



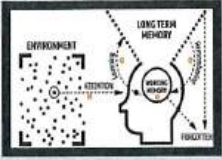
# Ormiston Sheffield Community Academy

## Spring Term

### Study Skills Booklet



<b>Name</b>	
<b>Year</b>	
<b>Form</b>	
<b>Form Room</b>	
<b>Form Tutor</b>	

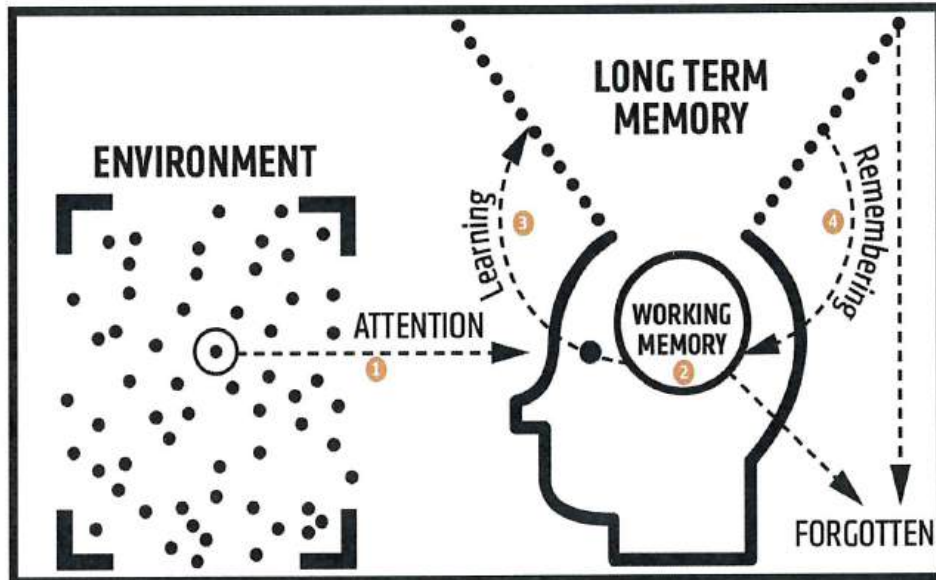


Last term we looked at how to learn, retain knowledge, and store information in our long-term memory. This term we will look at:

- How successful we were and what needs to change
- Revisiting study skills

Study environment and focus

Long Term memory



Working memory

Remembering



# Mid-Year Results Reflection

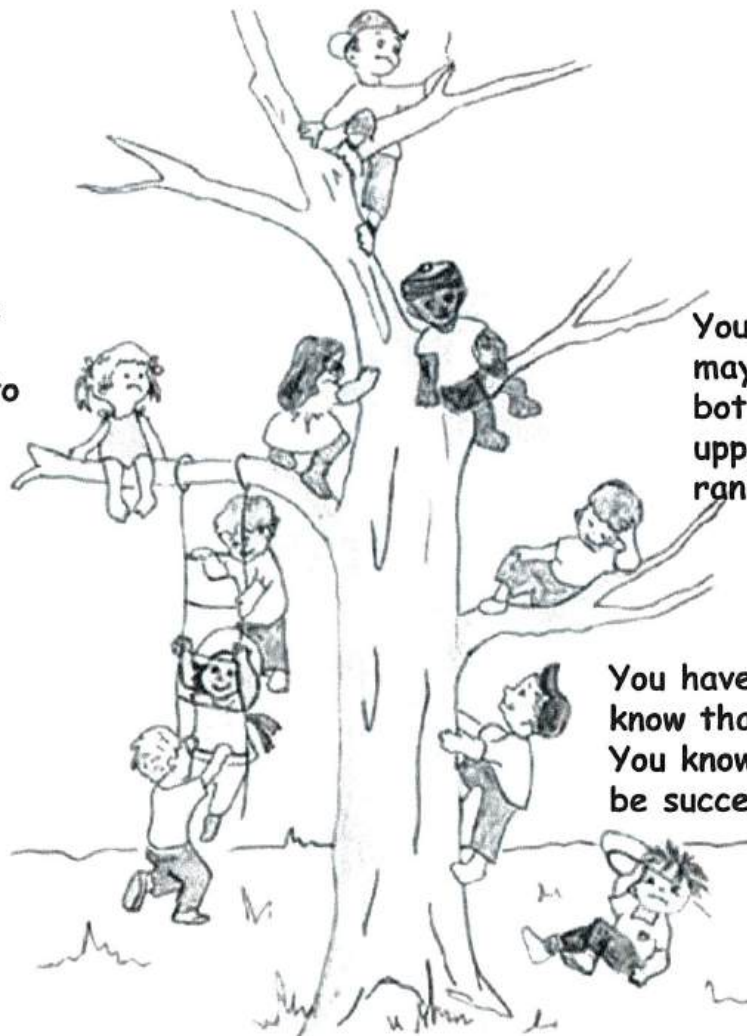
Subject	Rank Autumn	Rank Spring	Reflection and What I need to do next
English			
Maths			
Science			
History			
Geography			
Spanish			
ICT			
Drama			
Art			
Music			
Technology			



*You have completed your Mid-Year assessments and have your rank order for each subject. Look at your results and where you are in the rank orders - where do they reflect where you are on the Success Tree?*

**At the top. You have the highest rank scores and are confident that you are on track to achieve the top grades when you get to GCSE.**

**You can see the top. You know what you have to do to put that extra effort to achieve it.**



**You are coasting - maybe at the bottom middle or upper middle of the rank orders.**

**You have made progress and know that you can improve. You know what is needed to be successful.**

**On the way up the ladder. You are pleased with some of your progress. You need some help and support to get you to the next level.**

**You are at the bottom of rank ordering. You are disappointed in your results and have underperformed. You need some support to get up the rank orders.**

# Mid-Year Results Success Tree



*Look at your results and where you are in the rank orders. Label your Success Tree with your subjects according to where you are and where you need to be by End of Year assessments.*



*Gates open at 08:15 and you should be on-site and inside the building by 08:30. The first bell rings at 08:37, followed by the second bell at 08:40, signalling that you should be in your form room. This routine helps establish order and set a positive tone for the day, promoting punctuality and focus.*

A WEEK Timetable					
Lesson	Monday	Tuesday	Wednesday	Thursday	Friday
Morning Reg					
Period 1					
Period 2					
Period 3					
Period 4					
Period 5					
Afternoon Reg and activities					
Study Subjects					

B WEEK Timetable					
Lesson	Monday	Tuesday	Wednesday	Thursday	Friday
Morning Reg					
Period 1					
Period 2					
Period 3					
Period 4					
Period 5					
Afternoon Reg and activities					
Study Subjects					



You now need to think about the study skills you have been taught and how you have used them. Beside each strategy start by RAG rating and then write why you have given them that rating. The final box is for a study method that you may have found useful that is different to what you have been taught.

## Study Skill

## Reflection

Mind Map



Flashcard



Re-Teach



Spelling strategies



Own Strategy



# Using Critical Knowledge Organisers to Study Effectively



Take this easy quiz to make you think about how you went about studying for your Mid-Year assessments. Make some decisions based on the right answers and your assessment results.

1. **Why is creating a study timetable important?**
  - a) It helps you avoid distractions
  - b) It ensures you manage your time effectively
  - c) It makes studying more fun
2. **What is the best way to take notes during a lesson?**
  - a) Write down everything the teacher says
  - b) Summarise key points in your own words
  - c) Copy from your friend's notes
3. **Which of these is an active revision technique?**
  - a) Reading notes silently
  - b) Highlighting text only
  - c) Creating flashcards and testing yourself
4. **Why should you take regular breaks when studying?**
  - a) To check social media
  - b) To help your brain process and retain information
  - c) To finish later
5. **What is the benefit of setting specific goals for each study session?**
  - a) It makes you feel busy
  - b) It gives you a clear focus and sense of achievement
  - c) It allows you to study less
6. **Which environment is best for studying?**
  - a) A quiet, well-lit space with minimal distractions
  - b) A noisy café
  - c) Your bed while watching TV
7. **What should you do if you don't understand a topic?**
  - a) Ignore it and move on
  - b) Ask your teacher or use reliable resources to clarify
  - c) Wait until the exam

# Critical Knowledge Organisers



*You have critical knowledge organisers for every topic you study. CKOs contain powerful and important core knowledge. The information forms the foundation for that subject with the facts and key vocabulary that you can, and should, learn. They do not replace what you learn in class!*

## *Rationale*

**For class work**

**For homework**

**For checkpoints and assessments**

**For revising**

**For checking core learning**

## *Explanation*

You will have a CKO for every subject: Maths, English, Science, Spanish, History, Geography, ICT, Music, Drama, Art, D&T.

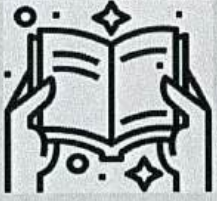
The Study Booklet has all the CKOs and you will have them on you at all times – this is part of your core academy equipment.

Your Form Tutors and teachers will teach you the revision strategies and how to use them with your subject CKOs.

You will be set revision tasks for homework on your CKOs so that you are ready for classwork as well as assessment points.

Why is it important that you have a secure and confident knowledge of the core information needed in every subject you study at Key Stage 3?

***How well did you use your CKOs in preparation for your Mid-year? What could you have done better?***



What is a Reading Age?

A Reading Age is:

My Reading Age should be:

*Academic Reading*

*Transactional Reading*

*Reading for Pleasure*

# Tracking the Text



*There are many proven reasons why tracking the text improves reading. Whether you are a good reader, a weaker reader, dyslexic, have ADHD etc, this is the easiest step on your journey to successful reading.*

## Why do I Track the Text?

- **It improves my focus and attention:** Tracking helps me stay engaged with the text and reduces distractions.
- **It enhances my eye movement and tracking skills:** Guides my eyes smoothly across the page, preventing skipped words or lines.
- **It boosts word recognition and fluency:** Reinforces the connection between spoken and written words.
- **It supports my comprehension:** Helps me process and understand what I am reading more effectively.
- **It reduces visual stress:** Tools like reading rulers can minimize glare and visual overload, especially helpful if I have dyslexia or ADHD.
- **It encourages independence and confidence:** Tracking tools help my self-guided reading and reduce frustration.
- **It works for all ages and abilities:** Whether using a finger, a ruler, a pen or any of those, tracking is a strategy that benefits me regardless of what I am reading.



### How to Track With Your Finger

1. Put your finger *under* the text—not covering it.
2. Move smoothly from left to right.
3. Keep your eyes on the words, not your finger.
4. Follow the line breaks carefully.
5. Aim to read each word once without skipping.

# Academy Spelling Strategies



## *Syllabification*

*Breaking words into sound chunks/syllables*

*This is how you learn more challenging words and their spelling.*

## *Application*

**temperature**

temper noun, with limits

how hot or cold a thing, place or person is, measured  
in degrees Celsius, Fahrenheit or Kelvin

Choose vocabulary from a CKO and use this method to learn the spelling.

# Academy Spelling Strategies



*You can pyramid the word, letter by letter*

*Or*

*You can pyramid the word syllable by syllable*

## *Application*

Choose some vocabulary from a CKO and pyramid them below.

# Academy Spelling Strategies



*Prefixes: added to the beginning of the root word to create a new word with a different meaning.*

*Suffix: added to the end of the root word to create a new word with a different meaning.*

## *Application*

UN help FUL

EX port ED

De ACTIV ate

Choose some tricky vocabulary from a CKO and use this method to learn the spelling.

# Using the Internet for Support

*Sometimes we are unsure of a topic or we really want to find out more about it.  
Sometimes we just want to consolidate our learning. Here is a guide to some  
websites that might help you.*

*Name of website*

*What it does*

**Khan Academy**



<https://www.khanacademy.org/lohp/learner>  
Free, high-quality online learning resources and offers instructional videos, practice exercises, and personalised learning tools across a wide range of subjects.

**Quizlet**



<https://quizlet.com/gb>  
Interactive flashcards, practice tests and study guides

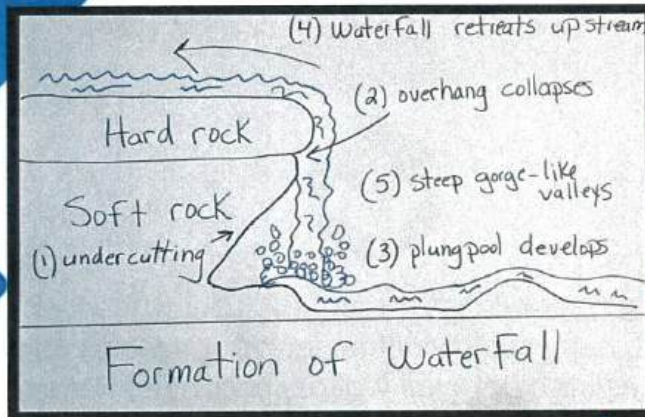
**BBC Bitesize**

**B B C**  
**BITESIZE**

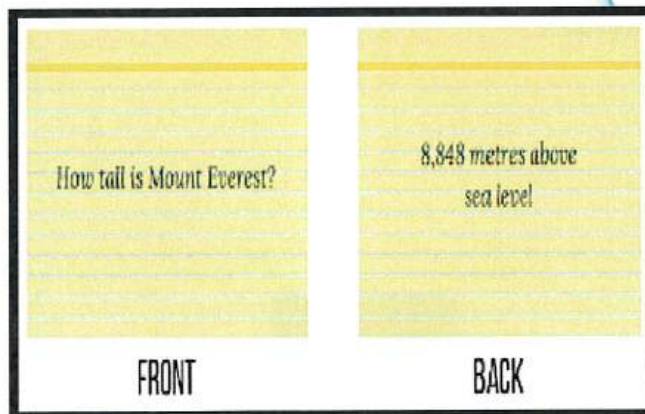
<https://www.bbc.co.uk/bitesize>  
BBC's free online educational platform providing study support and revision resources.



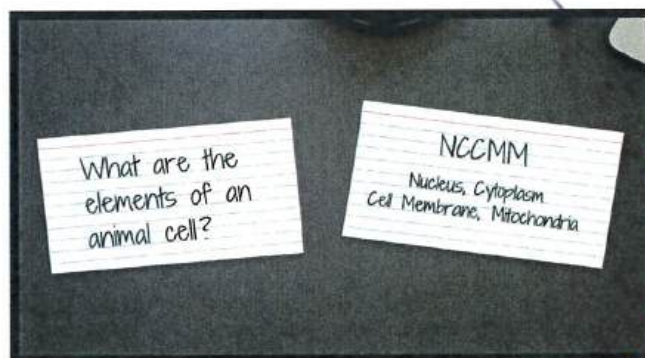
Flashcards are great for revision because they help you remember things more easily. They help your brain get better at remembering the information. Flashcards are quick to use, easy to carry, and make learning more fun



Use flashcards for revision by writing a question or prompt on one side and the answer on the other.



Use flashcards for revision by writing a question or prompt on one side and the answer on the other.



You can then test yourself or have someone to test you and the exact correct answer is on the back.



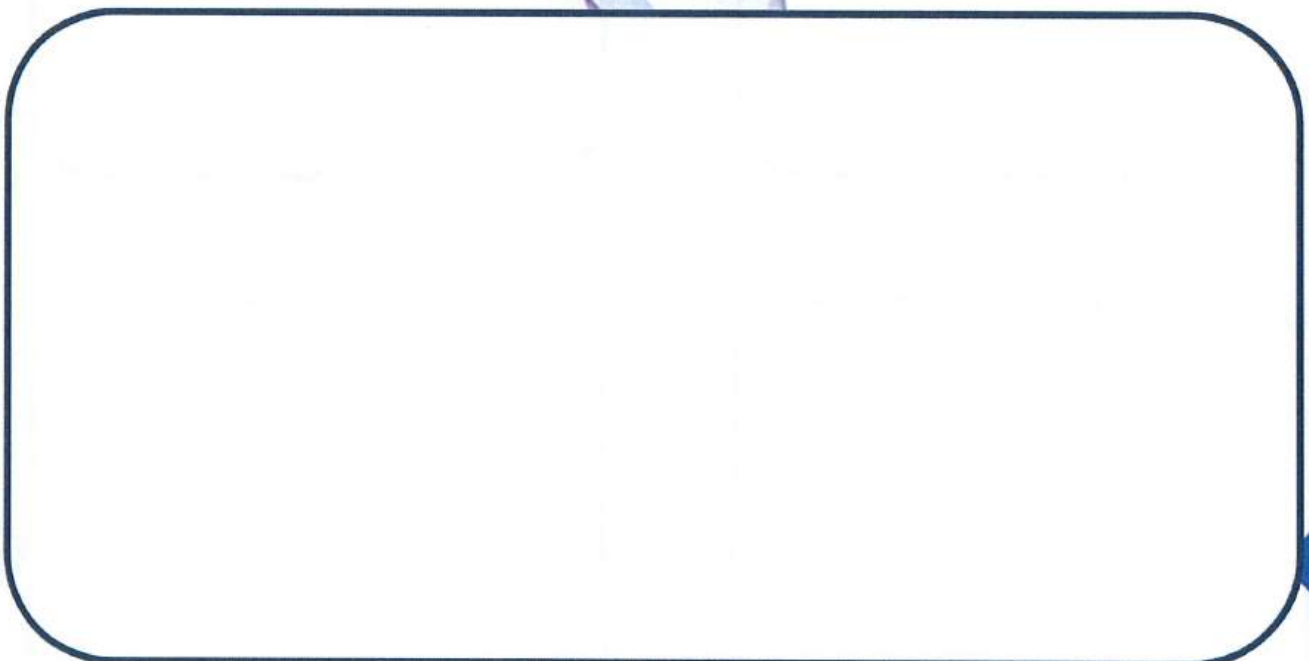
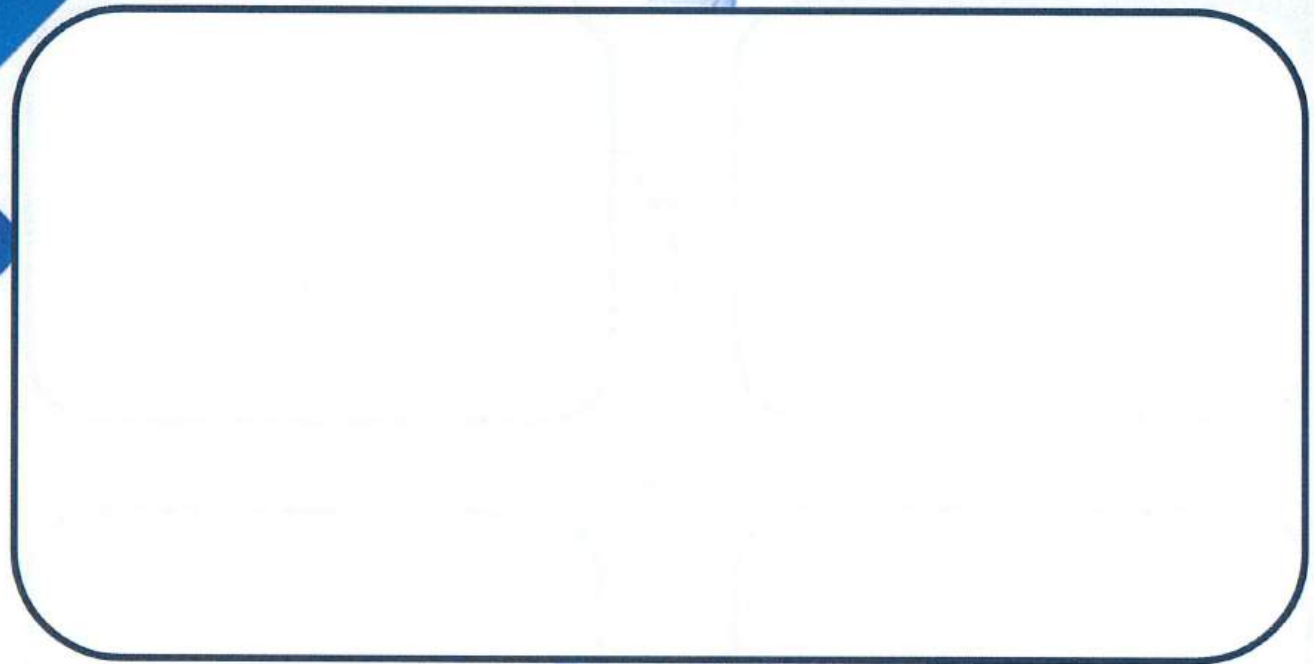
This is too busy for such a small space and better suited for a mind map as there is too much crammed onto a small card





