

Knowledge Organiser

Year 7

Term 2
2024/25



The Abbey
School

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English Year 7 Term 1
Travel and Literacy

Term Focus

You will learn how to:

- appreciate and comment on a writer's presentation and experience of travel.
- become a travel writer yourself and produce pieces of travel writing for different purposes, audiences and forms.
- Write accurately with secure literacy skills.



Prior Learning Links

- Creative writing tasks will continue to develop the stamina to write at length.
- Revisit and practise the correct use of spelling, punctuation, and grammar.
- Development of vocabulary, building systematically on pupils' current knowledge.
- Increase pupils' vocabulary store make connections between known and new vocabulary; discuss the meaning of similar words.
- Read fluently and with good understanding of the texts.

Future Learning Links

- Reading a variety of fiction and non-fiction texts will spiral into Year 8 schemes and reading of more challenging fiction and non-fiction texts.
- Creative writing skills will spiral into Year 8 learning.
- Develop pupils' reading and writing in all subjects to support their acquisition of knowledge.
- Pupils' command of vocabulary is the key to their learning and progress across the whole curriculum

Prior and future learning links are underpinned by the National Curriculum guidance.

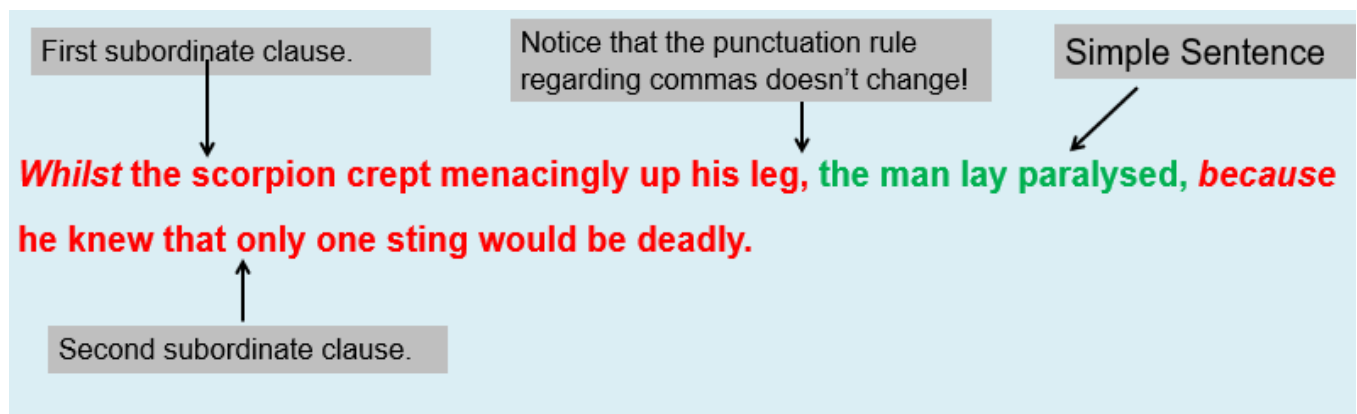
KEY VOCABULARY

KEY WORDS	KEY SUBJECT TERMINOLOGY
Travel Writing: a person writes about their experiences of places they visit	Skim: means to look for important information without reading the whole text; a speed read.
Humour: the quality of being amusing or funny – try to include humour in your writing.	Scan: means reading to pick out information such as the cost of a hotel room.
Brochure: a booklet that has the texture of a magazine – people look in brochures to find holidays.	First person: a type of writing in which uses the personal pronoun: "I". A personal, intimate account creating a connection between the reader and writer.
Blog: a personal piece of writing about a topic, usually found online. And written in an informal or conversational style.	Autobiography: an account of a person's life written by that person
Monolith: a large block of stone	Biography: an account of someone's life written by someone else
Innocuous: not harmful or offensive	Opinion: a personal view or judgement formed about something.
Obliterate: destroy, wipe out	Fact: something that is known or proved to be true

Thesaurus: a reference book that will help you find alternative words with similar meanings. We use the yellow Oxford edition.	Genre: a style or category of art, music, or literature
Sombre: dark or dull in colour; a feeling of deep seriousness and sadness	Implicit: suggested but not directly expressed. Look for the hidden meaning.
Dispirited: Feeling unhappy and without hope or enthusiasm	Explicit: stated clearly and in detail, leaving no room for confusion or doubt

1. <u>What are extended complex sentences?</u>	Red	Amber	Green
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Complex sentences can have more than one subordinate clause.

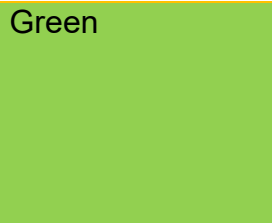
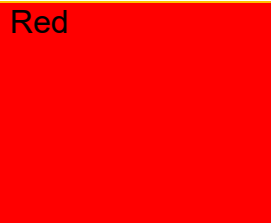


Examples of subordinating conjunctions:

- after
- as
- whenever
- although
- since
- if
- because
- while
- even though

Word Class	Definition
Common Noun	Common nouns are the names of things that you can touch and see.
Proper Noun	A proper noun is the name of a particular person, place or thing, and always begins with a capital letter.
Abstract Noun	Ideas, concepts, emotions, and other "things" you can't physically interact with.
Collective Noun	Words to describe groups of things.
Compound Noun	Nouns made up of more than one word.
Pronoun	A word that takes the place of a noun in the sentence.
Verbs	Verbs are 'doing words'. A verb can express: <ul style="list-style-type: none"> • A physical action • A mental action • A state of being
Adjectives	A word that describes a noun.
Adverbs	A word that gives more information about a verb, adjective or another adverb.
Prepositions	A word that describes the position of something, the time it happened or the way it is done.
Conjunctions	A word that connects, phrases or sentences.
Determiners	A word that introduces a noun.

2. What is GOMASSIVE and how does it help in creative writing?



Group of three: cold, dark and gloomy



Onomatopoeia: snap, pop, crackle



Metaphor: She is a wave, wild and fierce.

Alliteration: crystal clear



Simile: Superman's cape is red like blood.

Senses: I could feel the scorching sun burning my delicate skin.



Imagery: The azure ocean was speckled with drops of emerald green

Vocabulary: 'petrifying' is better than 'scary'

Emotive language: The poor defenceless fox is cowering in fear.

Bonus language techniques!

Sibilance: the repetition of 's' in a sequence of words. *The sea sighed in despair.*

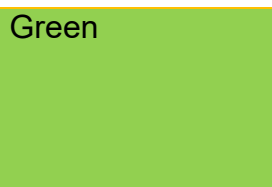
Personification: describing objects as if they are people.

*The rain **stomped** angrily on the fragile roof like a grumpy giant. The snow **painted** delicate white pictures on the ground as it fell gently from the sky*

Pathetic fallacy: giving human feelings to something non-human.

A friendly sun shone down brightly on the party guests as they arrived in the garden

3. How do you plan a descriptive writing response?

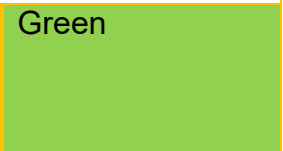


1. Look carefully at the image. Start at the top and work your way to the bottom – this is your pathway. *Where will you start and where will you finish?*
2. Find three-four nouns that catch your attention, for example, *sky, clouds, trees.*
3. Write down the nouns you are going to describe. If you have the image in front of you, label them on the image.
4. Create a mind map for each of the nouns.



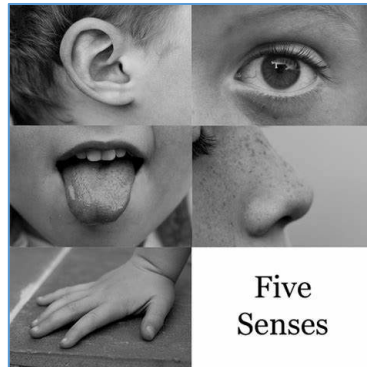


4. How do the five senses make writing exciting?



Reminder:

1. Touch
2. Taste
3. Smell
4. Sound
5. Sight

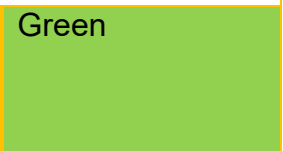


The senses transport the reader into the image you are describing.

Using the senses in creative writing enables the reader to see what you see.

Using the senses in creative writing brings the image to life for the reader.

5. How can verbs be powerful in writing?



Verbs are actions/doing words.

- ✓ **Tense**: the form a verb takes to show the time it/something happened.
- **Past tense**: to talk about the past
- **Present tense**: to talk about the present
- **Future tense**: to talk about the future

Reminder: PAF

Purpose

The purpose is to ask why a person would read this piece of writing and what its goal or aim is.

- Informative writing gives facts or directions. Example: forest trail guide
- Persuasive writing that gives the reader an opinion and tries to convince them that it is correct. Example: a holiday brochure

- Descriptive writing that gives a clear and vivid picture of a person, place, thing or event.
Example: a journal or blog.

Audience

The audience means who would read it and who it is aimed at.

For example:

- Couples
- Families
- Solo travelers

Form

The form refers to the type of text

For example, a book, a brochure, a leaflet, a newspaper, or something else?



6. What is A.P.E and how do I use it in paragraphs?

Red

Amber

Green

A: what is the **answer** to the question you've been asked?

P: **prove** your answer with a quotation.

E: **explain** why that quote helped you answer the question. Refer to any techniques, key words, reader feelings.

Evidence:

a piece of the text that has been copied and is surrounded by quotation marks.

When you are given a text in English and then asked a question based on the text, you will be expected to prove your ideas with evidence.


Quotations:

A quotation mark looks like two **apostrophes** together and is always written in pairs (" ")

Quotation marks are used to show the **exact** words you have borrowed to prove your answer to the question.

Answer it

I think...
The writer...
In this text...
I believe that...
It is clear that...
The speaker...
The writer creates ... by ...
My opinion is ...




A.P.E.

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Prove it

For example...
I know this because...
The writer states that...
The text includes...
The character says...
For instance, the writer describes ...
as ...
I get this impression because...




A.P.E.

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Explain it

This implies...
This suggests that...
This means that...
This makes you realise...
This creates a sense of...
This makes the reader think/feel...
This can be interpreted as...
The effect of this is...



A.P.E.

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7. How can similes and metaphors bring a scene to life?

Red

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Green

What is a **simile**?

A simile describes something by **comparing** it to something else using like or as:

- The snake moved like a ripple on a pond.
- It was as green as a lizard.
- Jess is as graceful as a gazelle.

What is a **metaphor**?

A metaphor is a word, or a phrase used to **describe something as if it were something else**.

For example:

- A wave of terror washed over him.

The terror isn't a wave; however, a wave is a good way of describing the feeling of fear.

- Jess is dynamite.

She's not made of dynamite; however, this creates the idea that Jess is really exciting and lively.

(Examples from BBC Bitesize)

What metaphors and similes do you know?

Can you include metaphors and similes in your own creative writing?

8. **What makes a lively first-person account?**

Red

Amber

Green

First person: a type of narrative in which the protagonist relates their story using the first person, i.e. using the pronoun 'I'.

Why do we use the First-person in travel writing?

- It helps create a relationship between speaker and reader.
- It helps the reader understand the writer's feelings as he passes through the forest.
- It is a personal, intimate account of a person's travel experience – the reader can also feel like they are experiencing this too!

9. **What makes paragraphing effective in a description?**

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Paragraphs contain a collection of sentences – paragraphs help structure your writing.

