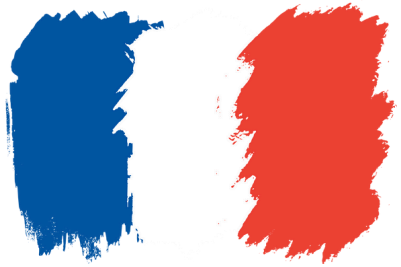
YEAR 7

Knowledge

ORGANISER

2025-26

SEMESTER 2



WHO CAN I GET *support* FROM?

You can also speak to your check-in tutor, all your subject teachers, your PD teacher and all your pastoral staff: Miss Leonard, Miss Howe, Mr Sykes. If you are unable to speak to any member of staff, please contact: **studentsupport@bentonpark.mlt.co.uk**

My Year 7 Leader
Miss Downing

KEY STAGE LEADER
Mrs Collins

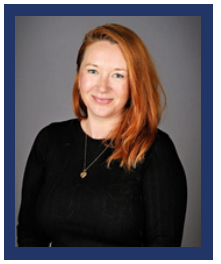
MY SLT LINK
Mr Coltman

OTHER YEAR LEADERS

Year 8 – Miss Bannister

Year 9 – Miss Charlton

Year 10 - Mrs Sykes



Designated Safeguarding Lead / Assistant Headteacher
Mrs Howard

KS3 Safeguarding Officer
Miss Fox

SENCo / Assistant Headteacher
Miss Tyldsley

Key Stage 4 Leader
Miss Dobby

HOME-SCHOOL *Communication* LOG

DATE	NOTE

MY *Attendance* RECORD

ATTENDANCE %

Year so far:

Attendance Targets:

DATE	WEEKLY %	YEAR TO DATE %
Week 1		
Week 2		
Week 3		
Week 4		
Week 5		
Week 6		
Week 7		
Week 8		
Week 9		
Week 10		
Week 11		
Week 12		
Week 13		
Week 14		
Week 15		
Week 16		
Week 17		
Week 18		
Week 19		

HOME *Learning*

In addition to your online home learning with SPARX and EDUCAKE, some subjects will give you homework based on your Knowledge Organiser. The next page gives you further information...

HOW DOES HOME LEARNING WORK?

The main way you will complete homework will be via 2 online platforms: SPARX and EDUCAKE.
These online platforms will quiz you on your learning in lesson. It's a great way to test yourself and developing your memory retrieval and retention skills. As well as home learning quizzes, these platforms allow you to prepare for assessments and revise key content.

HOW DO I ACCESS THESE?

PLATFORM	WEB ADDRESS	SUBJECTS
SPARX	www.sparx.com	Maths and Science
EDUCAKE	www.educake.co.uk	English, Geography, History, Languages, and Computer Science

HOMEWORK PLAN

SUBJECT	FREQUENCY
English / Science / Maths	Weekly
Geography / History / Languages / Computer Science	Fortnightly

IN THE LIBRARY YOU CAN:

- Access books and resources
- Use the internet to complete any online home learning
- See staff who can give you any advice and guidance you may need
- Study independently in a quiet place

HOME *Learning*

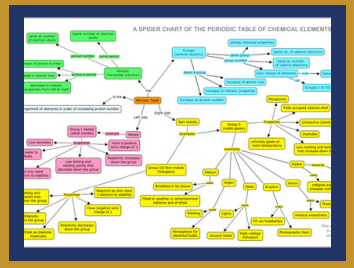
HOME LEARNING AND REVISION PRACTISE

For subjects that do not use an online learning platform for home learning, you will receive homework that is based on your Knowledge Organiser.

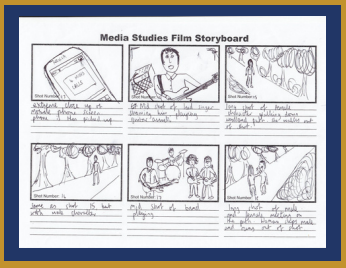
You complete this homework on paper that you hand in to your subject teachers.
The purpose of this is to help you know and remember more content over time, by developing your memory recall and supporting your revision practise.

ADDITIONAL HOME LEARNING AND REVISION PRACTISE METHODS:

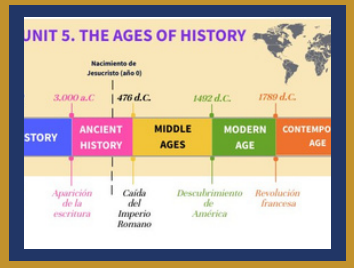
- Using the Word Revolution words – checking spellings are 100% accurate and that you know the definitions
- Producing a mind map or a spider diagram with the key learning content
- Making a storyboard of key events or draw out key images
- Making a timeline of events
- Copying out a diagram and practising labelling it accurately
- Practising writing out some sentences or phrases in the language you are studying
- Retrieving and finding information from what you have read



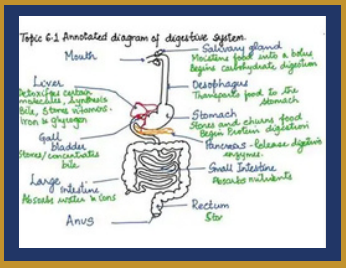
MIND MAP/SPIDER DIAGRAM



STORYBOARD



TIMELINE



DIAGRAM

Organisation AND Planning SHEET

DATE SET	TASK	DUE DATE	TICK WHEN COMPLETE

DATE SET	TASK	DUE DATE	TICK WHEN COMPLETE

STUDENT *Loyalty* CARD

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40

COLLECT A STAMP EACH TIME YOU ATTEND A LUNCH AND AFTER SCHOOL EXTRA-CURRICULAR ACTIVITY. WHEN YOU'VE REACHED 10, 20, 30 AND 40 STAMPS YOU WILL RECEIVE A REWARD!

SUBJECT: ENGLISH **YEAR: 7**

TOPIC: Crime and Punishment **SEMESTER: 2**

WORD REVOLUTION	
Tone	The writer's attitude toward the subject; can shift from calm to
Bias	A one-sided viewpoint that influences the way events are
Reporting	The act of narrating or telling events, sometimes like a journalist
Deduction	Logical reasoning used to solve a mystery
Perspective	The point of view from which the story is told
Foreboding	A sense of something bad about to happen
Significance	The importance of a word, image, or event in shaping meaning
Unconventional	Going against norms or expectations
Impartiality	Being neutral and fair; the opposite of bias
Sexism	Prejudice based on gender, often explored or challenged in literature
Stereotypes	Oversimplified ideas about groups of people
Subversion	Undermining or overturning expectations or norms
Characterisation	How a character is presented and developed
Implies	Suggests something without saying it directly

What will I study in this topic?	You will be studying a range of texts within the Crime and Punishment and Mystery genres. This will include *Sherlock Holmes* by Arthur Conan Doyle and *Tales from the Unexpected* by Roald Dahl.
What will I be able to do by the end of this topic?	Understand that texts are structured for effect, using techniques to create mystery and tension. Consider and be able to explain an opinion of a text. Understand that context is important in our understanding of a text and therefore how we comment on it.

Understanding Society and Attitudes

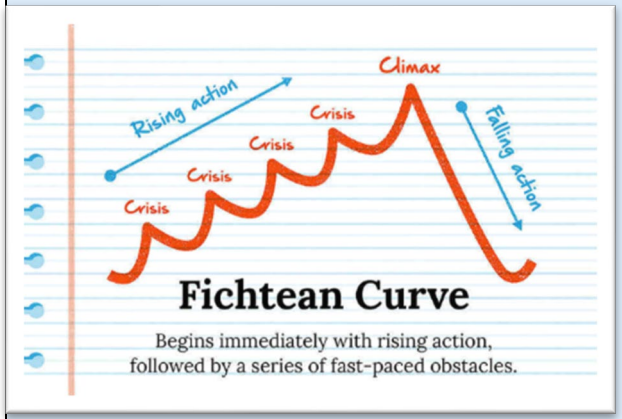
In this unit of work, we will explore Gender Roles and sexism within the 1950's and explore how this is presented within the story of "The Lamb to the Slaughter" written by Roald Dahl. This will lead into assessing how stereotypes are presented in stories and how this may shape the narrative. We will also explore **impartiality** and **subversion**.

People and Relationships

This unit of work will allow you to explore marital roles as well as male friendships through our study of *Sherlock Holmes*. We will also explore how the **femme fatale** or dangerous females are presented in literary texts and why powerful female voices are important in society.

Form, Structure and Narrative

During this unit of work, we will look at the structure of a mystery or detective novel. We will be exploring how **perspective** can adjust the course of a story, and therefore whether or not a narrative voice can be trusted.
We will study how foreshadowing and suspense are used in detective novels to engage readers, and therefore be able to identify turning points in narrative.
The picture to the right shows an image of a narrative structure called the **Fichtean Curve** that is used in detective novels.



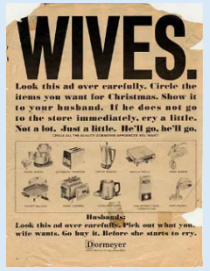
SUBJECT: ENGLISH **YEAR: 7**

TOPIC: Crime and Punishment **SEMESTER: 2**

Key Questions:	How does literature explore the gender stereotypes of this time period? What are the conventions of a crime or detective story? How do writers use language to create tension, mystery and suspense?
Curriculum Connections:	This unit of work will allow you to begin to explore stereotypes and moral responsibility within literature which you will come back to in more detail in Year 10 with your study of An Inspector Calls. The introduction of **subversion** is also an important concept at this point to prepare you for your study of heroes and villains and later Gender and Identity in Y8.

Extract from "A good housewife guide" 1955: Example of outdated stereotyping to link to Roald Dahl!

"Don't complain if he is late for dinner, even if he stays out all night." "During the cooler months of the year, you should prepare and light a fire for your husband" "Don't ask him questions about his actions…remember, he is the master of the house…you have no right to question him."	"Listen to him. You may have a dozen important things to tell him, but the moment of his arrival is not the time. Let him talk first – remember, his topics of conversation are more important than yours."



Writing a Newspaper Article

Title: (Write a clear heading about the topic)
Introduction: State the purpose of the report and outline what it will cover.
Main Sections with Subheadings: Background / What Happened, Findings / Observations, Any Data or Evidence.
Conclusion: Summarise key points and add recommendations if needed.

Style Tips: Use formal language, write in third person, organise information clearly with paragraphs or bullet points.

SUBJECT: ENGLISH — YEAR: 7
TOPIC: Crime and Punishment — SEMESTER: 2

How will I be assessed?	At the end of the unit of work, you will produce a report based on the knowledge you have gathered, this will likely be a report of "The Adventures of the Speckled Band" Sherlock Holmes story.

Conventions (Tropes) of a mystery story

A Central Mystery or Crime
The plot revolves around an unexplained event, often a crime such as a murder or theft, that needs to be solved.
Suspense and Tension
The story keeps readers guessing through clues, red herrings, and unexpected twists, creating a sense of uncertainty.
Detective or Investigator Figure
There is usually a protagonist—professional or amateur—who works to uncover the truth using logic, observation, and deduction.
Clues and Evidence
The narrative includes hints and details that readers can piece together, often mixed with misleading information to maintain intrigue.

Language methods

First-person narration: Often used by the detective or protagonist to give a personal view of the investigation (e.g., hard-boiled detective stories)
Suspenseful and tense tone: Builds anticipation and uncertainty.
Descriptive settings: Gritty urban streets, dimly lit rooms, or isolated mansions
Interrogative dialogue: Questions and evasive answers during interviews
Symbolism: Objects like weapons, clocks, or shadows symbolizing danger or time running out
Foreshadowing: Hints about future events or the culprit

Understanding impartiality

Definition of impartiality - fair treatment of others, without bias.

Bias is when a story is only presented from **one viewpoint** without considering the other side of the story. A **balanced or impartial** story would include various viewpoints and angles, offering the complete picture so you can make your own judgements.
Whether it's a positive or negative bias, reports can often miss out important details, which makes them unreliable.

Further Reading and Other Resources

The Adventures of Sherlock Holmes series by Arthur Conan Doyle
Lockwood & Co series by Jonathan Stroud
Skulduggery Pleasant by Derek Landy
The Midnight Game by Cynthia Murphy
Murder Most Unladylike by Robin Stevens
Enola Holmes by Nancy Springer
Scarlet and Ivy by Sophie Cleverly
A Series of Unfortunate Events by Lemony Snicket
The London Eye Mystery by Siobhan Dowds

Recall Questions

1. What type of narrative is used for a detective novel?
2. Why is foreshadowing important in a detective novel?
3. What is definition of impartiality?
4. Name two conventions of a mystery story.
5. What gender stereotypes were prevalent in 1950's literature?
6. What is subversion?
7. What is the Fichtean Curve?
8. What is a femme fatale?

SUBJECT: ENGLISH **YEAR: 7**

TOPIC: The Tempest **SEMESTER: 2**

WORD REVOLUTION	
Protagonist	The main character
Antagonist	An opposing force or character
Soliloquy	A speech where a character speaks their thoughts aloud
Aside	A brief remark to the audience, unheard by other characters
Monologue	A long speech by one character
Dialogue	Conversation between characters
Stage directions	Instructions in the script (e.g., "Enter Ariel, invisible")
Dramatic irony	When the audience knows more than the characters
Foreshadowing	Hints of what is to come
Symbolism	Objects or events representing deeper
Allegory	A story with a deeper political, moral, or spiritual meaning
Motif	A recurring theme, image, or idea
Colonialism	Explored through Prospero's control of the island.
Connotation	An idea or feeling that a word invokes in a person in addition to its literal meaning.

What will I study in this topic?	This will be your first study of a Shakespeare play at Benton Park School. You will explore how life during this time period influenced Shakespeare. You will explore the language of Shakespeare and start to analyse what the language means.
What will I be able to do by the end of this topic?	By the end of this topic, you will be able to recall the key moments of the play, the characters name and the purpose they serve within the story. You will be able to comment on the language used by the characters and the intentions and message of Shakespeare.

Understanding Society and Attitudes

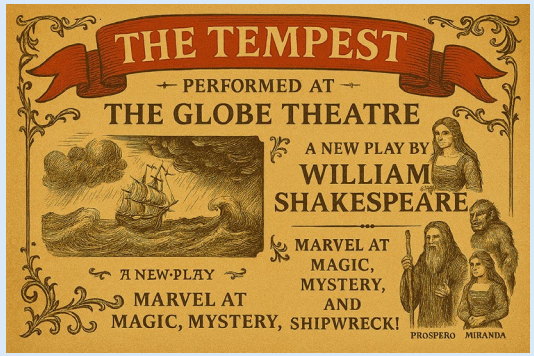
During this unit of work we will explore **slavery and colonialism** as well as life during the 1600s **Jacobean** era which is the time period in which *The Tempest* was written. We will look at how oppression was used during this time period to enslave people and therefore why freedom is such a prominent theme in the play. Plays during this time period were performed at the Globe, so we will explore this as well.

Power and relationships

During our study of *The Tempest* we will be explore Father/daughter relationships through the study of Prospero and Miranda. Through the study of Prospero and Caliban we will analyse the power struggle between the two characters and look at how Caliban reacts to his adversity. This will also allow us to reflect on the hierarchy and power struggle between them as well.

Form, Structure and Language

Studying a play comes with its own challenges as it's not written like a story. We will explore how stage directions are used to create meaning and direct actors and how monologues and soliloquies are used to explore the innermost thoughts of a character on stage. We will also explore how Shakespeare creates humour within the play through dialogue and **physical comedy**.



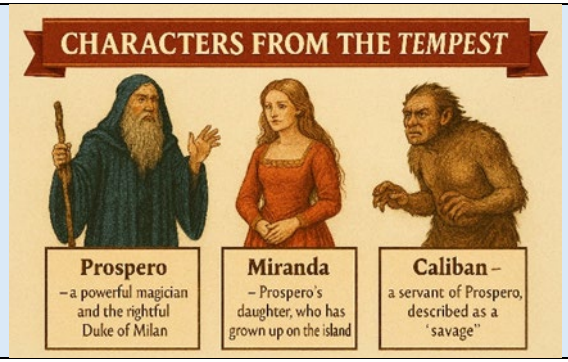
SUBJECT: English **YEAR: 7**

TOPIC: The Tempest **SEMESTER: 2**

Key Questions:	What is colonialism, and how is it reflected in *The Tempest*? How does Shakespeare present Prospero (the protagonist) in the opening of *The Tempest*? How is Caliban treated in the start of Act 2? Is Caliban justified in wanting to kill Prospero? What does Prospero's treatment of Ariel reveal?
Curriculum Connections:	At the beginning of Year 7 during our study of *A Christmas Carol* we explored the themes of **morality** and **class structures**, which are also prevalent in *The Tempest*. Through our introductory unit "Why We Tell Stories", we also looked at the importance of storytelling and how stories can reflect the life of people during that time period. *The Tempest* is a reflection of how power and class influenced the lives of everyone in society and this was also true during our exploration of biographies.

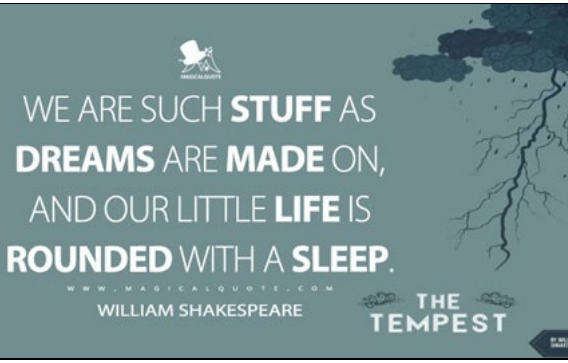
Key characters

- ☐ **Prospero** – The rightful Duke of Milan, now a powerful magician living on an isolated island. He uses magic to control events and seek justice.
- ☐ **Miranda** – Prospero's innocent and compassionate daughter, who has grown up on the island.
- ☐ **Ariel** – A spirit servant bound to Prospero, who longs for freedom and helps carry out his magical commands.
- ☐ **Caliban** – The island's original inhabitant, portrayed as brutish and resentful of Prospero's control.
- ☐ **Sebastian** – Alonso's scheming brother, who plots murder during the play.
- ☐ **Gonzalo** – A kind and loyal counselor who aided Prospero during his exile.
- ☐ **Stephano and Trinculo** – Comic relief characters; a drunken butler and jester who plot foolish schemes with Caliban.