*Flashcards are great for revision because they help you remember things more easily. They help your brain get better at remembering the information. Flashcards are quick to use, easy to carry, and make learning more fun*

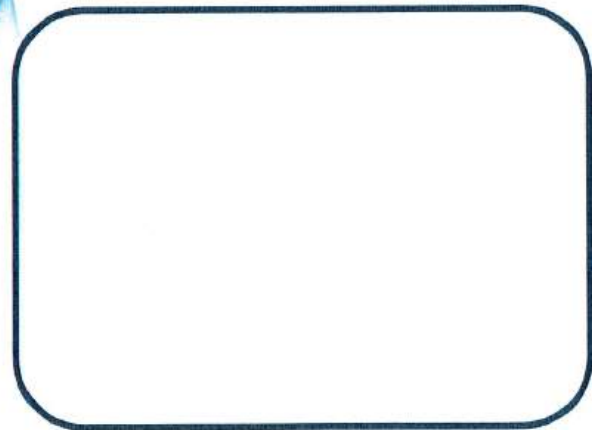
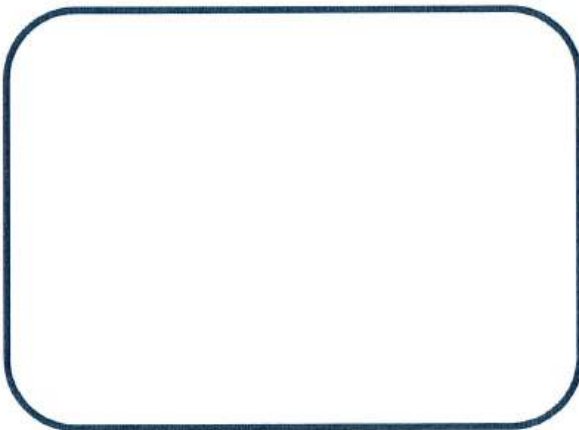
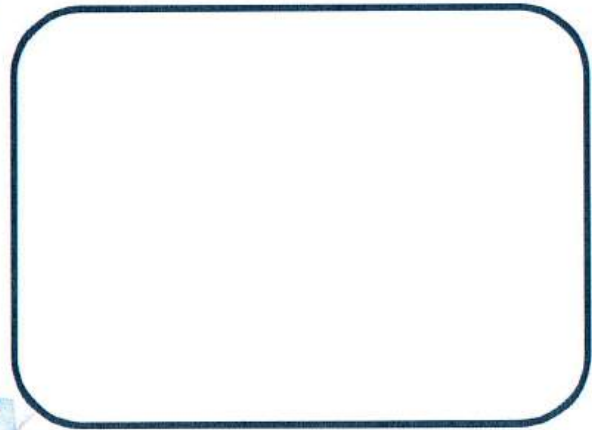
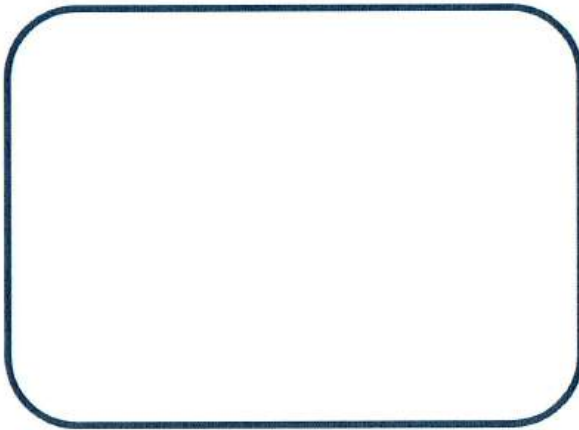
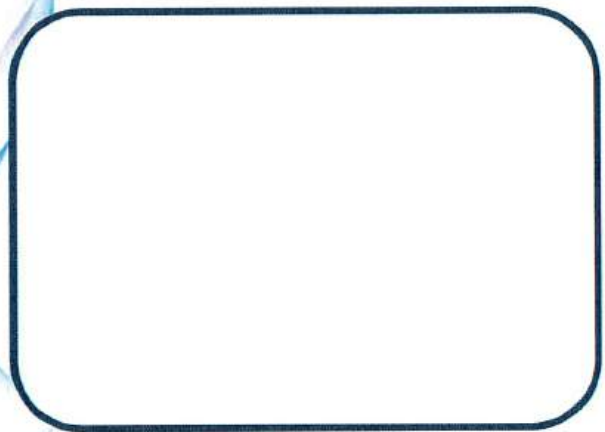
*Create your own flashcard (front and back) on a topic of your choice, in your preferred style*

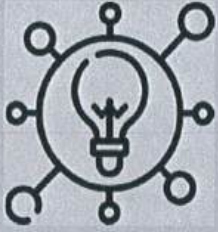




*Use flashcards for revision by writing a question or prompt on one side and the answer on the other. You can then test yourself or have someone to test you and the exact correct answer is on the back.*

*Create your own flashcard (front and back) on a topic of your choice, in your preferred style*





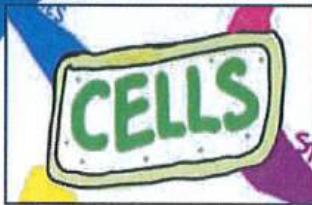
Mind maps help you learn better by showing information in a clear and fun way. They help you see how things are linked and what the most important points are.

**Step 1:**  
Draw or write  
the main title,  
issue or focus.

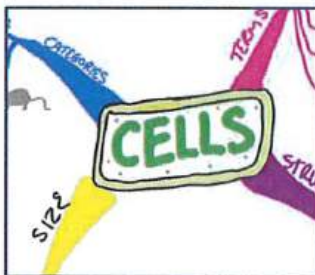
**Step 2:**  
Draw some  
branches off your  
main title, issue or  
focus to help you  
organise your  
thoughts.

**Step 3:**  
At the end of  
each branch,  
draw thinner  
branches of  
ideas relating to  
the content and  
possible images.

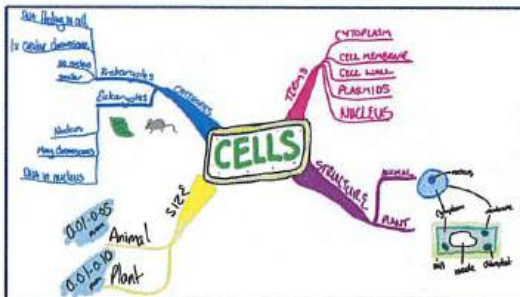
**Step 4:**  
Once complete:  
Are there connections  
between your ideas?  
Can you draw arrows  
to link together  
different parts of your  
mind map?



**Step 1:**



**Step 2:**



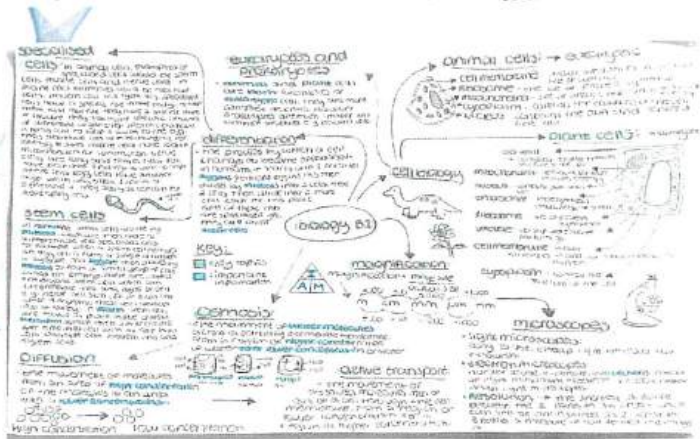
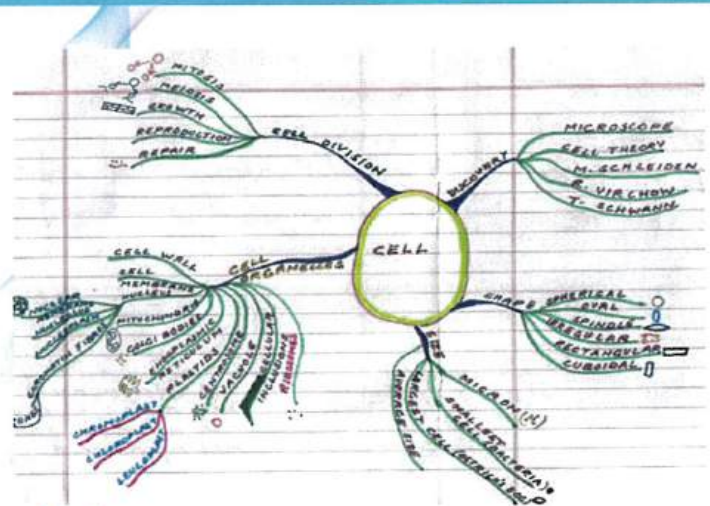
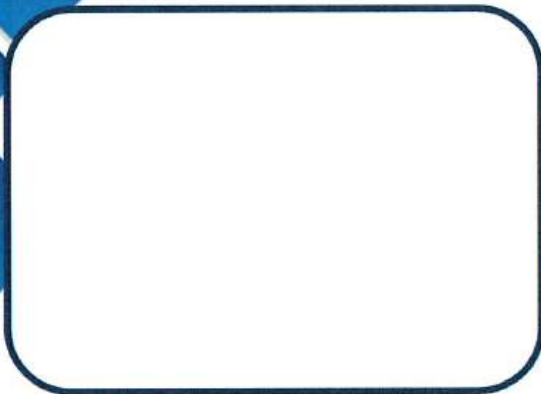
**Step 3:**

**Step 4:**



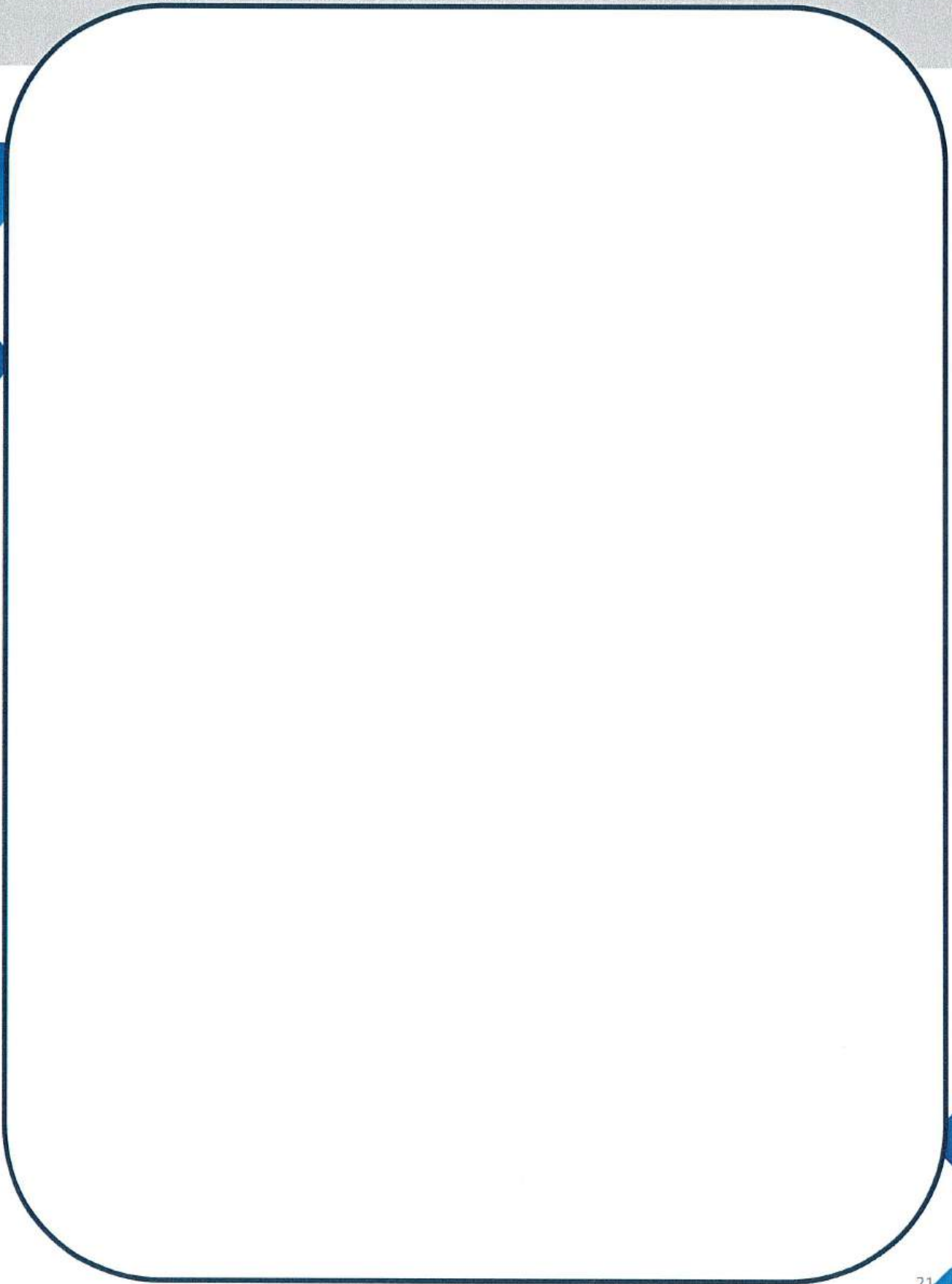
When creating mind maps, you need to make sure that it works for you. So, how much detail, and whether you use images, acronyms etc depends on how you like to remember things.

## What is good in these mind-maps?





*Create your own mind map on a topic of your choice, in your preferred style*





*Re-teaching is a good revision technique because it helps you check what you really understand. Your brain works harder to remember and understand it properly. If you get stuck, it shows you what you need to go over again.*

## Steps

### Step 1

Choose a topic. Write down the key points that are critical - you could use flashcards or a mind map for this.

### Step 2

Explain the topic/idea to someone: (parent/carer, family or friend)

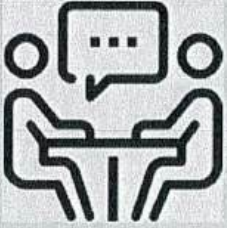
### Step 3

Identify where you have a knowledge gap/something you could not remember, and go back to learn it.

### Step 4

Go through the process again, refine your explanation until you can explain the topic simply and accurately.

# Re-Teach



*Use this page to practise the Re-teach method on a topic of your choice.*

A large, empty rounded rectangular box with a dark blue border, intended for students to write their re-teach notes.

# Mindfulness Moments for Studying



Here are some simple mindfulness exercises that can be done in 5 minutes or less to help you reset during a study break.

## Mindful Breathing: A simple and very effective exercise.

- Sit comfortably with a straight back and your feet flat on the floor.
- Place one hand on your stomach and the other on your heart.
- Inhale slowly and deeply through your nose, feeling your belly expand.
- Exhale slowly through your mouth, feeling the air leave your chest and then your stomach.
- Repeat this for 10 breaths, or count each breath up to ten and start again



## 5-4-3-2-1 Sensory Technique: This grounding exercise uses your five senses to bring your attention to the present moment.

- Acknowledge **5** things you can **see** around you (e.g., a crack in the wall, the texture of your desk).
- Acknowledge **4** things you can physically **feel** (e.g., your feet on the floor, the fabric of your clothes).
- Acknowledge **3** things you can **hear** (e.g. distant traffic).
- Acknowledge **2** things you can **smell** (e.g., a scented candle, a cup of tea).
- Acknowledge **1** thing you can **taste** (e.g., the lingering taste of coffee, or take a sip of water).



## Mindful Movement: Get up and move your body with intention.

- **Stretching:** Reach your arms overhead, roll your neck, and wiggle your fingers and toes, paying close attention to the sensations of tightness and release in your muscles.
- **Slow Walk:** Walk a short distance very slowly, focusing entirely on the sensation of each step and the movement of your body.



## Mindful doodling: A good way to calm the mood and improve concentration.

- Find a pen/pencil and paper, sit comfortably.
- Draw basic shapes (circles, lines, zigzags) or patterns repeatedly.
- Link your drawing to your breath - inhale to make a stroke, exhale to pause or make another.



# Attendance and Achievement



Regular attendance is a key driver of academic success, personal development, and future life opportunities. When you attend school consistently, you benefit from high-quality teaching, structured routines, and meaningful relationships that support both learning and wellbeing. Attendance is not only an educational requirement - it is a strong indicator of your future outcomes and long-term potential.