Paragraphs are used in writing to introduce new sections – remember to Tip Top your paragraphs.

Using paragraphs can help the reader to enjoy what has been written because the text is broken up into sections.

Paragraphs can help the reader to focus on a specific part of the text.

Remember to **TIP TOP** your paragraphs!

- **TIME**: you move to a new time.
- **PLACE**: you shift to a different place or location
- **TOPIC**: you move from one topic to another
- **PERSON**: you bring a new person into your writing or change from one person or another. Remember dialogue between two characters needs a new line each time.

10. What is atmosphere in writing?

Atmosphere means the tone and mood of a place or situation.

Atmosphere in writing refers to the feelings and emotions the writer brings into the text.

The atmosphere can make the reader feel a certain way. For example, happy, sad, or frightened.

Atmosphere is created through description using setting, imagery, and GOMASSIVE techniques.

11. What is pathetic fallacy?

Pathetic fallacy is a technique that gives **human emotions** to nature or objects, such as angry storms or smiling flowers.

Weather and seasons

Pathetic fallacy is often used to describe the environment. The weather and season can be described with human emotions to reflect the mood of a character or create a tone.

- *The raindrops wept all around her.*
- *A friendly sun shone down brightly on the children playing in the park.*
- *The weather is unhappy outside.*

Warning: don't mix up pathetic fallacy with personification.

- Pathetic fallacy is **always** about giving emotions to something non-human.
- Personification is giving **any** human attribute to an object. For example: The trees waved in the breeze.

12. What is the effect of powerful vocabulary?

Synonyms: words with a similar or the same meaning.

We should always try to aim for **ambitious and powerful vocabulary** in our creative writing.

For example:

- I ate a **nice** piece of cake at lunchtime.
- I ate a **scrumptious** piece of cake at lunchtime.



Remember you can use a Thesaurus to find synonyms to help you aim for powerful and ambitious vocabulary.

13. What makes a successful essay?

Red

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Green

Introduction:

Include the **TITLE, AUTHOR, GENRE** and then make a **LINK** to the question. Your link simply answers the question briefly. Remember **TAGL!**

A.P.E paragraphs x 3

Conclusion:

Finish with your final thoughts on how the writer feels about their experience but avoid repeating anything you have already said.

Exemplar Introduction

In the travel blog, 'Avoid the Terror of the Myanmar Overnight Train' by Julian Lee, he seems bewildered and shocked by the conditions of the train, which altogether leads to a rather uncomfortable experience.

Exemplar paragraph

The writer sounds like he is finding it difficult to endure the temperature on the train. He describes the train as, "a steamy tin can," which tells the reader the level of heat is quite unbearable. The metaphor also suggests that he feels he is trapped in a tiny space with little ventilation. In particular, the adjective "steamy" leaves us wondering if he finds the train comparable to a sauna – sticky and humid.

In conclusion, Lee presents a journey which is both humorous and baffling for him. There is no doubt that he does not wish to repeat the journey again.

Thinking point

1. What should come at the **beginning** of an essay and what should it include?
2. What should come in the **middle** of an essay?

HOME LEARNING TASKS

Task Description	Done?
Reading of your library book approx. 15-20 minutes per day.	
Complete your Accelerated Reader quiz	
Literacy tasks set for homework	
Learn your weekly spellings for the quiz	
Knowledge organiser revision for class quiz – revise the sections advised by your teacher.	

Literacy Knowledge Organiser

Term Focus

Year 7 and 8 -all schemes of learning

The literacy knowledge organiser is an important tool for students to enhance their learning across the curriculum in all subjects.



Prior Learning Links

- Consolidates previously learned literacy information and skills which underpin the curriculum.
- Provides a structured outline of key literacy concepts, and supports in the revision process of previously learned skills in primary school and KS3.
- Helps students recall and revise important literacy information by highlighting what is most important and breaking down complex topics into manageable chunks.

Future Learning Links

- Students can revise and retain literacy information by giving prominence to the key aspects which are broken down into manageable parts.
- Enhances student's learning and provides a clear understanding of what students need to revise and retain; also, can be used to track progress throughout the academic year.
- Promotes consistency across the wider school, and ensures all students are learning the same key literacy knowledge and skills.

1. Punctuation

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Full stops: remember to use a full stop at the end of every sentence.



Capital Letters:

- **T**he first word of a sentence always has a capital letter.
- **T**he names of people: **J**ohn, **S**arah, **H**arry.
- **T**he names of places: **C**alifornia, **N**ew **Y**ork, **F**rance.

Apostrophes to show contraction:

You use apostrophes to show you have left out some letters when joining words together. Contractions can make your writing more informal: **Do + Not = Don't**. **Will + Not = Won't**.

Apostrophes to show possession:

Apostrophes can be used to show that something belongs to someone.



- When the noun is **singular**:
- **Sam's** book (the book belongs to Sam)
- **Nicola's** football (the football belongs to Nicola)
- When the noun is **plural**: The **girls'** pencils (the pencils belong to the girls)

Exclamation marks: used to end a sentence to show a strong feeling of emotion like surprise, anger, or shock. For, example: **I'm so frightened!**

!

Ellipses: used to show an omission of words, a pause in thought or to create suspense. For example: **Suddenly, there it was ... his worst nightmare.**

● ● ●

Colons: used to precede lists or explanations.

- I went to the store and bought a lot of fruit: peaches, apples, oranges and pears.
- Sarah wrote a story: The Hungry Fish.

●
●

Semi Colons: used to join two related independent clauses.

- We made too many mistakes; we lost the game.

Also, use a **semi-colon** instead of a comma, usually in a list.

- You will need many backpacking items: a sleeping bag; torch; tent; and pillow.

●
;

Hyphens: you can use hyphens for several reasons.

—

- To separate sentences with added information: **I enjoy English – as well as Maths.**
- To indicate periods of time: **2000-2006.**
- To form hyphenated words: **self-respect.**
- To create emphasis: **Mum loves seafood – she absolutely adores seafood.**

Brackets: use brackets to indicate added information. The sentence should still make sense when removed.

- **I did my homework, (it took me twenty minutes) and brought it in early.**

()

2. Comma Rules

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- Use a comma before a conjunction, (and, but, nor, yet, or so), to connect two independent clauses.
I had an English test last night, so I revised.
- Use a comma to set off an opening phrase.
As such, I feel there is much I can learn.
- Use a comma when using quotes to separate the quote from the rest of the sentence.
Like Mary Radmacher said, "As we work to create light for others, we naturally light our own way".
- Use a comma to separate adjectives in a descriptive list.
The pizza was hot, delicious and freshly cooked.
- Use a comma to separate three or more things in a series.
Of Charles Dickens' novels, I have read A Christmas Carol, Oliver Twist, and Great Expectations.

- Use a comma with phrases that present a contrast.
Learning about Shakespeare can be beneficial for students, not only in their secondary school studies, but also in their future careers.
- Use a comma to add **extra information** that can be taken out without changing the meaning of the sentence.
My sister Mary, who is a doctor, lives in London.

3. Sentence Structures

Red Amber Green

- **Independent Clause:** A clause that can stand alone as a sentence.
The cat sat on the mat. Contains a **subject** and a **verb**.
- **Subordinate Clause:** A clause that depends on an independent clause to make sense.
Without turning around, the cat sat on the mat.
- **Simple Sentence:** Contains just one clause (subject + verb)
Tom went to the shops.
- **Compound Sentence:** **Independent Clause + Conjunction (FANBOYS) + Independent Clause (For, And, Nor, But, Yet, So)**
Tom went to the shops and he bought some bread.
- **Complex Sentence:** Contains one main clause and one or more subordinate clauses/s.
Although it looked difficult, they still pushed on with the challenge.
- **Exclamatory:** A sentence that shows great emotions.
I am appalled by your behaviour!
- **Imperative:** A sentence that gives commands.
Get out!
- **Interrogative:** A sentence that asks a question (not rhetorical questions).
How much is that dress in the window?
- **Declarative:** A sentence that makes a declaration.
She sells seashells.

4. Paragraphs

Red Amber Green

Texts of any length and written in continuous prose are usually divided into paragraphs. Paragraphs are a useful way of helping the reader through a text.

In your writing when you start a new paragraph remember to leave a line to ensure your paragraphs are clear.

Remember to **TIP TOP** your paragraphs!

- **TIME:** you move to a new time.
- **PLACE:** you shift to a different place or location
- **TOPIC:** you move from one topic to another
- **PERSON:** you bring a new person into your writing or change from one person or another. Remember dialogue between two characters needs a new line each time.

5. Sentence Openings

Red Amber Green

In your writing aim to vary your sentence openings to make your writing more interesting for the reader.

Opener	Definition	Examples
Prepositional phrase	Describes the relationship between nouns	Under Beside Below
Adverbs	Adverbs modify adjectives and verbs	Happily (adjective +ly) He ate (verb) his breakfast quickly .
Action words ending in -ed or -ing	Verbs with an -ed or -ing ending	Played Playing
Transitional words	Tell time, sequence, cause/effect, closing	Since Immediately
Very short sentences	Sentences with 2-5 words	We jumped! It was scary.

6. Homophones

Red Amber Green

Homophones are words that sound the same but have different meanings.

- **Their** means it belongs to them.
- **I ate their sweets.**
- **They're** short for they are.
- **They are going to be cross.**
- **There** refers to a place.
- **I'm going to hide over there.**
- **Your:** refers to something that belongs to you.
- **Your bag.**
- **You're:** a contraction of 'you are.'
- **You're going to win.**



their
there
they^are

7. Spellings

Red Amber Green

Commonly misspelled words:

- Believe
- Experience
- Necessary
- Successful
- Environment
- Immediate
- Achieve

- Definitely
- Separate
- Occurrence
- Embarrass
- Receive
- Beginning
- Argument

The **I** before **E** rule:

- Remember: I before E, except after C.
- Examples: believe, receive, piece.

Silent Letters:

- Be aware of silent letters in words like, **k**night, **g**nome, and doubt.

Spelling tips

1. **Read Aloud:** try to pronounce the words as you read them to catch any spelling errors.
2. **Break Words Down:** Divide complex words into syllable sounds for easier spelling.
3. **Use Mnemonics:** Create memory aids. For example:

- **B**ig
- **E**lephants
- **C**an
- **A**lways
- **U**nderstand
- **S**mall
- **E**lephants.

BECAUSE

4. **Learn Common Patterns:** Understand rules like I before E and silent letters.
5. **Practice:** Regularly write and review words to reinforce correct spelling.
6. **Proofread:** Always check your work for mistakes.

8. Word Classes

Red

Amber

Green

Common Noun

Words for types of things, people, and places: **dog, chair, city.**

Proper Noun

The name of a specific person place or thing: **France, Jane, London.**

Abstract Noun

The name of an idea, feeling, quality or state: **love, truth, danger.**

Pronoun

Used instead of a name or names: **they, it, her.**

Verb

An action or a 'doing' word: **run, jump, swim.**

Adjective

Describes the noun: **brave, tall, lumpy.**

Adverb

Tells us how something is done: **slowly, bravely, and very.**

Preposition

Shows direction, time, place, location: **in, at, on.**

Conjunction

- A connecting or joining word: **for, and, nor, but, yet, so**

9. Tenses

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Present tense

Something that is happening now.

Past tense

Something that has happened in the past.