Key quotes

"We are such stuff as dreams are made on, and our little life is rounded with a sleep."
"Hell is empty and all the devils are here."
"This thing of darkness I acknowledge mine."
"Be not afeard; the isle is full of noises, sounds, and sweet airs…"
"You taught me language, and my profit on't is, I know how to curse."
"I'll drown my book."
"This thing of darkness, I acknowledge mine"
"Thought is free"



SUBJECT: English **YEAR:** 7

TOPIC: The Tempest **SEMESTER:** 2

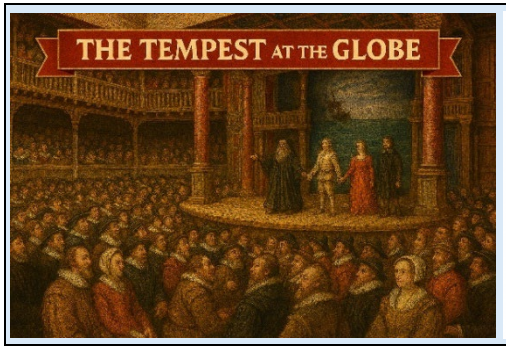
Slavery in the 1600s

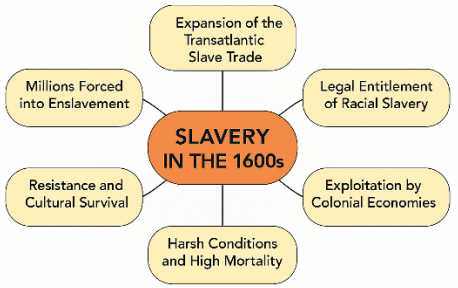
Slavery in the 1600s was a brutal and expanding institution that shaped global economies and societies. During this century, European powers—particularly Spain, Portugal, England, France, and the Netherlands—intensified the transatlantic slave trade. Millions of Africans were forcibly taken from their homelands, transported across the Atlantic under horrific conditions, and sold into lifelong servitude in the Americas. Initially, some colonies relied on them as servants, but by mid-century, racial slavery became entrenched, with laws codifying Africans as property rather than people. The Caribbean and American plantations demanded labour for sugar, tobacco, and later cotton, fuelling immense wealth for European nations while devastating African communities.

Slave ships were overcrowded, disease-ridden, and deadly, with mortality rates often exceeding 15%. Enslaved individuals endured relentless physical abuse, family separation, and cultural erasure. Resistance persisted through rebellions, escapes, and the preservation of African traditions, but the system grew stronger as colonial economies depended on it. By 1700, slavery was deeply institutionalized, laying the foundation for centuries of racial inequality and exploitation.

Sentence starters to use in analysis of The Tempest

Perhaps Shakespeare wanted his audience to feel….
The use of the word "……" highlights to the audience…
Prospero's monologue at the end of the plays implies that…
Caliban is a representation of……. in his opening scene he states that…
The relationship between Miranda and Prospero shows…
Audiences at the time would respond to this scene…..
The use of …… in his/her speech in Act… Scene….. conveys….





Framework for analysis

Point: The writer focuses on …
Evidence: Use a well-chosen quotation here.
Analyse:
What methods/language does the writer use?
What effect does this have? What impression does it create for the reader?
Link:
Does this link to another quotation?
Does this link to the context?
Does this link back to the writer's intention?

SUBJECT: English **YEAR: 7**

TOPIC: The Tempest **SEMESTER: 2**

How will I be assessed?	At the end of unit of work, you will complete an oral presentation on the treatment of Caliban in the play. The final Semester Two Assessment will be a language analysis on an extract from The Tempest looking at a specific theme that is explored throughout the play.

Life in Shakespearean times (Jacobean era)

Life in the Jacobean era (1603–1625) was marked by **stark contrasts** between wealth and poverty, elegance and hardship. Society was **deeply hierarchical**, with rigid class divisions shaping daily existence. The wealthy enjoyed lavish banquets, ornate clothing, and grand homes, while the poor struggled with overcrowded housing and limited food. Religion dominated life, as tensions between Protestants and Catholics simmered beneath the surface. London thrived as a cultural hub, with theatres showcasing works by Shakespeare and his contemporaries. Yet, plague outbreaks and harsh punishments for crime were constant threats. Despite challenges, the era brimmed with artistic innovation and political intrigue, influencing literature, architecture, and drama for generations.

Key Shakespearean words:

Anon	Soon	**Thou**	You
Art	Are	**Thee**	You
Ay	Yes	**Thy**	Your
Fain	Gladly	**Thine**	Yours
Hark	Listen	**Hie**	Go quickly
Wherefore	Why	**Methinks**	I think

Other worlds events happening during the time *The Tempest* was written (1610-1613)

1610: King Henry IV of France is assassinated; his young son Louis XIII becomes king, with his mother Marie de' Medici as regent.
1611: The King James Version of the Bible is published in England, a landmark literary event
1613: English courtier Thomas Roe sets out for India, eventually securing trading rights with the Mughal Emperor

Further Reading and Other Resources

A Midsummer Night's Dream by William Shakespeare
The Chronicles of Narnia by C.S. Lewis
Percy Jackson and the Olympians by Rick Riordan
Harry Potter and the Philosopher's Stone by J.K. Rowling
The Hobbit by J.R.R. Tolkien
A Wrinkle in Time by Madeleine L'Engle

https://www.youtube.com/watch?v=ovTnJFz3eNM Shakespeare in Shorts: The Tempest. A short ten minute video of the whole play.

Recall Questions

1. What is Caliban a representation of?
2. What year was slavery abolished?
3. What years were the Jacobean era?
4. What significant literary event happened in 1611?
5. Name three characters from the play.
6. How does Prospero control events?

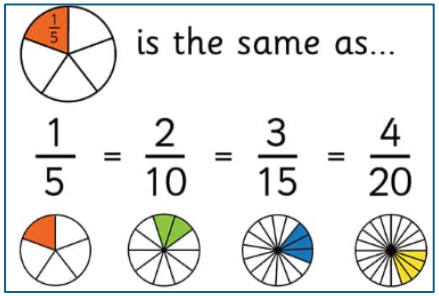
Fill in the missing words in these quotations:

1. "Hell is ……. and all the devils are here"
2. "We are such stuff as ….. are made on"

SUBJECT: Maths **YEAR: 7**

TOPIC: Fractions **SEMESTER: 2**

WORD REVOLUTION	
Numerator	The number above the line on a fraction. Represents how many equal parts of the whole are taken.
Denominator	The number below the line on a fraction. Represents how many equal parts the whole is divided into.
Improper Fraction	An improper fraction has a numerator which is greater than or equal to the denominator.
Mixed Number	A mixed number is made up of an integer (whole number) and a proper fraction.
Equivalence	Two fractions are equivalent if one is a multiple of the other



Simplifying Fractions:
Divide the **numerator** & **denominator** by the same **factor**.

$\frac{8}{12} \xrightarrow{\div 4} \frac{2}{3}$

What will I study in this topic?	• Find fractions of shapes • Construct and compare fractions • Find equivalent fractions • Simplify Fractions • Ordering Fractions • Convert between mixed numbers and improper fractions. • Add and subtract fractions • Add and subtract mixed numbers • Multiply Fractions • Divide Fractions
What will I be able to do by the end of this topic?	• Solving complex fluency and reasoning problems • Solving cross-topic questions involving measures, time and probability • Be able to order a list of improper fractions and mixed numbers.

Adding Fractions

$+ \quad \frac{3}{5} + \frac{2}{7}$

Make the denominators the same

$\frac{3}{5} + \frac{2}{7}$ (x7, x5)

$\frac{21}{35} + \frac{10}{35} = \frac{31}{35}$

Subtracting Fractions

$- \quad \frac{3}{5} - \frac{2}{7}$

Make the denominators the same

$\frac{3}{5} - \frac{2}{7}$ (x7, x5)

$\frac{21}{35} - \frac{10}{35} = \frac{11}{35}$

Multiply Fractions

$\times \quad \frac{3}{5} \times \frac{2}{7}$

multiply the numerators and the denominators

$= \frac{3 \times 2}{5 \times 7} = \frac{6}{35}$

Divide Fractions

$\div \quad \frac{3}{5} \div \frac{2}{7}$

Multiply the first fraction by the reciprocal of the second

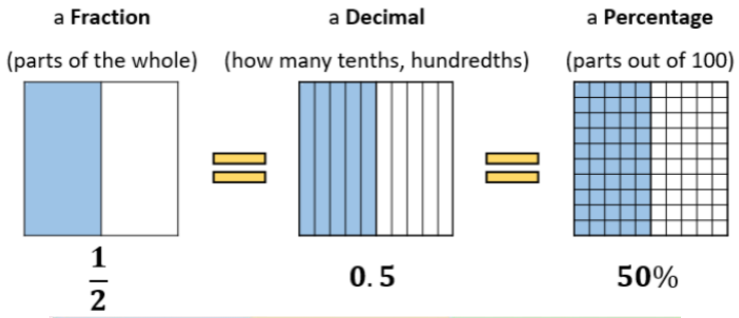
$\frac{3}{5} \times \frac{7}{2} = \frac{21}{10}$

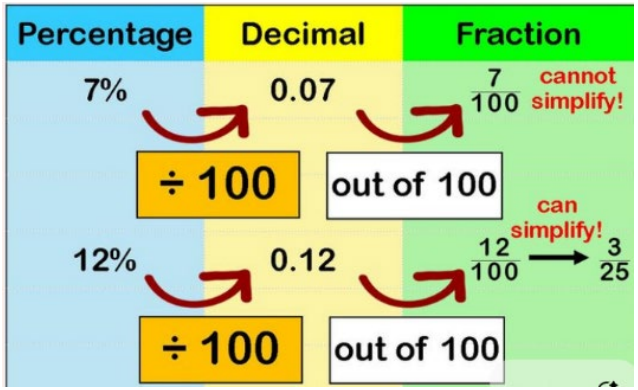
SUBJECT: Maths **YEAR:** 7

TOPIC: Fractions, Decimals & Percentages **SEMESTER:** 2

WORD REVOLUTION

Convert	This means to change a value or expression from one form to another.
Proportion	Refers to the relationship between two quantities, often expressed as fractions, decimals or percentages.
Equivalence	The relationship between two quantities that have the same value.
Simplify	To reduce the values in simpler forms for example $\frac{12}{24}$ can be simplified to $\frac{1}{2}$

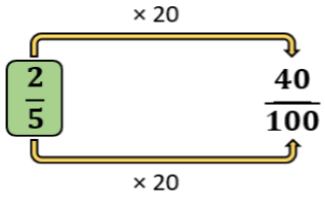




What will I study in this topic?	• Reciprocals • Multiply with mixed numbers • Divide with mixed numbers • Fractions of amounts without calculator • Fractions of amounts with calculator • Convert between fractions, decimals and percentages • Order fractions, decimals and percentages • Write numbers as percentages of other numbers
What will I be able to do by the end of the topic?	• Solve area questions by multiplying fractions or mixed numbers. • Identify a student's mistake in dividing fractions working. • Solve complex fluency and reasoning problems. • Perform calculations involving a mixture of fractions and decimals. • Convert percentages greater than 100%

Fraction to Percentage

You could convert the fraction to 100 total parts



We know 'out of 100' means %

40%

Fraction to Decimal

Complete the division.

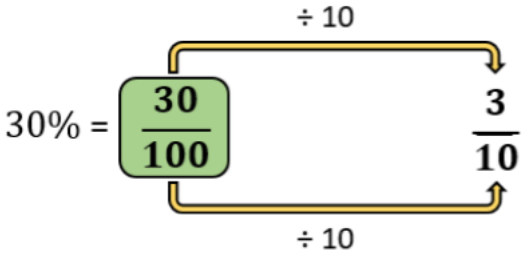
$\frac{40}{100}$ 40 ÷ 100 = 0.40 or

How many tenths do we have?
How many hundredths do we have?

4 tenths = 0.4

Percentage to Fraction

Convert the percentage to fraction with 100 total parts (denominator)



Percentage to Decimal

30% :

To convert % to decimal just divide the % by 100.

0.3

SUBJECT: Maths **YEAR: 7**

TOPIC: Brackets **SEMESTER: 2**

WORD REVOLUTION	
Expand	Multiply a bracket by a term to produce an equivalent expression that does not have brackets.
Factorise	Write an equivalent expression that has a common factor multiplying a single bracket. (Essentially the opposite of expanding brackets)
Distributive Law	The ability to partition or simplify a sum or expression using equivalent calculations.
Simplify Expressions	Write an expression in the simplest way it can be by collecting terms that are the same type as each other.
Term	A single part of an algebraic expression that may include multiplication, e.g. $3x$, $-y$, $+6$

Distributive Law

Using $a \times (b + c) = a \times b + a \times c$ to carry out a calculation by first partitioning. E.g.:

Use the distributive law to calculate 23 x 104:

$23 \times 104 = 23 \times (100 + 4)$

$= 23 \times 100 + 23 \times 4$

$= 2300 + 92$

$= 2392$

Using $a \times b + a \times c = a \times (b + c)$ to simplify and carry out a calculation. E.g.:

Use the distributive law to calculate 71 x 36 – 71x 32:

$71 \times 36 - 71 \times 32 = 71 \times (36 - 32)$

$= 71 \times 4$

$= 284$

What will I study in this topic?	You will learn how to write equivalent algebraic expressions by either expanding brackets to produce an expression with the same value but without brackets, or by factorising an expression without brackets to write an equivalent expression that does have brackets.
What will I be able to do by the end of this topic?	• Use the distributive law to carry out calculations by partitioning first, or by writing a simpler version of the sum. • Expand a single bracket by multiplying all terms inside by a single term. • Expand a single bracket that includes more than one variable. • Expand and simplify expressions that include one or more single bracket and collecting like terms. • Factorising expressions using common factors of terms.

Expand a single bracket

Multiply a single term over a bracket by multiplying each term inside the bracket by the one outside. E.g.:

Expand $8(x + 5)$

$8(x + 5)$

$= 8 \times x + 8 \times 5$

$= 8x + 40$

Expand $9f(f + 8)$

$9f(f + 8)$

$= 9f \times f + 9f \times 8$

$= 9f^2 + 72f$

Expand and simplify

Expand any single brackets in the expression, then simplify by collecting all like terms. E.g.:

Expand and fully simplify $8(x - 6) + 11(3x + 5)$

$8(x - 6) + 11(3x + 5)$

$= 8 \times x + 8 \times -6 + 11 \times 3x + 11 \times 5$

$= 8x - 48 + 33x + 55$

$= 41x + 8$

Factorising

Find the highest common factor of each term, write this on the outside of the bracket, then divide each term by the HCF to write down the terms inside the bracket. E.g.:

Factorise $28x + 21$

$28 = 1 \times 28$ $21 = 1 \times 21$

$28 = 2 \times 14$ $21 = 3 \times 7$

$28 = 4 \times 7$

Factors of 28: 1, 2, 3, 4, 7, 14, 28

Factors of 21: 1, 3, 7, 21

HCF of 28 and 21 = 7

$28x + 21 = 7(4x + 3)$

Fully factorise $x^2 + 13x$

HCF of 1 and 13 = 1

Common variable = x

$x^2 + 13x = x(x + 13)$

Factorising (more than one common factor)

As before, but find all common factors to write outside of the bracket. E.g.:

Fully factorise $18n^2 - 45n$

HCF of 18 and 45 = 9

Common variable = n

$18n^2 - 45n = 9n(2n - 5)$

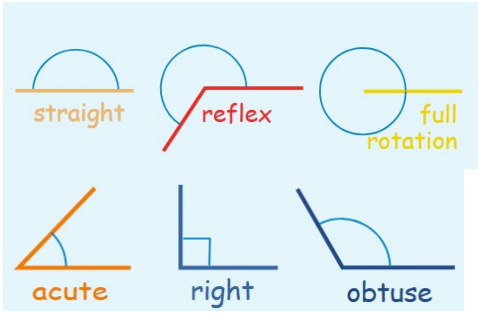
SUBJECT: Maths **YEAR: 7**

TOPIC: Angles **SEMESTER: 2**

WORD REVOLUTION	
Angle	An angle measures the size of a turn
Acute angle	Is less than 90°
Right angle	Is exactly 90°
Obtuse angle	Is greater than 90° but less than 180°
Reflex angle	Is greater than 180°
Vertically Opposite	Vertically opposite angles are equal
Angles on a straight line	Angles on one side of a straight line always add to 180°
Angles around a point	Angles around a point will always add to 360°
Angles in triangles	Angles in triangles add to 180°

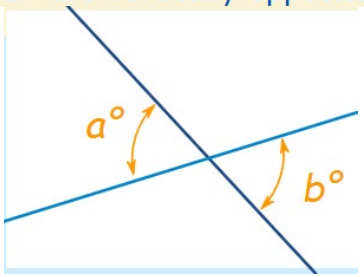
What will I study in this topic?	You will learn about different types of angle, estimating angles and accurately measuring and drawing angles. You will learn and use angle facts to find missing angles on a lines and triangles.
What will I be able to do by the end of this topic?	• Know the different types of angles • Estimate the sizes of different angles • Accurately measure and draw an angle • Find missing angles on straight lines • Find missing angles around a point • Identify vertically opposite angles • Find missing angles in triangles

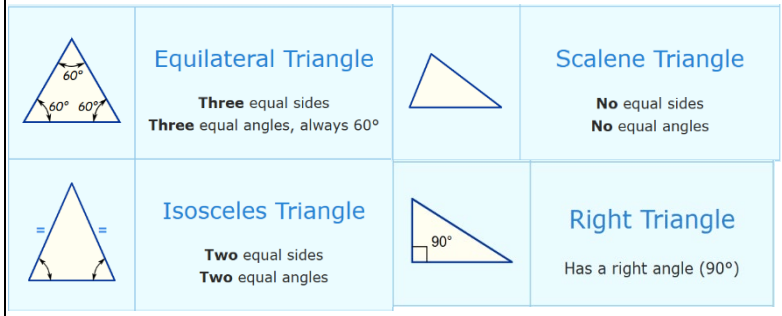
Types of Angles



Vertically Opposite

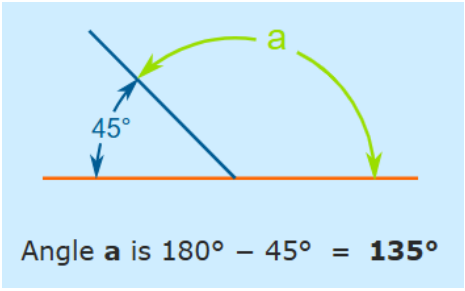
a° and b° are vertically opposite angles.





