made.

## Tier 3 vocabulary

Key Words	Definition
Tactile	Our sense of touch
Arts & Crafts Movement	A trend in the decorative and fine arts between about 1880 and 1920.
Art Nouveau	An international style of art, architecture and the decorative arts popular between 1890 and 1910.
Icon	A person or thing widely admired especially for having great influence or significance.
Undulating	To move in a wave-like pattern.
Pewter	A silver-colored metal that's been used for decorative objects and plates, cups, and bowls since ancient times.

# DT Knowledge Organiser – Food and nutrition

1	TIER THREE VOCABULARY
Seasonality	When foods grow naturally.
Food Provenance	Where our food comes from
Food miles	How far the food has travelled to get to us
Food waste	To use food to prevent waste.
Cornish foods	Traditional foods and the Cornish culture
Annotation	To label and explain an idea or drawing
Nutrients	Basic nutrients and their function in the body.

2	Skills
Skills	
Reduction	Thickening a sauce by allowing it to simmer. (Bolognese)
Rubbing in	Mixing fat into flour to form 'crumbs'
Stewing	To cook fruit in a small amount of liquid
Scones	Mixing, shaping and baking
Bread making	Use of yeast, kneading, shaping, proving and baking

**LOVE  
FOOD  
hate waste**