Past progressive

Used to describe an ongoing activity in the past. *My teacher was eating chocolate.*

Present progressive

Used to describe an action that is currently happening. *We are running.*

Present perfect

Used when talking about experiences from the past, a change or situation that has happened in the past and is continuing today. *She has lived here all her life.*

Past perfect

Used to talk about actions and events that were completed at a specific point in the past. *I had written the email on Monday morning.*

10. Root words and word families

Red

Amber

Green

Root words are the core parts of words that carry the main meaning.

Root words form the foundation from which other words are built.

A **root word** can stand alone as a word. For example: **act**.

However, some **root words** may need affixes to become a complete word. For example: **bio**.

Word families are groups of words that share the same root word and have related meanings.

Examples

- **Act**: relates to doing or performing. *Action, Actor, Activate.*
- **Bio**: means life. *Biography, Biology, Biosphere*
- **Geo**: means earth. *Geography, Geometry, Geology*

References:

Oxford A-Z of Grammar and Punctuation.

BBC Bitesize

Maths Year 7 Term 2 - Expressions, functions and formulae

Analysing and Displaying Data

TERM FOCUS –

What is 'Algebra'?

What is meant by 'average'?

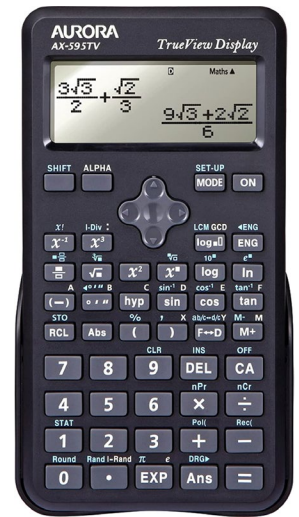
How can we represent the world we live in with graphs and charts?

Prior Learning Links

- Multiply multi-digits numbers up to 4 digits
- Perform mental calculations
- Have some knowledge of the order of operations.
- Solve multi-step addition and subtraction problems
- Construct tally charts

Future Learning Links

- Factorising algebraic terms
- Expanding brackets and grouping like terms
- Solving linear equations
- Interpreting graphs and charts, finding averages from graphs and tables



2x	$2 \times 0 = 0$
	$2 \times 1 = 2$
	$2 \times 2 = 4$
	$2 \times 3 = 6$
	$2 \times 4 = 8$
	$2 \times 5 = 10$
	$2 \times 6 = 12$
	$2 \times 7 = 14$
	$2 \times 8 = 16$
	$2 \times 9 = 18$
	$2 \times 10 = 20$
	$2 \times 11 = 22$
	$2 \times 12 = 24$

3x	$3 \times 0 = 0$
	$3 \times 1 = 3$
	$3 \times 2 = 6$
	$3 \times 3 = 9$
	$3 \times 4 = 12$
	$3 \times 5 = 15$
	$3 \times 6 = 18$
	$3 \times 7 = 21$
	$3 \times 8 = 24$
	$3 \times 9 = 27$
	$3 \times 10 = 30$
	$3 \times 11 = 33$
	$3 \times 12 = 36$

4x	$4 \times 0 = 0$
	$4 \times 1 = 4$
	$4 \times 2 = 8$
	$4 \times 3 = 12$
	$4 \times 4 = 16$
	$4 \times 5 = 20$
	$4 \times 6 = 24$
	$4 \times 7 = 28$
	$4 \times 8 = 32$
	$4 \times 9 = 36$
	$4 \times 10 = 40$
	$4 \times 11 = 44$
	$4 \times 12 = 48$

5x	$5 \times 0 = 0$
	$5 \times 1 = 5$
	$5 \times 2 = 10$
	$5 \times 3 = 15$
	$5 \times 4 = 20$
	$5 \times 5 = 25$
	$5 \times 6 = 30$
	$5 \times 7 = 35$
	$5 \times 8 = 40$
	$5 \times 9 = 45$
	$5 \times 10 = 50$
	$5 \times 11 = 55$
	$5 \times 12 = 60$

6x	$6 \times 0 = 0$
	$6 \times 1 = 6$
	$6 \times 2 = 12$
	$6 \times 3 = 18$
	$6 \times 4 = 24$
	$6 \times 5 = 30$
	$6 \times 6 = 36$
	$6 \times 7 = 42$
	$6 \times 8 = 48$
	$6 \times 9 = 54$
	$6 \times 10 = 60$
	$6 \times 11 = 66$
	$6 \times 12 = 72$

7x	$7 \times 0 = 0$
	$7 \times 1 = 7$
	$7 \times 2 = 14$
	$7 \times 3 = 21$
	$7 \times 4 = 28$
	$7 \times 5 = 35$
	$7 \times 6 = 42$
	$7 \times 7 = 49$
	$7 \times 8 = 56$
	$7 \times 9 = 63$
	$7 \times 10 = 70$
	$7 \times 11 = 77$
	$7 \times 12 = 84$

8x	$8 \times 0 = 0$
	$8 \times 1 = 8$
	$8 \times 2 = 16$
	$8 \times 3 = 24$
	$8 \times 4 = 32$
	$8 \times 5 = 40$
	$8 \times 6 = 48$
	$8 \times 7 = 56$
	$8 \times 8 = 64$
	$8 \times 9 = 72$
	$8 \times 10 = 80$
	$8 \times 11 = 88$
	$8 \times 12 = 96$

9x	$9 \times 0 = 0$
	$9 \times 1 = 9$
	$9 \times 2 = 18$
	$9 \times 3 = 27$
	$9 \times 4 = 36$
	$9 \times 5 = 45$
	$9 \times 6 = 54$
	$9 \times 7 = 63$
	$9 \times 8 = 72$
	$9 \times 9 = 81$
	$9 \times 10 = 90$
	$9 \times 11 = 99$
	$9 \times 12 = 108$

10x	$10 \times 0 = 0$
	$10 \times 1 = 10$
	$10 \times 2 = 20$
	$10 \times 3 = 30$
	$10 \times 4 = 40$
	$10 \times 5 = 50$
	$10 \times 6 = 60$
	$10 \times 7 = 70$
	$10 \times 8 = 80$
	$10 \times 9 = 90$
	$10 \times 10 = 100$
	$10 \times 11 = 110$
	$10 \times 12 = 120$

11x	$11 \times 0 = 0$
	$11 \times 1 = 11$
	$11 \times 2 = 22$
	$11 \times 3 = 33$
	$11 \times 4 = 44$
	$11 \times 5 = 55$
	$11 \times 6 = 66$
	$11 \times 7 = 77$
	$11 \times 8 = 88$
	$11 \times 9 = 99$
	$11 \times 10 = 110$
	$11 \times 11 = 121$
	$11 \times 12 = 132$

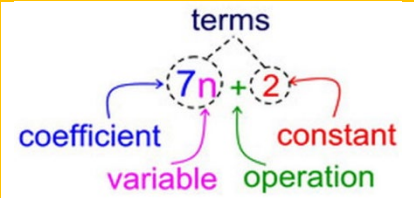
12x	$12 \times 0 = 0$
	$12 \times 1 = 12$
	$12 \times 2 = 24$
	$12 \times 3 = 36$
	$12 \times 4 = 48$
	$12 \times 5 = 60$
	$12 \times 6 = 72$
	$12 \times 7 = 84$
	$12 \times 8 = 96$
	$12 \times 9 = 108$
	$12 \times 10 = 120$
	$12 \times 11 = 132$
	$12 \times 12 = 144$

Literacy In Maths	Command Words
Evaluate ...	Work out and write your answer
Work out ...	Working out is required
Calculate ...	Working out is required. A calculator may be needed.
Solve ...	Work out the values
Prove ...	All working must be shown in steps to link reasons and values.
Expand...	Multiply out of the brackets
Draw...	Draw accurately with a pencil and equipment.
Explain ...	Use words to give reasons
Factorise	The reverse process of expanding brackets. Remove the HCF.
Estimate	Work out an approximate answer using rounded values.

Top 10 Key Words		Examples
Integer	A whole number	0, 5, 203, -4
Factor	A number that divides into another number exactly, without leaving a remainder	Factors of 20: 1 & 20, 2 & 10, 4 & 5
Multiple	The result of multiplying whole numbers. Multiples belong in the number's times table.	Multiples of 5 are 5, 10, 15, 20, 25,
Product	The result you get when you multiply	The product of 3 and 4 is 12
Percentage	Number of parts per 100	35% is 35 out of every 100.
Fraction	Part of a whole number. A fraction represents a division.	$\frac{1}{2}$, $\frac{3}{4}$, $\frac{7}{8}$
Numerator	The top number in a fraction	
Denominator	The bottom number in a fraction	
Negative	A quantity below zero	-4, -1.5, -3.4
Estimate	Work out an approximate answer	

Number Groups		
Prime numbers	2, 3, 5, 7, 11, 13, 17 ...	Prime numbers have exactly two factors, themselves and 1.
Square numbers	1, 4, 9, 16, 25, 36, 49 ...	Square numbers are the product of two identical numbers.
Cube numbers	1, 8, 27, 64, 125, 216, 343 ...	Cube numbers are the product of three identical numbers.
Odd numbers	1, 3, 5, 7, 9, 11, 13, 15, ...	Odd numbers are whole numbers that cannot be divided exactly into two.
Even numbers	2, 4, 6, 8, 10, 12, 14 ...	Even numbers are whole numbers that can be divided exactly into two.
Triangle numbers	1, 3, 6, 10, 15, 21, 28 ...	Triangle numbers can be represented as a triangle of dots.

Variable: A letter representing a number we don't know the value of.
Coefficient: Number multiplied by the variable.
Formula: A rule written using symbols that describe a relationship between different quantities. Eg: $v = u + at$
Expression: A mathematical statement written with letter and numbers. Eg: $f^2 + f^2 + f^2$
Equation: A mathematical statement that shows that two expressions are equal.
 Eg: $34 = 12 + 6t$
Terms: The numbers and letters in the expression or equation.
Like Terms: Terms that have the same letter and the same power.



2. How do I collect like terms?

Red Amber Green

When collecting like terms involving addition or subtraction, add/subtract the numbers in front of the letters.
 If the like terms are multiplied, multiply the numbers in front of the letters and put the letters next to each other.

$$a + 7a - 3a =$$

$$a + 7a - 3a =$$

$$8a - 3a =$$

$$5a$$

$$9b + a - 5b =$$

$$9b + a - 5b =$$

$$9b - 5b + a =$$

$$4b + a$$

3. How do I multiply terms together?

Red Amber Green

Multiply the numbers first.

Letters multiplied in algebra just go together without the multiplication sign. Eg: $a \times b = ab$

Simplify: $7 \times 5h$

$$= 7 \times 5 \times h$$

$$= 35 \times h$$

$$= 35h \checkmark$$

Simplify: $7e \times 5h$

$$7e \times 5h$$

$$= 7 \times e \times 5 \times h$$

$$= 7 \times 5 \times e \times h$$

$$= 35eh \checkmark$$

4. How do I substitute numbers into an equation?

Red Amber Green

Substitution – you replace a number with a letter

If $a = 5$ & $b = 2$

$a + b =$	$5 + 2 = 7$
$a - b =$	$5 - 2 = 3$
$3a =$	$3 \times 5 = 15$
$ab =$	$5 \times 2 = 10$
$a^2 =$	$5^2 = 25$


5. How do I use function machines?

Red Amber Green

A FUNCTION MACHINE TAKES AN INPUT AND DELIVERS AN OUTPUT

Input	Output
5	21
5	17
8	19
8	9

If you know the output then to find the input do the REVERSE operations:

 I think of a number... I triple it and subtract 5. The answer is 7. What was my number?