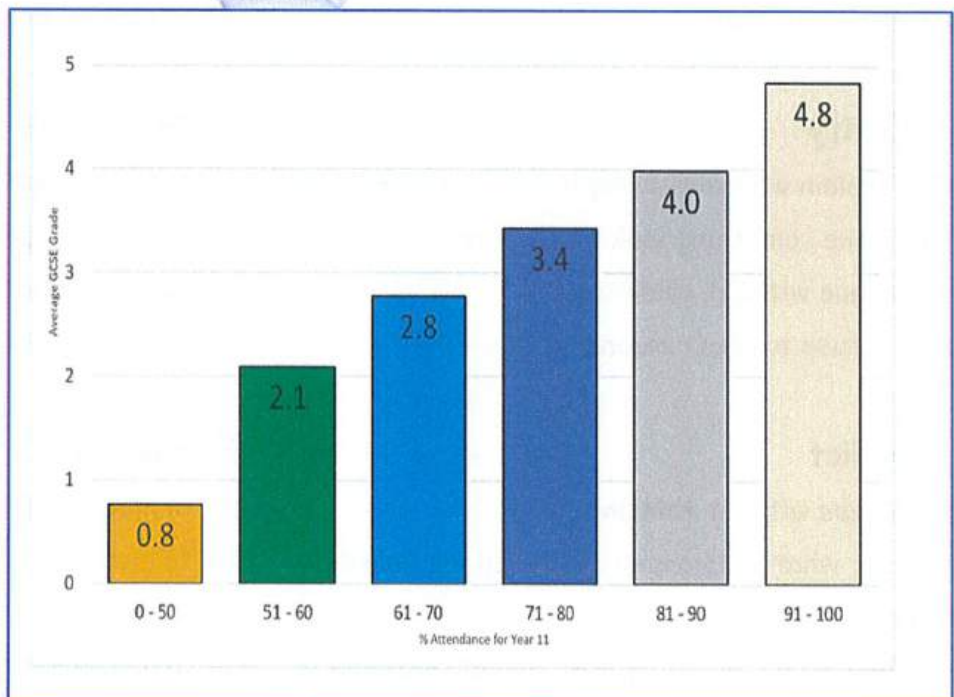
How many days absence have you had?

What are the reasons students may be absent?

What happens when an employee is absent from work?

What happens when a student misses lessons?

What does this chart tell you about the impact that poor attendance has on academic success?



## QUOTES:

*Every day you show up, you grow up.*

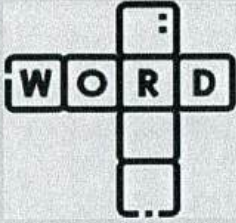
*Success begins with showing up—even on the days you don't feel like it.*

*Your future self will thank you for today.*

*Small steps each day lead to big achievements.*

*You don't need to be perfect—just present.*

Now make up your own quote



*The bigger your vocabulary the more power you have.  
The following words are all words that you will commonly find on assessments,  
GCSEs and BTEC PSAs. By the end of this term –you will have learn them all!*

## 1. Analyze

- a) To ignore something completely
- b) To examine something carefully in detail
- c) To copy someone's work
- d) To make something bigger

## 2. Contrast

- a) To show how things are similar
- b) To show how things are different
- c) To make something look better
- d) To hide the truth

## 3. Justify

- a) To explain why something is fair or reasonable
- b) To make something look attractive
- c) To argue without evidence
- d) To refuse to give reasons

## 4. Predict

- a) To guess without thinking
- b) To say what will happen in the future based on evidence
- c) To describe something that already happened
- d) To change your mind often

## 5. Evaluate

- a) To judge the value or quality of something
- b) To ignore all details
- c) To copy someone's ideas
- d) To make something disappear

## 6. Summarize

- a) To write every detail of a text
- b) To give a short version of the main points
- c) To create a new story
- d) To argue against something

## 7. Infer

- a) To state something directly
- b) To guess randomly
- c) To figure out something from clues and evidence
- d) To copy what someone said

## 8. Significant

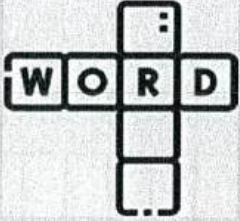
- a) Very small and unimportant
- b) Very important or meaningful
- c) Easy to forget
- d) Something that happens often

## Emphasize

- a) To make something less noticeable
- b) To give special importance or attention to something
- c) To ignore something completely
- d) To repeat something without meaning

## 10. Interpret

- a) To translate or explain the meaning of something
- b) To copy someone's ideas
- c) To make something disappear
- d) To argue without evidence



*The bigger your vocabulary the more power you have.  
The following words are all words that you will commonly find on assessments,  
GCSEs and BTEC PSAs. By the end of this term –you will have learn them all!*

## 1. Demonstrate

- a) To show clearly by example or action
- b) To hide something from view
- c) To guess without thinking
- d) To refuse to explain

## 2. Establish

- a) To destroy something completely
- b) To set up or create something firmly
- c) To ignore all details
- d) To make something disappear

## 3. Illustrate

- a) To decorate with pictures only
- b) To explain or make clear using examples or pictures
- c) To argue against something
- d) To copy what someone said

## 4. Maintain

- a) To keep something in good condition or continue it
- b) To stop something suddenly
- c) To ignore something completely
- d) To make something disappear

## 5. Modify

- a) To change something slightly to improve it
- b) To destroy something completely
- c) To copy someone's ideas
- d) To ignore all details

## 6. Obtain

- a) To lose something important
- b) To get or acquire something
- c) To make something disappear
- d) To refuse to accept something

## 7. Require

- a) To need something because it is essential
- b) To ignore something completely
- c) To guess without thinking
- d) To make something disappear

## 8. Respond

- a) To refuse to speak
- b) To answer or react to something
- c) To ignore all details
- d) To copy someone's ideas

## 9. Clarify

- a) To make something easier to understand
- b) To confuse someone on purpose
- c) To hide the truth
- d) To ignore all details

## 10. Indicate

- a) To point out or show something
- b) To destroy something completely
- c) To guess without thinking
- d) To refuse to explain

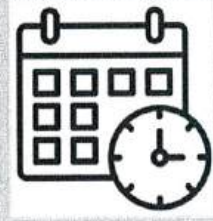


# End of Year Assessment Dates

*Use this space to write in the dates and periods of your End of Year assessments and Check points. This will help you plan your revision.*

Subject	Date and lesson	Notes (topics to be revised, important things to remember)
English		
Maths		
Science		
History		
Geography		
Spanish		
ICT		
Drama		
Art		
Music		
Technology		

1. What is the difference between cramming and spaced practice?
2. Why is spaced practice better than cramming?
3. What are the steps in spaced practice?



## *Study Timetable*

	4.00pm	5.00pm	6.00pm	7.00pm	8.00pm
<b>Monday</b>					
<b>Tuesday</b>					
<b>Wednesday</b>					
<b>Thursday</b>					
<b>Friday</b>					
<b>Saturday</b>					
<b>Sunday</b>					

1. What is the difference between cramming and spaced practice?
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## *Study Timetable*

	4.00pm	5.00pm	6.00pm	7.00pm	8.00pm
<b>Monday</b>					
<b>Tuesday</b>					
<b>Wednesday</b>					
<b>Thursday</b>					
<b>Friday</b>					
<b>Saturday</b>					
<b>Sunday</b>					

*Being able to study independently:*



- *Boosts confidence:* You learn to rely on yourself and feel proud of what you achieve.
- *Improves results:* The more you practise, the more you remember and understand.
- *Prepares for the future:* Exams (GCSEs, PSAs, A Levels) need strong study habits.
- *Builds responsibility:* You take charge of your learning, which helps in school and in life.



*Homework will be set by subjects as necessary and must be completed and handed in on time, showing effort and thought.*

*Homework completed well will be rewarded.*

*Homework not completed will be sanctioned.*

## HOMework

Week beginning	Subject Content and due date	Signature
<b>Half Term</b>		











## English Year 7 Term 2:

### Political Attitudes – “Animal Farm”

#### 'Animal Farm' Reading Selection:

Old Major, the prize boar, calls a secret meeting of all the farm animals on Manor Farm. He states that a rebellion against their human master, Mr Jones, will one day come. The rebellion starts because the animals are starving so they storm the food shed. The animals end up chasing Mr Jones off the farm. Now they are free, the animals all agree on seven commandments that they will live by. The pigs start to order the other animals around and take more food than they should. The animals bravely fight off a human attempt to retake the farm. This becomes known as 'The Battle of the Cowshed'. The animals set to work building a windmill and Napoleon takes charge. Napoleon reduces the rations and rights of the animals and starts breaking the commandments. There is another invasion by the men and the windmill is blown up. Boxer collapses whilst rebuilding. Napoleon and the other pigs learn to walk on their hind legs, wear human clothes and carry whips. Despite all their hard work, the animals of the farm are right back to where they began, hungry, scared and exploited.

#### Knowledge for Writing:

Rhetoric: the art of persuasion

Clauses: relative clauses

Grammar for Academic Writing: present tense, academic verbs,

modal verbs, modal adverbs, embedding quotations

Connectives: concluding, illustrative, change, emphatic.

#### Key Concepts/ Context:

**Orwell's purpose** - 'Animal Farm' is an allegory - a story with a hidden meaning where the events and characters are used to represent specific ideas. 'Animal Farm' is an allegory for the Russian Revolution and the people involved. Orwell wrote the novel to expose how power corrupts people.

**Rebellion** - Farmer Jones is a tyrant, a cruel and unfair leader. The animals are forced to work until they no longer can, slaughtered for food and their children are taken from them. Old Major uses rhetoric (the art of persuasion) to inspire the animals to rebel against Jones. Rhetoric includes ethos, logos and pathos. The pigs take control after the rebellion. They are able to do this because they are educated - they can read and write. Even though the seventh commandment says 'All animals are equal', the pigs are clearly the dominant animals.

**The New Democracy** - the incident with the milk and apples represents the pigs superiority and higher status. Snowball simplifies the seven commandments to 'Four legs good, two legs bad' - all humans are now seen as enemies. After the battle, Boxer feels sorry for the young boy he hurts, but Snowball is not sorry at all. It shows the pigs are more ruthless and committed to 'Animal Farm'.

**Control** - Snowball is a charismatic leader, but Napoleon is more cynical. Napoleon defeats Snowball because he raises the puppies in secret to be vicious dogs. He uses physical force to take control. Squealer plays on the animals fears by asking 'Surely, comrades, you do not want Jones back?'. This stops the animals from challenging Napoleon.

**Manipulation** - in chapter 6, the windmill is destroyed. Snowball is accused of secretly entering the farm and destroying the windmill, so that the other animals won't blame the pigs, which is a lie. Propaganda is biased or misleading information used to control others. Squealer is a symbol of effective propaganda.

**Leadership** - Napoleon gets rid of his enemies by using public trials to have them executed for treason. The animals now work harder than ever and have even less to eat. They cannot compare it to when Jones was in charge because they have no written records and have to rely on their poor memories. Napoleon creates a cult of personality to create a heroic and idealised version of himself. He forces the animals to be loyal to him personally, not the farm

**Boxer's significance** - Boxer is hardworking, devoted and loyal, but poorly educated. He represents the Russian workers / peasants. Squealer claims he dies peacefully in his sleep at the vets but he was sent to a glue-maker and slaughtered. Napoleon gives a speech at the funeral and uses Boxer as an example of how all the animals should behave.

**Failed revolutions** - The pigs carry whips which symbolise how they are just like Jones. They appear to actually turn into humans at the end of the novel. Orwell shows how revolutions fail because those who take power are corrupted and become as bad as those they replaced.

## English Year 7 Term 2: Political Attitudes – “Animal Farm”

Vocabulary	Definition & Sentence Level Example
Corruption (n.)	Dishonest or illegal behaviour, especially by powerful people.
Corrupt (v.)	The mayor was removed from office because of corruption.
Corrupt (adj.)	
Tyranny (n.)	Using power in a cruel or unfair way.
Tyrant (n.)	The tyrannical ruler punished anyone who disagreed with him.
Tyrannical (adj.)	
Moral (n.)	Related to right and wrong behaviour.
Morality (n.)	His actions showed a strong sense of morality.
Moral (adj.)	
Patriotism (n.)	Showing love and support for your country.
Patriot (n.)	His patriotism inspired others to help their country.
Patriotic (adj.)	
Virtue (n.)	Behaviour that displays a high moral standard.
Virtuous (adj.)	
Hubris (n.)	She was known as a virtuous person who always helped others.
Hubristic (adj.)	Too much pride or confidence, often leading to failure.
Isolation (n.)	His hubris made him believe he couldn't lose, but he did.
Isolate (v.)	To be separated from others.
Isolated (adj.)	The village was isolated during the snowstorm.
Exploitation (n.)	Unfair use of someone or something for personal gain.
Exploit (v.)	The company was accused of the exploitation of workers.
Exploitative (adj.)	
Transgression (n.)	An act that goes against a rule or law.
Transgress (v.)	He transgressed the school rules by cheating on the test.
Transgressive (adj.)	
Subversion (n.)	To secretly try to ruin or destroy a system or belief.
Subvert (v.)	The subversive speech caused a lot of anger.
Subversive (adj.)	

Futility (n.)	Pointless or useless.
Futile (adj.)	It was futile to argue with someone who wouldn't listen.
Conforming (n.)	To follow rules or behave like others.
Conform (v.)	She didn't want to conform to what everyone else was doing.
Conforming (adj.)	
Ignorance (n.)	Lacking knowledge or awareness.
Ignorant (adj.)	His ignorance of history caused him to make mistakes.
Benevolence (n.)	Acting kind and generous.
Benevolent (adj.)	Her benevolence was known throughout the community.
Malevolence (n.)	Having or showing a desire to harm others.
Malevolent (adj.)	His malevolence was clear from his cruel actions.

### 'Animal Farm' Specific Vocabulary

Vocabulary	Definition & Sentence Level Example
Oppression (n.)	To receive harsh treatment and not be able to fight back against it.
Oppressed (adj.)	Under both Jones and the pigs, the other animals are oppressed and dominated.
Elite (n.)	A select group in society that is superior to all others.
Elitism (n.)	The revolution was meant to bring equality but instead the pigs become the new elite.
Elitist (adj.)	To have power and influence over others.
Dominance (n.)	The cleverest of the animals, the pigs, easily become the dominant group on the farm.
Dominant (adj.)	
Charisma (n.)	To be able to charm others, usually so they will do what you want.
Charismatic (adj.)	As a charismatic speaker, Squealer easily convinces the other animals to follow the pigs' rules.

# Critical Knowledge Organiser - KS3

## Basic Sentence Structure

Term	Definition	Example
Subject	The person or thing doing the action in a sentence.	The cat sat on the mat.
Object	The person or thing affected by the action.	The cat sat on the mat.
Main Clause	A group of words with a subject and verb that makes sense on its own.	She ran to the shop.
Fragment	An incomplete sentence missing a subject or verb.	Running through the park. ✗
Run-on Sentence	Two or more main clauses joined incorrectly.	I went to the shop I bought sweets. ✗
Corrected Run-on	Use punctuation or conjunctions.	I went to the shop, and I bought sweets. ✓

## Parts of a Sentence

Type	Definition	Example
Subject	The person or thing doing the action.	The cat sat on the mat.
Verb	The action or state of being.	The cat sat on the mat.
Object	The person or thing affected by the action.	She kicked the ball.

## Word Classes

Type	Definition	Examples
Noun	A person, place, thing, or idea.	dog, London, happiness
Proper Noun	A specific name (always capitalised).	Harry, Paris, Monday
Verb	An action or state.	run, is, think
Adjective	Describes a noun.	happy, blue, tall
Adverb	Describes a verb, adjective, or another adverb.	quickly, very, silently
Adverbial Phrase	A group of words acting as an adverb.	In the morning, she ran.
Fronted Adverbial	An adverbial phrase at the start of a sentence (followed by a comma).	Before sunrise, he left.

## Punctuation

Punctuation	Use	Example
Inverted Commas	Show speech or quotations.	She said, "Hello."
Semi-colon (;)	Link two related main clauses.	It was late; we went home.
Colon (:)	Introduce a list or explanation.	He brought three things: a pen, a book, and a ruler.
Comma (,)	Separate items, clauses, or after fronted adverbials.	After lunch, we played.
Dash (—)	Add extra information or emphasis.	He was fast — like lightning.

## Critical Knowledge Organiser - KS3

### Sentence Types

Key Concept	What You Need to Know	Example
Simple Sentence	One main clause (subject + verb).	The sun set.
Compound Sentence	Two main clauses joined by a coordinating conjunction (FANBOYS).	She was tired, but she kept working.
Complex Sentence	A main clause with one or more subordinate clauses.	Although it was late, he stayed up.

### Clause Structures

Clause Type	Definition	Example
Main Clause	Can stand alone as a sentence.	The dog barked.
Subordinate Clause	Cannot stand alone; adds detail.	Because it was hungry
Varying Clause Position	Clauses can appear at the start, middle, or end of a sentence.	When the bell rang, the students left.

### Pronouns

Punctuation	Use	Example
Personal Pronouns	Replace people or things.	I, you, he, she, it, we, they, me, him, her, us

### Prepositions

Definition	Examples
Show relationships in time, place, or direction.	above, across, against, along, among, around, at, before, behind, below, beneath, beside, between, by, down, from, in, into, near, of, off, on, to, toward, under, upon, with, within

### Conjunctions

Type	Examples
Coordinating	and, but, or, so, yet
Subordinating	because, since, although, even though, while, as soon as, in case, though
Conjunctive Adverbs	therefore, moreover, however

### Determiners (word classes)

Type	Definition	Examples
Articles	Define nouns as specific or unspecific.	a, an, the
Demonstratives	Point to specific things.	this, that, these, those
Quantifiers	Show quantity or amount.	(a) few, fewer, (a) little, many, much, more, most, some, any

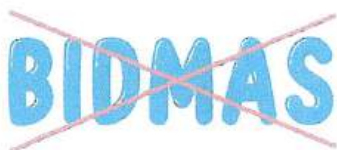
Year 7 - CKO – Sentence Variation

<b>Sentence Structure</b>	<b>Definition</b>	<b>Example</b>
<b>Adjective Attack</b>	A sentence that uses two adjectives.	The red, shiny apple was delicious.
<b>Triple Adjective Punch</b>	A sentence that uses three adjectives.	The tall, dark, handsome stranger walked in.
<b>Preposition Push Off</b>	A sentence that starts with a prepositional phrase.	In the morning, I like to drink coffee.
<b>Without Without</b>	A sentence that uses 'without' repeatedly.	Without a doubt, without hesitation, she agreed.
<b>Three Verb Sentence</b>	A sentence that uses three verbs.	She danced, sang, and laughed all night.
<b>Double Adverb Snap</b>	A sentence that uses two adverbs for emphasis.	Quickly and quietly, she left the room.

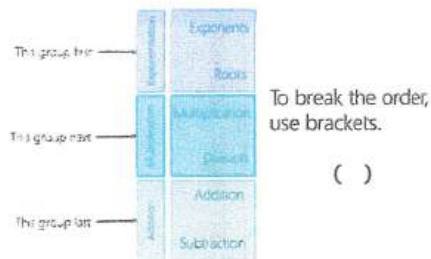
# Maths Knowledge Organiser NP5

## Order of operations

We must think about order of operations, NOT BIDMAS, as it is a trick that does not always work!



## Order of operations



## Exponentiation

This group is repeated multiplication, so we can think of it as "stronger" than multiplication.

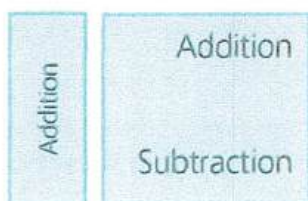


## Multiplication

This group is repeated addition, so we can think of it as "stronger" than addition.



## Addition



## Recap from NP2/3: Commutative

$$12 + 36 = 48 \quad 3 \times 6 = 18$$

$$36 + 12 = 48 \quad 6 \times 3 = 18$$

Where you can change the order of the numbers and not change the answer.