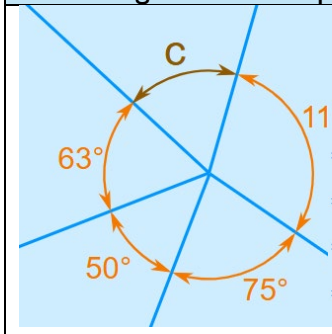
Angles on a straight line equal 180°

We know one angle is 45°, what is the other angle **"a"** ?



Angle **a** is 180° – 45° = **135°**

Angles around a point equal 360°



= 110° + 75° + 50° + 63°

= 298°

= 360° – 298°

= 62°

SUBJECT: Maths — YEAR: 7

TOPIC: Handling Data — SEMESTER: 2

WORD REVOLUTION

Average	A number expressing the central or typical value in a data set. Averages are Mean, Mode and Median.
Range	A measure of how spread out the data is. Found by subtracting the smallest value from the largest.
Bar-Chart	A diagram where the numerical value of the frequency is represented by the height of the bars.
Pictogram	A diagram where the frequency is represented by a picture.
Frequency Table	A table displaying how often something occurs, eg the number of pupils who have particular hair colours.

What will I study in this topic?	You will learn how to calculate the averages and range from a data set and how to put data and information into a chart that is visual and easy for someone to read. You will also extract information from these charts, such as finding frequencies and averages.
What will I be able to do by the end of this topic?	• Calculate the mean, mode and median from a data set. • Calculate the range from a data set. • Draw and interpret bar-charts, pictograms and two-way tables. • Calculate the mean and range from a frequency table.

Averages and Range

3 5 3 6 5 9 2 3 9

Mean: Add the values together and divide by how many there are – 3+5+3+6+5+9+2+3+9 = 45 45÷9 = 5

Mode: Most common value. Here the mode is 3

Median: Middle value when the numbers are in order of size: 2 3 3 3 5 5 6 9 9 - here this is 5

(If you have two middle values, the median is halfway between them)

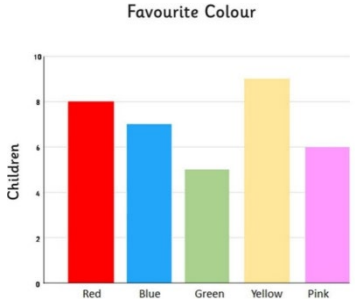
Range: Difference between the largest and smallest value: 9 - 2 = 7

A two-way table gives information in two-ways. Here we can see how many medals a country won, but also how many of each medal was given out. Eg Finland won 37 medals in total (first column), 26 bronze medals were won in total (first row).

	Finland	Poland
Bronze	9	17
Silver	21	13
Gold	7	5

Bar-Charts

A bar-chart shows how often things occur by reading the height of the bars. Here there are 8 children with a favourite colour of red. There are 35 pupils in total.



Pictograms

In the pictogram above, showing how pupils get to school, a full circle represents 4 people (note the key). So 6 pupils get the bus (a full circle and then half a circle). The number of pupils that cycle to school is 4 + 4 + 4 + 1 = 13.

Frequency Tables

The table below shows how many bicycles were owned by families. Eg 13 families have 3 bicycles.

Number of bicycles	Frequency
1	15
2	9
3	13
4	5
5	2

Mean from a Frequency Table

To find the mean, we need to know how many bicycles there are in total and divide by the total number of families. You need to multiply across to find the number of bicycles.

1x15 + 2x9 + 3x13 + 4x5 + 5x2 = 102 bicycles

15 + 9 + 13 + 5 + 2 = 44 families in total

102 ÷ 44 = 2.32 (to 2dp) bicycles per family

SUBJECT: Maths **YEAR: 7**

TOPIC: Proportion **SEMESTER: 2**

WORD REVOLUTION	
Unitary Method	A technique to solve problems by first finding the value of a single unit
Proportion	A comparison between two numbers
Product	The result of multiplying two or more numbers
Constant	A value that remains fixed and unchanging
Reciprocal	The number you multiply by to get an answer of one

What will I study in this topic?	How to solve proportion problems using the unitary method and identifying the multiplier. You will investigate the relationship between numbers in practical context.
What will I be able to do by the end of this topic?	• Use multiplication and division to find an amount when given a unitary proportional relationship. • Use multiplication and division to find an amount in a proportional relationship • Interpret recipes and other contextual proportional relationships • Solve proportion problems

Unitary Method

The cost of 7 chocolates is £84. What is the cost of 9 chocolates?

7 Chocolates = £84

÷7 ↓ ↓ ÷7

1 Chocolate = £12

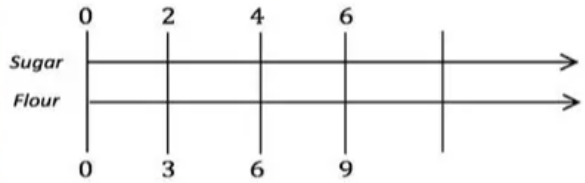
x 9 ↓ ↓ x 9

9 chocolates = £108

Firstly, we divide by 7 to find the cost of 1 chocolate (this is the unit cost), then we multiply by 9 to find the cost of 9 chocolates.

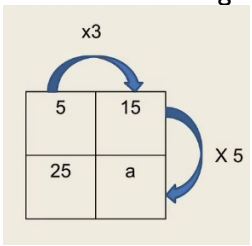
Double Number Line

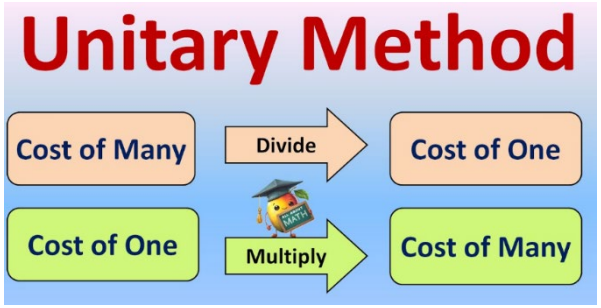
A double number line can set out the problem and show the relationship clearly



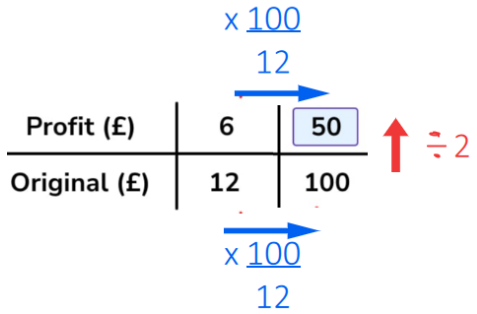
Proportion Box

Using a box can highlight the different multipliers you can use to find the missing value





Finding the multiplier (Non Unitary method)



SUBJECT: Maths **YEAR: 7**

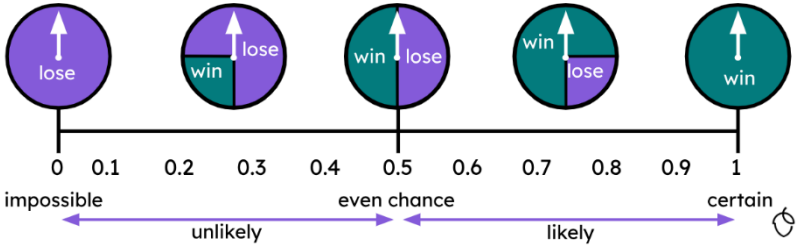
TOPIC: Probability **SEMESTER: 2**

WORD REVOLUTION

Experiment	An activity with observed results (e.g., flipping a coin).
Trial	Each repetition of an experiment
Outcome	A single possible result of a trial (e.g., heads).
Sample Space	The set of *all* possible outcomes (e.g., {Heads, Tails}).
An Event	An outcome or a collection of outcomes (e.g., rolling an even number).

What will I study in this topic?	• Using probability phrases • Writing probabilities as fractions • Writing probabilities as fractions, decimals and percentages • Probabilities of mutually exclusive events • Sample space diagrams
What will I be able to do by the end of this topic?	• How to describe the probability of an event happening: impossible, unlikely, evens, likely, certain • Know how to calculate the probability of an event and represent their answer as a fraction, a decimal, or a percentage. • Generate sample spaces for single events • Know that the sum of probabilities of all possible outcomes total one

The **probability scale**



Some possible outcomes when rolling a fair 6 sided dice:

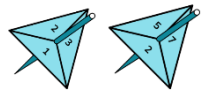
	Event	Description	Probability
A	Rolling a 7	Impossible	0
B	Rolling a 3	Unlikely	$\frac{1}{6}$
C	Rolling an odd number	Even chance	$\frac{3}{6} = \frac{1}{2}$
D	Rolling a number 3 or greater	Likely	$\frac{4}{6}$
E	Rolling a number less than 7	Certain	1

Theoretical Probability

1. Determine the frequency of the event occurring
2. Determine the total frequency of all possible outcomes
3. Substitute these values into the formula. Write your answer as a fraction, decimal or percentage.

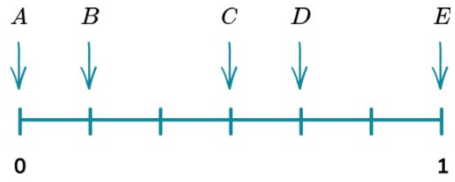
Sample Space diagrams

A sample space diagram is a visual representation of all possible outcomes of an experiment or event. We can write a list or create a table.
Example: Two fair spinners are spun and the scores added together
The scores are recorded in the Table below…..



Probability Scale

Below shows the events from the table on the left on a probability scale



Sample Space Diagram

The table can then be used to calculate the probability of particular events happening.
This diagram illustrates
P(Total score is prime)= $\frac{3}{9} = \frac{1}{3}$

+	2	5	7
1	3	6	8
2	4	7	9
3	5	8	10

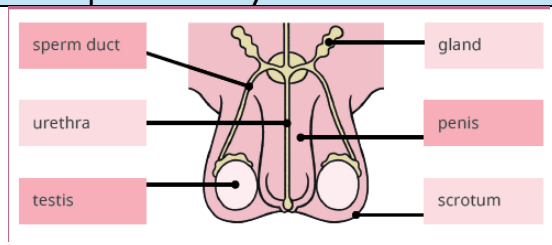
SUBJECT: Science **YEAR: 7**

TOPIC: Organisation **SEMESTER: 2**

WORD REVOLUTION	
Fertilisation	The fusion of the sperm and the egg during sexual reproduction.
Zygote	The first cell produced when the sperm fertilises the egg.
Menstrual Cycle	A monthly event where the body prepares the lining of the uterus in case it receives a fertilised egg. The uterus lining then breaks down if the egg has not been fertilised.
Ovulation	The part of the menstrual cycle where the egg is released from the ovary.
Sperm	The male sex cell (gamete) that contains the male's genetic material.
Egg	The female sex cell (gamete) that contains the female's genetic material.
Foetus	The name for a human being or animal before birth, after the organs have started to develop.
Embryo	The initial stage of development of a human being or animal, before organs have started to develop.
Gamete	Sex cells- can be male (sperm/pollen) or female (egg)

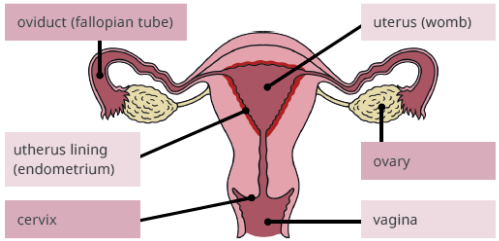
What will I study in this topic?	During this topic you will study how the human skeleton and muscles work. You will then look in detail at the process of reproduction in humans, how the human foetus develops and how sperm and egg cells are adapted for their function. We will finish the topic looking at how to stay healthy during pregnancy.
What will I be able to do by the end of this topic?	• State the structure and function of parts of the male and female reproductive systems. • Describe the process of fertilisation. • Describe the adaptations of the sperm and egg. • Describe the development of the foetus. • State the 4 stages of the menstrual cycle.

Male Reproductive System



Penis- allows sperm and semen to pass out of the male's body.
Testis- Produces sperm cells.
Urethra- A tube that carries urine and semen.
Scrotum- A bag of skin that contains the testes.
Gland- Produces fluids that mix with sperm to make semen.
Sperm Duct- Carries sperm from the testes to the urethra.

Female Reproductive System



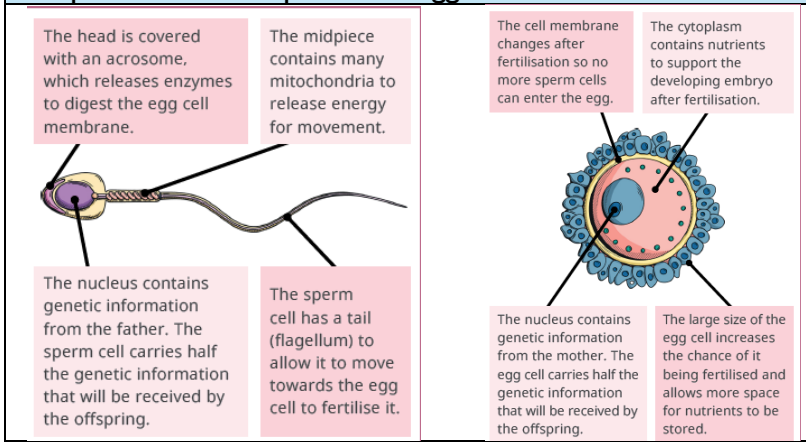
Vagina- A muscular tube that leads from the cervix to outside the body.
Cervix- A ring of muscle at the lower end of the uterus. Keeps the foetus in place during pregnancy.
Ovary- Releases egg cells.
Uterus- Where the foetus develops during pregnancy.
Oviduct- Carries egg cells from the ovaries to the uterus.

SUBJECT: Science **YEAR: 7**

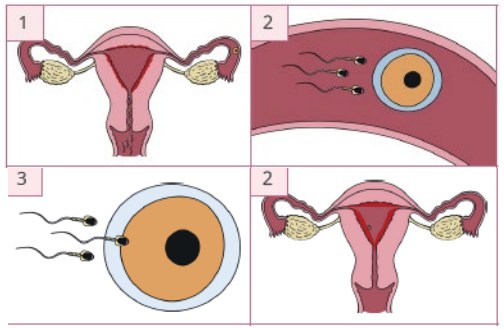
TOPIC: Organisation **SEMESTER: 2**

Key Questions:	How are sperm and egg cells adapted for fertilisation? What are the stages of sexual reproduction? What are the stages of the menstrual cycle?
Curriculum Connections:	To understand that energy stores are the foundation for describing energy in different scenarios from Year 7 to 11 and is the cornerstone of understanding the conservation of energy.

Adaptations of the Sperm and Egg cell



Adaptations of the Sperm and Egg cell



1. During sexual intercourse semen containing sperm cells is ejaculated from the penis into the vagina.
2. Sperm cells travel through the female reproductive system to meet an egg cell in the oviduct.
3. One sperm cell penetrates the egg cell membrane. The nucleus of the sperm cell fuses with the nucleus of the egg cell. This is called fertilisation.
4. The resulting zygote divides several times to form a ball of cells called an embryo, which implants in the uterus lining

The Menstrual Cycle

Day 1-5- The uterus lining breaks down and passes out of the vagina. This is known as menstruation or 'having a period.'
5-14- The uterus lining starts to build up again. An egg cell starts to mature in the ovary.
14- An egg cell is released from the ovary. This is called ovulation.
14-28- The uterus lining remains thick. During this time, the egg may be fertilised by a sperm cell.
28- If the egg cell is not fertilised by a sperm cell, the uterus lining begins to break down and the cycle begins.

Effect of Maternal Lifestyle

Oxygen and nutrients, such as glucose, can pass from the mother's blood into the foetus across the placenta. The placenta is attached to the foetus by the umbilical cord.
Smoking cigarettes during pregnancy can increase the risk of miscarriage, stillbirth or sudden infant death syndrome (SIDS) Babies are more likely to be premature, have a low birthweight and have problems with brain development.
Drinking alcohol during pregnancy can increase the chance of miscarriage, stillbirth, premature birth, low birthweight and foetal alcohol syndrome.

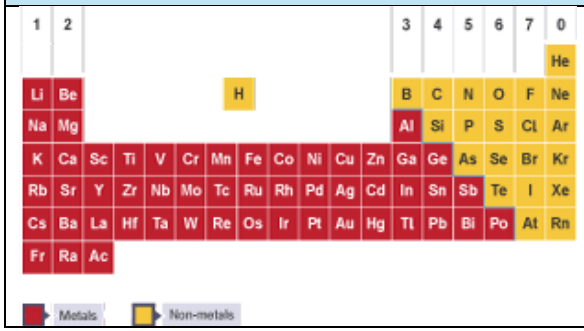
SUBJECT: Science **YEAR:** 7

TOPIC: Atoms & Compounds Acids & Alkalis **SEMESTER:** 2

WORD REVOLUTION	
Atom	A small piece of matter
Element	Substances made up of one type of atom
Compound	Two or more elements chemically joined together
Properties	Features of an object
Metals	Elements that are typically shiny, conduct electricity, and can be shaped or stretched.
Non-Metals	Elements that are usually dull, brittle, and poor conductors.
Acid	Substances that have a pH below 7.
Alkali	Substances that have a pH above 7.
Salt	A compound formed from the reaction of an acid and an alkali
Indicator	A substance that changes colour in response to changes in pH
Neutralisation	A reaction where an acid and alkali are reacted to create a neutral substance
pH scale	Measures acidity/alkalinity from 0 to 14 based on the concentration of hydrogen
Reactants	The starting materials in a chemical reaction
Products	The substances made during a chemical reaction.