? $\times 3 \rightarrow$? $- 5 \rightarrow 7$

4 $\leftarrow \div 3$ 12 $\leftarrow + 5$ 7

6. What are the different measures of 'average'?

Red

Amber

Green

Averages

There are three types of **average** that we use to analyse and compare data. We can calculate averages from a **discrete** data set.

Mode The most common value that appears in the list.

Median Once ordered, the middle value.

Mean $\frac{\text{Total of all data}}{\text{Number of pieces of data}}$

The **range** is used to analyse the **spread** of a data set or how **consistent** the data is.

Range
 $\text{largest data value} - \text{smallest data value}$

Here is a discrete data set, calculate the mean, mode, median and range for this data.

2 5 3 9 7 7

Mode: 7

Median: 2 3 5 7 7 9 $\frac{5+7}{2} = 6$

Mean: $\frac{2+3+5+7+7+9}{6} = 5.5$

Range: $9 - 2 = 7$

If there is an even number of values in the list then the middle two have to be added together and divided by 2 to find the midpoint .

Different measures of average may be better for measuring different things:

Mode is good for counting (eg which dish does a restaurant sell most of?)

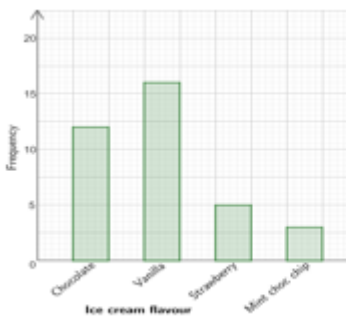
Mean is good for average scores (eg in tests)

7. How do I draw a bar chart?

Red

Amber

Green



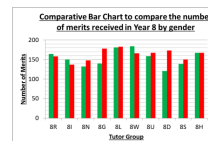
Bar charts

- Even scale
- Gaps between bars
- Bars of even width
- Label axes and have a title

Other types of bar chart:

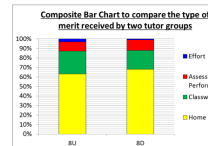
Comparative (or Duo) Bar Chart (sub categories within a class, eg. Boys and Girls)

Composite bar chart (bars are on top of each other).



Comparative Bar Chart:

- Bars for each category side-by-side
- Gaps between each category
- Heights of bars can be compared category-by-category



Composite Bar Chart:

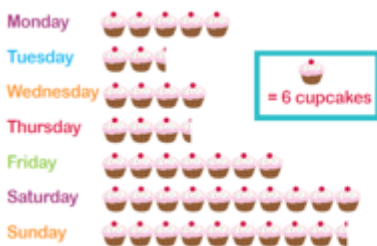
- Bars show the size of individual categories split into their separate parts
- The axis can be percentages or the actual numbers

8. How do I create and interpret pictograms?

Red

Amber

Green



Pictograms

- Needs a key
- Each symbol represents the same

Each symbol has to represent a divisible amount.

Eg. A triangle might be a bad shape to use as it is hard to divide.

In the example here, each cupcake represents 6 cupcakes, so half a cupcake = 3 cakes. So for Thursday there are $3 \times 6 = 18 + 3 = 21$ cupcakes.

9. How do I use tally charts?

Red

Amber

Green

Colour	Tally	Frequ
Red		13
Blue		9
White		24
Black		12

Tally charts

- Tally lines in 5s
- Frequency = how many tally marks

Tally charts are a useful way to collect initial data and group it into classes. It can then be used to create bar charts or pictograms.

10. How do I create grouped frequency tables from a list of data

Red Amber Green

A florist measured the heights of his flowers after 2 weeks. Put the data into a grouped frequency table.



22	39	18	30	4
24	11	26	13	27
20	24	9	40	20
7	30	21	17	28

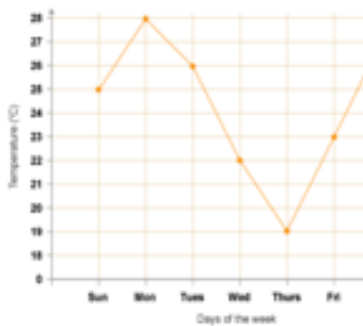
Height, h (cm)	Tally	Total
$0 < h \leq 10$		3
$10 < h \leq 20$		6
$20 < h \leq 30$		9
$30 < h \leq 40$		2

Key points:

Make sure classes do not overlap

11. How I draw line graphs?

Red Amber Green



Line graphs

- Even scale
- Join up each point to the next with a ruler

Time always goes along the horizontal axis

Read values from the graph using a ruler.

Remember that values between data points are only estimates

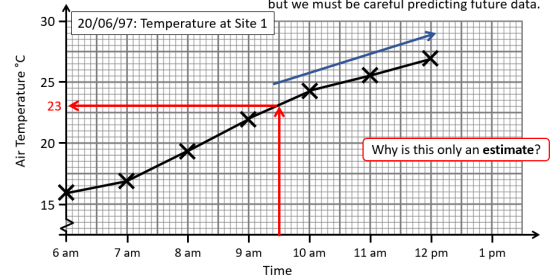
A line graph shows changes over time.

We can read data & trends using line graphs.

A) Estimate the temperature at 09:30 **23 °C**

B) What temperature might we expect at 1 pm?

The graph shows a **trend** of temperature increasing, but we must be careful predicting future data.



12. How do we compare data?

Red

Amber

Green

To compare data we use the different averages and also the range.

Definitions

Median: The **MIDDLE** value in an **ORDERED** set of data

Mean: The **arithmetic** **AVERAGE** of a set of data

Mode: The value in a set of data that appears **MOST** often

Range: The **difference** between the **highest** and **lowest** values in a set of data

The ages of two five-a-side teams are recorded as:

Rovers: 27, 23, 32, 21, 23

United: 28, 27, 25, 29, 27

Compare the mode, median and range of the ages for each team.

ROVERS : MODE 23 MEDIAN 23
RANGE 11
UNITED : MODE 27 MEDIAN 27
RANGE 4
UNITED HAS A HIGHER MODE,
HIGHER MEDIAN & SMALLER RANGE

A smaller range = more consistent data

HOME LEARNING TASKS

Task Description		Done?
Algebraic terminology	M830	
Simplifying expressions containing a single variable	M795	
Function machines with numbers	M175	
Finding averages from frequency tables	M127	
Interpreting frequency tables with grouped data	M411	

Science Year 7 Block 3 – Cells including mitosis

TERM FOCUS – Cells including mitosis

Big Ideas – How and why are animal and plant cells different?

Prior Learning Links

KS2 – Animals including humans

KS2 – Evolution and inheritance

Future Learning Links

KS3 – Variation and genetics

KS4 Biology – Genetic variation

KS4 Biology – Uses of stem cells

KS5 Biology – Genetics and inheritance



1. What are the common processes of all living organisms?

Red

Amber

Green

Common processes happen in all living organisms.

All living organisms are made from other living organisms when they reproduce.

Living organisms move themselves to achieve things including to support their survival.

The 7 life processes happen to all living organisms at some stage in their life cycle.

All **living organisms** carry out the same processes.

These processes include:

- **M**ovement
- **R**eproduction
- **S**ensitivity
- **G**rowth
- **R**espiration
- **E**xcretion
- **N**utrition

MRS GREN



2. How are multicellular organisms organised?

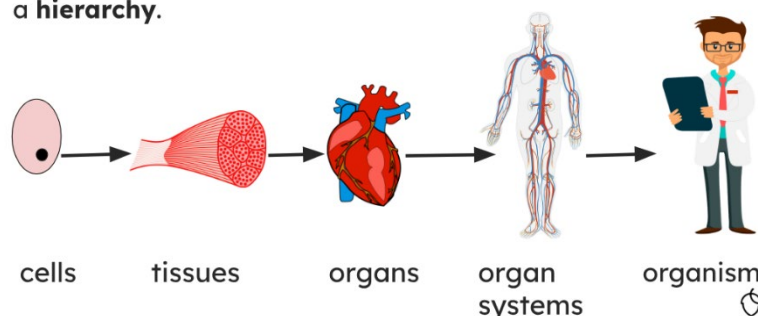
Red

Amber

Green

Multicellular **organisms** are made of structures arranged in a **hierarchy**, where **cells** are the smallest unit. Organ systems work together in an organism. Organ systems are made up of organs. The circulatory system is an example of an organ system. Each organ carries out a particular function and is made of different tissues. The heart is an example of an organ. Tissues are made of cells working together. Cardiac muscle is an example of a tissue.

The cells in multicellular organisms are arranged in a **hierarchy**.



3. What are common structures of plant cells and what are their functions?

Red

Amber

Green

Nucleus -contains DNA, which stores information that controls activities in the cell.

Cell membrane - surrounds the cytoplasm and controls which substances can enter or leave the cell

Cell wall - is made of fibres which strengthen the cell but allow substances to pass through.

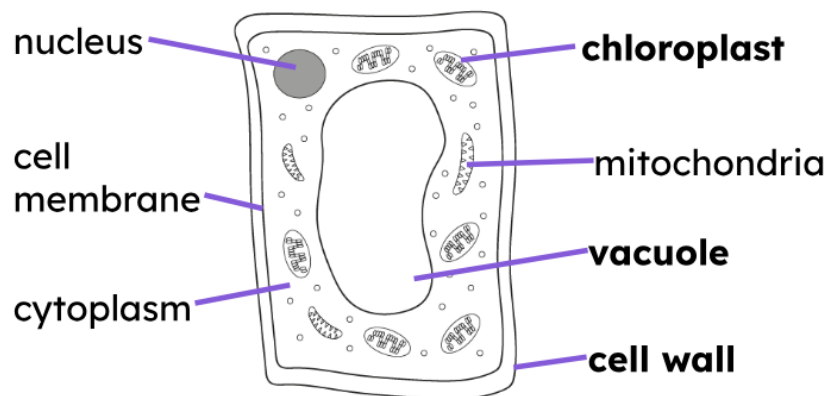
Cytoplasm - jelly-like substance that fills the cell, and where all of the cell's reactions take place

Chloroplast - are green, and trap light to enable the plant to make its own food.

Mitochondria - use food as a fuel to provide energy for the cell. This process is called respiration

Vacuole - contains watery sap which, when full, keeps the cell firm.

Cell wall - contains watery sap which, when full, keeps the cell firm.