## Brackets



By putting brackets ( ) in a calculation, we mean

"break the order, do this first"



## Writing calculations with brackets

$$2(5 + 3)$$

There is no symbol between the 2 and the bracket.

No symbol still means 'multiply'.

## Using Brackets



The brackets have changed the order of the calculation.

The addition is now calculated first.

## Using Brackets



The brackets have not changed the order of the calculation.

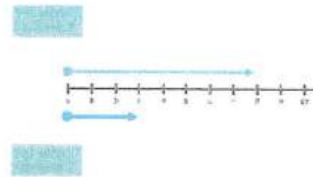
# Maths Knowledge Organiser NP6

## Number Line



A number line is both infinite and symmetrical.

## Recap NP2: Vector

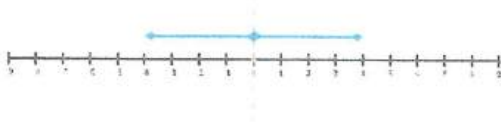


We can use vectors to represent numbers.

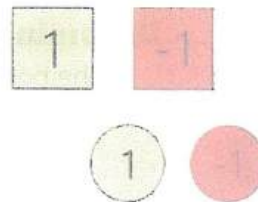
Vectors have magnitude (how long it is) and direction.

## Direction of numbers

These vectors show the numbers 4 and -4



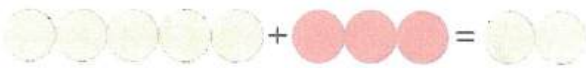
## Recap NP2: Zero pair



A pair of numbers whose sum is zero.

## Adding directed numbers

$$5 + (-3) = 2$$



Find the zero pairs and eliminate them.

## Subtracting directed numbers

$$7 - 5 \text{ is the same as } 7 + (-5)$$

$$9 - 6 \text{ is the same as } 9 + (-6)$$

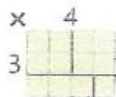
$$3 - 8 \text{ is the same as } 3 + (-8)$$

Subtracting is the same as adding the inverse

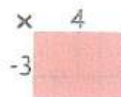
## Multiplying directed numbers

$$-3 \times 4 = -12$$

First set up  $3 \times 4$ .



Make the 3 negative and flip the tiles over.



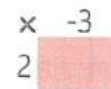
## Dividing directed numbers

$$-6 \div 2 = -3$$

First work out  $6 \div 2$ .



There is one negative, so flip the tiles once.



## Exponentiation with directed number

Powers of 2

$$\begin{aligned} 2^0 &= 1 \\ 2^1 &= 2 \cdot 2 = 2 \\ 2^2 &= 2 \cdot 2 \cdot 2 = 4 \\ 2^3 &= 2 \cdot 2 \cdot 2 \cdot 2 = 8 \\ 2^4 &= 2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 = 16 \\ 2^5 &= 2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 = 32 \end{aligned}$$

Powers of -2

$$\begin{aligned} (-2)^0 &= 1 \\ (-2)^1 &= (-2) \cdot (-2) = -2 \\ (-2)^2 &= (-2) \cdot (-2) \cdot (-2) = -8 \\ (-2)^3 &= (-2) \cdot (-2) \cdot (-2) \cdot (-2) = 16 \\ (-2)^4 &= (-2) \cdot (-2) \cdot (-2) \cdot (-2) \cdot (-2) = -32 \\ (-2)^5 &= (-2) \cdot (-2) \cdot (-2) \cdot (-2) \cdot (-2) \cdot (-2) = 64 \end{aligned}$$

## Generalisation



Looking for general patterns that work for lots of numbers.

# Maths Knowledge Organiser NP7

**Fraction**

Fractions are used to represent an amount of equal sized parts of a whole.

**Proper fraction**

$\frac{3}{5}$

A fraction where the numerator is smaller than the denominator

**Improper fraction**

$\frac{8}{7}$

A fraction where the numerator is bigger than the denominator

**Numerator**

The top number in a fraction.

$\frac{3}{5}$

**Denominator**

The bottom number in a fraction.

**Vinculum**

$\frac{3}{5}$

Fraction bar (vinculum)

**Mixed Number**

A whole number and a fraction combined into one "mixed" number

$2\frac{1}{7}$

**Reciprocal**

The reciprocal of a number is its multiplicative inverse the number you multiply by to make 1

Number: 7, Reciprocal:  $\frac{1}{7}$

Number:  $\frac{2}{3}$ , Reciprocal:  $\frac{3}{2}$

**Know your Calculator** Casio fx-83GT CW

Fraction

Mixed Number

**The sneaky one**

$\frac{4}{5} < 1$        $\frac{5}{5} = 1$  (Sneaky One)       $\frac{6}{5} > 1$

A fraction is equal to 1 if the numerator and denominator have the same value

**Co-prime**

Factors of 14: 1, 2, 7, 14

Factors of 15: 1, 3, 5, 15

14 and 15 are co-prime as the only common factor is 1

**Equivalent fractions**

$\frac{1}{2} \cdot \frac{5}{5} = \frac{5}{10}$        $\frac{1}{2} = \frac{5}{10}$

We can make equivalent fractions by multiplying or dividing by the sneaky one. The size of the fraction does not change.

**Simplifying fractions**

$\frac{12}{18} \div \frac{6}{6} = \frac{2}{3}$

The size of the fraction does not change because we have divided by the sneaky one. We have found the simplest form because 2 and 3 are co-prime

# Maths Knowledge Organiser NP8

**Percentage**

32% means  $\frac{32}{100}$

percent means 'out of 100'

**Reading decimals**

0.1 

0.1  
is 'zero point one'  
or 'thirty three per cent'  
or 'one tenth'

**Know your Calculator** Casio fx-83GT CW

Where is the percentage button?

Func Analysis

Probability

Numeric Calc

Angle/Coord/Sexa

%

Factorial(!)

Permutation(P)

Combination(C)

**Terminating decimal**

e.g. 0.215

e.g. 0.3

A terminating decimal has a finite number of decimal places.

**Recurring decimal**

e.g. 0.333333333 ... = 0.3̄

e.g. 0.804804804 ... = 0.804̄

Recurring decimals have an infinite number of decimal places, and its digits have a repeating pattern

**Repetend**

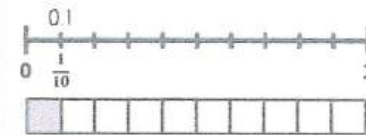
The repetend is the repeating part of a recurring decimal.

e.g. 0.333333333 ... = 0.3̄

e.g. 0.804804804 ... = 0.804̄

repetend

**Equivalent**



Two or more numbers which have the same value.

**Fraction, decimal, percentage equivalence.**

$\frac{1}{4} = 25\% = 0.25$

$\frac{1}{2} = 50\% = 0.5$

$\frac{3}{4} = 75\% = 0.75$

**Fraction, decimal, percentage equivalence.**

$\frac{1}{10} = 10\% = 0.1$

$\frac{1}{5} = 20\% = 0.2$

$\frac{1}{100} = 1\% = 0.01$

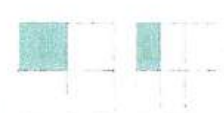
**Fraction, decimal, percentage equivalence.**

$\frac{1}{3} = 33\frac{1}{3}\% \text{ or } 33.\dot{3}\% = 0.\dot{3}$

$\frac{2}{3} = 66\frac{2}{3}\% \text{ or } 66.\dot{6}\% = 0.\dot{6}$


**Fraction, decimal, percentage equivalence.**

$\frac{1}{8}$  is half of  $\frac{1}{4}$



$\frac{1}{8} = 12.5\% = 0.125$

**Amazing fact**


$\frac{1}{9} = 0.\dot{1}$  

$\frac{5}{9} = 0.\dot{5}$

$\frac{9}{9} = 1$  0.9 does not exist.

$\frac{9}{9} = 1$

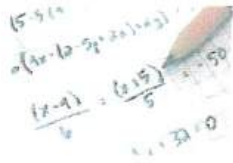
**Proportional reasoning**



Looking for the relationship between two linked quantities.

# Maths Knowledge Organiser A1

## Algebra



When we use a symbol to represent an unknown number, we are in the world of algebra.

## Know your Algebra tiles

Represents the number 1

Represents the number -1

Represents an unknown positive variable

Represents an unknown negative variable

## Constant

constant

$4x$

variable

A number that does not change, is fixed.

A number that can change its value, represented by a letter such as  $x$  or a green tile when we do not know its value

## Variable

## Operation

$+$   $-$   $\times$   $\div$   
 $\sqrt{x}$   $x^2$

Something that takes input numbers and turns them into output numbers, such as addition (including subtraction), multiplication (including division), exponentiation (including roots)

## Term

$6x + 8y$

The parts of an expression separated by  $+$  or  $-$

## Constant terms



A term that contains no variable.

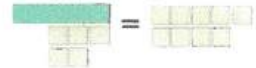
## Expression



An expression contains variables, constants and operations

## Equation

$x + 5 = 9$



A statement which tells us the value of an expression for a fixed value of  $x$ .

## Unlike terms

$4x + 3y + 2x + 5 + 6y + 2$



We call terms with different variables unlike terms.

## Like terms

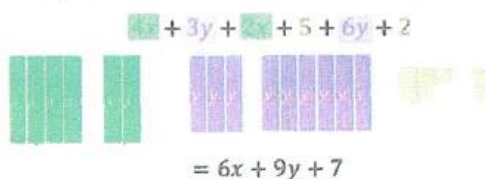
$4x + 3y + 2x + 5 + 6y + 2$



We call terms with the same variables like terms.

## Collecting like terms

To simplify expressions, we collect the like terms and simplify them.



## Substitution

When  $x = 10$



its value is 25.

When we assign  $x$  a numerical value, we call this substitution: we substitute the variable with a known number.

# Y7 BIOLOGY:

1. Animal Cells
2. Human Reproduction
3. The Breathing System
4. Healthy Living

For more Science scan here!



## BL1: Animal Cells

Identify the location of the sub-cellular structures in animal cell diagrams: nucleus, cytoplasm, cell membrane and mitochondria.

The function of the cell membrane is to control the movement of substances into and out of the body

The cytoplasm is the jelly-like substance found in cells where reactions happen

The nucleus is the part of the cell that stores the genetic material of the cell

The function of the mitochondria is to transfer energy.

A group of similar cells working together form tissues, tissues work together to form organs, many organs working together form organ systems, and all the organ systems form organisms.

A light microscope can be used to view objects that are too small to see with the naked eye

Identify the key parts of the microscope to include the: stage, eye piece lens, objective lens, focusing wheel.

The three main functions of the human skeleton are protection, production of blood cells and support

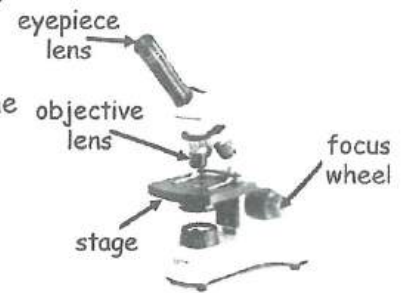
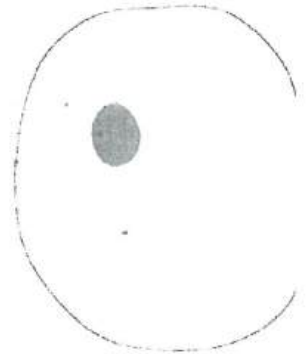
The place where two bones meet is called a joint

Muscles are attached to bones with tendons to help them move

A muscle will contract to exert a force on a bone and bring about movement around a joint

Most movement in the body is controlled by two muscles that work together - these are called antagonistic muscles.

Cytoplasm  
Nucleus  
Cell Membrane  
Mitochondrion



## BL2: Human Reproduction

Identify and describe the functions of the main parts of the male reproductive system to include the; penis, testes, glands, sperm duct, scrotum and urethra.

The testes are organs that produce and develop sperm to maturity and produce the male sex hormone.

Identify and describe the parts of the female reproduction system to include the: vagina, cervix, uterus, oviduct, and ovaries.

The uterus is a muscular sack that protects the growing foetus.

The ovary is the organ that produces and develops the ova (egg cells) and some of the female sex hormones.

The menstrual cycle takes about 28 days

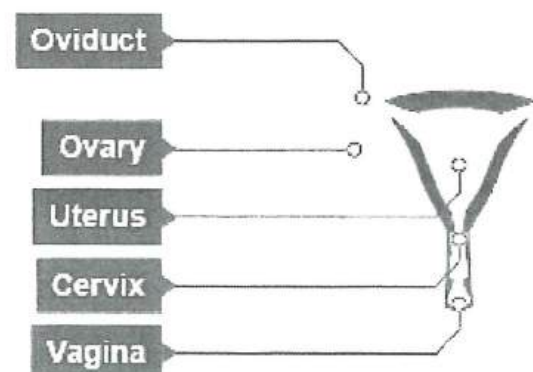
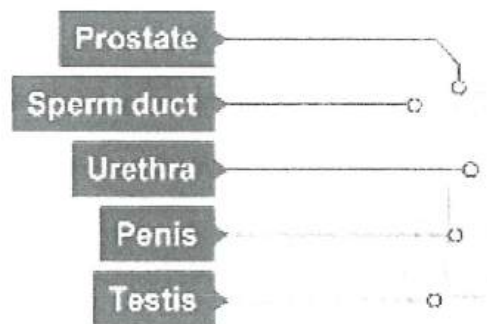
The menstrual cycle starts during puberty and prepares the female for pregnancy.

Fertilisation is the fusing of two gametes following sexual intercourse: an ovum and a sperm

On average, it takes 40 weeks for a baby to grow fully from fertilisation.

The foetus is connected to the mother through the umbilical cord and the placenta.

The placenta provides the foetus with nutrients and oxygen to grow, while getting rid of waste.



# Y7 BIOLOGY:

1. Animal Cells
2. Human Reproduction
3. The Breathing System
4. Healthy Living

For more Science here!



## HB7: The Breathing System

The trachea is the organ that runs down the neck and carries air from the mouth and nose to the lungs.

Identify the trachea, bronchi, bronchioles, alveoli, diaphragm, ribs and intercostal muscles on a diagram of the breathing system.

The airways are adapted with ciliated epithelial cells and goblet cells to maintain the health of the breathing system.

At the end of all the air tubes are microscopic air sacs called alveoli (singular alveolus) which have thin walls and a high blood supply for diffusion of gases.

Diffusion is the movement of molecules from an area of high concentration to an area of low concentration down a concentration gradient - often across a membrane.

In the alveoli, carbon dioxide diffuses from the blood to the air in the alveoli and oxygen diffuses from the air in the alveoli to the blood.

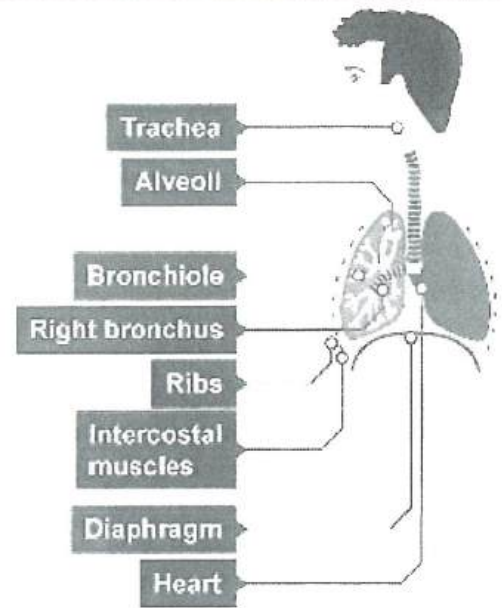
To breathe in (inhale), we make the chest cavity bigger by contracting the diaphragm to move it down, and contracting the muscles between the ribs, moving the rib cage out.

When we make the chest cavity bigger, the air pressure in the lungs decreases and air flows into the lungs.

To breathe out (exhale), we make the chest cavity smaller by relaxing the diaphragm to move it up, and relaxing the muscles between the ribs, moving the rib cage in.

When we make the chest cavity smaller, the air pressure in the lungs increases and air flows out of the lungs.

The maximum amount of air you can breathe in and out is your vital lung capacity.



## HB8: Healthy Living

A unicellular organism is a living thing made up of one cell only.

Label and describe the key parts of a bacterium including: DNA, Cytoplasm, Cell Wall, Cell Membrane, Plasmid.

Recall that bacteria, protozoa and unicellular fungi are all types of unicellular organisms and that some are pathogens that make us ill

Define a drug as a chemical that causes changes in our body.

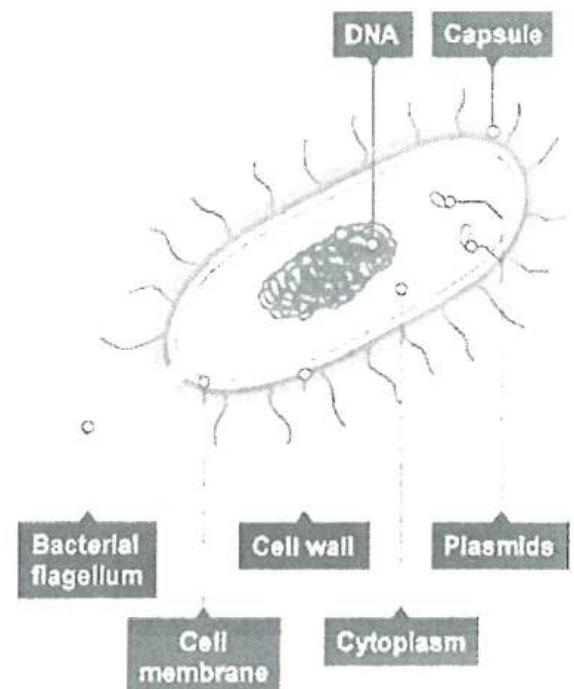
Recall that drugs can be medicinal or recreational and that many recreational drugs are illegal.

Exercise increases the demand on the breathing system - more oxygen is needed, and more carbon dioxide is produced.

Asthma is a condition that makes it harder for someone to get air into their lungs.

Smoking is a risk factor that can lead to lung disease, heart disease and some cancers.

A pregnant mother's use of recreational drugs, smoking and drinking alcohol can affect the growth of a foetus.



# Y7 CHEMISTRY:

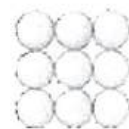
1. The Particle Model
2. The Atom
3. Changes of State
4. Types of Reactions
5. The Cycles

For more Science  
scan here!