What will I study in this topic?	Differences between atoms, elements and compounds Periodic table and the history of it Investigating properties of elements and compounds Naming compounds and word equations What are acids and alkalis What is neutralisation pH scale and indicators
What will I be able to do by the end of this topic?	Identify atoms, elements and compounds by their particle diagrams Name compounds ending in -ide and -ate Develop observation skills Identify common acids, alkalis and indicators Write basic word equations

Periodic Table

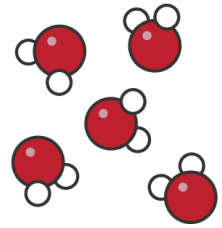


Compounds

There are very many different compounds.

For example, water is a compound of hydrogen and oxygen, chemically joined together.

Each of its molecules contains two hydrogen atoms and one oxygen atom.



Naming Compounds

Rule 1: Metal + Non-metal = -ide

1. Metal name goes first. It does not change.
2. Non-metal name goes second. The ending changes to **ide.**

Examples:

Sodium + Chlorine → Sodium Chloride

Magnesium + Oxygen → Magnesium Oxide

Rule 2: Metal + Non-metal + Oxygen = -ate

1. Metal name goes first. It does not change.
2. Non-metal name goes second. Change the ending to **ate**.

Examples:

Sodium + Sulphur + Oxygen → Sodium Sulphate

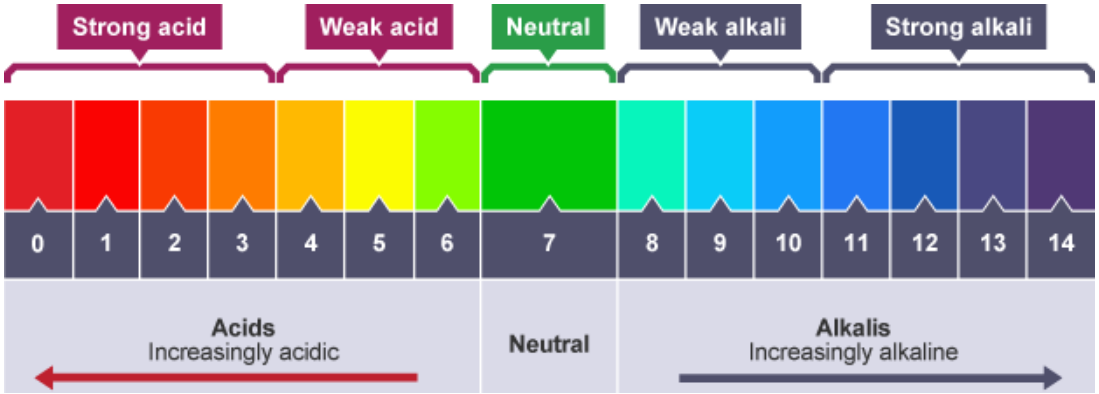
Iron + Nitrogen + Oxygen → Iron Nitrate

SUBJECT: Science **YEAR:** 7

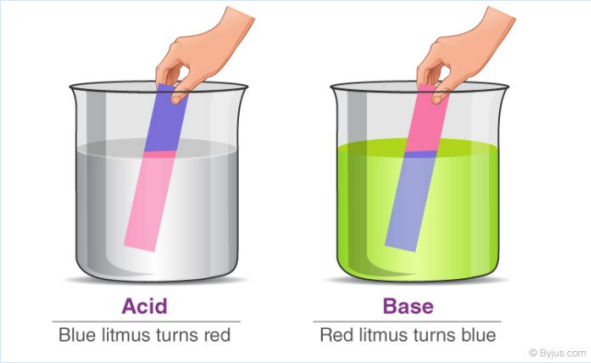
TOPIC: Atoms & Compounds Acids & Alkalis **SEMESTER:** 2

Key Questions:	What did Mendeleev do in his periodic table that was different to other scientist's? What observations could you make during a neutralisation reaction? How do you recognise an acid and alkali by name?
Curriculum Connections:	At primary school, the idea of irreversible changes to make new materials was explored. These topics build on that idea to introduce the world of elements, compounds and chemical reactions. Starting with acids and alkalis.

pH Scale



Litmus is another example of an indicator



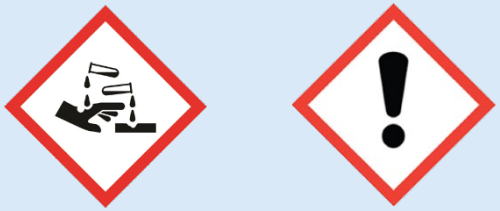
Neutralisation

A neutral solution (pH 7) is formed when an acid and alkali are added together.

General word equation for the reaction is:
Acid + **Alkali** → **Salt** + **Water**

Specific example:
Hydrochloric acid + **Sodium hydroxide** → **Sodium chloride** + **Water**

We can see the change in pH in a neutralisation reaction by using an indicator such as universal indicator (look at the pH scale diagram for the colours it goes at different pHs)



Acids and Alkalis will have either one of these hazard symbols on their containers.

Caution must always be taken and guidance followed for safe handling and disposal

SUBJECT: Science **YEAR: 7**

TOPIC: Forces and Motion **SEMESTER: 2**

WORD REVOLUTION	
Speed	How far you travel in a set amount of time
Distance	How far is between two points
Constant	unchanging
Friction	A resistive force, opposing motion.
Air Resistance	A kind of friction that happens when travelling through air.
Extension	Difference between original and final length.
Force	A push or pull when two objects interact.
Moment	A turning effect when a force acts on something that has a pivot.
Unbalanced	The overall forces on an object don't cancel out, bringing about a change.
Weight	How much force acts on a mass
Pivot	The point around which rotation happens
Gravity	A force that attracts all masses

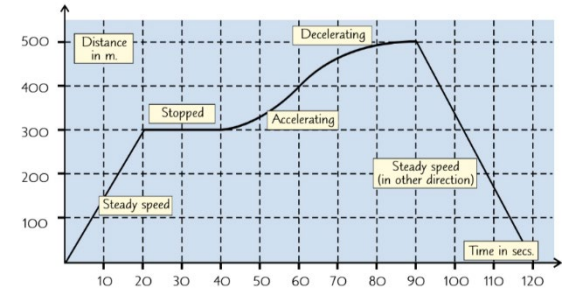
What will I study in this topic?	You will be introduced to mathematical skills – speed calculations and graph interpretation skills. The identification of forces and application of that to motion of objects.
What will I be able to do by the end of this topic?	• Identify and label forces • Use the equation for speed • Describe a simple journey using a distance-time graph • Investigate the speed of sound • Describe how friction, drag and air resistance arise. • Investigate the relationship between force and extension of an object. • Explain the effects of having balanced and unbalanced forces and link to moments.

Speed

How far you travel in a set amount of time. Unit for speed = metres per second, m/s.
Unit for distance is metres, m. Unit for time is seconds, s.

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

Distance-time graphs



Forces

Forces are pushes and pulls that occur when two objects interact. Forces are measured in Newtons, N. They usually act in pairs. A newton meter is used to measure forces.

Balanced forces produce no change in movement.

Unbalanced forces change the speed and/or direction of moving objects.

A moment is the turning effect on a force.
Moment = force x perpendicular distance
M (Nm) = F (N) x d (m)
Moments are balanced when the clockwise moment = anticlockwise moment.

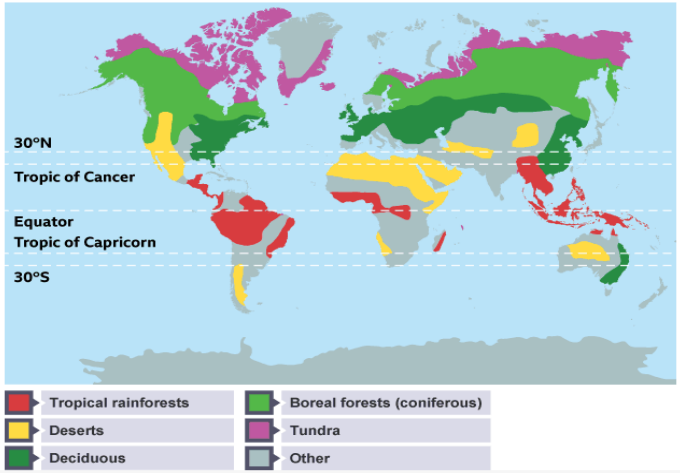
SUBJECT: GEOGRAPHY **YEAR: 7**

TOPIC: CLIMATE CHANGE **SEMESTER: 2**

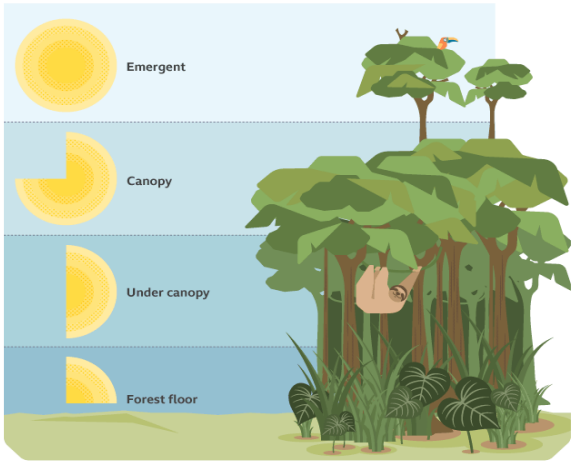
1. WORD REVOLUTION

Ecosystem	A system of living and non-living things that are dependent on each other.
Deciduous	A plant that sheds/loses its leaves each year.
Biome	A large-scale ecosystem with specific animals, plants and climate, e.g. a desert.
Adaptation	Special features that allow a plant or animal to survive.
Indigenous	Local communities who have a unique and distinct culture.
Climate	The overall pattern of weather, generally an average over many years.
Camouflage	Using concealment to disguise/blend into the surroundings.
Threat	Something with the potential to cause damage or harm in some way.

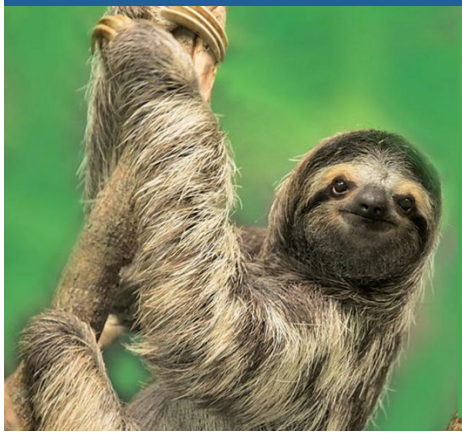
2. GLOBAL BIOMES OF THE WORLD



3. LAYERS OF THE RAINFOREST



4. ANIMAL ADAPTATIONS



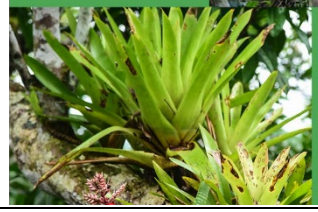
Sloth

- Brown, mottled fur camouflages the sloth making it less likely to be attacked by predators.
- Sloths move very slowly which preserves their energy so they have to eat less often.
- Their slow movement also means they are less likely to be seen by predators.

5. PLANT ADAPTATIONS

Drip tip leaves
Plants have leaves with pointy tips. This allows water to run off the leaves quickly.

Buttress roots
Large roots have ridges which create a large surface area that help to support large trees.



Epiphytes
These plants live on tree branches. They get their nutrients from the air and water.

6. FUTURE THREATS TO BIOMES

Climate change
Changing weather patterns affects the balance of plants and animals in an ecosystem.

Biomes like the tundra and polar regions are at threat from melting ice.

Threats to biomes

Exploiting resources
Using land to create energy, for example through a hydroelectric dam, could damage the natural environment and harm the indigenous people. For example, mining precious minerals like copper for phones destroys land.

Population growth
A higher population means a greater demand for houses. Building houses in unique biomes like the rainforest would destroy them forever. It could also affect indigenous people

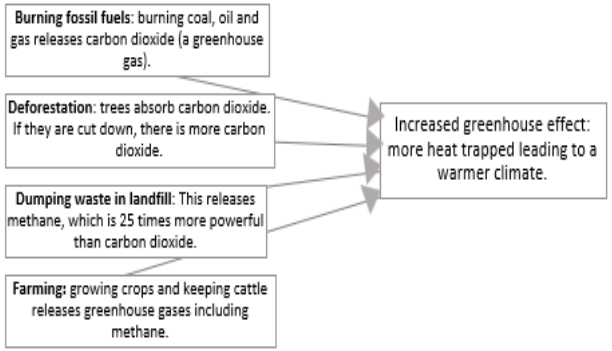
SUBJECT: GEOGRAPHY **YEAR: 7**

TOPIC: CLIMATE CHANGE **SEMESTER: 2**

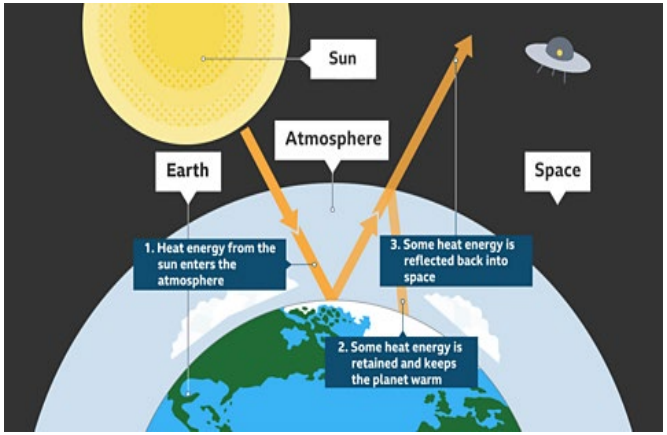
1. WORD REVOLUTION

Atmosphere	The layer of gases surrounding Earth, essential for life.
Greenhouse Effect	The natural effect that keeps the Earth warm enough to survive on.
Global Warming	The sustained rise in the planet's temperature due to human actions.
Greenhouse gases	Gases that trap heat in the Earth's atmosphere e.g. methane.
Carbon footprint	The amount of carbon emitted by a person or organisation over a period of time.
Conference	A meeting where a group of people meet to discuss a specific topic.
Vegan	A person who does not eat or use animal products.
Response	The actions taken by people, organisations or governments to deal with something.

2. CAUSES OF CLIMATE CHANGE



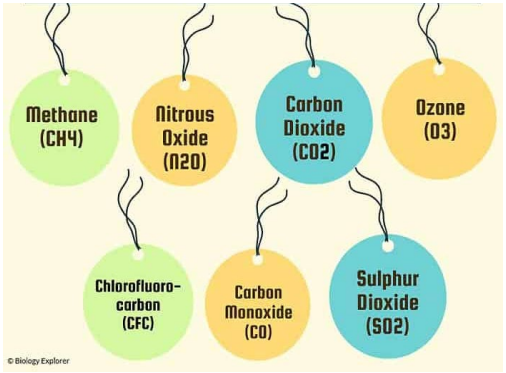
3. THE GREENHOUSE EFFECT



4. EFFECTS OF CLIMATE CHANGE

	Sea levels will rise by 70cm by 2100. Coastal and lowland areas of the UK will be flooded. Islands like the Maldives will be completed underwater.
	The Arctic Ocean will become ice free, leading to the extinction of animals like polar bears.
	Increased drought will lead to dust storms and food shortages.
	There will be more extreme weather events. Warm and dry temperatures will lead to increased chance of wildfires.

5. GREENHOUSE GASES



6. RESPONSES TO CLIMATE CHANGE

SUBJECT: Geography **YEAR: 7**

TOPIC: Fieldwork **SEMESTER: 2**

1. WORD REVOLUTION

Fieldwork	The process of investigating the world around us.
Enquiry question	A question about an area of geography that can be tested through fieldwork.
Hypothesis	A statement that can be tested through a fieldwork inquiry.
Primary data	Data you collect yourself.
Secondary data	Data collected by someone else.
Risk assessment	Process of working out the possible dangers, and how to avoid them

3. CREATING AN ENQUIRY QUESTION

- ✓ **Geographical**: to do with geography
- ✓ **Open ended**: not a yes/no question
- ✓ **Achievable**: not in a dangerous environment, possible to travel to

What will I learn?	What fieldwork is and how it works
What will I be able to do?	Take part in external fieldwork
How will I be assessed?	Progress check in class

4. DATA COLLECTION

Method	Purpose	Limitation
Field sketch	Record key features of the landscape	Hard to complete, not numerical
Questionnaire	Find out opinions about a place or issue	Members of the public might not want to answer
Measurements	Find numerical sizes/shapes/numbers	Making mistakes with measuring

2. FIELDWORK ENQUIRY PROCESS

Aim Write a question or hypothesis → **Plan** Complete risk assessment → **Data collection** Getting out and collecting data → **Data presentation** Show the data in a visual way → **Conclusion** Answer the question you started with → **Evaluation** How could the study be improved?