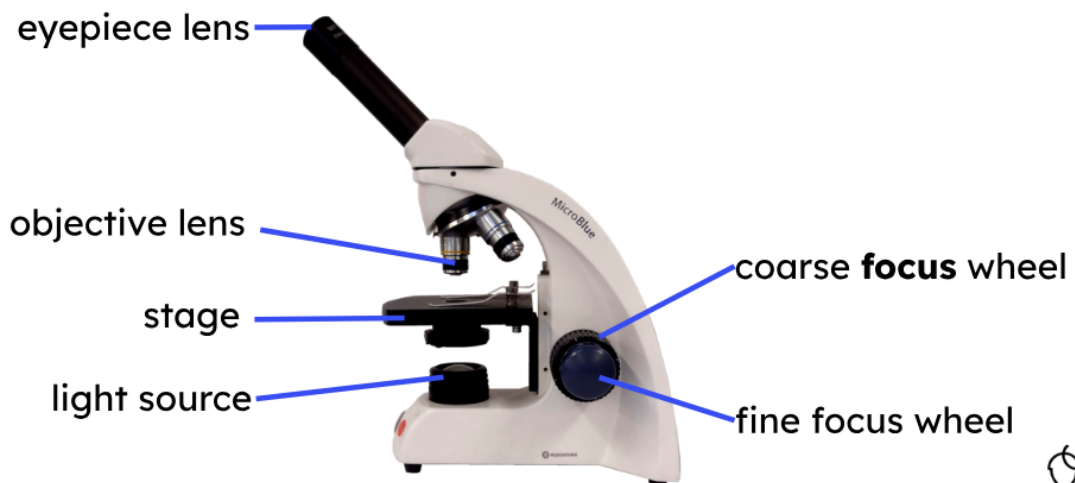


4. How can I use a light microscope effectively?

Red

Amber

Green



1. Turn the objective lens to the lowest magnification.
2. Place the slide on the stage under the clips.
3. Turn on the light source.
4. Looking from the side, turn the coarse focus wheel to move the stage up so it is close to the objective lens.
5. Looking into the eyepiece, turn the coarse focus wheel to bring your specimen into focus.
6. Turn the fine focus wheel to make the image clearer.
7. The **magnification** can be increased by changing to a higher power objective lens.

5. How can I prepare and observe plant cells and their structures?

Red

Amber

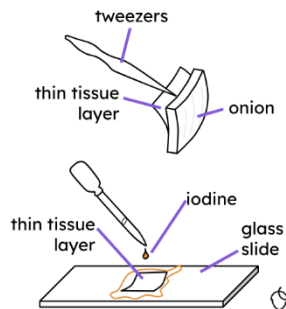
Green

To observe a specimen using a light microscope, we have to put a thin layer of it on a glass microscope slide. **Stain** is a coloured liquid that is put onto a specimen so that the cells and their structures can be more easily seen with a light microscope. Observations from a light microscope can be recorded by making a labelled **scientific line drawing**.

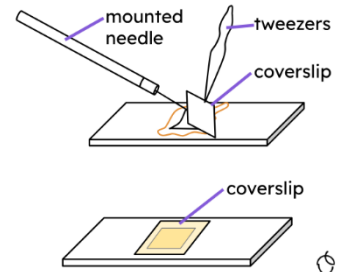


The method for preparing a **slide** of onion **tissue** is:

1. Take a thin sample of onion tissue (from between the layers) with tweezers.
2. Place the specimen on a slide.
3. Add a few drops of iodine stain (be careful not to **stain** your skin and clothes!).



4. Use tweezers to place a coverslip over the specimen of tissue, and gently lower it with a mounted needle.
5. Use a tissue to gently absorb excess stain.
6. Place the slide on the stage of the microscope.



6. Why do plants have such diverse structures?

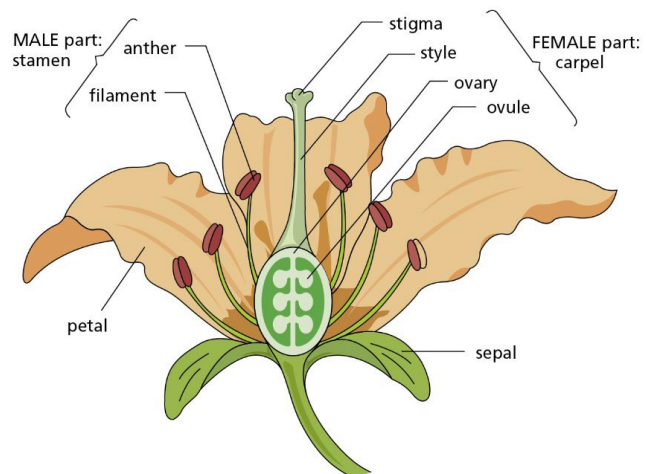
Red

Amber

Green

Most flowers have male and female parts. The male part is the stamen, consisting of an anther and a filament. The anther produces pollen, which contains the male sex cell.

The female part is the carpel. This consists of an ovary (with the female sex cells in the ovules), the style and the stigma, which has a sticky top. The purpose of the flower is to produce pollen in the anther and transfer it to the stigma of a different plant. This process, called **pollination**, is mainly achieved using wind, insects, birds or bats.



7. What are common structures of animal cells and what are their functions?

Red

Amber

Green

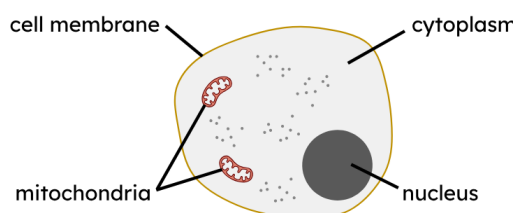
Nucleus - contains DNA, which stores information that controls activities in the cell.

Cell membrane - surrounds the cytoplasm and controls which substances can enter or leave the cell

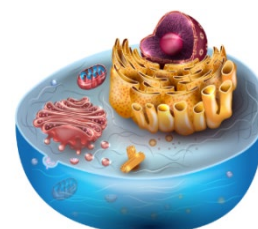
Cytoplasm - jelly-like substance that fills the cell, and where all of the cell's reactions take place

Mitochondria - use food as a fuel to provide energy for the cell. This process is called **respiration**

2D animal cell



3D animal cell



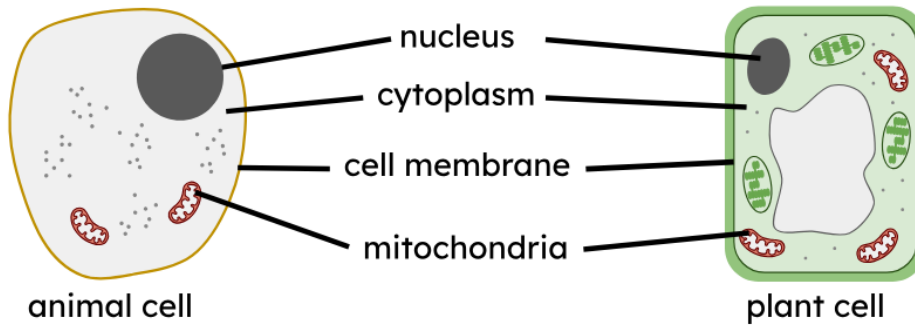
8. How and why are plant and animal cells different?

Red

Amber

Green

Animal and plant cells share some common structures. Plant cells have some additional structures that animal cells do not have.



9. What is the difference between multicellular and unicellular organisms?

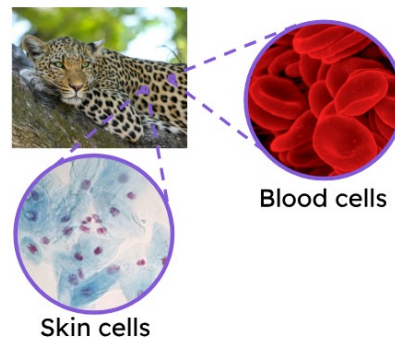
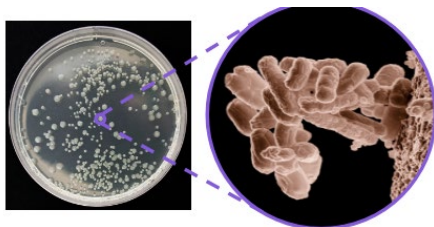
Red

Amber

Green

Some organisms live as single cells. These include bacteria, some fungi, some plants and some animals. These are called **unicellular organisms**. They can survive because they carry out the common processes of living organisms.

Some organisms are made of more than one cell. These are called **multicellular organisms**. Multicellular organisms are usually much larger than unicellular organisms. Large multicellular organisms are made up of millions of cells.



10. How are cells adapted for their function?

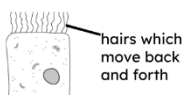
Red

Amber

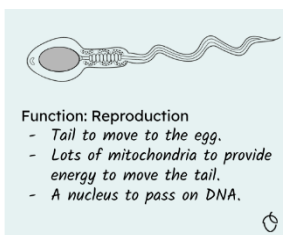
Green

A specialised cell is one that performs a specific function. Most cells in an organism are specialised. A cell's structure helps it carry out its function, so different types of cells can look different to one another.

Specialised animal cell example



Function: Clear the airways
 - Hairs trap particles that are breathed in.
 - Hairs brush the particles back up the airways, away from the lungs.
 - Mitochondria provide energy for hairs to move.

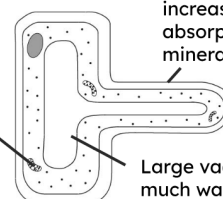


Function: Reproduction
 - Tail to move to the egg.
 - Lots of mitochondria to provide energy to move the tail.
 - A nucleus to pass on DNA.

Specialised plant cell example

Root hair cell

Many mitochondria because the mitochondria release energy needed for active transport of minerals from the soil.



Long, thin projection to increase the surface area for absorption of water and minerals.

Large vacuole to store as much water as possible.

11. What is the process of cell division?

Red

Amber

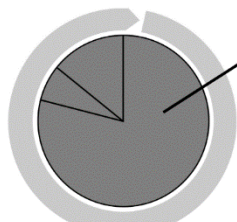
Green

Most multicellular organisms need to grow as part of their life cycle. Cell division in multicellular organisms is important for two reasons:

- growth
- repair of damaged tissue

It is essential that new cells are genetically identical to the original cell that is dividing. A growing and dividing cell goes through a set of specific stages called the **cell cycle**.

The first stage of the **cell cycle** is cell growth.



Stage 1: cell growth

- each **chromosome** is copied
- sub-cellular structures such as ribosomes and mitochondria are copied
- the cell grows larger

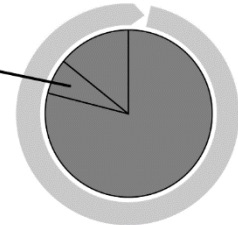
the cell cycle



The second stage of the **cell cycle** is nuclear division.

Stage 2 - mitosis:
nuclear division

- **chromosomes** line up along the middle of the cell and are pulled apart
- the **nucleus** divides

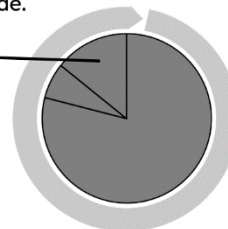


the cell cycle

The third stage of the **cell cycle** is where the cell membrane and cytoplasm divide.

Stage 3: division of cell membrane and cytoplasm

- the cytoplasm and cell membrane divide
- two genetically identical cells are produced



the cell cycle

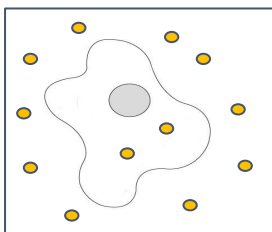
12. How are materials moved in and between cells?

Red

Amber

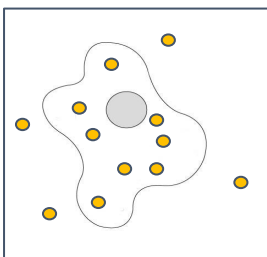
Green

Diffusion is a process by which substances move from an area of high concentration to one of low concentration. Diffusion is the **net** movement of **particles** from an area of high **concentration** to an area of low **concentration**. Diffusion continues to happen until, eventually, an equilibrium is reached. Diffusion allows substances to move in or out of cells



In this diagram, there is a higher concentration of particles **outside** the cell compared to inside the cell.

If the particles can move through the membrane, there will be net movement of particles **into** the cell until the concentration is equal both inside and outside the cell.