## 30M5: The Particle Model

- Particles in particle diagrams are represented as spheres but they may not be spherical in shape.
- Atoms and molecules are very small particles.
- The density of a substance is how much matter is in a specific volume.
- Solids are arranged in a regular pattern. Liquids are not.
- Solid particles vibrate in their positions but cannot move around.
- Materials in the solid or liquid states are incompressible as the particles are very closely packed together.
- Solid ice is less dense than liquid water. Ice floating on water is an anomaly.
- Substances in the gas state are less dense than the solid and liquid states.
- Gases are fairly easy to compress as most of the particles are far from each other.
- Substances in the gas state spread out to fill the whole space they are in.
- Gaseous particles move around rapidly in all directions and most of the particles are too far apart to exert any force on each other.
- A chemical change is when the atoms within a particle are rearranged to form a new product



## 30M6: The Atom

- John Dalton suggested that atoms are spherical and have a definitive size and mass.
- An element is made of one type of atom only which has the same size and mass.
- A molecule is when two or more atoms are chemically combined.
- A compound is a particle that contains two or more different elements that are chemically combined.
- Substances have different properties because of the elements they contain.
- A compound has a fixed melting and boiling point (Water = 0°C and 100°C).
- Each element is represented by an assigned name and symbol e.g. H, O, C, S, Cl, Mg, Na, F, Cu
- The names and quantities of atoms in a chemical compound can be derived from its formula e.g. H<sub>2</sub>O, O<sub>2</sub>, H<sub>2</sub>, CO<sub>2</sub>, NaCl, MgO
- The following chemical symbols of elements can be used to create chemical formula. (H, O, C, Cl, Mg, Na, Fe, S, Cu)
- Write chemical formula based on the number of each atom for the following elements and compounds H<sub>2</sub>O, O<sub>2</sub>, H<sub>2</sub>, CO<sub>2</sub>, NaCl, MgO
- Atoms are not created or destroyed during chemical reactions they are rearranged to form new products.
- Word equations can be used to represent reactants and products in a chemical reaction  
e.g.1: Iron + Sulphur → Iron Sulphide      e.g.2: Carbon + Oxygen → Carbon Dioxide



# Y7 CHEMISTRY:

1. The Particle Model
2. The Atom
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For more Science  
scan here!



## DOM7: Changes of State

Physical changes are reversible.

Mass is conserved during physical changes as atoms are not rearranged in physical changes and do not form new products.

The chemical formula of steam, liquid water and ice is  $H_2O$ .

The volume of a liquid can be determined using a measuring cylinder.

Solids will sink and displace liquids if they have a higher density.

The volume of a solid can be determined using a Eureka can and a measuring cylinder.

The volume of a gas can be determined using an inverted liquid-filled measuring cylinder.

Gases occupy a greater volume than liquids and solids.

The mass of a solute (e.g. salt/sodium chloride) is conserved when it is dissolved into a solvent (e.g. water). This makes a solution.

The particles in a soluble solid can move freely once they are dissolved.

Concentration is the number of particles in a given volume. Dilute and concentrated are used to describe concentration.

Brownian motion is the random motion of particles and/or collisions with other moving particles.

All particles are in constant motion.

Diffusion occurs in liquids and gases as the particles can move freely.

Diffusion is the net movement of particles from an area of high concentration to an area of low concentration.



# Y7 CHEMISTRY:

1. The Particle Model
2. The Atom
3. Changes of State
4. Types of Reactions
5. The Cycles

For more Science  
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## RE3: Types of Reactions

Reactants are the starting substance(s) in a chemical reaction.

Products are the substance(s) that is made in a chemical reaction.

A chemical reaction is represented by an arrow between the reactants and the products, and they are often not reversible.

Observations during chemical reactions can include but are not limited to change of state (leading to a measurable change of mass), change in colour.

Combustion is the burning of a substance in oxygen.

Combustion is an example of an irreversible change.



Wood, petrol, diesel and carbon are examples of fuels

Lime water can be used to test for carbon dioxide.

Thermal decomposition is the chemical breakdown of a substance when it is heated, e.g:



Oxidation is the addition of oxygen in a chemical reaction, e.g:



Displacement reactions are where a more reactive reactant takes the place of a less reactive reactant in a chemical compound e.g:



## RE3: The Cycles

The Earth is almost a sphere and is made up of three main layers: the core, the mantle and the crust.

The Earth's crust is a thin layer (7-35km) and is less dense than the mantle beneath it; it is made up of a mixture of minerals.

There are three main types of rocks: igneous, sedimentary, and metamorphic.

Igneous rocks are formed by the cooling of liquid rock.

Sedimentary rocks are formed by layers of transported rock being deposited and compacted over time.

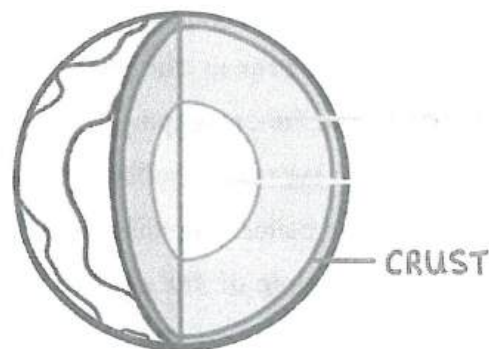
Metamorphic rocks are formed when rocks undergo chemical changes due to heat and pressure.

Igneous and metamorphic rocks are crystalline and are often harder and more dense than sedimentary rocks.

Sedimentary rocks are granular.

There are two main bodies of water: salt water (which has a high concentration of dissolved salts) and fresh water (which has a low concentration of dissolved salts).

Water poverty is the lack of access to clean and safe drinking water contributing to poor health and sanitation issues.



# Y7 PHYSICS:

1. Changing Shape
2. Astrophysics

For more Science

scan here!



## DE004: Changing Shape

The unit for force is Newtons

Forces act as pushes or pulls.

Forces act in pairs.

Some contact forces are tension, friction, air resistance, upthrust, thrust, normal reaction force.

Some non-contact forces are magnetic force, electrostatic force, gravitational force.

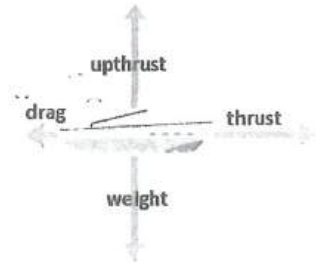
Forces can be represented using arrows. These arrows have both direction and magnitude.

When a force is placed on a material, that material may be stretched or compressed.

Elastic materials will often return to their original shape when the force is removed.

When forces acting on an object are unbalanced, the objects motion, direction or shape may change.

Equilibrium describes when opposing forces are equal or balanced.



## DE3: Astrophysics

A planet is a large, almost spherical object that orbits a star.

The inner planets are rocky planets; the outer planets are gas planets.

A moon is an object that orbits a planet or another celestial body that is not a star.

An asteroid is a small rock orbiting the sun.

A comet is a celestial object that is made of ice and dust.

A star is a luminous object - it produces its own light.

The Sun is the star at the centre of our solar system.

Gravity is the force keeping the planets orbiting the sun, and the moons orbiting the planets.

A galaxy is a system of millions or billions of stars, together with gas and dust.

Our galaxy is called the milky way.

Mass is a measure of the amount of matter an object or substance is comprised of.

Weight is the force needed to support an object or substance.

Weight of a stationary object can be calculated by multiplying the mass of an object by the gravitational field strength

Mass: 50 kg  
Weight: 500 N



Earth

Mass: 50 kg  
Weight: 200 N



Mars

## Year 7: SPRING 1 Geography Coasts


### Changing Coastlines

**What are the different types of coastline?**

**Discordant:** when rock type runs at 90° to the sea

**Concordant:** when rock type runs parallel to the sea

**What are the different types of wave?**



Constructive waves	Destructive waves
Strong wash and weak backwash Less frequent and low height	Weak swash and strong backwash More frequent and tall height
Deposition	Erosion

**What are the different types of rock?**

Hard rock	Soft rock
Limestone, chalk and granite	Boulder clay and sandstone

**What are the different types of erosion?**

**Abrasion:** The coast is worn down by material carried by the waves

**Attrition:** Material carried by the waves bump into each other breaking down into smaller particles

**Hydraulic action:** The force of the water breaking material from the cliff

**Solution:** The acids in the salt water slowly dissolve rocks on the coast

**What can affect the rate of erosion?**

1. Type of wave
2. Type of rock
3. Presence of coastal management

**What is longshore drift?**



**How is a spit formed?**

1. Spits are formed through longshore drift when the coastline changes direction
2. One part is connected to the mainland, and one sticks out to sea
3. As it sticks out to sea, a hook at the end of the spit is formed
4. Lagoons and salt marshes form in the sheltered area behind the spit



**How is a wave cut platform formed?**

1. At high tide, the base of the cliff is eroded through abrasion and hydraulic action
2. Overtime, a wave-cut notch is created which is visible at low tide
3. Weathering wears away the top of the cliff
4. The notch collapses into the sea as it is no longer supported
5. A gently sloping wave-cut platform is created which is smoothed out by abrasion over time

**What is hard engineering?**

This involves building structures to protect the coast

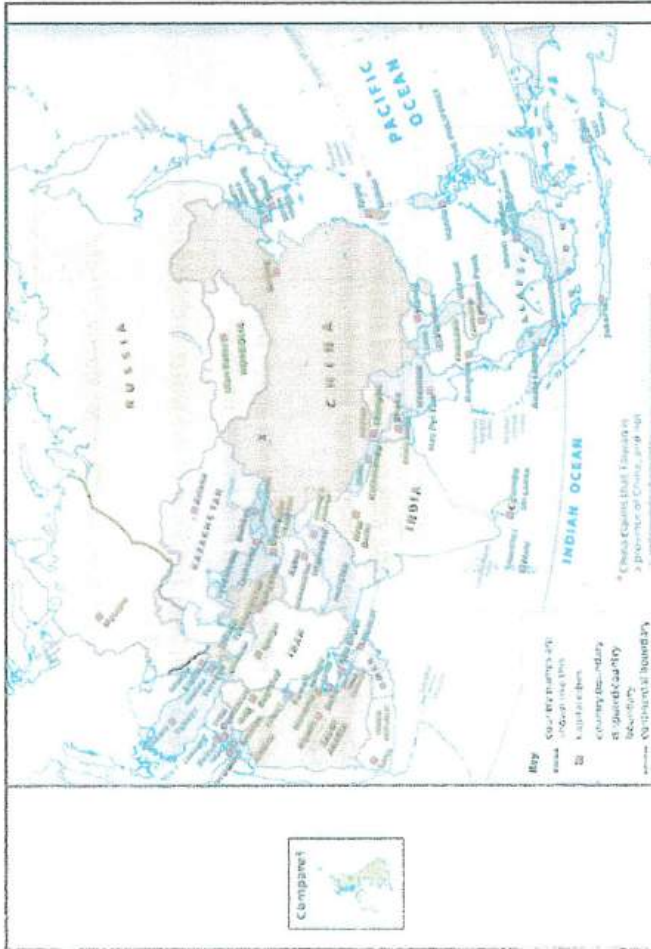
Sea wall	Groyne
A concrete structure that reflects the energy of the waves back to sea They are effective and long lasting - They are very expensive	Timber structures that stop sediment being moved by longshore drift + A wider beach is created for tourists - They are unnatural and unattractive

**What is soft engineering?**

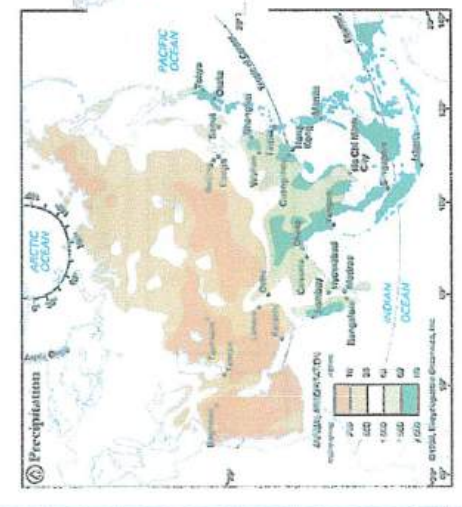
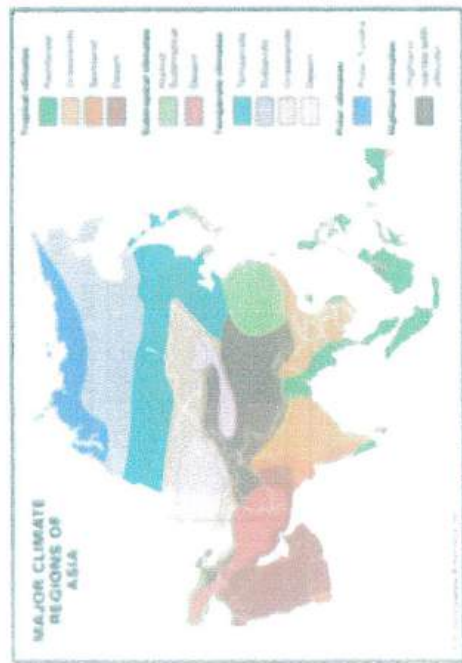
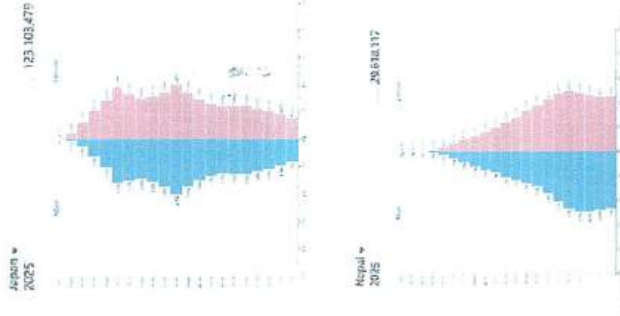
This involves working with nature by using natural materials

Beach nourishment	Dune regeneration
Sand or shingle is added to the beach to make it wider is natural and blends in with the environment cannot use the beach whilst it is taking place	Sand dunes are created to absorb the energy of the waves + It is natural and blends in with the environment - They are easily damaged by storms

## Year 7: SPRING 2 Geography Asia



- Mount Everest is the highest point on earth, over 8,848m above sea level.
- The Dead Sea is the lowest point on earth at -395m
- The Arabian Desert in Saudi Arabia is the world's largest continuous sandy desert.
- Asia has the longest coastline of any continent 62,800 km in length.
- The Yangtze is one of the longest rivers in the world- over 6,300km long.
- There are 77 volcanoes on the mainland with the most active ones in Indonesia and Japan.
- The official language of China, Mandarin is the world's most spoken language. Around 1.4% of the world's population speak this language.
- Asia has 9 of the top 10 largest cities in the world. Tokyo is the largest with a population of over 37 million.
- Japan and Indonesia are the top three countries for the highest life expectancy rates in the world. Here people are expected to live up until 85 years.



- Why is China's Population Distribution Uneven?**
1. The relief of the land (e.g., is it steep or flat?)
  2. The availability of jobs in the area.
  3. The climate, e.g., too cold/hot/wet/dry.
  4. Fertility of the soil, e.g., can the crops grow?
  5. Availability/access to transport
  6. Availability of natural resources, e.g., coal, gas, wood.

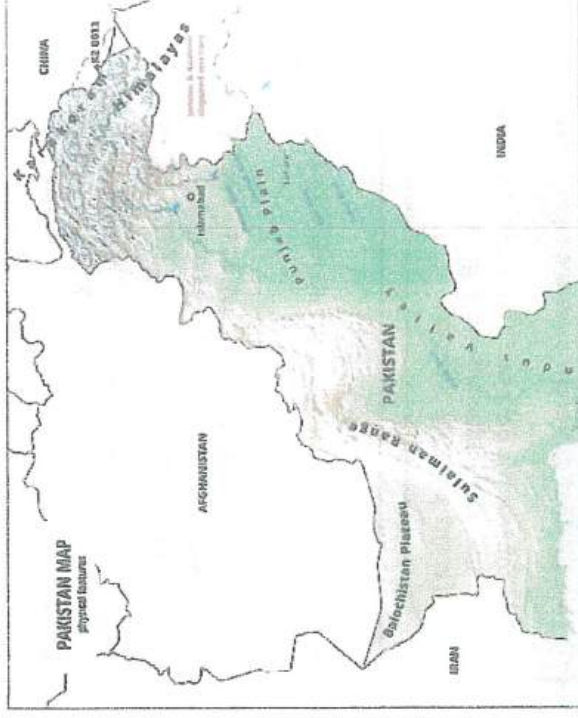
- Reasons for China's economic growth:**
1. Investment in infrastructure- government built new roads to transport.
  2. Large work force- mainly women
  3. Low wages
  4. Natural resources- China has 12% of the world's mineral resources.
  5. Poverty reduction
  6. Energy supply

## Year 7: SPRING 2 Geography Asia

### The 2022 Pakistan Floods

More than one-third of Pakistan is under water due to unprecedented levels of flooding. Estimates suggest that 1,265 people have been killed, with 6,000+ injured. The scale of the tragedy is already being compared to the devastating floods of 2010 when more than 2,000 people were killed, marking the event as the deadliest in Pakistan's history. There are four provinces in Pakistan. The Sindh contains Pakistan's largest river, which flows from the Himalayas down to the Arabian Ocean.

Glacial meltwater from the Himalayas plus snow melt and monsoon rains all supply the Indus with water. The Indus is 3,200 km long. Flooding often occurs in the southeast of the country, in the Sindh province.



**Sindh Province:**  
 The main economic industry of Sindh is agriculture, which the Indus river. The flow of the Indus is typically high between mid-July and mid-August due to environmental factors. However, this year rainfall in Sindh has been exceptionally heavy in recent months.  
Is climate change to blame?  
 Recent heavy rainfall is only part of the story. This flood event is widely being reported as a climate-related disaster due to extreme changes in monsoon behaviour, precipitation patterns, and melting glaciers. These contributing factors have been caused by increases in global temperature. The UN secretary general, António Guterres, emphasised the link to climate change saying "today, it's Pakistan. Tomorrow, it could be your country" signalling to the world that more needs to be done in the fight against climate change.

Effects of the 2022 Pakistan floods		
Social	Economic	Environmental
<ul style="list-style-type: none"> <li>Over 1,700 people have been confirmed to have died. The second most deadly flood in Pakistan's history.</li> <li>2,000,000 houses and shops were damaged with an extra 800,000 destroyed.</li> <li>Lack of clean water has increased disease such as cholera.</li> <li>22,000 schools were damaged or destroyed.</li> <li>2.1 million people have been left homeless by the floods.</li> </ul>	<ul style="list-style-type: none"> <li>The rebuilding is expected to cost 10% of Pakistan's GDP.</li> <li>Agricultural fields were inundated with floodwater.</li> <li>Property damage is estimated to cost \$40 billion.</li> </ul>	<ul style="list-style-type: none"> <li>Around 10% off Pakistan has been flooded.</li> <li>Soil has been washed away on fields.</li> <li>The banks of the Indus River have been severely eroded.</li> </ul>

## KS3 Year 7 History Skills Knowledge

### Organiser

#### What is provenance?

Provenance means understanding the background of a source. We can break that down into 'NOP'

**N - Nature:** What type of source is it? E.g. Is it a diary, a photo, a painting, a speech etc

**O - Origin:** Where, when and by who was it created?

**P - Purpose:** Why was it made? Was it to give facts? Or to share a personal story? To persuade people? Try to explain this as much as you can by linking your ideas to the specific source

#### How do I make an inference?

An inference is when you say what you can learn. 'work out' or suggest from a source.