SUBJECT: Geography **YEAR:** 7

TOPIC: Geography basics **SEMESTER:** 2

1. WORD REVOLUTION

Development	Process of a country or area improving
Life expectancy	Average age people live to in an area.
Literacy rate	Amount of people who can read and write in an area
Erosion	Wearing **away** of rock
Weathering	Weakening of rock **where it is**
Weather	Day to day changes in the atmosphere
Climate	Long term average weather conditions

2. DEVELOPMENT AROUND THE WORLD

Development

HIC: High income country

Europe and North America have mostly HICs, e.g. UK

NEE: Newly emerging economy

Asia and South America have mostly NEEs, e.g. Pakistan, Brazil

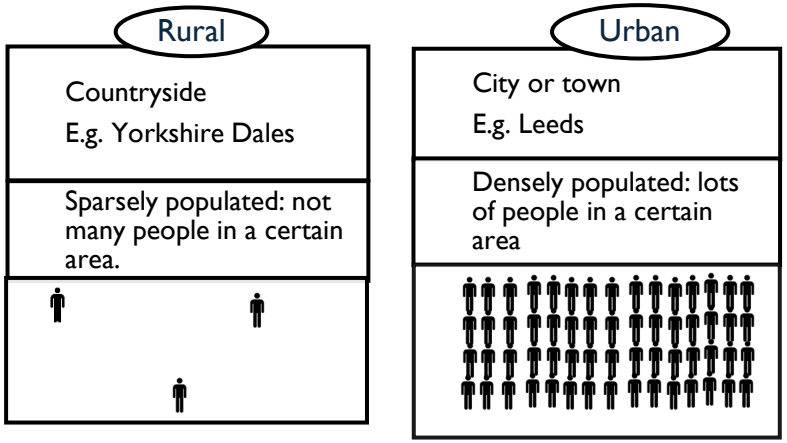
LIC: Low income country

Africa has many LICs, e.g. Niger

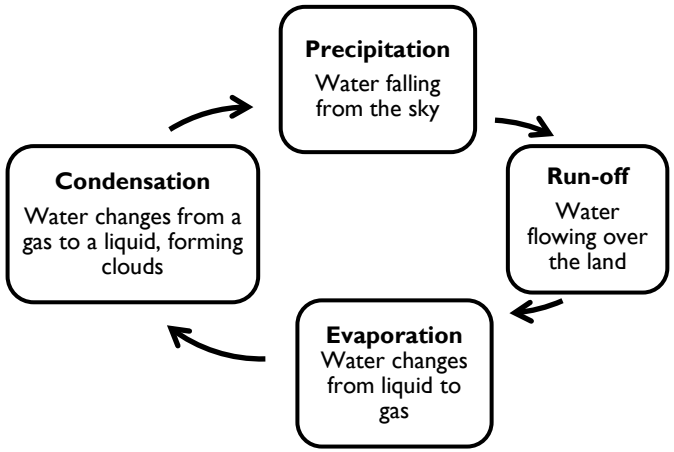
3. JOB TYPES

Tertiary jobs 	Providing a service, e.g. doctor, shop assistant, taxi driver
Secondary jobs 	Making raw materials into a product, e.g. in a factory
Primary jobs 	Extracting raw materials from nature, e.g. farmer, fisher, miner

3. RURAL and URBAN AREAS



4. THE WATER CYCLE



5. WEATHERING

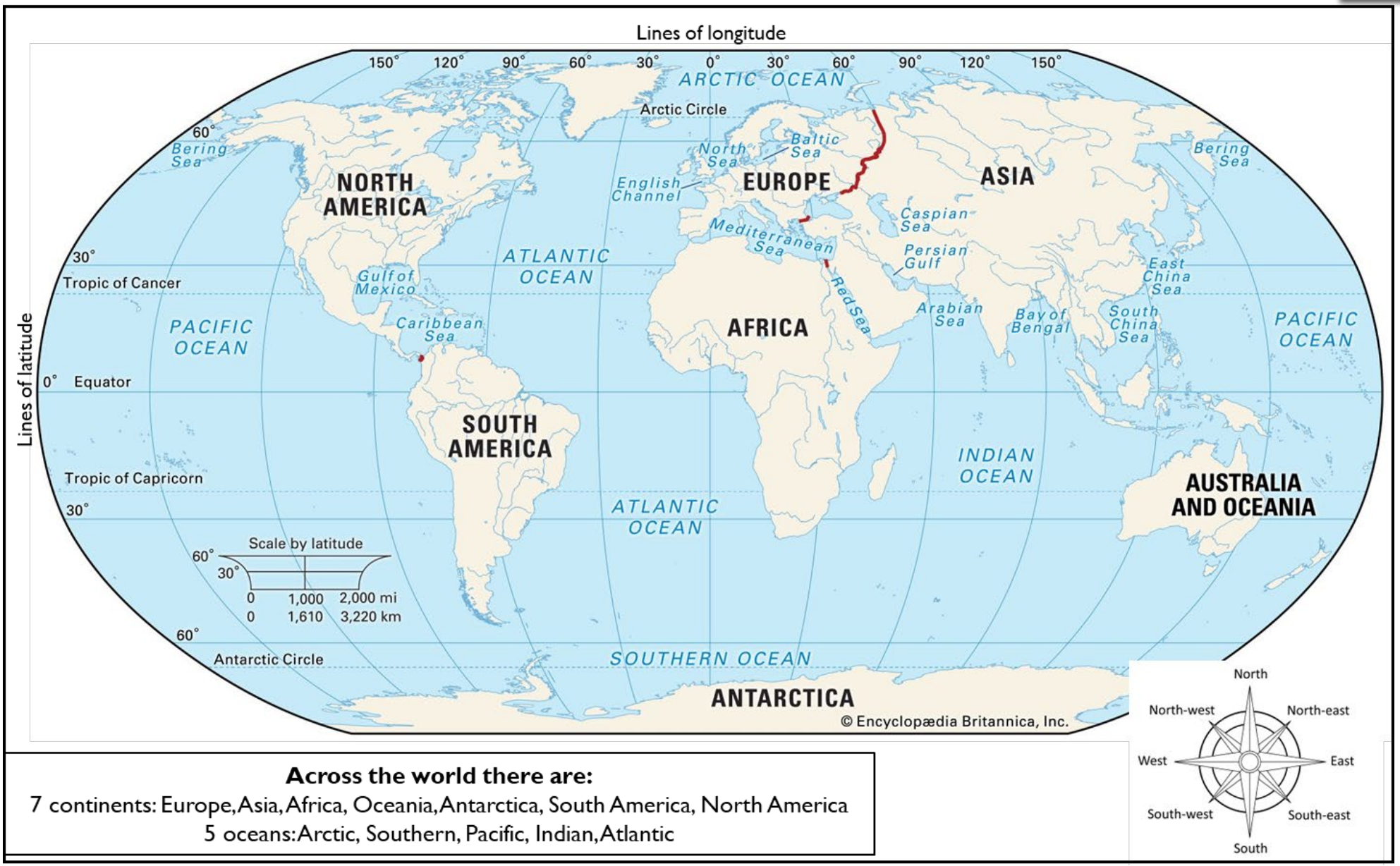
Biological: tree roots grow into rock, animals burrow into rock

Chemical: slightly acidic rainwater dissolves certain types of rock (e.g. limestone)

Freeze-thaw: water freezes and melts inside rock, expanding cracks

SUBJECT: Geography **YEAR:** 7

TOPIC: Locational basics **SEMESTER:** 2



Across the world there are:

7 continents: Europe, Asia, Africa, Oceania, Antarctica, South America, North America

5 oceans: Arctic, Southern, Pacific, Indian, Atlantic

SUBJECT: History **YEAR:** 7

TOPIC: Medieval Life **SEMESTER:** 2

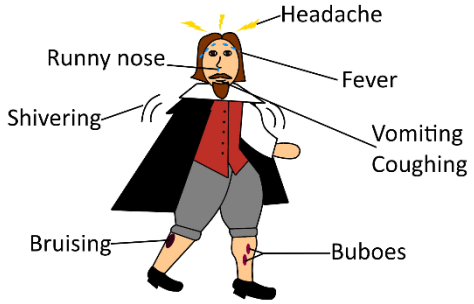
WORD REVOLUTION	
Black Death	a devastating pandemic of bubonic plague that swept through Europe, Asia, and North Africa in the mid-1300s
Peasant	a poor person of low social status who works on the land
Revolt	to take violent action against authority
Tithe	a tenth part of someone's produce or income that they give or pay as a tax to the Church
Villein	a class of serf tied to the land under the feudal system
Buboes	a symptom of bubonic plague and occur as painful swellings

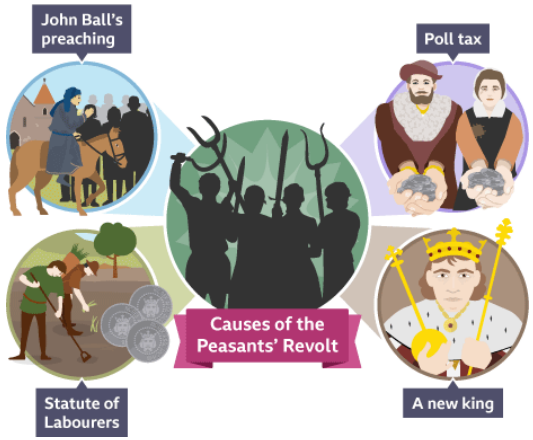
Black Death

- Arrived in 1348 through trade routes.
- Spread rapidly through crowded towns and villages.
- Medieval people did not understand germs. Many believed it was a punishment from God or caused by bad air.

Consequences

- Up to one-third of England's population died.
- Labour shortages meant peasants could demand higher wages. Social structure began to weaken.
- Some villeins escaped to cities for better opportunities.





Peasants' Revolt (1381)

- Rebels from Kent and Essex marched to London, led by Wat Tyler. Protesters attacked symbols of royal authority.
- They met the young King Richard II, demanding fairer treatment.
- During discussions, Wat Tyler was killed, and the revolt collapsed.

Consequences

- Royal promises were withdrawn.
- Rebel leaders were punished.
- Serfdom continued to decline, and peasants gained more freedom over time.

Medieval period					Renaissance		Industrial Period		Modern Period
1000-1100	1100-1200	1200-1300	1300-1400	1400-1500	1500-1600	1600-1750	1750-1800	1800-1900	1900-present

SUBJECT: History **YEAR:** 7

TOPIC: The Renaissance **SEMESTER:** 2

WORD REVOLUTION	
Reformation	a major 16th-century European movement aimed at reforming the Catholic Church, ultimately leading to the establishment of Protestantism
Protestantism	Christian religious movement that began in northern Europe in the early 16th century
Dissolution	The act of closing
Heretic	a person whose religious beliefs go against what is generally accepted
Armada	a fleet of warships
Exploration	the action of exploring an unfamiliar area

English Reformation

- Henry VIII wanted to divorce Catherine of Aragon so he could marry Anne Boleyn.
- The Pope refused to grant the divorce.
- In 1534, Henry VIII broke from Rome.
- England had become a Protestant country. Henry VIII declared himself Supreme Head of the Church of England.
- Monasteries like Kirkstall Abbey were dissolved.

Protestant vs Catholic

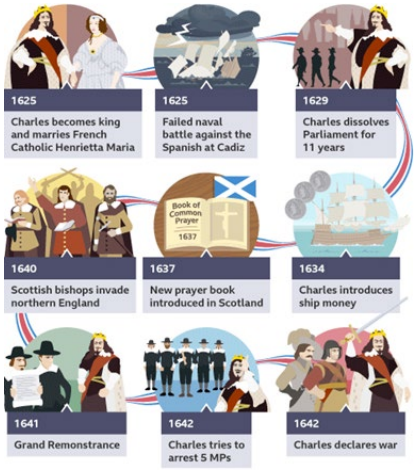
Monarch	Henry VIII	Edward VI	Mary I	Elizabeth I
Reign	1509-1547	1547-1553	1553-1558	1558-1603
Religion	Catholic then Protestant	Protestant (extreme)	Catholic	Protestant
Famous for...	6 wives and break from Rome	Short reign and radical Protestant reformation	Restoring Catholicism and being given the name 'Bloody Mary.	Oversaw exploration and defeated the Spanish

Medieval period					Renaissance		Industrial Period		Modern Period
1000-1100	1100-1200	1200-1300	1300-1400	1400-1500	1500-1600	1600-1750	1750-1800	1800-1900	1900-present

SUBJECT: History **YEAR:** 7

TOPIC: English Civil War **SEMESTER:** 2

WORD REVOLUTION	
Civil War	a war between people of the same country
Divine Right of Kings	the belief that the king's right to rule is from God
Roundhead	a supporter of Parliament during the English Civil War
Cavalier	a supporter of the King during the English Civil War
New Model Army	army formed in 1645 by the Parliamentarians
Treason	crime against the government or king



- Charles I argued with Parliament about money and power.
- These arguments led to the English Civil War between the king's supporters and Parliament's supporters.
- Parliament won, and Charles I was executed in 1649.
- Oliver Cromwell became the most powerful leader and ruled the country without a king.

Roundheads	Cavaliers
• Supported Parliament • Oliver Cromwell • Mostly Puritan • New Model Army • Believed in democracy	• Supported the king • Charles I • Anglicans and Catholics • Traditional army • Believed in 'divine right of kings'

Medieval period					Renaissance		Industrial Period		Modern Period
1000-1100	1100-1200	1200-1300	1300-1400	1400-1500	1500-1600	1600-1750	1750-1800	1800-1900	1900-present

SUBJECT: History **YEAR:** 7

TOPIC: Native Americans **SEMESTER:** 2

WORD REVOLUTION	
Native	a person who was born in a particular place
Nomadic	moving from one place to another rather than living in one place
Tribes	a group of people, often of related families
Hunters	a person that hunts
Settlers	a person who moves with a group of others to live in a new country or area

Native Americans were once called Indians because Christopher Columbus thought he had landed in India. Native Americans came from as far as Alaska and live in both South and North America. There exist roughly 200 tribes and languages.

Native American beliefs were about living in harmony with nature, respecting animals, and believing everything has a spirit.

Native American life

- Lived in teepees on the Plains because they were easy to move.
- Buffalo provided food, clothing, tools, and shelter materials.
- Many tribes moved often to follow animals and seasons.
- Others farmed maize, beans, and squash in settled villages.
- Clothing was made from animal skins and decorated with beads and feathers.
- Horses made travel and hunting quicker for Plains tribes.
- Believed in a strong connection to nature and held ceremonies and dances.

Medieval period					Renaissance		Industrial Period		Modern Period
1000-1100	1100-1200	1200-1300	1300-1400	1400-1500	1500-1600	1600-1750	1750-1800	1800-1900	1900-present

SUBJECT: Religious Studies **YEAR: 7**

SEMESTER: 2

Religion	When It Began	Where It Began	Founder	Holy Book(s)	Place of Worship	Key Beliefs About God	Key Practices	Symbol(s)	Major Festivals	Beliefs About Afterlife
Hinduism (Hindus)	Around 4000 - 2000 BCE	Indian Subcontinent	Developed from the people of the Indus Valley	Vedas, Upanishads, Bhagavad Gita	Temple	Many gods (polytheistic), Brahman is supreme reality	Puja (worship) Festivals like Diwali		Diwali Holi	Rebirth (reincarnation) and Moksha (liberation from cycle of rebirth)
Judaism (Jews)	Around 2000 BCE	Ancient Israel	Abraham	Torah Tenakh	Synagogue	One God (Monotheistic) Yaweh/Elohim	Sabbath, Kosher Prayer Festivals		Passover Yom Kippur Hanukkah	Resurrection and Olam Ha-Ba (World to Come); focus on this life
Buddhism (Buddhists)	Around 5th Century BCE	India	Siddhartha Gautama (The Buddha)	Various scriptures (Tripitaka) (Pali Canon)	Temple	No creator God	Meditation Following the Eightfold Path Festivals		Vesak Paranirvana Day	Rebirth and Nirvana (end of suffering and cycle of rebirth)
Christianity (Christians)	Around 1st Century CE	Jerusalem (Middle East)	Jesus Christ	Bible (Old & New Testament)	Church	One God (Monotheistic), Trinity (Father, Son, Holy Spirit)	Prayer Worship Baptism Communion		Advent Christmas Lent Easter	Heaven and Hell; eternal life through faith in Jesus
Islam (Muslims)	7th Century CE	Mecca (Saudi Arabia)	Prophet Muhammad	Quran	Mosque	One God (Allah) Monotheistic	Five Pillars (Faith, Prayer, Fasting, Charity, Pilgrimage)		Eid al-Fitr, Eid al-Adha	Paradise (Jannah) and Hell (Jahannam) based on deeds
Sikhism (Sikhs)	Late 15th Century CE	Punjab (India/Pakistan)	Guru Nanak	Guru Granth Sahib	Gurdwara	One God (Waheguru), Monotheistic	Prayer Seva (service) Community (Langar)		Vaisakhi Guru Nanak's Birthday	Rebirth and union with God; emphasis on living a truthful, humble life

SUBJECT: Religious Studies **YEAR: 7**

TOPIC: Introduction to Islam **SEMESTER: 2**

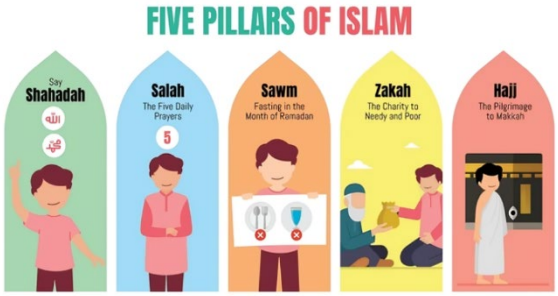
WORD REVOLUTION	
Allah	The Arabic word used by Muslims for God
Five Pillars	The five practices that Muslims are expected to follow
Hajj	Pilgrimage to the holy city of Mecca
Islamophobia	Hostility to Muslims and Islam (which often leads to hate speech)
Muslim	A follower of Islam
Muhammad	The last messenger of God/Allah and the key prophet in Islam
Pilgrimage	A special journey made for religious / spiritual reasons
Prejudice	Pre-judging someone without knowing anything about them
Prophet	A messenger of God/Allah
Ramadan	Fasting during the month of Ramadan
Salah	Prayer five times a day
Sawm	Fasting (going without food or drink)
Shahadah	The declaration of Faith
Zakat	Donating to Charity

What will I study in this topic?	Islam is the second largest religion in the world (and the UK) after Christianity. You will learn about key Muslim beliefs and practices, including beliefs about God (Allah), the Qur'an and the Five Pillars of Islam. You will learn how religious belief influences daily life/religious practice and you will learn that understanding different faiths helps to promote respect, challenge prejudice and works towards building a more inclusive society.
Curriculum Connections:	The foundational knowledge you learn about Islam and its key ethical teachings (such as how to how to live a good life, how to treat others, how religious belief influences practical action) will be further explored and expanded on in Years 8 and 9 alongside other religious views on a variety of ethical and philosophical topics.