In this diagram, there is a higher concentration of particles **inside** the cell compared to outside the cell. If the particles can move through the membrane, there will be net movement of particles **out of** the cell until the concentration is equal both inside and outside the cell.

The steeper the concentration gradient, the higher the rate of diffusion. The steeper the concentration gradient, the more particles will move in the direction of the lowest concentration.

HOME LEARNING TASKS

Task Description

Done?

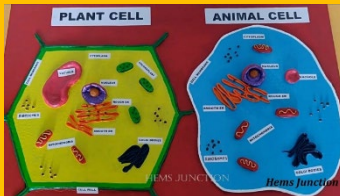
1. Engage with the animal and plant cell content on BBC bitesize to compliment your classroom learning.



2. Further your learning after your onion cell practical using the practical simulation accessible using the QR code.



3. Make a model of a plant or an animal cell including labels. You could use any medium to create it. Email or show your teacher your model to earn house points.



4. Investigate how water travels through specialised plant cells by conducting an osmosis practical at home. Write up your experiment using the scientific method and give it to your teacher to earn house points.

Coloured Celery

Science Experiment



Method

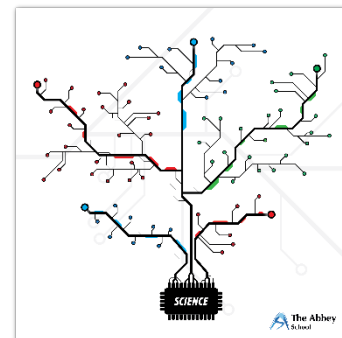
1. Pour some water into the glass.
2. Add a few drops of food colouring to the water and stir to distribute the colour.
3. Cut 2cm off the bottom of the celery stalk and put the stalk into the glass of coloured water.
4. Leave the glass and celery in a sunny spot for a couple of hours or overnight.
5. Observe the results.

You will need:

Celery stalk with leaves
Tall glass
Water
Food colouring
Scissors



Science Year 7 Block 2 – Physical changes, states of matter, changing states and mixtures



TERM FOCUS: Physical changes and states of matter

Big Ideas: What physical changes take place in chemistry and how can we tell?

Prior Learning Links

- KS2 Science – Uses of everyday materials
- KS2 Science – States of matter
- KS2 – Properties and changes of materials

Future Learning Links

- KS4 - Structure, bonding and the properties of matter
- KS4 – Chemical changes

1. What model can we use to explain the properties of solids, liquids and gases?

Red

Amber

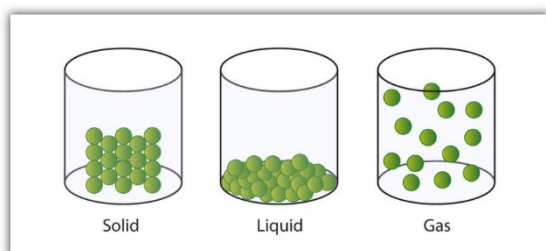
Green

All particles are made up of matter.

All matter is broken up into 3 states. There are solid, liquid and gas. All substances can exist as these states, depending on their temperature, for example water is a solid below 0°C, a liquid from 0-100°C and a gas above 100°C.

Below is a diagram of the 3 states of matter

Different states of matter have different properties. A property is a characteristic that is typical for that object. For example, some of the properties of good students are: organised, hardworking, bringing the correct equipment, being on time to lessons.



Property	Solid	Liquid	Gas
Does it have a fixed shape?			
Does it have a fixed volume?			
Can it be compressed?			
Can it flow?			

2. How do solids, liquids and gases behave?

Red

Amber

Green

The properties of matter can be explained by knowing how the particles are arranged and how they move and behave (known as *kinetic theory*).

States	How are the particles arranged?	How do they move?
Solid	<ul style="list-style-type: none"> • Particles are touching • Particles are in neat rows • Particles are held together by strong forces of attraction 	<ul style="list-style-type: none"> • Particles vibrate in fixed positions
Liquid	<ul style="list-style-type: none"> • Particles are touching • Particles are randomly arranged • Particles are held together by weak forces of attraction 	<ul style="list-style-type: none"> • Particles can move freely and slide past each other
Gas	<ul style="list-style-type: none"> • Particles are not touching • Particles are spread apart randomly • Particles have very weak forces of attraction so are not held together 	<ul style="list-style-type: none"> • Particles are moving very fast bouncing off each other and the container.

3. What happens to change the state of a solid, liquid or gas?

Red

Amber

Green

At different temperatures, a substance may have a different state of matter.

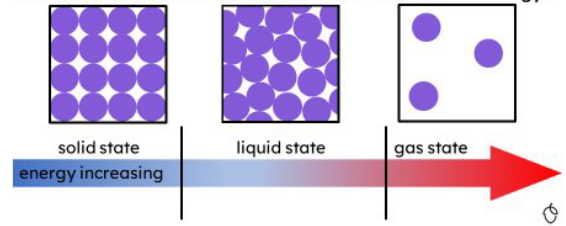
Substances can change from one state of matter to another state of matter.



Energy and changing state



Different states of matter have different amounts of energy.



4. What is density and why is it useful?

Red Amber Green

Density is a measure of how tightly the mass of an object is packed into the space it takes up.

It can be calculated by dividing **mass** by **volume**.
Objects with a higher density feel heavier for their size because more matter is packed into the same space.

Density is different to mass. Mass is the amount of matter in an object.

density = $\frac{\text{mass}}{\text{volume}}$

$\rho = \frac{m}{V}$

g/cm³ or Kg/m³

g or Kg

cm³ or m³

5. What are the differences between physical and chemical changes?

Red Amber Green

6. What else can we explain using the particle model?

Red Amber Green

7. What are the differences between substances, materials and elements?

Red Amber Green

8. How can we separate mixtures of different substances?

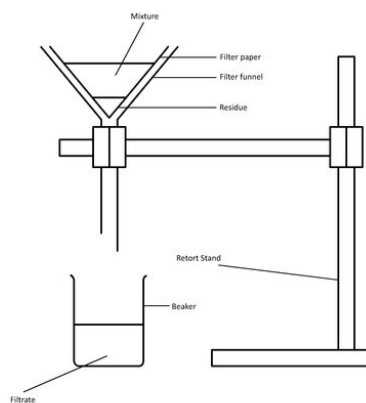
Red

Amber

Green

Practical Activity – Filtering a solid from a liquid

1. Into a beaker, measure 50mls of Magnesium sulphate solution.
2. Measure and add 5 mls of Sodium hydroxide solution.
3. Note down any observations.
4. Set up the filtration equipment from your diagram.
5. Fold a piece of filter paper into quarters and place into the filter funnel
6. Swirl the mixture gently in the beaker and pour into the filter paper in the funnel.
7. Note down any observations.



9. What techniques can we use when a substance is dissolved?

Red

Amber

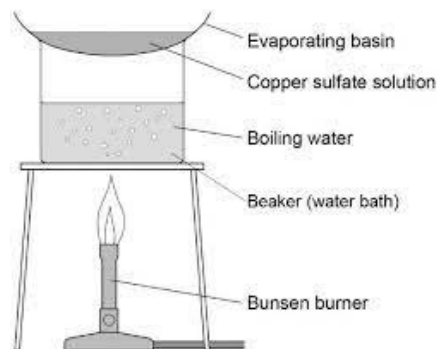
Green

To separate a solid from a solution, we use the process of evaporation:

- Water boils at 100°C
- Copper Sulfate boils at 650 °C

So if we heat the mixture up, the water will boil away before the copper Sulfate does, leaving it behind.

1. Set up the equipment as shown in the diagram.
2. Add approximately 50mls of Copper Sulfate solution to your evaporating basin.
3. Light your Bunsen burner and heat the water on a blue flame.
4. Observe what happens to the Copper Sulfate solution whilst you heat.



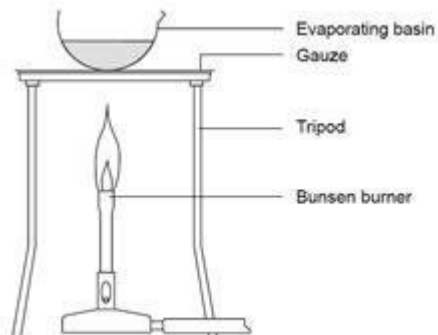
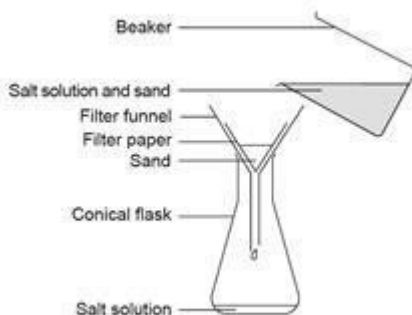
10. How can we extract pure salt from rock salt?

Red

Amber

Green

1. Grind the rock salt with a pestle and mortar
2. Dissolve the salt from the rock salt mixture using warm water
3. Filter the mixture to remove the rock particles as they do not dissolve
4. Evaporate the salt solution from the water



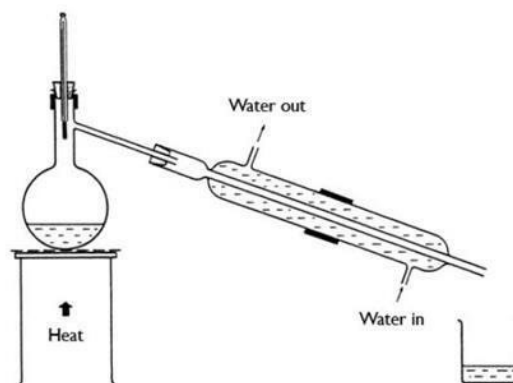
11. How can we separate two liquids that have been mixed together?

Red

Amber

Green

The mixture of liquids is put into the round bottomed flask (A)
 Heat is applied to make the mixture heat to boiling point (the lowest boiling point of the liquids in the mixture) (B)
 The vapour travels upwards and out of the flask into the condenser. The temperature of the vapour is checked to ensure that the correct liquid is being evaporated (C)
 The vapour is cooled in the Liebig Condenser and changes back into a liquid (D)
 The separated liquid is collected in a beaker at the bottom (E).



12. How can we tell which colours make up an ink?

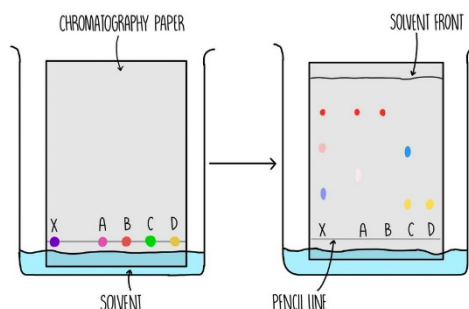
Red

Amber

Green

Compare the inks in different felt tip pens to see their composition.

1. Draw a pencil line, 1cm from the bottom of the chromatography paper
2. Place a dot of each of the inks at least 1cm apart onto the pencil line
3. Fill a beaker with water to a depth of 0.5cm (must be less than the pencil line)
4. Place the chromatography paper into the beaker and let the solvent travel up the paper
5. Take the chromatogram out of the beaker when the solvent front is approximately 2cm from the top



HOME LEARNING TASKS

Task Description

Done?

1. Complete the Changes of State revision on BBC Bitesize:



2. Use the Phet Simulation suite to investigate how solids, liquids and gases behave.



3. Use the Phet Simulation suite to investigate density



4. Try one of the 'Density at home' practical from the Institute of Physics.



5. Answer the following questions:

What name did Democritus give the tiny units of matter?