You need to carefully look at/read the source and annotate it. Look carefully at the question - what is it asking you to make an inference about?

Make an inference and then link it to the specific part of the source.

#### How do I know if a source is useful?

All primary sources are useful to some extent - but some are more useful than others.

For example - a source is useful if we can learn something from it, if we can trust where it comes from and if it links to something we already know (which can mean that it's accurate).

However, a source might be less useful if we think it's been exaggerated, if some information has been left out or if it's one-sided etc

#### EXAMPLE: How useful is the source of the Windrush ship for learning about migrants coming to Britain?

- The source is useful because I can learn people were excited to come to Britain - I can see them waving their arms and cheering.
- The source is useful because it's a photograph of the event showing it must have been an important event as it was in a newspaper.
- The source is useful because it links to my knowledge that thousands of people came to Britain on the Windrush from countries such as Jamaica.
- The source is slightly less useful because a photo is just one snapshot in time - they might have just been smiling for the photos but in reality might have had different feelings about arriving in Britain.

#### What is an interpretation?

An interpretation is a historian's view or opinion of the past. For example, if you are studying the reasons why William won the Battle of Hastings, one historian might think the main reason he won was because of his planning and battle tactics, but another historian might think it was because of Harold Godwinson's mistakes in battle.

It is up to you to carefully read interpretation and spot the differences!

You can do this by choosing key quotations that show the difference.

#### Why do historians have different views?

Historians study the past by using primary sources. So different historians will have probably used different primary sources, and will have thought that different ones are more useful.

We can use the phrase: 'The views are different because the historians have given weight to different primary sources.'

#### How to PEEL

In History, when we explain our ideas we need to write PEEL paragraphs.

**P - POINT** - Use words from the question to start your paragraph and say what the paragraph is about.

**E - EXAMPLE** - For example..... Show off key facts, key words, dates etc

**E - EXPLAIN** - This meant, this led to, Therefore...

**L - LINK** your ideas back to the question and use key words from the question again to make sure you do this.



**C.1066**

January 1066 – death of Edward the Confessor.

6th January 1066 – Harold Godwinson King of England

25th September – Battle of Stamford Bridge

14th October 1066 – Battle of Hastings

**Year 7 History Knowledge Organiser – MIDDLE AGES**

Christmas Day 1066 – William crowned King of England

1087 William I dies

1085 Domesday Book is started, collecting information on England

1215 – Magna Carta signed

1381 – Peasants' Revolt

**C.1500**

1348-49 – Black Death hits England

**What happened in 1066?**

- 1066 is one of the most famous years in English history. It included the death of two kings and two invasions
- The death of Edward the Confessor in January 1066 started a year of turmoil. Normally, there is a clear line of succession, and it is obvious who the next monarch will be. He had no children, and his closest living heir was his great-nephew Edgar the Atheling, who was just 14 years old.
- Four key contenders all had strong claims to become the next king of England.

**Potential heirs to the English throne in 1066: Who should become king?**

**Harald Hardrada**

- Viking King of Norway
- Hardrada means 'hard ruler' and his nickname was 'the Ruthless'.
- Harald was supported by Tostig Godwinson who wanted revenge on his brother Harold

**Harold Godwinson**

- Anglo-Saxon. Earl of Wessex, one of the most powerful men in England
- Harold was a brave and respected soldier
- The Witon, wanted Harold to be the next king.

**William of Normandy**

- Duke of Normandy, France.
- He was a brave soldier. Edward's cousin.
- Edward had supposedly promised that William should become King of England



	Key Vocabulary:
Anglo-Saxons	People that lived in England before the Normans
Normans	People from the Norman region in France, led by William
Bayeux Tapestry	An embroidery telling the story of the Norman Conquest
Conquest	Taking an area by using force
Domesday Book	A record of the wealth of England
Motte and Bailey castle	The first proper castles that were built in England. A motte is a mound of earth that the main building of the Castle sits on
Rebellion	When people fight against their ruler
Shield Wall	A defensive strategy used in battle. Creating a wall by interconnecting shields

**Why did William win the Battle of Hastings?**

**William's army (French/ Normans)**

- His soldiers were well trained and well equipped.
- They wore chain mail armour which gave them much protection.
- His army was made up of infantry, archers and cavalry.
- His cavalry rode specially bred horses which could carry the weight of these horse soldiers and still ride at speed.

**Harold's army (English/ Saxons)**

- Harold's army was made up of professional soldiers and conscripts, peasant farmers who were forced to join the army and fight.
- Harold's best professional soldiers were the Saxon Huscarls (or housecarls).
- They were the king's elite bodyguard. They fought with large axes and round shields.

**William was very prepared**

- William had well-trained and professional soldiers..
- William used the tactic of the feigned retreat.
- William brought pre-prepared castle parts.
- Harold was not prepared for the battle.
- William's army was fresh and well rested.
- Harold's was tired and reduced in size following the Battle of Stamford Bridge.

**William was a great leader**

- William was very brave and led his men very well.
- William showed his face during the battle to keep his soldiers from running away.

**William had good luck**

- The weather changed when William was trying to invade.
- Harold had to fight the Vikings first
- The Saxons left the shield wall to chase the Normans down the hill.
- At a key moment in the battle Harold was killed.

**C.1066**

**Year 7 History Knowledge Organiser – MIDDLE AGES**

25<sup>th</sup> September – Battle of Stamford Bridge

1348-49 – Black Death hits England

**C.1500**

January 1066 – death of Edward the Confessor.

6<sup>th</sup> January 1066 – Harold Godwinson King of England

14<sup>th</sup> October 1066 – Battle of Hastings

1070 – First stone castle is built in Wales

1077 – Bayeux Tapestry is completed, showing William's take over of England.

1085 Domesday Book is started, collecting information on England

1215 – Magna Carta signed

1381 – Peasants' Revolt

Christmas day 1066 – William crowned King of England

1087 William I dies

**Castles**

- William also kept control by building castles throughout England.
- Motte and Bailey castles were built throughout Britain.
- The first castles built to help fight against rebellions. They were built quickly and made out of wood, meaning that they were not very strong, and could be easily destroyed.
- The Bailey was on flat land, where the majority of the people lived. The Motte was the higher land of the castle, where the Keep was.

**The Domesday Book**

In 1086, William sent out surveyors to every part of England, with orders to list:

- how much land was there
- who had owned it in 1066, and who owned it now
- what was the place like, and who lived there
- how much it was worth in 1066 and how much now

William did this to allow him to effectively tax the land and earn money. William also needed to have an idea of what could be seized from landowners who did not show him loyalty.

**The Feudal System**

After taking the throne in 1066, William has a few problems:

- the English lords do not like him.
- He has to force the English to accept him as King.
- He has to pay the French Knights who helped him to win the throne.

**Solution:** William took the land away from the English lords and gave it to his supporters instead.

William also sets up the **Feudal System**. William is at the top of the system, as he holds all the land and money, which he gives to the Barons.

The Barons promise William their money, soldiers and loyalty. They give the land to the Knights in return for loyalty and military service. Finally the knights give the land to the peasants. The peasants farm the land and give food, money and services to the knights.

**Medieval Religion.**

- The Church affected every aspect of medieval life.
- Many people turned to the Church for medical care and were offered basic medical care and prayers. The Church also controlled education.
- Many leading members of the Church advised the King and the Church owned a huge amount of land and collected a lot of money.

**Black Death**

- The Black Death arrived in England in 1348
- It is estimated that it killed at least one third of the English population.
- **Causes of the Black Death**  
Medieval people did not know what caused the Black Death and had many theories such as the movement of planets/ a punishment from God/ bad smells and corrupt air/ their enemies had poisoned the wells.

**Peasants' Revolt (1381)**

The revolt was caused by the unpopular poll tax of 1380, and the poor wages paid to peasants after the Black Death

In June rebels from Essex and Kent marched toward London, under Wat Tyler, they entered London, where they rioted.

The chancellor, Archbishop Simon of Sudbury, and the treasurer, Sir Robert Hales, both of whom were held responsible for the poll tax, were beheaded.

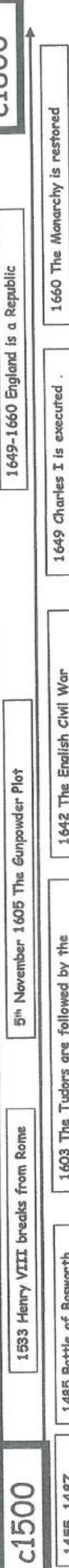
The king met Tyler and promised changes. Wat Tyler was arrested and executed. The rebellion succeeded in having the poll tax reduced.

**Magna Carta 1215**

- King John was deeply unpopular.
- On 15 June 1215, the Barons forced John to agree to sign Magna Carta (The Great Charter) a set of demands to limit the power of the king.
- No monarch of England ever had unrestricted, or 'absolute', power again.

Y7 Knowledge Organiser - The development of Church, state and society in Britain 1509-1745: Who had the power?

c1800



1455-1487 War of the Roses	1533 Henry VIII breaks from Rome	5th November 1605 The Gunpowder Plot	1642 The English Civil War breaks out	1649 Charles I is executed	1660 The Monarchy is restored
1485 Battle of Bosworth	1603 The Tudors are followed by the Stuarts	Henry VII's problems	Henry VIII's Break with Rome	Mary I (Catholic Religion)	Elizabeth I (Problems)
<b>Key Vocabulary:</b>					
Power	The capacity or ability to direct or influence the behaviour of others or the course of events.				
Pope	Head of the Catholic Church				
Monarch	King or Queen				
Catholic	The religion of everyone in England until 1533				
Protestant	A new Christian religion coming from the protests of Martin Luther in 1517				
Taxes	Compulsory money paid to the King or state				
Monastery	A building occupied by a religious community of monks				
Rome	The home of the Pope (capital city of Italy)				
Reformation	The change in religion from Catholicism to Protestantism				

**Henry VII's problems**

- He had a weak claim to the throne after defeating Richard III (from York) at Bosworth.
- The Nobles had too much power, and the ability to raise an army
- He lacked money to fight wars, purchase weapons or live a lavish lifestyle.
- He faced threats from countries like Spain and France.

**How did Henry VII secure his throne?**

- He married Elizabeth of York
- He banned private armies
- He had the best weapons
- He forced people to give him money
- He made sure everyone knew who he was
- He made deals with other countries

**Henry VIII's Break with Rome**

**Political:** Henry wanted power over all aspects of life including the decisions made by the church.  
**Personal:** He needed to divorce Catherine of Aragon to marry Anne Boleyn, to have a male heir.  
**Financial:** The Church's wealth was taken through Dissolution of Monasteries (1536-1541).  
**Religious:** Introduced Protestant reforms but remained Catholic in belief

**Edward VI (Protestant Religion)**

- He was the youngest child of Henry VIII, and became King at 9 years old
- He continued to enforce Protestant changes, including an English Bible and the removal of Catholic statues and richly decorated churches.

**Mary I (Catholic Religion)**

- Reversed Edward's Protestant reforms, restored Catholicism.
- Killed Protestants (was known as "Bloody Mary")
- Married Philip II of Spain
- Died without an heir, leading to Elizabeth I's reign.

Who were the Tudor kings and queens?

Henry VII	Henry VIII	Edward VI	Mary I	Elizabeth I
				
1485-1509	1509-1547	1547-1553	1553-1558	1558-1603

What does John Blanke's story tell us about Tudor attitudes?

- Black trumpeter in Henry VIII's court.
- Evidence of diversity in Tudor England.
- Paid royal wages, played in royal ceremonies.

**Elizabeth I (Problems)**

- Protestant queen but had to manage Catholic threats.
- Spanish Armada (1588) - Catholic Spain tried to invade but failed.
- Elizabeth's legitimacy was also questioned and the ability to rule as a female questioned.
- Elizabeth never married.

Who were the Stuart kings and queens?



James I 1603-1625 Charles I 1625-1649 James II 1685-1688 William III and Mary II 1702-1714 Anne

How are Catholic and Protestant Churches different?

Protestant	Catholic
Bible in English	Bible in Latin
Head of Church - The King / Queen	Head of Church- The Pope
Churches plain in design	Churches richly decorated
Simple services, focused on God	Elaborate services with hymns

Glorious Revolution (1688)

- James II (Catholic) replaced by William & Mary (Protestants).
- No bloodshed - peaceful transition.
- Bill of Rights (1689): Limited the king's power, Parliament gained more control.
- End of absolute monarchy, start of constitutional monarchy.

Stuart society

- Entertainment banned under Cromwell.
- Entertainment open up again under Charles II (Merry Monarch)
- Great Plague 1665 - rich left London to live in the country.
- 1666 Great Fire of London - London was rebuilt
- Attitudes towards race change under the Stuarts and the slave trade begins.
- Parliament's role grew, setting up later constitutional changes

Key Vocabulary:

Divine Right	a belief that a king or queen represents, and has been given power by, God.
Civil War	A war between citizens of the same country
Republic	A country with no King or Queen
Restoration	The return to the throne of Charles II
Parliament	The law-making group in English government
Prime Minister	The head of an elected government

Why were Catholics unhappy with James I?

- James was a Scottish king on an English throne
- He brought back fines against Catholics
- 5000 Catholics were convicted for not attending Protestant Churches
- Some Catholics plotted to kill him in November 1605 - or did they?

Causes of the English Civil War (1642-1651)

- Political: Charles I believed in divine right, shut Parliament (1629).
- Religious: Charles married a Catholic
- Financial: Raised taxes without Parliament's consent.
- Trigger: 1642 - Charles I tried to arrest MPs, war began.

Consequences of the English Civil War

- Execution of Charles I (1649) - first time a king was put on trial & killed.
- England became a republic (1649-1660) under Oliver Cromwell.
- Strict Puritan rule: fun activities banned (theatres, Christmas).
- Monarchy restored (1660) under Charles II.

Why did Prime Ministers & Parliament become more powerful than the monarch?

We had a civil war in the seventeenth century and Charles I was executed. When his son was allowed to return, it was on terms dictated by Parliament. From that point on the power of the monarchy gradually decreased, and that of Parliament gradually increased.

## History Year 7-Key Knowledge on: Migration, Medieval England and Tudor monarchs

Who were the Contenders for the throne in 1066?

### Harald Hardrada

- Viking King of Norway
- Hardrada means 'hard ruler' and his nickname was 'the Ruthless'.
- Harald was supported by Tostig Godwinson who wanted revenge on his brother Harold

### Harold Godwinson

- Anglo-Saxon, Earl of Wessex, one of the most powerful men in England
- Harold was a brave and respected soldier
- The Witan, wanted Harold to be the next king.

### William of Normandy

- Duke of Normandy, France.
- He was a brave soldier. Edward's cousin.
- Edward had supposedly promised that William should become King of England

### Castles

- William also kept control by building castles throughout England.
- Motte and Bailey castles were built throughout Britain.
- The first castles built to help fight against rebellions. They were built quickly and made out of wood, meaning that they were not very strong, and could be easily destroyed.
- The Bailey was on flat land, where the majority of the people lived. The Motte was the higher land of the castle, where the Keep was.

### William had good luck

- The weather changed when William was trying to invade.
- Harold had to fight the Vikings first at Stamford Bridge.
- The Saxons left the shield wall to chase the Normans down the hill.
- At a key moment in the battle Harold was killed.

### Why did William win the Battle of Hastings?

#### William was very prepared

- William had well-trained and professional soldiers..
- William used the tactic of the feigned retreat.
- William brought pre-prepared castle parts.
- Harold was not prepared for the battle.
- William's army was fresh and well rested.
- Harold's was tired and reduced in size following the Battle of Stamford Bridge.

#### William was a great leader

- William was very brave and led his men very well.
- William showed his face during the battle to keep his soldiers from running away.
- William had support from the pope with the papal banner.

### Henry VII's problems

- He had a weak claim to the throne after defeating Richard III (from York) at Bosworth.
- The Nobles had too much power, and the ability to raise an army
- He lacked money to fight wars, purchase weapons or live a lavish lifestyle.
- He faced threats from countries like Spain and France.

### Henry VIII's Break with Rome

- Political:** Henry wanted power over all aspects of life including the decisions made by the church.
- Personal:** He needed to divorce Catherine of Aragon to marry Anne Boleyn, to have a male heir.
- Financial:** The Church's wealth was taken through Dissolution of Monasteries (1536-1541).
- Religious:** Introduced Protestant reforms but remained Catholic in belief

### Elizabeth I's Problems

- Protestant queen but had to manage Catholic threats.
- Spanish Armada (1588) - Catholic Spain tried to invade but failed.
- Elizabeth's legitimacy was also questioned and the ability to rule as a female questioned.
- Elizabeth never married.

### Caribbean Migration

- Black people have been in Britain since Roman times.
- Caribbean migrants increased in Britain after World War Two when Britain needed workers to help 'rebuild' Britain.
- Caribbean migrants faced racism and discrimination throughout the 1950s/60s and 70s.
- Caribbean migration has made a positive impact on Britain through music/ sport/ politics and literature.