Key Beliefs

- Muslims believe that there is **one God** called Allah. Allah is the **creator** and **ruler** of the Universe.
- There are **99 names** for Allah in the **Quran**, each of these names tells Muslims what Allah is like e.g. loving, powerful, forgiving.
- The holy book of Islam is The **Quran,** this contains the **words and teachings of**

The Five Pillars



Expressions of Belief

Muslim birth ceremonies

- Father whispers the **Adhan** (the call to prayer) in the ear of the Baby as soon as it is born
- When a Muslim child is born it is given one of the **99 names of Allah** in the hope that the child will grow up to have this quality.
- A meal is shared to show **generosity and love**. Also a donation is made to charity to help those in need. The **first act of the Charity** of the baby.
- Something **sweet** is put into the mouth of the baby (honey or a bit of date) as the parents want the baby to have a **sweet nature**.

SUBJECT: Religious Studies **YEAR: 7**

TOPIC: Introduction to Islam **SEMESTER: 2**

The Five Pillars of Islam

Shahadah	Salat/Salah	Zakat/Zakah	Sawm	Hajj
• The declaration of faith. • "*There is no God but Allah, and Muhammad is his messenger.*" • To become a Muslim a person needs to recite (read out load from memory) this statement three times in front of witnesses. 	• Prayer. • Prayers are performed five times each day by Muslims all around the world. • Muslim children are also encouraged to pray. • Praying connects Muslims to God (Allah) and also to the wider Muslim community. 	• Charity • The compulsory giving of a 2.5% of your wealth to charity (each year) to benefit the poor. • Those who cannot afford it can give time or practical help. • It is regarded as an act of worship as well as a way to help individuals become less selfish. 	• Fasting (going without food/drink) during Ramadan, the ninth month of the Islamic lunar calendar. • All adult Muslims must fast during the hours of daylight. • Muslims who are unwell, under twelve, very old, pregnant or breast-feeding do not have to fast. 	• The journey that every Muslim must undertake at least once in their lives if they can afford it and are physically able. • It happens once a year in the month of Dhul Hijjah, the twelfth month of the Islamic lunar calendar. • Muslims from all over the world gather together in Mecca and stand before the Kaaba to praise Allah. 

The Quran

- The Muslim holy book which contains the **word of God (Allah),** guidance and teachings.
- It is written in **Arabic**.
- It was given to The **Prophet Mohammed** by the Angel Jibril on the Night of Power.
- The **Night of Power** is celebrated during Ramadan.

How The Quran is treated

- Kept on a **high shelf** (to show that nothing is higher than the word of God/Allah)
- Covered with a **special cloth**
- Raised off the ground to be read
- Wash (perform wudu) before touching it – you need to **be clean** to touch the word of Allah.

SUBJECT: Religious Studies **YEAR: 7**

TOPIC: Religion Through Time **SEMESTER: 2**

WORD REVOLUTION	
Afterlife	What some people think happens after we die
Ancient	Very old, from a long time ago
Civilisation	A group of people who live together with their own culture and rules
Custom	A way of doing things that people in a culture have done for a long time
Embalming	The process of preserving a dead body to keep it from decaying
Festival	A special time when people celebrate with events, music, food
Judgement	Making a decision about someone's actions (right or wrong)
Mummification	The process used in ancient Egypt to prepare a dead body for the afterlife
Myths	A traditional story from long ago
Polytheistic	Belief in multiple Gods/Goddesses
Ritual	A special thing using words/actions that people do again and again
Virtue	A good quality or habit, like being brave
Wisdom	Knowing what is right and making good choices based on experience
Worship	Showing respect and love to a God or something you believe is very

What will I study in this topic?	In this topic you will learn how people in ancient Egypt, Greece, and Rome believed in many Gods and an afterlife. You'll explore how these beliefs shaped their daily lives, including how they worshipped, celebrated festivals, and prepared for death and the afterlife.
Curriculum Connections:	This topic introduces you to some philosophical and religious ideas about life after death and how our behaviour on earth affects this. You will go onto explore some of these ideas in more detail in Year 8 and Year 9.

Ancient Egypt

- Ancient Egyptians believed in many Gods who controlled every aspect of life and nature.
- They thought the soul lived on after death, so they prepared carefully for the afterlife by building tombs and mummifying bodies.
- People prayed, made offerings and celebrated festivals to honour the Gods.

Ancient Rome

- Ancient Romans believed in many Gods and Goddesses who looked after different parts of life.
- They prayed, made offerings, and held festivals to please the Gods and protect their city.
- Religion was part of everyday life and influenced important events like wars, celebrations, and government decisions.

Ancient Greece

- Religion was an important part of daily life and certain key ideas about the Gods were widely accepted.
  - They did exist
  - They could influence human affairs
  - They welcomed and responded to acts of worship
- As a result, there were temples dedicated to the different Gods and Goddesses. Anyone could visit a temple whenever they wished. They often left offerings such as flowers or food to please the Gods and gain favour.

SUBJECT: LANGUAGES: FRENCH — YEAR: 7

TOPIC 4: Social Media & Technology — SEMESTER: 2

KEY VOCABULARY

key verbs	*time phrases*
utiliser to use	**often** souvent
se faire des amis to make friends	**every day** tous les jours
prendre des photos take photos	**in the evening** le soir
partager to share	**le matin** in the morning
aller (je vais) to go (I go)	**le week end** at the weekend
regarder (je regarde) to watch (I watch)	***time phrases*** *(past tense)*
télécharger to download	**le week end dernier** last weekend
chatter (je chatte) to chat (I chat)	**hier** yesterday
jouer (je joue) to play (I play)	**la semaine dernière** last week
publier to post	**il y a deux jours** two days ago
écrire to write	**hier soir** last night
reference to others	***adjectives***
ma mère mum	**animé** lively
mon père dad	**utile / inutile** useful / useless
mon frère brother	**pratique** practical
ma sœur sister	**bon marché / cher** cheap / expensive
mon cousin cousin	**rapide** quick
mon ami/mon amie friend	**dangereux/euse** dangerous
mon professeur teacher	**facile / difficile** easy / difficult
mon voisin neighbour	**confortable / facile à utiliser** comfy / easy to use

What will I study in this topic?	☐ 1: Describing how often I use technology ☐ 2: Saying how friends & family use technology ☐ 3: How I used technology last weekend ☐ 4: Writing about my use of technology
What will I be able to do by the end of this topic?	Discuss free time hobbies and how I use technology Talk about other people (reference to others) Begin to understand how to use past tense verbs

Grammar: Utiliser + pour + infinitive

- ✓ '**Utiliser**' means '**to use**'
- ✓ English infinitives start with 'to'
- ✓ French infinitives end in '**-er**', '**-ir**', '**-re**'
- ✓ '**pour**' means '**in order to**'

J'utilise mon portable **pour tchater.** I use my phone to chat.
J'utilise mon tablet **pour regarder les videos.** I use my tablet to watch videos.

Grammar: Reference to others

The French **pronoun** and **auxiliary verb** change depending on **who the verb refers to** (the subject)

Elle a envoyé un message She sent a message
Ils ont envoyé un message they sent a message

Past participles don't change

Grammar: le passé compose (past tense) ⚠

Past tense The main past tense in French is called the *perfect tense or passé composé.*

avoir (have) + **-é -u** or **-i** (past participle)

j'**ai joué**	I played
tu **as chanté**	you sang
il/elle /on **a mangé**	s/he/we ate
nous **avons acheté**	we bought
vous **avez visité**	you pl. visited
ils/elles **ont feté**	they celebrated

What is a past participle?

The part of the passé compose that conveys meaning ('eaten', 'went', 'saw')

To form it, take an infinitive and add an ending.

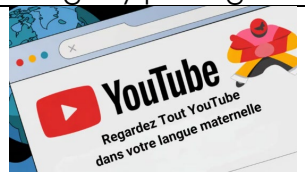
-er = é -ir = i -re = u	aller ➔ all- ➔ allé partir ➔ part- ➔ parti fondre ➔ fond- ➔ fondu

Many verbs have irregular past participles:
boire ➔ **bu**, voir ➔ **vu**, faire ➔ **fait**

SUBJECT: LANGUAGES: FRENCH — YEAR: 7

TOPIC 4: Social Media & Technology — SEMESTER: 2

Key Questions:	**Quelle technologie aimes-tu utiliser? Pourquoi?** What technology do you like to use? Why? **Pour quoi utilises-tu (ton portable/ta tablette/etc) normalement?** What do you use (your mobile/tablet/etc) normally? **Pour quoi utilisais-tu (ton portable/ta tablette/etc) normalement?** What did you use (your mobile/tablet/etc) for normally?
Cultural links:	Technology for language learning. Try putting the apps you use normally in French!

1 2 3 4 5 6 francetélévisions (like BBC)		Quizlet.com Educake.com vocabulary and skills	CoffeeBreak French — Podcasts in French for beginners!

⚠️ Passé compose (past tense) avoir verbs and être verbs

In French, verbs of movement **do not** use **avoir** to form the passé compose tense. Instead they use **être**.

avoir verbs (most verbs)	
j'ai mangé	I ate
j'ai acheté	I bought
j'ai vu	I saw
j'ai bu	I drank
j'ai perdu	I lost

être verbs (movement verbs)	
je suis allé(e)	I went
je suis arrivé(e)	I arrived
je suis entré(e)	I entered
je suis rentré(e)	I returned home
on est allé(é)(s)	we went
on est parti(e)(s)	we left

Curriculum Connections:

- ☐ **Opinions**
- ☐ C
- ☐ **Reference to others**
- ☐ D
- ☐ N
- ☐ F

Spanish in context

J'aime utiliser mon portable. J'utilise mon portable tous les jours parce qu'il est très utile.
I like to use my phone. I use my phone every day as it is very useful.
Généralement, j'utilise la tablette pour faire mes devoirs et pour jouer aux jeux vidéo.
Generally, I use the tablet to do homework and to play videogames.
Le week-end dernier, j'ai écouté de la musique et j'ai regardé des vidéos avec mes amis.
Last weekend, I listened to music, and I watched videos with my friends.

Quantifiers and intensifiers:

Get into the habit of including **quantifiers** and **intensifiers** to **add detail to your work**

un peu	a little
très	very
assez	quite
trop	too (much)

SUBJECT: LANGUAGES: FRENCH — YEAR: 7

TOPIC 5: Food — SEMESTER: 2

KEY VOCABULARY

topic vocabulary	key eating verbs
le pain bread	**manger/boire** to eat/drink
le fromage cheese	**prendre** to take / to have
le jambon ham	**prendre le petit-déjeuner** to have breakfast
le poulet chicken	
le poisson fish	**déjeuner (je déjeune)** to have lunch (I have lunch)
la viande meat	
le fruit fruit	**goûter (je goûte)** to have a snack (I snack)
la pomme apple	
l'orange orange	**dîner** to dine
les légumes vegetables	**adjectives**
la salade salad	**délicieux/euse** delicious
le riz rice	**savoureux/euse** tasty, rich in flavour
les pâtes pasta	**plein de saveur** flavourful
la soupe soup	**épicé** spicy
l'œuf egg	**sucré** sweet
le lait milk	**salé** salty
l'eau water	**amer / amère** bitter
le jus juice	**froid / froide** cold
le café coffee	**chaud/e** hot
le té tea	**dégoûtant/e** disgusting

What will I study in this topic?	☐ 1: Saying what food I like and don't like to eat ☐ 2: Saying what I have at different meal- times ☐ 3: Investigating Spanish cultural dishes and comparing them ☐ 4: Café and restaurant conversations
What will I be able to do by the end of this topic?	Discuss food preferences Find out about French food; differences and similarities between what and when we eat

Grammar: Direct Object Pronouns

French **direct object pronouns**

me me	**nous** us
te you (one person)	**vous** you plural
le it (masculine)	**les** them (m/f)
la it (feminine)	

J'aime le pain. Je le mange le matin.
I like bread. I eat it in the morning.

Grammar: Subject Pronouns

- ✓ **Pronuoun**: replaces a **noun.**
- ✓ **Subject pronouns** show who is doing the action of a verb

je I	**nous** we
tu you (one person)	**vous** you plural
il he	**ils** they
elle she	**elles** they –(f)
on we	

Grammar: Direct Object Pronouns

- ✓ A **direct object** is the **thing or person that receives the action** of the verb.

I want **the apple**.
→ "The apple" is the *object*.

- ✓ To avoid repeating nouns, we can replace the direct object with a **direct object pronoun**.

I want **the apple**. I eat **it**
→ "**it**" is the *direct object*.

Regular present tense verb -er

manger – to eat

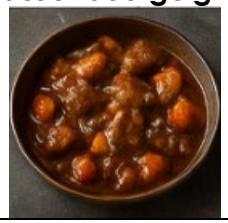
je mange	I eat
tu manges	you (singular) eat
il/elle/on mange	he/she/one eats
nous mangeons	we eat
vous mangez	you (plural) eat
ils/elles mangent	they eat

SUBJECT: LANGUAGES: FRENCH **YEAR: 7**

TOPIC 5: Food **SEMESTER: 2**

Key Questions:	**Que manges-tu normalment ?** What do you normally eat? **Qu'est-ce que tu as mangé hier ?** What did you eat yesterday? **Quel plat français aimerais-tu goûter ?** What French food would you want to try?
Cultural links:	In France breakfast (le petit déjeuner) is similar to in the UK. In France lunch (le déjeuner) is a bigger meal than in the UK and schools have three courses (starter, main, dessert). The evening meal (le dîner) is usually around a table with the whole family. Typical food is quite different in France. Here are four typical foods found in France. **Regarde les images en dessous** ⬇️

La compida típica española

Le bœuf bourguignon	La quiche lorraine	Les crêpes	Croque monsieur
			

Reference to others
Talking about other people means you need to change the verb.

Mon frère mange les crêpes en France My brother eats pancakes in France
Mes amis mangent le dîner chez moi My friends eat dinner at my house

French in context

J'aime manger le poisson. Je le mange le vendredi avec des frites.
I like fish. I eat it on Fridays with chips.
Hier j'ai mangé les pâtes. Mon père l'a cuisiné.
Yesterday, I ate pasta for dinner. My dad cooked it.
Mon plat français préféré serait le bœuf bourguignon. Je l'aime manger avec du riz.
My favourite dish would be beef bourguignon. I like to eat it with rice.

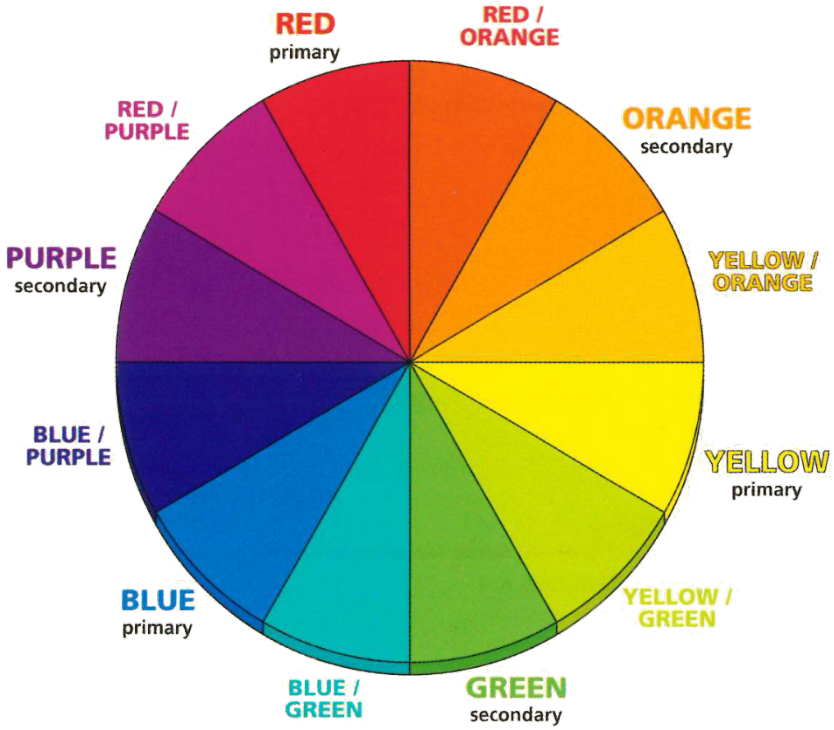
Curriculum Connections:

- ☐ **Opinion** about food
- ☐ C
- ☐ **Reference to others:** discussing food
- ☐ **Description** of what you eat, when
- ☐ N
- ☐ F

SUBJECT: Art & Design **YEAR:** KS3

TOPIC: Formal Elements **SEMESTER:** 2

THE COLOUR WHEEL



COMPLEMENTARY COLOURS

The colours opposite each other on the wheel are called complementary colours.

RED is opposite GREEN
BLUE is opposite ORANGE
YELLOW is opposite PURPLE

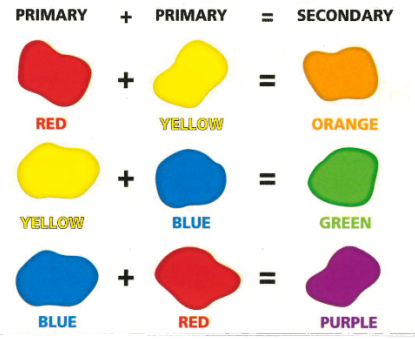
If a colour is surrounded by its complementary colour it will appear stronger and brighter.

PRIMARY COLOURS

There are THREE PRIMARY COLOURS.
These are pure colours which cannot be made by mixing other colours.

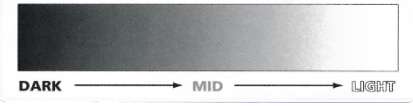
SECONDARY COLOURS

Secondary colours are made by mixing each primary colour with one other primary colour.



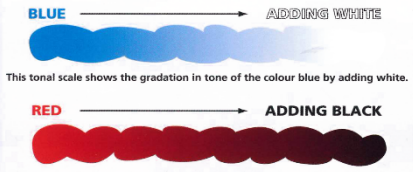
TONE

This tonal scale shows the gradation of dark tones, mid tones and light tones.
It shows the passage from black through grey to white.