What were his 4 rules for atoms?

Why do we talk about particles instead of atoms when explaining the states of matter?

Describe the arrangement of particles in a solid

Describe the arrangement of particles in a liquid

Describe the arrangement of particles in a gas

Describe the motion of particles in a solid, liquid and gas

Fluids are substances that can flow and be poured. Which two states of matter are fluids?

History Year 7 Term 2 – Middle Ages: Political

In this unit, you will explore the political transformation of medieval England from 1066 to 1215. You will examine key events such as the Norman Conquest, the establishment of the feudal system, and the conflicts between the monarchy and the Church. You will analyse the reigns of William I, Henry II, and John I, focusing on how these monarchs shaped England's governance. Through this unit, you will evaluate historical evidence, assess different perspectives, and draw connections between events and to enhance your understanding how political power was contested and exercised in medieval England.



GCSE Pod

<https://members.gcsepod.com/shared/course/preview/20>

Prior Learning Links

- Year 7 Term 1: Historical Skills

Future Learning Links

- Year 7 Term 3: Middle Ages: Social
- Year 9 Term 1: Medieval Medicine
- Year 9 Term 5: Anglo-Saxon & Norman England

KEY VOCABULARY

Historical Skills Vocabulary

Cause – the reason for something happening
Change – when things are different to how they were before
Consequence – the result of something happening
Continuity – the opposite of change; when something stays the same or continues
Difference – the ways in which things are different to one another
Factor – something that can affect, or determine an event or outcome
Inference - a conclusion drawn about something using the information you already have about it
Rate of change – the pace at which change occurs; e.g. very quickly or slowly
Reliability – the degree to which something can be trusted or relied upon as accurate
Significance – the importance of something
Similarity – the quality of being similar, or the same
Trend – when there are a number of similar and related changes continuing in the same direction over a period of time
Turning point – a significant change happens – something that is different from what has happened before and which will affect the future

Middle Ages: Political Generic Vocabulary

Conflict: A serious disagreement or argument, often a prolonged struggle.
Dynasty: A series of rulers from the same family or lineage.
Government:
Hierarchy: Organising people in society based on their power or importance.
Legitimacy: The quality of being legitimate, or lawful and accepted as rightful.
Monarchy: A form of government in which a single individual, the monarch (a king or queen), holds supreme authority and often inherits their position.
Rebellion: An act of violent or open resistance to an established government or ruler.
Reform: The process of making changes to improve a system, organization, or institution, often in response to issues or corruption.
Succession: The process of inheriting a title, office, or property, especially in a monarchy.
Tactics: The strategies and methods used to achieve a particular goal, especially in conflict or competition.
Tyranny: A cruel or harsh and unfair government in which a person or small group of people have power over everyone else.

Middle Ages: Political Specific Vocabulary

- Battle of Hastings:** The 1066 battle in which William the Conqueror defeated King Harold II, leading to the Norman conquest of England.
- Barons:** High-ranking nobles who held land from the king and were often key figures in medieval politics.
- Bayeux Tapestry:** An embroidered cloth depicting the events leading up to the Norman conquest of England and the Battle of Hastings.
- Domesday Book:** A comprehensive record of the landholdings and resources of England commissioned by William the Conqueror in 1086.
- Feudal System:** The hierarchical system of land ownership and duties in medieval England, where lords granted land to vassals in exchange for military service.
- Henry II:** King of England (1154–1189), known for his legal reforms and conflicts with the Church, including the murder of Thomas Becket.

7. **Magna Carta:** The 1215 document signed by King John that limited the powers of the monarchy and established certain legal rights.
8. **Motte & Bailey:** An early form of castle, brought to England by William I. Set up on the south-coast initially to build a power base prior to the Battle of Hastings, William ordered the building of many hundreds of castles across England as a sign of his control and domination of England.
9. **Norman Conquest:** The invasion and occupation of England by the Normans, led by William the Conqueror, starting in 1066.
10. **Regent:** A person appointed to govern a country or kingdom in the absence or minority of the sovereign.
11. **Robert Curthose:** The eldest son of William the Conqueror, known for his rebellion against his brother William II and his role in the First Crusade.
12. **Thomas Becket:** Archbishop of Canterbury who was murdered in 1170 due to his conflicts with King Henry II over the rights and privileges of the Church.
13. **Vassal:** A person who held land from a lord in exchange for military service or other obligations in the feudal system.
14. **William I (William the Conqueror):** The first Norman King of England, who ruled from 1066 to 1087 and began significant changes in England's governance.
15. **William II (William Rufus):** King of England (1087–1100) known for his conflict with the Church and his untimely death, which led to his brother Henry I ascending the throne.
16. **Excommunication:** The act of officially excluding someone from participation in the sacraments and services of the Christian Church.
17. **Fealty:** The loyalty or allegiance a vassal owed to a lord in the feudal system.
18. **Heresy:** Beliefs or practices that are contrary to the accepted doctrines of the Church, often resulting in persecution.
19. **Magna Carta:** The 1215 charter agreed to by King John, which limited royal power and laid the foundation for future constitutional developments.
20. **Plantagenet:** The royal dynasty that ruled England from 1154 to 1485, beginning with Henry II.
21. **Primogeniture:** The right of an eldest son to succeed the role of his ancestor excluding any other claimants.
22. **Richard the Lionheart:** King of England (1189–1199) known for his role in the Third Crusade and his military leadership.
23. **Stephen Langton:** The Archbishop of Canterbury who played a key role in drafting the Magna Carta and in the conflict between King John and his barons.
24. **Vassal:** A person who holds land from a lord in exchange for military service or other obligations in the feudal system.: A person who holds land from a lord in exchange for military service or other obligations in the feudal system.
25. **Writ:** A formal legal document or order issued by a king or other authority, used to address specific issues or commands.

1. What were the key causes and outcomes of the succession crisis of 1066?	Red	Amber	Green
Can you identify the main contenders for the English throne in 1066?			
Are you able to explain why the succession crisis led to the Battle of Hastings?			
Can you assess the immediate and long-term consequences of the Norman Conquest?			
2. Why did William the Conqueror win the Battle of Hastings?	Red	Amber	Green
Can you describe the strategies and tactics used by William at Hastings?			
Are you able to compare the strengths and weaknesses of William's and Harold's forces?			
Can you evaluate the significance of leadership and luck in determining the outcome of the battle?			
3. How did William I consolidate his power over England after 1066?	Red	Amber	Green
Can you explain how the construction of castles helped William maintain control?			
Are you able to describe the role of the Domesday Book in asserting William's authority?			
Can you analyse the impact of the feudal system on William's rule in England?			
4. How did the Norman Conquest change the political structure of England?	Red	Amber	Green
Are you able to explain the key features of the feudal system introduced by William?			
Can you analyse the role of castles in establishing Norman control?			
Can you evaluate the long-term effects of the Norman Conquest on English governance?			
5. What were the consequences of the Domesday Book for England?	Red	Amber	Green
Can you describe the purpose and contents of the Domesday Book?			
Are you able to explain how the Domesday Book increased William's control over England?			
Can you evaluate the significance of the Domesday Book for medieval society?			

6. Why was the Feudal System important in medieval England?	Red	Amber	Green
Can you explain the structure of the feudal system and its key components? Are you able to describe how the feudal system influenced relationships between the king, nobles, and peasants? Can you evaluate the effectiveness of the feudal system in maintaining social and political order?			
7. What challenges did Henry II face during his reign?	Red	Amber	Green
Can you identify the legal and political reforms introduced by Henry II? Are you able to explain the conflict between Henry II and Thomas Becket? Can you assess how Henry II's reign impacted the relationship between the monarchy and the Church?			
8. Why was Thomas Becket's murder significant in medieval England?	Red	Amber	Green
Can you explain the events leading up to Thomas Becket's murder? Are you able to analyze the reasons behind Becket's conflict with Henry II? Can you evaluate the consequences of Becket's death for the monarchy and the Church?			
9. What led to the widespread discontent with King John's rule?	Red	Amber	Green
Can you identify the political and economic challenges faced by King John? Are you able to explain why King John's actions led to unrest among the barons and the general population? Can you evaluate the role of King John's personality and decisions in causing widespread discontent?			
10. What caused King John to lose the trust of his barons?	Red	Amber	Green
Are you able to identify the key grievances the barons had against King John? Can you explain the impact of King John's military failures and financial demands? Can you assess the role of King John's leadership in the eventual revolt by his barons?			
11. Why is the Magna Carta considered a turning point in English history?	Red	Amber	Green
Can you describe the key clauses of the Magna Carta and their significance? Are you able to explain how the Magna Carta limited the power of the monarchy? Can you analyse the long-term impact of the Magna Carta on constitutional development?			
12. How did the relationship between the monarchy and the Church evolve during this period?	Red	Amber	Green
Are you able to explain the nature of the conflicts between the monarchy and the Church? Can you describe the role of key figures, such as Thomas Becket, in shaping this relationship? Can you analyse the impact of these conflicts on the authority of both the Church and the monarchy?			
HOME LEARNING TASKS			
Task Description	Done?		
Use 'Look, Cover, Write, Check' to learn the key vocabulary			
Complete the GCSE Pod Tasks using the QR Code at the top of the page			
Exam Style Question: Describe two features of a Motte & Bailey Castle (4 marks)			
Exam Style Question: Describe two features of the Feudal System (4 marks)			
Exam Style Question: Describe two features of the Domesday Book (4 marks)			
Exam Style Question: Explain why King John was so unpopular during his reign (12 marks)			
Exam Style Question: 'The Magna Carta is the most significant turning point in English History' How far do you agree? (16 marks)			

Geography Year 7 Term 2 – Cold Environments

In this topic, you will explore some of the coldest places on Earth, including Antarctica and the Arctic. You will learn how to use tools like GPS and understand lines of latitude and longitude to locate places globally. We'll also look at how animals have adapted to survive in extreme cold, the threats to these fragile environments, and whether they should be protected. You'll explore glacial landscapes, especially in the Lake District, and discover the role glaciers play in shaping land. Finally, you will examine Russia's geography, discussing the challenges and advantages of its vast cold environment.



Prior Learning Links

- Geographical description skill Term
- Sense of place, with foundation interrelationships between the physical landscape and humans.
- Built upon Term 1, taking Antarctica as the sense of place to examine those human and physical interrelationships. Comparison to UK and Russia.
- Longitude and latitude.