Year 7 Term 2 Critical Knowledge Organiser

**SPANISH**

Greetings

Hola-Hello  
 Adios- Goodbye  
 Good morning-Buenos días  
 Good afternoon-Buenas tardes

Months of the Year

January-enero  
 February-febrero  
 March-marzo  
 April-abril  
 May-mayo  
 June-junio  
 July-julio  
 August-agosto  
 September-septiembre  
 October-octubre  
 November-noviembre  
 December-diciembre

Conjunctions

And - y  
 But-pero  
 Or -o  
 Because - porque  
 However - sin embargo  
 Also-También  
 In addition- además

Key Verbs

I have-tengo  
 I am-soy  
 It is/ He or she is-es  
 I study- Estudio  
 There is/There are-Hay

Adverbs

Never- nunca  
 Always-siempre  
 Sometimes- a veces  
 Often - a menudo  
Quantifiers  
 Quite-bastante  
 Very- muy  
 A lot- mucho/a/s  
 More- más

Days of the week

Monday- lunes  
 Tuesday- martes  
 Wednesday- miércoles  
 Thursday- jueves  
 Friday- viernes  
 Saturday- sabado  
 Sunday- domingo

Present Tense

Step 1: Identify the ending  
 Step 2: Get rid of the (AR/ER/IR)  
 Step 3: Add the new ending from the grid

Regular verbs – present tense endings			
	AR verbs	ER verbs	IR verbs
I	o	o	o
you	as	es	es
he/she/it	a	e	e
we	amos	emos	imos
you(pl)	áis	éis	ís
they	an	en	en

Example: I chat (chatear)- chateo

Family members

Sister-hermana  
 Brother-hermano  
 Grandad-abuelo  
 Grandma-abuela  
 Dad-padre  
 Mum-madre

Express opinions

I love-me encanta(n)  
 I really love -me flipa(n)  
 I like - me gusta(n)  
 I don't like-no me gusta(n)  
 I detest - detesto  
 I hate- odio  
 I would like- Me gustaría

Because it is- Porque es/ son

Fun-divertido/a/s  
 Boring-aburrido/a/s  
 Exciting-emocionante/s  
 Difficult-difícil/es  
 Useful- útil/es  
 Practical- practico/a/s  
 Slow- lento/a/s  
 Quick-rápido/a/s

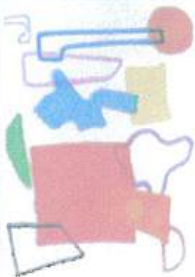
Numbers

1-uno  
 2-dos  
 3-tres  
 4-cuatro  
 5-cinco  
 6-seis  
 7-siete  
 8-ocho  
 9-nueve  
 10-diez  
 11-once  
 12-doce  
 13-trece  
 14-catorce  
 15-quince  
 16-dieciséis  
 17-diecisiete  
 18-dieciocho  
 19-diecinueve  
 20-veinte

<u>Year 7 Term 2 Critical Knowledge Organiser</u>		<u>Key personal Questions</u>
<p><u>Time</u></p> <p>Es la una/ son las dos..</p> <p><u>Example:</u> Son las dos y media It is 2:30</p>	<p><u>School Key Vocabulary</u></p> <p>Science- Las ciencias Art-El dibujo Drama- El teatro English- El inglés Spanish-El español PE- La educación física IT- La informatica Classroom- La aula Library- La biblioteca Playground-El patio Basketball court- La cancha de baloncesto</p>	<p>1) <u>¿Como te llamas?</u> <i>What is your name?</i></p> <p>Me llamo..... <i>My name is.....</i></p> <p>2) <u>¿Cuántos años tienes?</u> <i>How old are you?</i></p> <p>Tengo.....años <i>I am ..... years old</i></p> <p>3) <u>¿Qué tal?</u> <i>How are you?</i></p> <p>Estoy bien gracias <i>I am good thank you</i> Estoy fenomenal <i>I am phenomenal thank you</i> Estoy mal <i>I am bad</i></p> <p>4) <u>¿Cuándo es tu cumpleaños?</u> <i>When is your birthday?</i></p> <p>Mi cumpleaños es el ..... de ..... <i>My birthday is the ..... of.....</i></p>
	<p><u>Eyes/hair</u></p> <p>I have..... hair <i>Tengo el pelo.....</i></p> <p>Brown-Castaño Blonde- Rubio/a Black-Negro</p> <p>I have..... eyes <i>Tengo los ojos.....</i></p> <p>Blue-Azules Brown- Marrones Green- Verdes Black-Negros</p>	
	<p><u>Free time</u></p> <p>Sports- Los deportes Activity- La actividad</p> <p>Swimming- La natación Basketball-El baloncesto Horse riding- La equitación Cycling- El ciclismo Volleyball-El voleibol Salsa (dance)- La salsa Tennis- El tenis</p>	<p><u>Physical Description</u></p> <p>Tall-Alto/a Small-pequeño Pretty-guapo/a Slim-delgada</p> <p><u>Personality Description</u></p> <p>Intelligent - inteligente/s Calm- tranquilo/a/s Sporty- deportista/s Creative- creativo/a/s</p>
<p><u>Colours</u></p> <p>¿Cuál es tu color favorito? <i>What is your favourite colour?</i></p> <p>Blue-azul Green-verde Rosa-pink Morado-purple Naranja-orange Yellow-amarillo Black-negro White-blanco</p>		

*Formal Elements*  
**Critical Knowledge Organiser**

**Shape**



**SHAPES**



**PATTERN**  
IS THE REPETITION OF THE ELEMENTS OF ART OR PATTERNING THEM.

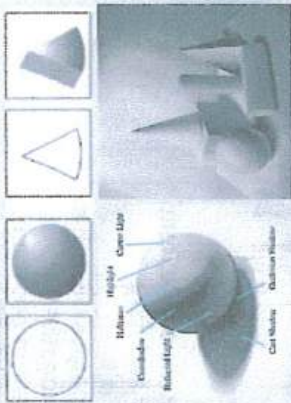
**PATTERNS OF LINE**

**PATTERNS OF COLOR**

**PATTERNS OF FORM**

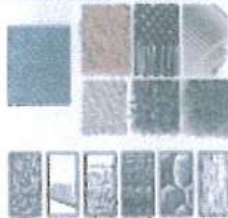
**PATTERN IS EVERYWHERE!**

**Form**

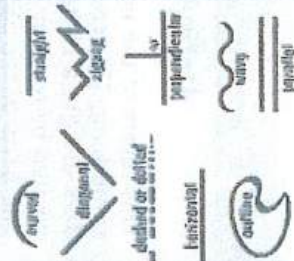
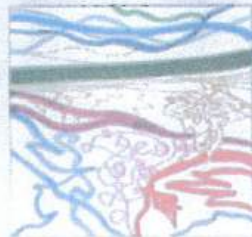


**Texture**

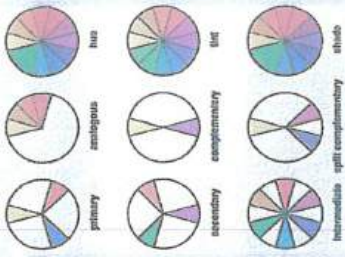
- **Real** - How something feels
- **Implied** - Looks like it feels
- **Examples:** rough, smooth, sandy, fuzzy, slick



**Line**



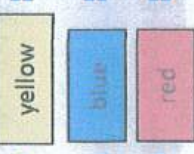
**Colour**



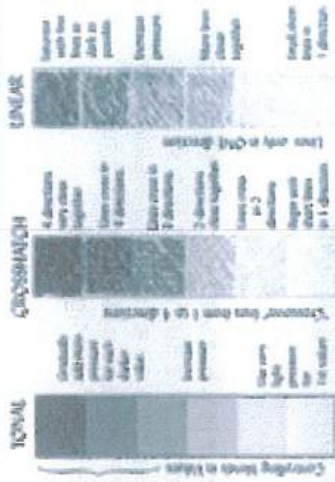
**Primary colour**



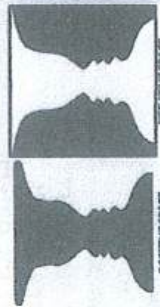
**Secondary colour**



**Tone**



**Space / Composition**



**Positive & Negative space.**  
Negative space is, quite simply, the space that surrounds an object in an image. Positive space is the space filled by the main item in the artwork



*How will I be assessed?*  
Application of the FE skills to production  
Mastery of skill  
Independent exploration  
creativity

## Formal Elements Definitions

This refers to the lightness or darkness of something. This could be a shade or how dark or light a colour appears. Tones are created by the way light falls on a 3D object. The parts of the object on which the light is strongest are called highlights and the darker areas are called shadows

### Tone



A form can be three-dimensional, like a sculpture. Form can also be when a shape has had tone added to give the impression that it is three-dimensional.

### Form



Shape is an image that is created when the ends of a line join. Shape is a flat, enclosed area of an artwork created through lines, textures, colours or an area enclosed by other shapes for example triangles circles and squares.

### Shape

Space is the boundless, three-dimensional extent in which objects and events occur and have relative position and direction. In art we think about space and composition, this is about how a piece of art is put together. Choosing how things look, or where to put them. HOW THE PIECE OF ART IS PUT TOGETHER

### Composition Space



### Line

It is a path of a moving point, such as pen, pencil or brush. Lines vary. They can be bold and heavy or light and delicate. They can be straight or curvy. Long or short.

### Colour

Colour is what we perceive when light reflects off a surface. It is a sensory experience as a result of vision. There are three features of colour: hue, saturation and lightness.

### Pattern

Pattern is a decorative design, usually made up of repeated shapes or images.

### Texture

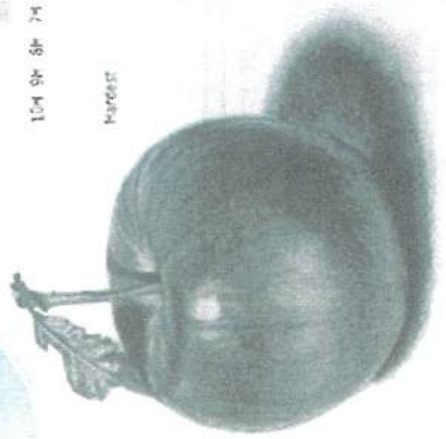
Texture is the sight or feel of a surface. A texture could be rough, smooth, bumpy, sharp, fluffy. We can add texture to a drawing through different types of line and mark making.

## Pencil Tone Drawing

Critical Knowledge Organiser

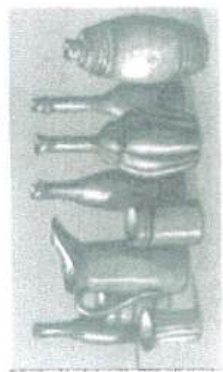


Tone refers to the lightness or darkness of something. This could be a shade or how dark or light a colour appears. Tones are created by the way light falls on a 3D object. The parts of the object on which the light is strongest are called highlights and the darker areas are called shadows.



Pencils come in a range of hardness:

- The H range is hard and light and useful for design or technical drawings
- The B range is soft and dark and more suitable for shading and tonal drawings.



### Recording from Observation

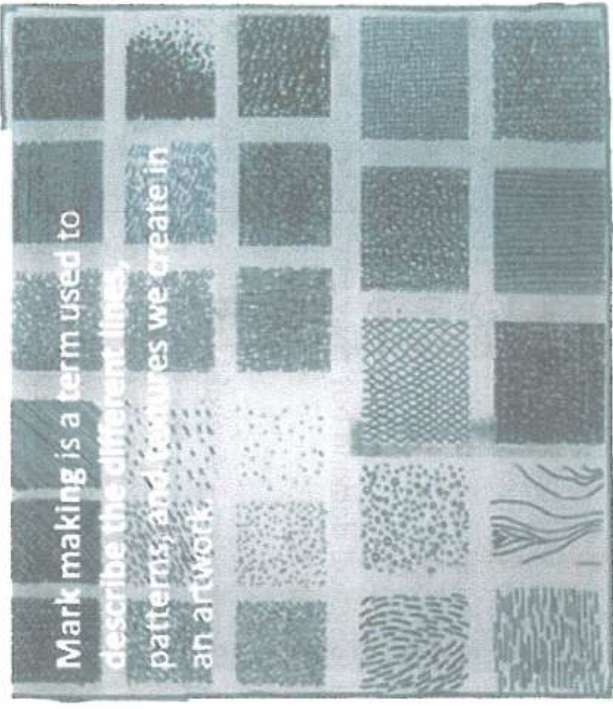
Primary source observational drawing; something real in front of you.  
Secondary source observational drawing; drawing something from a picture.

## Year 7 - Art



Hatching

Cross-hatching



Mark making is a term used to describe the different lines, patterns, and textures we create in an artwork.

USEFUL WEBSITE for DRAWING :

<https://www.bbc.com/bitesize/guides/zc7sfrd/revision/2>

How will I be assessed?

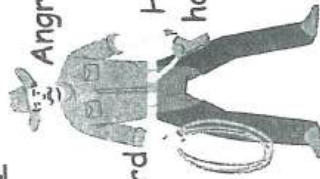
Application of the FE assign & presentation. Mastery of skill. Independent, explanation, creativity.



# Year 7 Drama

## Westerns

### Character



Angry face

Hips forward  
Holding gun or  
hands in pocket

Legs just wider than hip  
width apart

### Phrases

1. Howdy Partner
2. Give me a beer
3. That money is mine
4. This town isn't big enough for the both of us

### Hot seating

When an actor sits in the 'hot seat' during rehearsals. They will be asked questions about their character and have to make up the answers on the spot, acting as their character

### Butch Cassidy

Butch used to be a cowboy but he turned to the life of crime at an early age. He had numerous jail sentences in his life and spent most of it running from the law. He led The Wild Bunch, who became the most successful train robbing gang in history. He was a very dangerous criminal

### Keywords:

- Projection** - Speaking loud so the audience can hear you.
- Pitch** - How high or low your voice is.
- Accent** - The way you talk depending on where you are from.
- Posture** - The position of your body when standing or sitting.
- Facial expression** - The way you move your face to show emotion.
- Gestures** - The actions you do with your hands.
- Character** - Someone an actor plays in a performance. When you are on stage you are not playing as you, you are playing as a character.
- Scenario** - The basic outline of the story of the performance - the situation the character is

### Characters we have explored

**Sheriff** - Head of the Police Force, a powerful person. The Sheriff has worked very hard to earn this title and will do anything to keep the town safe and crime free.

**Police Officers** - Justice seekers of the town. Police Officers answer to the Sheriff and hold high respect for them, Police Officers may even be jealous of the power that The Sheriff holds. It's a tiring job, with long hours and high physical demand but they work hard to keep people safe.

**Bartender** - Arguably the person with just as much power as the Sheriff. There's only 1 bar in a 50 mile radius, everyone's go-to social hotspot, the Bartender knows everyone! There's never any trouble, what the Bartender says is the most important.

**Cowboys** - Hard workers, long days working on the Farm, waking up at 4am and not finishing work until 5pm. It's an honest living, everyday is exactly the same. Sometimes crops aren't as strong, which causes some financial strain, but it always works out in the end.

# Year 7 Drama

**Criminal** - Always plotting ways to get more money. Very intimidating people, not only sneaky but they love to get revenge on people who have done something wrong.

**Cards Player** - Easy going people, who enjoy a good game and laugh with friends. No bad intention, just fun and taking some time away from work.

## Angel & Devil

Devil:	Actor in middle	Angel:
Evil face		Soft face
Hunched posture		Straight posture
Cunning gestures		Gentle gestures

## Showing Angel & Devil

1. A problem is introduced, everyone freezes
2. Person in the middle steps forward and tells the audience their problem
3. Angel and Devil step forward
4. Both sides give their perspective and advise on what to do
5. Everyone steps back into 1<sup>st</sup> freeze frame
6. Scene continues

**Feedback:** Supports in understanding what the strengths of a performance are and what could be improved. The most effective feedback explains a positive, gives an improvement and then an additional positive. Feedback is really important because it helps us understand how we can challenge ourselves to perform beyond what we believe we are capable of, it helps us to improve our skills and get an additional point of view, which can help us develop our stories.

**Tableau:** A freeze frame that is built up with one person at a time, like a jigsaw.

**Devising:** A scene that you create, made up from ideas.

## Moral

The message behind the story. What do you want your audience to learn from the performance. For example: don't mess around with fire, peer pressure can lead to bad outcomes, trust your own judgment over others.

## **Improvisation:**

Improvisation is when you make something up on the spot. When we improvise, the word "no" is banned! This is because it immediately shuts down any idea, instead we use "yes, and..." to keep the scene going. You have to work in a team and listen to each other, otherwise whatever you improvise will not make any sense.

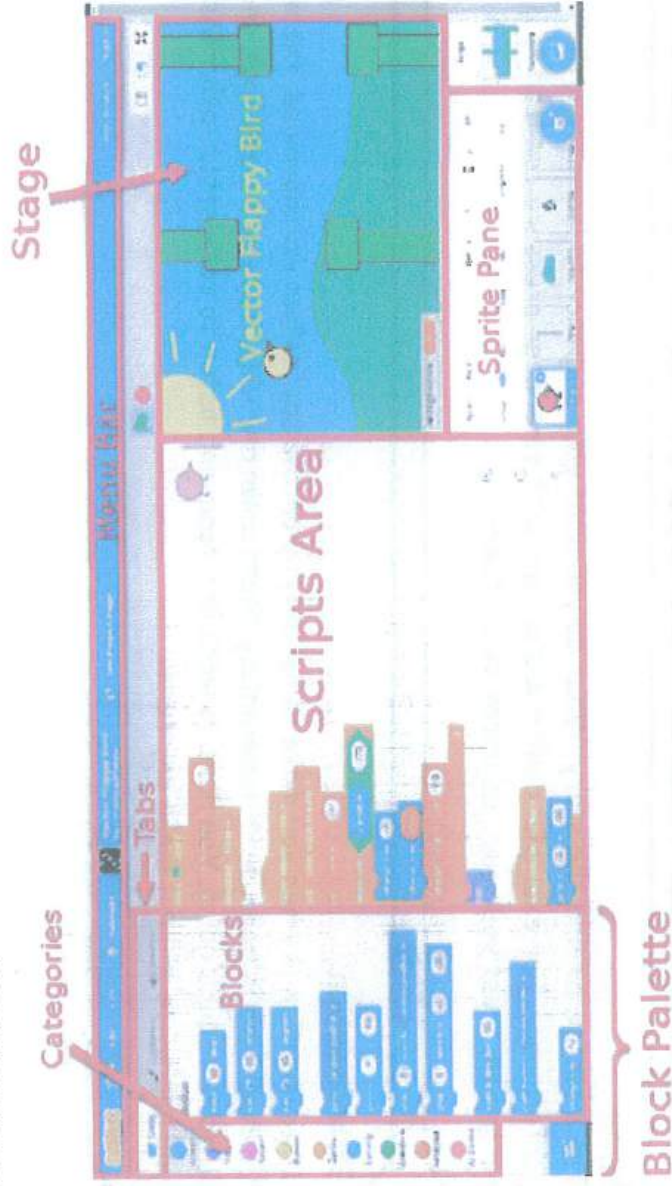
## What is Scratch:

Scratch is a free interactive programming language that allows you to create animations, games, stories and art through the use of coding blocks that are put together to create a sequence of instructions. Scratch can be used through an offline app or an internet browser on the computer. Anything created in scratch can be shared to the scratch website for others to play, explore and learn from. It is a highly popular so it is easy to find guides, help and tutorials online and on YouTube.

## How to open Scratch:

Scratch is installed and available on the computer through an offline app. By clicking the windows icon, navigate to the ICT folder and open the application named: 'Scratch 2'. Scratch files created can be saved to your documents and opened up again through the application.

The Scratch Interface:



## Scratch instructions block type:

Type	Description
Events	Events blocks are used to control events and the triggering of scripts.
Control	These are used to control the scripts.
Motion	Motion blocks are included to control the movement of Sprites.
Looks	Looks blocks are required so you can change the way a sprite looks.
Sensing	The sensing blocks are used to detect things that happen in your game.
Sound	This type of block controls any audio that may be included.
Pen	Allows you to draw on the stage with a pen.
Operators	Let's you perform math functions and comparisons.
Data	Includes variables that let you store data.
More Blocks	Where you can create your own blocks.

## Sequences:

To program a sprite in Scratch you must join two or more blocks together. The blocks are joined together in a sequence as they follow on from each other step by step. It is important to work out the order of how you want to place blocks together, so your program makes sense and works correctly.

## Loops:

A good trick when creating a scratch program is to loop blocks which are a part of a repeat action. If you're controlling movement of a sprite, you will definitely want to use the repeat block found in the control type. Looping saves on space and time when creating a scratch program.

## Sprites :

A sprite in Scratch is the character that has been placed into the animation/game that is being created. The default sprite is an orange cat; this doesn't have to be used and can be changed with a library of many other sprites. A sprite can have multiple 'costumes'. A costume is a certain pose/look for a sprite.