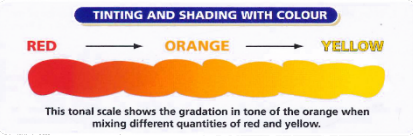


TINTING AND SHADING

Tinting and shading refer to making a colour lighter by adding white (tinting) or darker by adding black (shading).



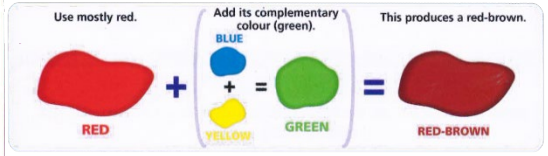
TINTING AND SHADING WITH COLOUR

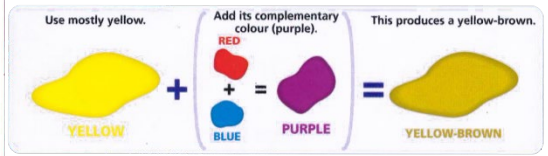


TERTIARY COLOURS

TERTIARY COLOURS CONTAIN A MIX OF ALL THREE PRIMARY COLOURS. A PRIMARY, MIXED WITH ITS COMPLEMENTARY COLOUR EQUALS A TERTIARY COLOUR

PRIMARY + COMPLEMENTARY = TERTIARY





By using varying amounts of each colour, an infinite number of shades are possible. The more colours are mixed on the palette, the less luminous the result.

WORD REVOLUTION VOCABULARY

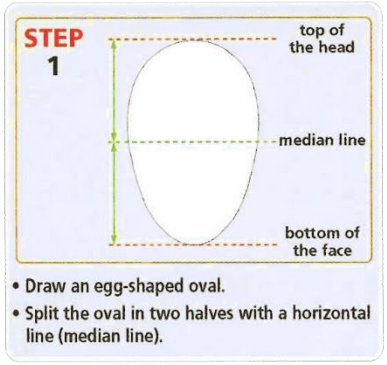
PORTRAIT	VIEWPOINT	GRAPHIC ART
OBSERVATION	SYMMETRICAL	ILLUSTRATION
FACIAL -	STILL-LIFE	FINE ART
PROPORTION	ELLIPSE	ICONOGRAPHY
EXPRESSION	VERTICAL	SYMBOLISM
TONE	DEPTH	ZENTANGLE
TINT	PROPORTION	MARK-MAKING
SHADE	ACCURACY	HATCHING
CUBISM	LIMITED PALETTE	CROSS HATCHING
CONTOUR	MONOCHROME	STIPPLING
DISTORTION	COLLAGE	TONAL RANGE
GRADATION	DEFINE	COMPOSITION
COMPLIMENTARY	COMPOSITION	CONTEXTUAL
- COLOUR	DIAGONAL	ANALYSIS
	METHOD	PERSONAL
	PERSPECTIVE	LAYERING
		VISUAL IDENTITY

SUBJECT: Art & Design **YEAR:** KS3

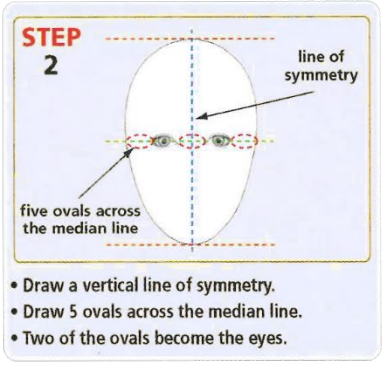
TOPIC: Formal Elements **SEMESTER:** 2

PORTRAIT

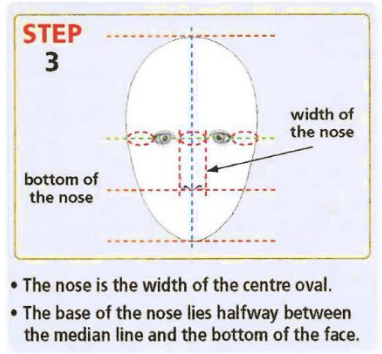
HOW TO DRAW A PORTRAIT - A STEP BY STEP GUIDE



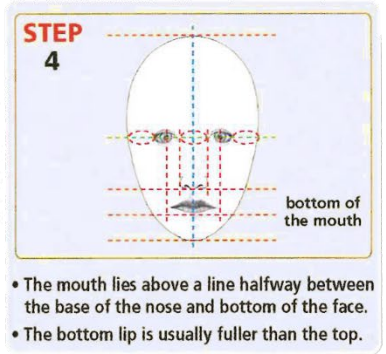
- Draw an egg-shaped oval.
- Split the oval in two halves with a horizontal line (median line).



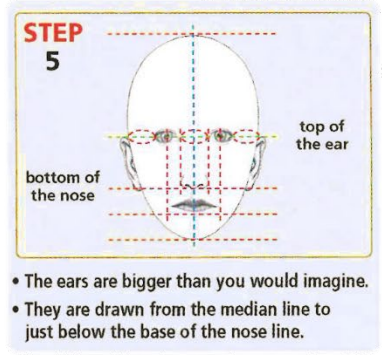
- Draw a vertical line of symmetry.
- Draw 5 ovals across the median line.
- Two of the ovals become the eyes.



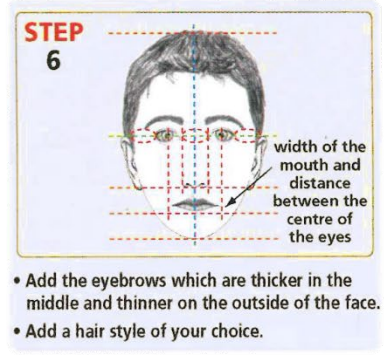
- The nose is the width of the centre oval.
- The base of the nose lies halfway between the median line and the bottom of the face.



- The mouth lies above a line halfway between the base of the nose and bottom of the face.
- The bottom lip is usually fuller than the top.

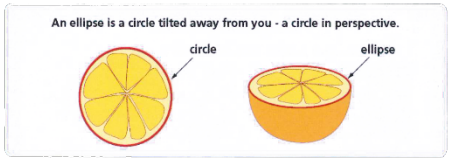


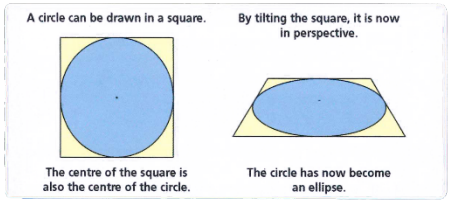
- The ears are bigger than you would imagine.
- They are drawn from the median line to just below the base of the nose line.

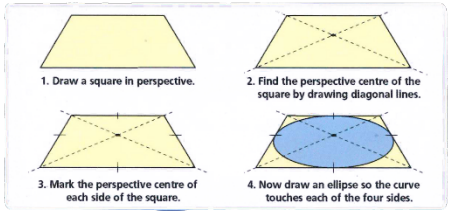


- Add the eyebrows which are thicker in the middle and thinner on the outside of the face.
- Add a hair style of your choice.

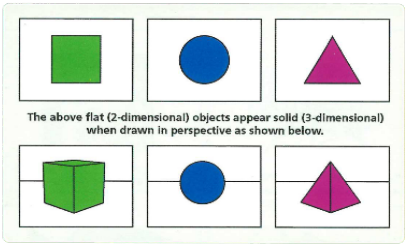
CIRCLES & ELLIPSES

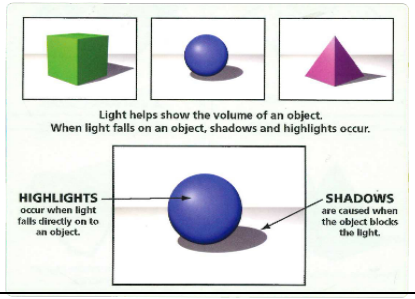






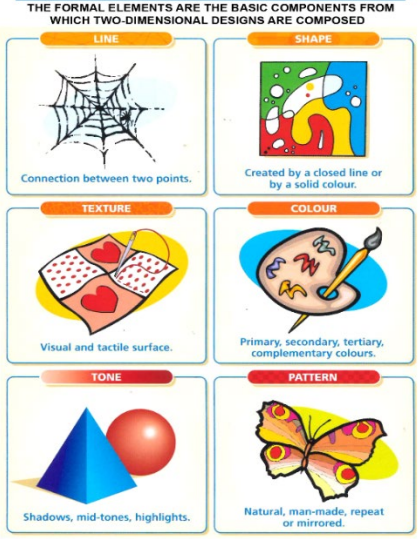
LIGHT AND SHADE

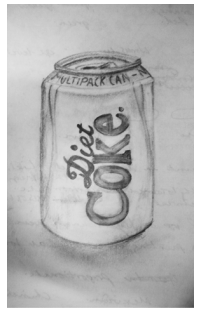


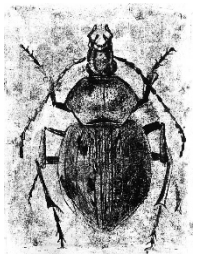


ANALYSING IMAGES

FORMAL ELEMENTS





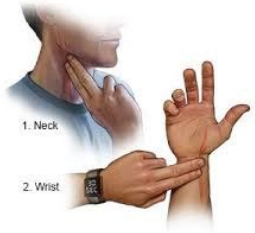


SUBJECT: Physical Education **YEAR: 7**

TOPIC: Summer Sports **SEMESTER: 2**

WORD REVOLUTION	
Wicket	Three stumps with two bails across at either side of the cricket pitch.
LBW	Ball hits batter's body instead of the bat which would have hit the wicket.
Batter	Striker of the ball.
Bowler	A member of the fielding time who bowls.
Reaction time	The length of time taken to respond to a stimulus.
Power	Strength X Speed
Speed	The rate at which someone moves.
Warm-up	Preparing for physical activity by gently exercising beforehand.
Pulse-raiser	First stage of a warm up, a light continuous exercise like jogging.
Stretching	Lengthening muscles to improve flexibility and range of motion.
Accuracy	The quality of being precise.
Metre	Unit of measurement used for high jump and shot put.
Co-ordination	The ability to use different parts of the body together efficiently.

Why might you take your pulse? When might you take your pulse? What will it show you?



How to Take Your Pulse

Immediate effects of exercise	
Increased Heart Rate	Your heart beats faster to pump more oxygen-rich blood to your muscles.
Increased Body Temperature	Muscle activity generates heat, raising your core temperature. You may start to sweat to cool down.
Increased Breathing Rate and Depth	You breathe more quickly and deeply to take in more oxygen and expel carbon dioxide.

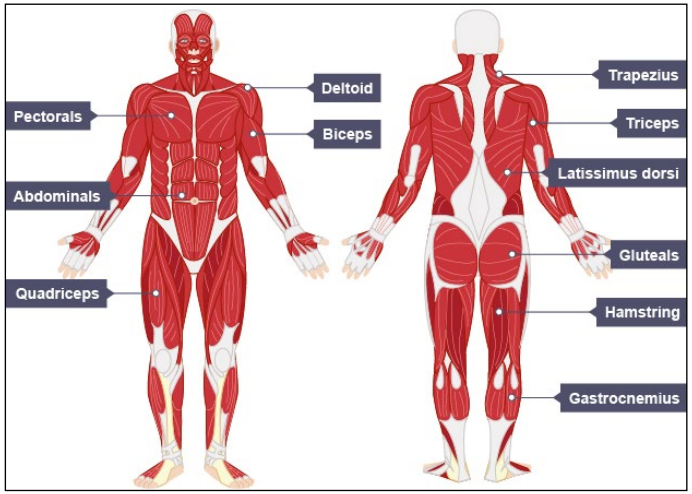
Further reading/resources

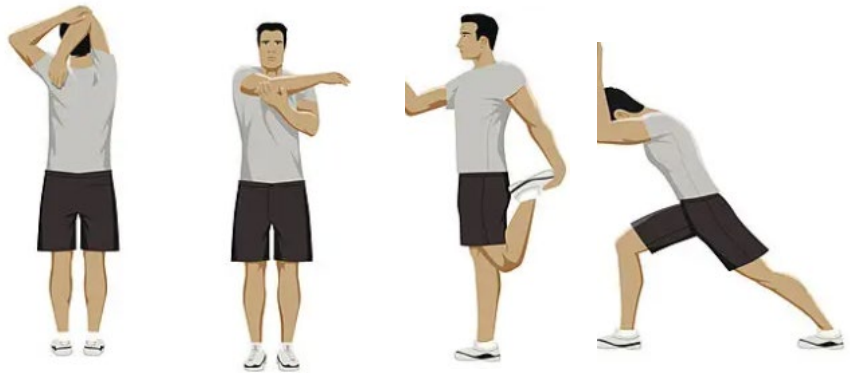
BBC Bite size KS3

www.youthsporttrust.org

PE with Joe (you tube)

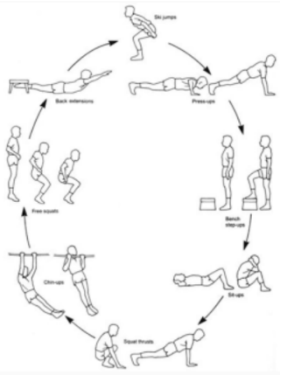
www.englandnetball.co.uk





Task: Can you identify the main arm and leg muscles being stretched in the diagrams to the left?

Challenge yourself: Can you identify which skills you will need these muscles for?

Athletics – Field	Athletics - Track	Rounders	Cricket	Fitness	Dance
Shot put: **Technique:** - Shot rests on the neck, gripped with fingers and not touching the palm - Elbow high and out - Eyes forward - Body upright - Follow through Measure distance from toe board to nearest mark by the shot (metres) **High jump:** **Technique:** - Curved run - Last 2 steps quick and powerful - Take off from inside foot - Drive outside knee upward with arms - Maintain upright posture - Land on back or seated to absorb impact. Measure height of the bar (metres)	**Sprint technique:** - Tall stance - Head neutral - Knees high - Elbows bent - Hands straight - "Hip to lip" - Push off the balls of the feet **Sprint start position:** - Dominant foot behind line - Non-dominant foot behind heel (T) - Dominant foot moved behind (T) - Front foot flat, rear foot on toes - Hands shoulder-width apart, fingers behind line **Relay:** - Baton held at the bottom - Place baton firmly in receiver's hand - Receive starts moving before giver reaches the zone - Maintain speed	**Underarm throw:** - Face direction of target - Hold throwing arm straight behind back - Swing arm forwards - Release ball at waist height **Catching:** - Cupped hand position - Bringing hands into body - Eyes on the ball **Barrier:** - Keep eyes on the ball - Hands in position and heel + knee join directly under eyes - Little fingers together and palm facing up **Bowling:** - Smooth underarm action - Height of throw between knee and head - Bend knees and align shoulders with hips - Release ball from fingertips **Batting:** - Sideways stance - Strong grip - Swing through the ball - Step forward with opposite foot - Transfer weight for power generation - Maintain balance	**High catch:** - Position body under the ball - Keep eyes on the ball - Cup shape with hands to cushion the catch - Bring the ball into body. **Overarm throw:** - Step towards target, swing the throwing arm forward - Release ball at head height - Transfer weight **Bowling:** - Turn shoulder towards wicket - Rotate shoulder and push bowling arm forward and down - Ball needs to bounce before the target	**Circuit Training** **Stations**: range from 6-10 they alternate muscle groups the arrows show the direction of movement from one station to another **Flow**: Arrows show the direction students move from one station to the next. **How it works**: Spend a set time at each station They then move to the next station Can be repeated 	**Gestures** Use your hands, arms, or face to express emotion or tell a story. Movements should be clear and intentional. Can be literal (e.g., waving) or abstract (e.g., reaching).  **Levels** Use different heights in your movement: high (standing tall), medium (bent knees), and low (close to the floor).  **Mirroring** Copy your partner's movements as if you are their reflection. Stay directly opposite your partner. Focus on timing and direction to match perfectly. 
Key rules and important things to remember					
Show technique on "Technique!" Throw on "Throw!" Avoid twisting or turning mid-air	Eyes forward – Do not look back Focus on own performance	**Out if…** Your shot is caught, you ran inside a post, the post you are running to is stumped, you overtake	**Out if…** Bowler hits the stumps with their bowl, shot is caught, you knock over your own stumps	Safe technique, hydration, alternate muscle groups, progressive in time, rest period	Work in a 32-beat count, good body tension, aesthetically pleasing

SUBJECT: Computer Science **YEAR:** 7

TOPIC: Spreadsheets **SEMESTER:** 2

WORD REVOLUTION

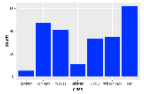
Spreadsheet	A type of program which stores and analyses data in a table format
Formula	A mathematical rule expressed in symbols.
Autosum	A function that quickly calculates the sum of a range of number
Data	Information that can be interpreted and processed by a computer
Information	Data which has meaning to it.
Control	The ability to manage or direct a computer system or process
Input	A device through which information enters a system
Output	A device where information leaves a system
Process	The running of a computer program
Flowchart	A diagram to show the sequence of actions in a computer system
Program	A series of coded software instructions to control a computer
Sequence	A particular order in which related things follow each other
Variable	A named storage location in a computer's memory that holds a value
Iteration	To repeat something within a program

What will I study in this topic?	We will be looking extensively at spreadsheets, and how these can be used to manipulate data to present them in a manner that makes it easier to understand. We will look at examples of control systems and how these use the four main fundaments of Inputting, Outputting, Storing and Processing data. Finally, we get practical, building on the basic programming principles taught in primary school and how this can be used in a text-based environment.
What will I be able to do by the end of this topic?	By the end of Semester 2, students will be able identify if a piece of hardware is an Input, Output, Storage or Process device. Students will be able to describe why we might use spreadsheet software. They will have used a range of functions and formulas in a spreadsheet and produced at least one visual method of displaying this. Students will have used both block and text-based programming and structured programs to draw shapes and used variables to store text.

Key tips for using spreadsheet software

- Always start a formula with an equals sign (=)
- Boxes are called 'cells'
- Cells are referred to by their name (A1, B4, H8)
- The letter indicates the Column and the number the Row
- Use the Autofill to quickly copy formulas downwards

Presenting data visually in spreadsheets



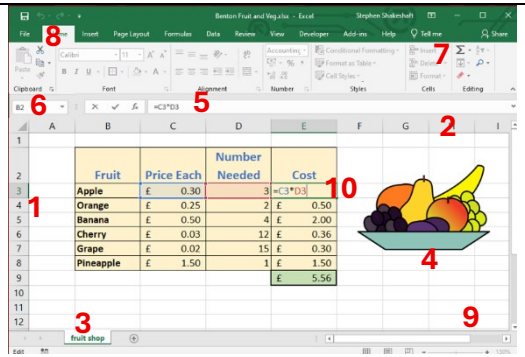
Bar Charts – are a great way to make quick comparisons between items.

Line Charts – can be used to show trends and patterns over time

Pie Chart – Shows visually the percentage share of a item, object or event

Parts of a spreadsheet

1) Rows
2) Columns
3) Worksheet Name
4) Image
   Formula Bar
5) Cell Reference



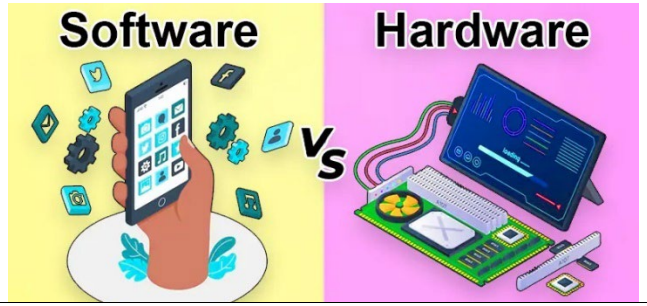
6) Cell reference
7) Autosum
8) Save
9) Zoom Tool
10) Formula

SUBJECT:	**Computer Science**
TOPIC:	**Understanding Computer Systems**
YEAR:	**7**
SEMESTER:	**2**

Key Questions:	1. How can we store data in a way that we can manipulate to produce results we want? 2. How can we turn data into meaningful and visual information? 3. What is the difference between software and hardware? 4. How can we determine if a piece of hardware on a computer is an Input, Output, Storage or Processing device? 5. What do we mean by words 'to program'? 6. Do computers ever make mistakes if we are the ones programming them?
Curriculum Connections:	In Semester 2 units, we begin our journey towards understanding data and information and how this can be manipulated and represented visually. This provides the knowledge base for future units in Year 8 and 9 to explore in more detail data modelling. We look at how computer systems are based on the principles of inputs and outputs which will lead on to hardware, software and components within the Tech in the House unit at the start of year 8. Programming or coding plays an integral part to understanding how computers process instructions in a sequenced manner and will provide the underpinning knowledge required for future lessons on block based programming in Year 8 and Python programming for the future in Year 9.

Differences between Hardware and Software

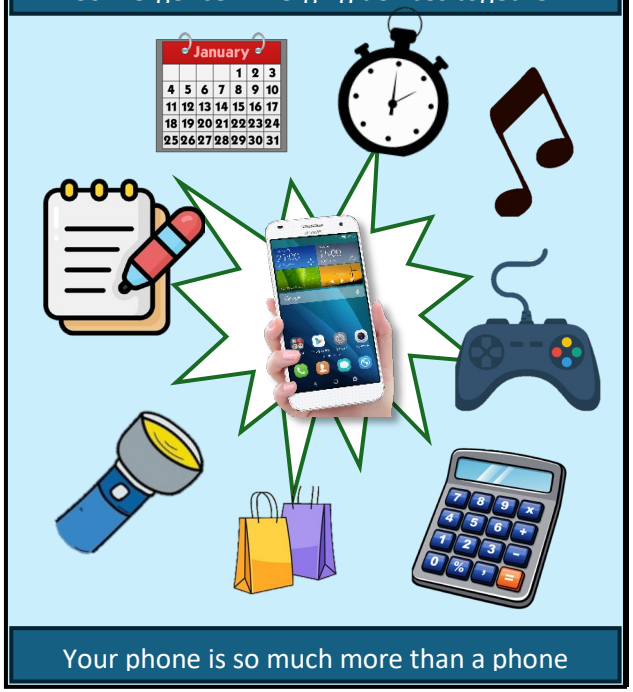
- Software are the programs that run on the computer
- They cannot be touched
- Software needs hardware to work
- Eg. Word, Excel,



- Hardware are the physical parts
- They can be touched
- Computers need hardware to run
- Hardware needs software

Peripheral (add-on) Devices of a Computer System

Convergence – merging devices together



SUBJECT: Computer Science **YEAR:** 7

TOPIC: Coding **SEMESTER:** 2

Python Vs Scratch – what's the difference?

Python Term	What It Means	Like in Scratch
Variable	A name that stores a value (like a number or word).	A variable block (e.g., score = 10)
Print	Shows a message on the screen.	Like the "say" block, but in the console.
Input	Lets the user type something.	Like asking a question and storing the answer.
If Statement	Makes decisions (runs code only if something is true).	Like the "if" or "if-else" block.
Loop	Repeats code.	Like "repeat" or "forever" blocks.

Understanding Python – what do the colours mean?

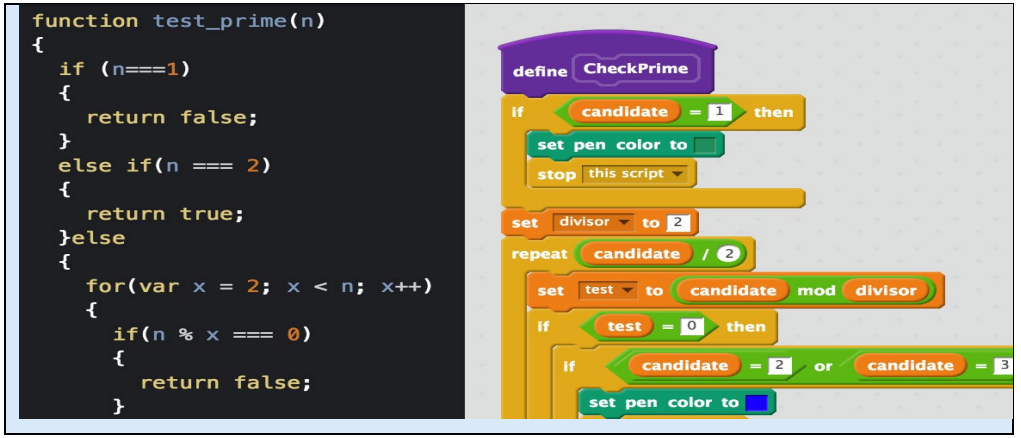
Colour	What It Highlights	Example	What It Means
Orange	Keywords	if, else, def, while	Special words that Python understands as commands.
Green	Strings (text)	"Hello" or 'name'	Text inside quotes.
Purple	Built-in functions	print(), input()	Functions that Python already knows how to use.
Black	Variables	name = "Alex"	Names you create to stare values in. Choose the name of your variables well.
Red	Errors or warnings	SyntaxError	Something is wrong with code.

What's the difference between data and information?

Data is like raw facts or pieces of a puzzle. On their own, they don't tell you much. *Example: 5, 12, 18, 22 – just numbers.*

Information is what you get when you organise or understand the data. It's the completed puzzle that tells a story. *Example: "The average age of the students is 14.*

We use many different types of software to transform data into meaningful information such as Access and Excel
Now the numbers make sense!



SUBJECT: Design & Technology **YEAR: 7**

TOPIC: Product Design **SEMESTER: 1 & 2**

WORD REVOLUTION	
Design Brief	A short paragraph explaining what you need to design and make
Accuracy	Doing something very carefully and exactly
CAD	Computer Aided Design: using a computer to draw your design
CAM	Computer Aided Manufacture: using a machine to make your design
Evaluation	Saying what went well and how you could improve your work
Pewter	A soft, silvery alloy used for casting.
MDF	A man-made wood made from tiny fibres
Alloy	A mixture of 2 or more metals. Done to improve properties
Coping Saw	A thin-bladed saw for cutting curves in wood or plastic
Pillar Drill	A large, fixed drill used to make holes in materials
Try Square	A tool used to draw straight lines at 90°
Vice	A tool that holds materials still while you work
Annotation	Notes or labels that explain your drawings
Pins	Small nails used to hold material together until glue dries

What will I study in this topic?	• Designing for a client (Tropical World) • Computer Aided Design (CAD) • How to create movement using mechanisms • Pewter casting
What will I be able to do by the end of this topic?	• Use the range of key tools show below safely and effectively • Follow the design process: research, design, make and evaluate • Use CAD to design for laser cutting • Measure and mark out materials using a steel rule and try square

Key Tools:

Try Square

Pillar Drill

Wood Vice

Coping Saw

Curriculum Connections:

Introduces key skills that you will use throughout your time in D&T at Benton Park:

- Developing ideas through sketching
- Computer Aided Design (CAD)
- Marking out accurately
- Use of basic hand tools
- Safe and effective use of the pillar drill

Health & Safety

Wear goggles when operating machinery

Tie back long hair

Wear an apron.

How will I be assessed?

Design Ideas

Practical outcomes

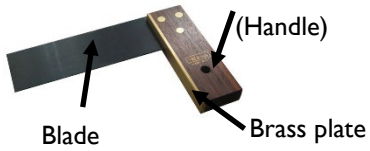
End of unit test

SUBJECT: Design & Technology — YEAR: 7

TOPIC: Product Design — SEMESTER: 1 & 2

Key practical skill: Marking out with a try square

Try Square



Step 1

Mark out your dimension with a steel rule

Step 2

Place the blade flat on your work in line with your measurement

Step 3

Place the brass plate securely against your work

Step 4

Run your pencil along the blade to draw your line

Key Technical Knowledge: Materials

Alloys

Alloys are a made by mixing different metals together. This is done to achieve improved properties

Pewter is an example of an alloy

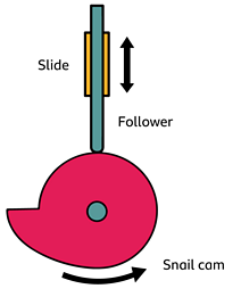
Manufactured Boards

These are timber based materials made by combining wood with another material, usually a type of glue called resin

MDF is an example of a manufactured board

Cam Mechanisms

The rise and fall movement of the follower is determined by the shape of the cam:



Eccentric cam

1 Even rise and fall per turn

Heart cam

Slow long rise, shor fall, short rise, long fall

Hexagon cam

6 small rises and falls per turn

Drop cam

Slow rise, fast drop once per turn

Pewter Casting

Step 1

A mould is designed using "2D Design" on the computer (CAD). There must be a runner to pour the molten pewter in and a riser to allow air to escape. Red lines tell the laser to cut

Step 2

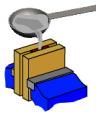
The mould is cut out using the laser cutter

Step 3

Pewter is melted in a ladle until it reaches its melting point (approx. 200C)

Step 4

Molten pewter is poured into the mould through the runner



2D Design Key Tools

Line tool. Press and hold for the connected line tool

Shape tool. Press and hold a choice of different shapes

Path tool. Use to draw a curved path. Left click to place a point on the path. Right click to end the path

Text tool. Use to add text or letters

Delete all tool. Press and hold for the delete between 2 intersections tool:

SUBJECT: MUSIC **YEAR: 7**

TOPIC: **SEMESTER: 1 and 2**

WORD REVOLUTION	
The Elements of Music	These are the building blocks of any piece of music.
Dynamics	The volume of the music
Rhythm	Note duration / length
Pitch	How high or low the notes are
Structure	How the music is set out
Metre	The number of beats per bar
Instruments (sonority)	The instruments used (sound colour)
Tonality	The key of the music – major 😀 minor 😔
Texture	How the musical layers are combined
Tempo	The speed of the music
Harmony	Use of chords and accompaniment
Sharp and Flat	Sharp ♯ Flat ♭ A sharp raises a note by a semitone A flat lower a note by a semitone

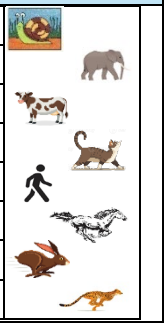
What will I study this year?	**Performing:** Keyboard, drums, guitar and voice **Reading Music:** Learn symbols for notes & rhythms **Composing:** Make short tunes in different styles **Technology:** Use GarageBand to make and save music **Listening:** Identify pitch, dynamics, texture **Context:** Understand music's origins and emotions
What will I be able to do by the end of this year?	**Compose**: Create music in C major/D minor on GarageBand **Understand**: Treble clef notes, rhythms, and time values **Identify Styles**: E.g. Classical era, Jazz, Rock, Pop **Perform**: Use instruments or voice in time confidently

Dynamics

pp	Pianissimo
p	Piano
mp	Mezzo Piano
mf	Mezzo Forte
f	Forte
ff	Fortissimo
	Crescendo
	Diminuendo

Tempo

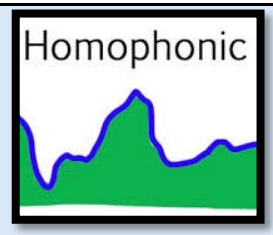
Lento	Slowly
Largo	Slow and stately
Adagio	Leisurely
Moderato	Moderate pace
Andante	Walking pace
Allegro	Fast
Vivace	Lively
Presto	Very quickly

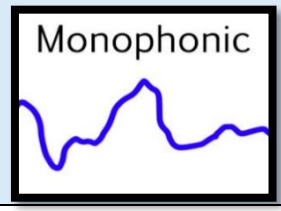


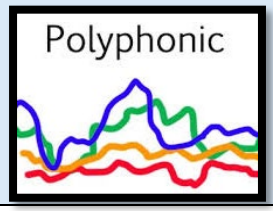
Rhythm

Semibreve	
Minim	
Crotchet	
Quaver	
Semiquaver	

Texture is the way the musical layers are combined. Basic texture can be described as 'thick' or 'thin'

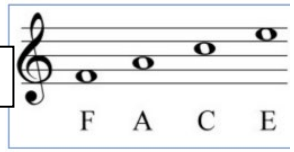




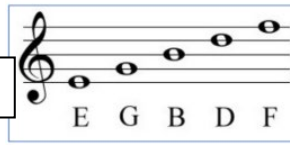


SUBJECT: MUSIC YEAR: 7

Space notes

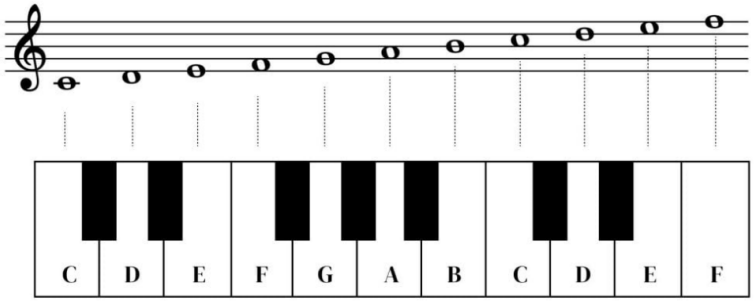


Line notes



Every **G**reen **B**us **D**rives **F**ast

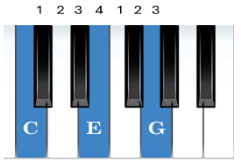
Treble clef notes and keyboard



How to work out major and minor chords

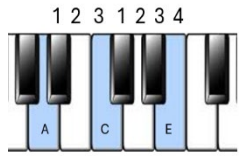
Major

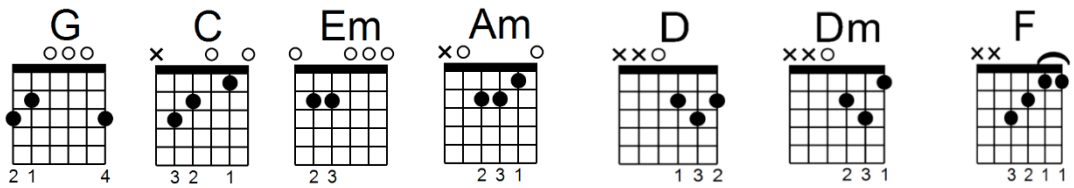
4 steps then 3 steps



Minor

3 steps then 4 steps

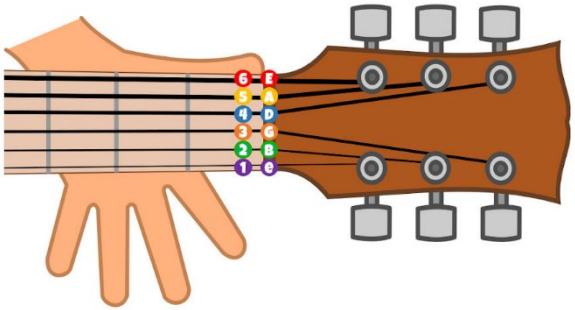


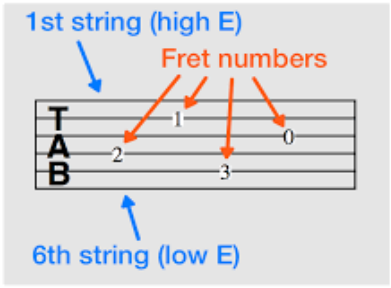


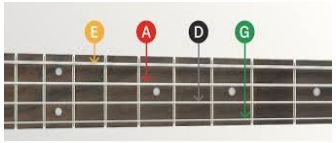
Guitar Chords

Beat	1	2	3	4
RH Hi-hat	X	X	X	X
LH Snare drum			X	
RF Bass drum	X			

Drum Kit Rock Beat







Bass Guitar strings

INSTRUMENTS

Strings	Woodwind	Brass	Percussion
Violin	Flute	Trumpet	Xylophone
Viola	Clarinet	French Horn	Glockenspiel
Cello	Oboe	Trombone	Timpani
Double Bass	Bassoon	Tuba	Triangle
Guitar	Saxophone	Cornet	Tambourine
Bass Guitar	Recorder		Drum Kit


BENTON PARK