## Stages:

A stage in Scratch is the background of the animation/game being created. By default, the stage is a solid white colour and can be easily changed with a different stage from the library of stages built into scratch. It is also possible to import your own stages by loading an image that is stored locally on the computer.

## Units of information:

Computers store all their data in binary form. A binary digit can be represented by a 1 or 0.

A single binary digit is known as a bit. This is the smallest unit of data that a computer can use. Eight bits are called a byte.

An 8-bit binary number looks like this:

1010011 this represents the denary value; 170.

## Converting between number bases:

Humans count in the denary number system; this includes 10 unique digits we all know; 0 to 9. So, because computers use the binary system, a conversion must take place for the computer represent and use denary numbers.

8-bit binary numbers add up to 255. When converting from denary to binary it includes 8 place values that equal to 255.

$$128 + 64 + 32 + 16 + 8 + 4 + 2 + 1 = 255$$

Binary to denary (Converting 10110110 to denary):

128	64	32	16	8	4	2	1
1	0	1	1	0	1	1	0

$$128 + 32 + 16 + 4 + 2 = 182$$

This means that 10110110 is equal to 182 in denary format.

## Binary arithmetic:

Adding two binary numbers is different to traditional addition of decimal numbers. To add numbers in binary we first need to understand the four rules:

- 0+0=0
- 0+1=1 or 1+0=1
- 1+1=10 ← but we carry a 1 to the next column on the left so it equals to 10. 10 in binary is equal to 2 in decimal format.
- 1+1+1=11 ← with the extra 1 this time we change the 0 in the first column to a 1 so it equals 11. 11 in binary is equal to 3 in decimal format.

0	1	0	1	0	0	1	1
+	0	1	1	1	0	1	0
<hr/>							
1	1	0	0	1	0	0	1
	1	1	1	1	1	1	

Start from the right and work left column by column.

## IPOS (Input, Process, Output, Storage) model:

- **Input** - An input device is a piece of computer hardware that is used to provide data to a computer system.
- **Process** - Once we have inputted data the computer system needs to do something with it. This is where it is processed so that what has been input is made use of and not just wasted.
- **Output** - Once data has been processed, it will often be output to the person using the computer system. This allows the person using the computer to know what is going on.
- **Storage** - This is a hardware device that is responsible for storing data used by a computer system. Without them our computers wouldn't be able to access anything we want to use or save.

## Connectivity devices:

To access a network and for a device to connect to the internet, there are a range of different pieces of hardware which are required:

- A network card is found in every device that wants to connect to a network, they can allow a device to be wireless or wired.
- Routers have the job of connecting computers and other network capable hardware together to build a network.
- Wireless is a method of connection that uses radio signals to transmit data instead of cables.
- A server is a computer that contains data that is shared with other computers on a network.

## Storage devices:

There are multiple types of storage devices that all have their own unique uses. These include:

- **Hard disk drive (HDD)**. Usually found in a desktop computer. Contains a magnetic disc that spins. This type is good for saving documents and files that are used on a computer. They are not the fastest type available but are cheaper to buy and allow for very large capacities of storage compared to other types.
- **Solid state drive (SSD)**. This type of storage device is also known as flash memory. This works at much faster speeds than a HDD and can save the user a lot of time when saving and opening files stored on a device. As it is much faster, the cost is a lot more than compared to a HDD.
- **Optical storage (Blu-ray disc)**. Uses lasers to read and write data to the disc. Mainly used to store digital media content such as videos, music, and images. Slower than other types of storage but highly portable.

## Computational Thinking:

This is when we consider a problem in a way that a computer can help us to solve it. In order to use computational thinking properly, we must apply a number of processes to help us plan and solve a problem.

- Decomposition - breaking down a complex problem into smaller parts.
- Abstraction - reducing unnecessary detail and focusing on the important parts of a system.
- Pattern Recognition - recognising and finding patterns or trends.
- Algorithms - developing instructions to solve a problem; the steps or rules to complete a task.
- Evaluation - considering if the solution is 'fit for purpose'.

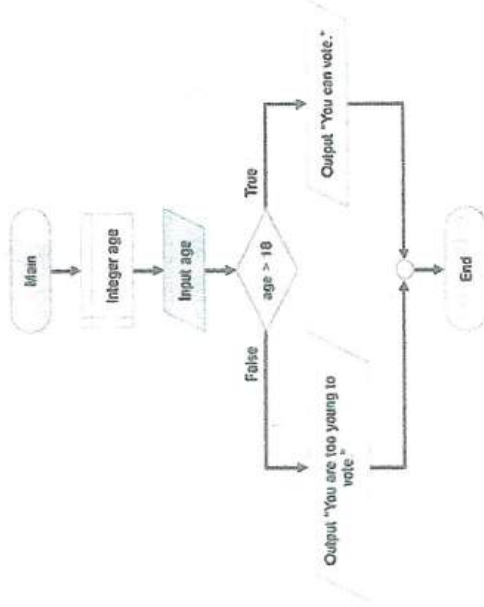
- To ensure that solving a problem has the best chance possible, it's important that the solution is planned out carefully.
- By using computational thinking and decomposition, we can break down a problem into smaller parts.
- From this, we can plan out how they will fit back together in a suitable order which solves the problem.

- The order of the solution will always be represented in the algorithm used. An algorithm must be clear, so it makes sense.
  - It must have a starting point.
  - It must have a finishing point.
  - It must have a clear set of instructions in between those two points.






The two main methods for creating algorithms are through creating **Pseudocode** or a **Flowchart**.

## Flowcharts:

A flowchart is a type of diagram which can be used to represent an algorithm. This style of diagram uses different symbols to represent what is happening within the algorithm. Every flowchart has a starting point and will flow from step to step until it reaches the ending point. Below is an example of a flowchart:



There is a range of different symbols available to use when creating a flowchart. Each symbol has a different role. The table below details each symbol:

Symbol	Name	Function
	Start / Stop	Oval represents a start or stop point
	Arrows	a connector that shows relationships between the shapes
	Input / Output	Parallelogram is used to show an input and an output
	Process	Rectangle is used to show a process - doing something
	Decision	Diamond is used to ask a question and make a decision

## Pseudocode:

The use of Pseudocode allows for a simple way to describe a set of instructions which doesn't have to use specific syntax like a programming language does.

While there are no strict notations for pseudocode, it does use a set of keywords, which are:

- **INPUT** - indicates that a user will be inputting something
- **OUTPUT** - indicates that an output will appear on the screen
- **WHILE** - used to show a loop (iteration structure that has a condition at the beginning)
- **FOR** - a counting loop (iteration with a condition that shows how many loops will happen)
- **REPEAT - UNTIL** - a loop (iteration that has the condition at end)
- **IF - THEN - ELSE** - a decision (selection) in which a choice is made

Note: any instruction that occurs inside a selection or iteration structure will usually be intended.

Pseudocode can be used to plan out programs. Planning a program that asks people what the best subject they take is, would look like this in pseudocode:

```

REPEAT
  OUTPUT 'What is the best subject you take?'
  INPUT user inputs the best subject they take
  STORE the user's input in the answer variable
  IF answer = 'Computer Science' THEN
    OUTPUT 'Of course it is!'
  ELSE
    OUTPUT 'Try again!'
  UNTIL answer = 'Computer Science'
  
```

### What is Python:

Python is a type of programming language used to create code that a computer can understand. This code tells the computer what to do and forms part of a program / application.

Python is known as a 'high-level' language. This means it can be read and understood easily by humans and is user-friendly.

When typing code in Python you must follow the set rules of syntax and naming of functions to correctly create your program.

### Input:

To allow your Python program to get information from the user you will need to use the input command. Make sure you use the correct command for what you are asking for.

String inputs (such as a name):

```
input("Enter your name")
```

Integer Inputs (for whole number responses):

```
int(input("What is your age?"))
```

Integer Inputs (for whole number responses):

```
int(input("What is your age?"))
```

### Output:

To output data from your Python program you can use a function called 'print'. When print is called, it allows you to output a stored item of data found in a variable.

Printing a new message:

```
print("Hello World")
```

Printing the value of a variable:

```
print(x)
```

Printing a message with variables included:

```
print("Hello", name, "you are", age, "years old.")
```

### What does it look like:

Python code must be typed up in an IDE (Integrated Development Environment). Python comes with its own version of this called IDLE. While typing your code, certain parts may change colour to show what that part of the code is being used for.

Colour	Use for	Examples
Black	Data & variables	23.6 area
Green	Strings	"Hello World"
Purple	Functions	len() print()
Orange	Commands	if for else
Blue	User functions	get_area()
Dark red	Comments	#Remember VAT
Light red	Error messages	SyntaxError

```
agePerHour = 12
```

```
bonus = 20
```

```
hoursWorked = int(input("Enter number of hours worked:"))
```

```
weeklyPay = hoursWorked * wagePerHour
```

```
if hoursWorked > 40:
```

```
    weeklyPay = weeklyPay + Bonus
```

```
print(weeklyPay)
```

### Selection:

The name given to Python's if-elif-else statements that are used to decide which path a program will take. If a condition is 'true' then Python will choose to run specific lines of code, but if false Python will choose to run different lines of code. Example:

```
colour = input("Enter your favourite colour")
```

```
if colour == "Red":
```

```
    print("Reminds me of tomatoes")
```

```
elif colour == "Blue":
```

```
    print("Reminds me of the sea")
```

```
else:
```

```
    print("If it isn't Red or Blue then I'm not interested")
```

### Iteration:

An iteration in Python is where a section of code loops / repeats over and over again. There are two different types of loops that work differently; they are known as 'For loop' and 'While loop'

#### For:

'For' loops are used when you have a block of code which you want to repeat a fixed number of times.

Example:

```
for i in range(5):
```

```
    movie = input("What is one of your top 5 favourite movies?")
```

#### While:

The 'while' loop is where a section of code is repeated until a condition changes.

Example:

```
while answer != "London":
```

```
    answer = input("What is the capital of London?")
```

### Variables:

A variable is a name given to an item of data so that the data can be stored in memory while your Python program is running.

Variables enable you to input data from the keyboard and to change the data however you need to.

In Python you create a variable by writing the name of the variable (known as an identifier) followed by an =.

#### Examples:

```
name = "SpongeBob"
```

```
age = 14;
```

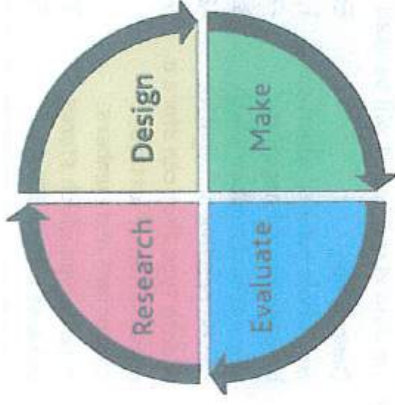
### Data types:

This is where data is assigned a type so that Python and the program code can understand what the purpose of the data is and how it will be used.

Type	Description	Example
Integer	Any whole number which can be positive and negative.	1, 45, -756
Float	Any decimal number which can be positive or negative.	3.68, -29.1
String	A data type that can store a combination of letters, characters and numbers.	"Hello!"
Boolean	A data type which stores a value of either TRUE or FALSE	TRUE FALSE

# Year 7 Knowledge Organiser

## The Design Process



Stage	What does this mean?
Research	Understand the problem, gather inspiration and explore existing solutions.
	User Needs Who is the product for? What do they need?
	Product Analysis Looking at existing products to see what works well and what doesn't.
	Design Brief A short statement that outlines the task.
	Specification A list of requirements the product must meet.
Design	Develop creative ideas and plan how the product will be made.
	Idea Generation Sketching and brainstorming multiple ideas.
	Annotation Adding notes to explain your ideas.
	Technical Drawing Accurate drawings with measurements.
	Materials Selection Choosing the right materials for the job.
Make	Use tools and materials to create the product.
	Planning Step-by-step plan of how to make the product.
	Tools & Equipment Knowing how to use tools safely and correctly.
	Quality Control Checking your work as you go to ensure accuracy.
Evaluate	Reflect on the success of the product and the process.
	Testing Does the product work as intended?
	Feedback What do others think of the product? Improvements What could be done better next time?

Research		
Area	Focus	Examples
Product Design	Investigate user needs, materials, and existing products.	Analyse different examples of key rings.
Food	Explore nutrition, dietary needs, and food origins.	Research balanced diet, health and safety and examples of knife skills.
Textiles	Study fibres, fabrics, and fashion trends.	Look at designer Jon Burgerman. Analyse existing squishmallow toys.
Design		
Area	Focus	Examples
Product Design	Sketch ideas, use CAD, plan dimensions.	Draw and design an acrylic keyring.
Food	Plan recipes, consider presentation and nutrition.	Design a health and safety poster. Design dishes that use seasonal produce
Textiles	Create patterns, choose colours and textures.	Design a felt squishmallow toy
Make		
Area	Focus	Examples
Product Design	Use tools to shape and join materials.	Cut and assemble plastic components. Use machinery safely.
Food	Follow recipes, use kitchen equipment safely.	Bake, chop, mix, and present food attractively.
Textiles	Use sewing techniques and equipment.	Making a paper pattern, cutting fabric out, embroidery stitches
Evaluation		
Area	Focus	Examples
Product Design	Test product function and durability.	Does the key ring meet the design brief?
Food	Taste, texture, appearance, and nutrition.	Was the dish balanced, tasty, and well-presented?
Textiles	Fit, finish, and user feedback.	Does your finished Squishmallow have the characteristics of a Jon Burgerman design?

## Food Technology - Knife Skills

### Bridge Method



Take the knife and hold it in your writing hand. Make sure that the blade of the knife is facing downwards.

Pinch the food between your thumb and your fingers to make a bridge. Keep your fingers together. The bridge should stay strong and tall.

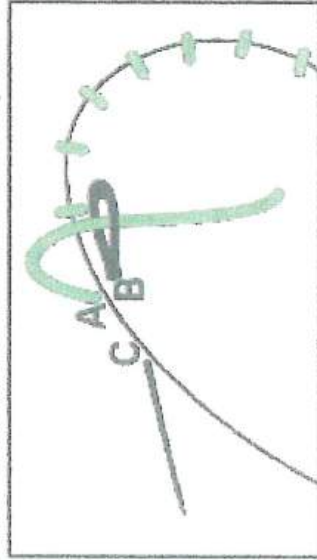
The knife goes under the bridge and cuts down through the food by moving the knife back and forth slowly. Cut the food in half.

### Claw Method



Hold the knife in your writing hand with the blade pointing downwards. Take the food in your holding hand. Rest the nails of your holding hand on top of the food near where you want to cut. Curl your fingers and press down with your nails. Cut through the food in front of your claw grip, keeping your fingers away from the blade. Keep moving your claw grip back along the food to cut more slices.

## Textiles - Basic Embroidery Stitches



### Whip Stitch

#### Extended writing:

- Because - to explain why your statement is true.
- But - to introduce a different or contrasting statement.
- So - to show the consequence of your statement.

**A** is for **Aesthetics**

**S** is for **Safety**

**C** is for **Cost**

**F** is for **Function**

**C** is for **Customer**

**M** is for **Material**

**E** is for **Environment**

**M** is for **Manufacturing**

**S** is for **Size**



**Aesthetics** means **what does the product look like?**

What is the Colour? Shape? Texture? Pattern? Appearance? Feel? Weight? Style?



**Cost** means **how much does the product cost to buy?**

How much does it Cost to buy? Cost to make? How much do the different materials cost? Is it good value?



**Customer** means **who will buy or use your product?**

Who will buy your product? Who will use your product? Are they the products target market group? How will it improve their life? What is their Age? Gender? What are their likes? Dislikes? Needs? Preferences?



**Environment** means **will the product affect the environment?**

Is the product Recyclable? Repairable? Sustainable? Environmentally friendly? Bad for the environment?

**6R's of Design:** Recycle / Repair / Reuse / Rethink / Reduce / Refuse



**Size** means **how big or small is the product?**

What is the size of the product in millimeters (mm)? Is this the same size as similar products? Is it comfortable to use? Does it fit? Would it be improved if it was bigger or smaller?



**Safety** means **how safe is the product when it is used?**

Will it be safe for the customer to use? Could they hurt themselves? What's the correct and safest way to use the product? What are the risks?



**Function** means **how does the product work?**

What is the products job and roles? What is it needed for? How well does it work? Is it fit for purpose? How could it be improved? Why is it used this way?



**Material** means **what is the product made out of?**

What materials is the product made from? Why were these materials used? Would a different material be better? How was the product made? What manufacturing techniques were used?



**Manufacturing** means **How is the product made?**

How has the product been made? Has CAD/CAM been used? Is this the best method of manufacture?

# Year 7 Music Knowledge Organiser

## Rhythm 2a

### Keyword

This is the symbol for **REST**  the music pauses here.

A pulse is the steady beat - you can clap or tap your foot.

A rhythm is made up of lots of short and long notes.

A polyrhythm is when 2 or more different rhythms are played at the same time.

### Rhythm

Long Short-Short Long Long

### Pulse

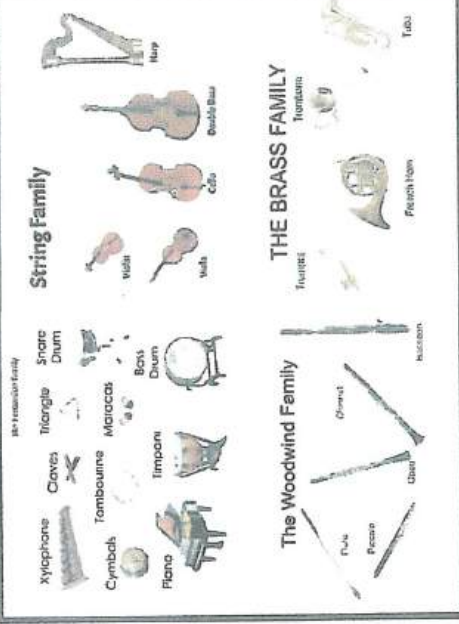
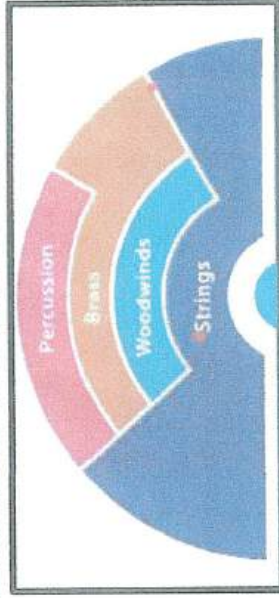
There are 4 beats in every bar



A triplet is a group of three notes that are played in the time as two regular notes of the same value

## Instruments of the Orchestra 2b

An orchestra is a group of people who play music together. There are lots of different instruments. There are 4 families of instruments - Strings, woodwind, brass, percussion.



### Important Facts

The conductor leads the Orchestra.

The percussion and brass instruments sit at the back as they are the loudest.

Don't forget the saxophone is part of the woodwind family.