Future Learning Links

- Stepping into Asia (Russia)
- Weather and Climate
- UK Geography
- Sustainability and climate change

KEY VOCABULARY

KEY WORDS

- | | |
|---|---|
| <ul style="list-style-type: none"> • Explore: To travel to new places to learn about them. • Antarctica: The southernmost continent on Earth, known for its extreme cold. • Expedition: A journey undertaken for exploration or research. • Country: A nation with its own government and defined borders. • Continent: A large landmass, such as Africa or Antarctica. • Ocean: A vast body of saltwater that covers a large part of the Earth's surface. • Longitude: Imaginary vertical lines on a map, used to measure distances east or west of the Prime Meridian. • Latitude: Imaginary horizontal lines on a map, used to measure distances north or south of the Equator. • Prime Meridian: The 0° longitude line, running through Greenwich, England. | <ul style="list-style-type: none"> • Equator: The 0° latitude line that divides the Earth into northern and southern hemispheres. • Tropic of Capricorn: The latitude line at 23.5° south of the Equator. • Tropic of Cancer: The latitude line at 23.5° north of the Equator. • Arctic Circle: A latitude line at 66.5° north, marking the southern boundary of the Arctic. • Antarctic Circle: A latitude line at 66.5° south, marking the northern boundary of Antarctica. • Relief: The variation in elevation across a land surface. • Contour Lines: Lines on a map that represent different elevations or heights of the land. • Grid Referencing: A system used on maps to pinpoint specific locations using coordinates. |
|---|---|

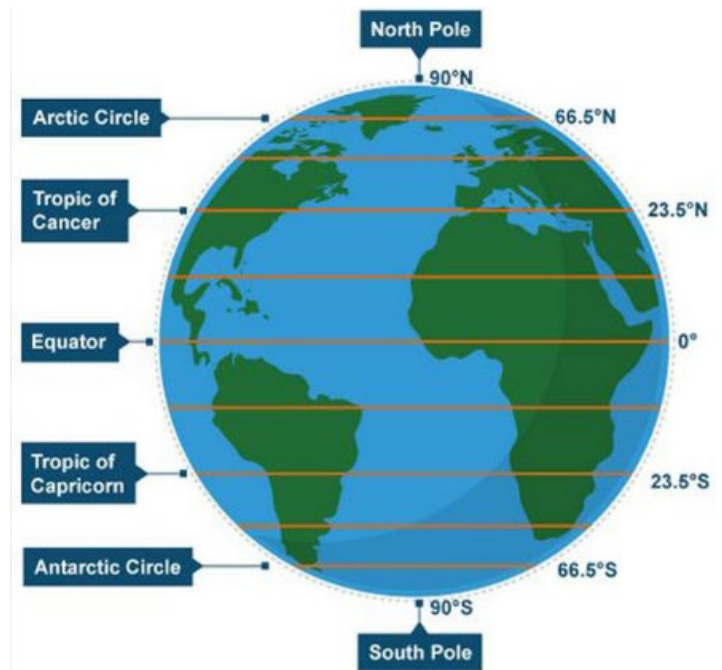
1. What is GPS, and how do we locate globally?

Red

Amber

Green

- **GPS:** Stands for Global Positioning System. It's a satellite-based navigation system that allows us to pinpoint locations anywhere on Earth.
- **Latitude and Longitude:**
 - **Latitude** runs east-west and measures north-south position.
 - **Longitude** runs north-south and measures east-west position.
 - Coordinates are given in degrees (°), minutes ('), and seconds (").
- How GPS works:
 - Uses signals from multiple satellites to calculate precise locations.
 - By reading signals from at least four satellites, the system triangulates a location in terms of latitude, longitude, and altitude.
 -



2. What is the coldest continent on Earth?

Red

Amber

Green

- **Antarctica** is the coldest, driest, and windiest continent. It's located at the southernmost point on Earth.
 - The average temperature can drop to -60°C (-76°F) in winter.
 - It is mostly covered by ice sheets, which hold about 60% of the world's fresh water.
 - There are no permanent human inhabitants; only researchers live there temporarily in research stations.
 - Despite the harsh conditions, some animals like penguins, seals, and certain types of algae survive there.



3. How have animals adapted to survive in cold environments?

Red

Amber

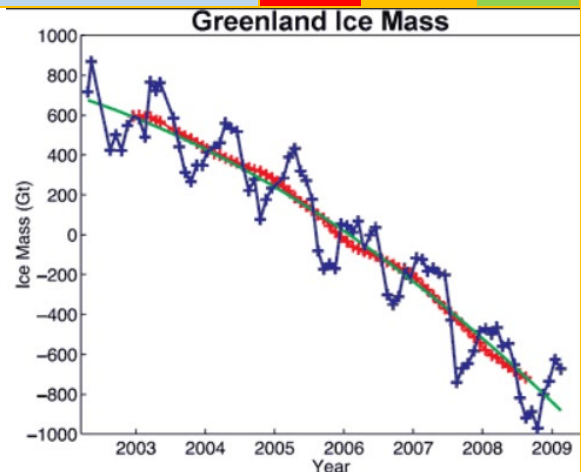
Green

- Animals in cold environments have evolved special adaptations to survive:
 - **Polar Bears:** Thick fur and a layer of fat (blubber) keep them warm. They have large paws for walking on snow.
 - **Penguins:** Streamlined bodies for swimming, with a layer of fat for insulation and waterproof feathers.
 - **Arctic Fox:** Thick fur that changes colour with the seasons (white in winter, brown in summer) to help with camouflage.
 - **Reindeer:** Thick fur, large hooves for walking on snow, and the ability to find food under snow in winter.

4. What threats are there to cold environments?

Red Amber Green

- **Climate Change:** Rising temperatures are melting ice sheets and glaciers. This threatens animals like polar bears, whose habitats are shrinking.
- **Tourism:** Increased tourism brings pollution, disrupts wildlife, and damages fragile ecosystems.
- **Fossil Fuel Extraction:** Some cold environments have rich reserves of oil and gas. Drilling for these can cause pollution and disturb the landscape.
- **Overfishing:** In places like Antarctica, overfishing threatens marine life, especially krill, which many animals rely on for food.



5. Should we protect the wilderness of Antarctica?

Red Amber Green

- **Arguments for protection:**
 - Antarctica is a global commons, meaning it belongs to no one country but to everyone. Its wilderness is pristine and unique.
 - Its ice sheets help regulate the Earth's climate and sea levels.
 - Protecting it preserves biodiversity and scientific research opportunities.
- **Arguments against protection:**
 - Some argue there could be economic benefits from mining resources under the ice.
 - Limited tourism provides income for research and promotes global awareness of Antarctica's fragility.

6. What are glaciers, and how do they change landscapes?

Red Amber Green

- **Glaciers** are slow-moving rivers of ice that erode, transport, and deposit sediment.
- **How glaciers shape the land:**
 - **Corrie (Cirque):** A bowl-shaped hollow in mountainsides formed by the erosion from a glacier.
 - **Arête:** A sharp ridge formed between two corries.
 - **U-Shaped Valley:** Formed by glaciers carving through valleys, leaving behind wide, flat valley floors with steep sides.



7. How do we know the Lake District was glaciated?

Red Amber Green

- The Lake District in the UK has many features shaped by past glaciers:
 - **U-shaped valleys**, such as Langdale.
 - **Corries**, such as Red Tarn.
 - **Arêtes**, like Striding Edge.
- Evidence like the arrangement of rocks and landforms shows the area was covered by glaciers during the last Ice Age

8. Lesson 8: Is the geography of Russia a curse or a benefit?

Red Amber Green

- **Russia's geography:**
 - Largest country in the world, covering multiple biomes (tundra, taiga).
 - Benefits: Rich in natural resources like oil, gas, and minerals.

- Challenges: Harsh climate (especially in Siberia) makes it difficult to live in or exploit resources in some areas.



9. Lesson 9: Why did Russia plant their flag on the seabed of the North Pole?

Red

Amber

Green

- Russia planted their flag on the seabed in 2007 to claim ownership of parts of the Arctic.
- The Arctic is believed to hold vast reserves of untapped oil and gas, making it highly valuable.
- There are conflicting interests between countries like Russia, Canada, and the US over access to Arctic resources.



HOME LEARNING TASKS

Task Description	Done?
1. Learn key word terminology	
2. Create 3 top trump animal cards of those found in cold environments.	
3. Visit Where is Antarctica? - BBC Bitesize and take quiz.	
4. Antarctica Treasure map – apply geographical skills.	
5. Visit Glacial process guide for KS3 geography students - BBC Bitesize and take quiz.	
6. Read and recap over knowledge organiser.	

Subject Art Year 7 Term 1 & 2 – 'Observation and Tone'

Term Focus – *Through a series of activities, students develop skills in observational drawing using a variety of materials, drawing techniques and processes. They investigate how artists use observation, mark making and tone to convey detail. They will discover how to apply Formal Elements **TONE, MARK MAKING, SHAPE, FORM, and LINE** to their own artwork.*



Prior Learning Links

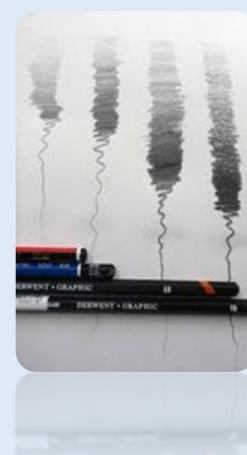
At Key Stage 2 Pupils should be taught to develop their techniques, including their control and their use of materials, with creativity, experimentation and an increasing awareness of different kinds of art, craft and design

Pupils should be taught:

- to create sketch books to record their observations and use them to review and revisit ideas
- to improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials [for example, pencil, charcoal, paint, clay]
- about great artists, architects and designers in history

Future Learning Links

Through a series of activities, students develop skills in observation, colour mixing and application of paint exploring Formal Elements **COLOUR, SHAPE and COMPOSITION**. They investigate examples of abstract art focusing on composition, message and meaning. Students will use their knowledge of colour theory, painting techniques and composition to create their own abstract art.



KEY VOCABULARY

KEY WORDS	KEY SUBJECT TERMINOLOGY
I will learn the meaning of... <i>Investigate/Draw/Observe/Blend/Hatch/Contrast/Directional within the context of 'Observation and Tone'.</i>	Record Develop Refine Outcome Evaluate

1. How do artists use observation and tone?

Red

Amber

Green

Know about great artists, craft makers and designers and understand the historical and cultural development of their art forms:

I will learn to record...

- images and information appropriate to a given theme
- using drawing media to closely observe objects and pictures
- increasing my knowledge and understanding of how artists use 'Observation and Tone' to create meaningful work

Evaluate and analyse creative work using the language of art, craft and design:

I will learn how to evaluate...

- artists using analytical writing skills and forming opinions

Describe the artist work using keywords
Compare similarities and differences in artists work
Give your personal opinion about the artist's work

Remember to
SHAPE!



2. Can you list 3 types of drawing media?

Red

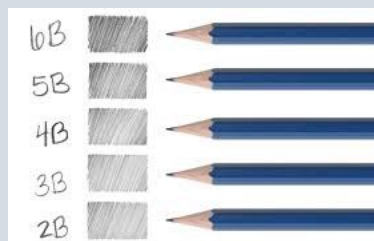
Amber

Green

Become proficient in drawing, painting sculpture and other art, craft and design techniques:

I will learn to record...

- using drawing media to closely observe objects and pictures



3. What is mark making?

Red

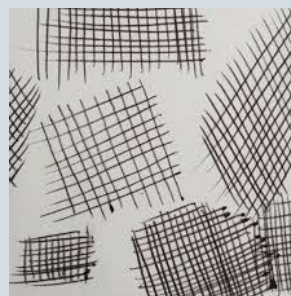
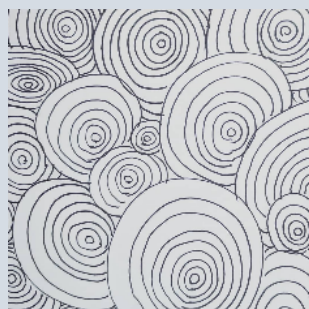
Amber

Green

Become proficient in drawing, painting sculpture and other art, craft and design techniques:

I will learn how to develop...

- my knowledge and understanding of tone and mark making



4. How does light and dark affect shape and form in a drawing?

Red

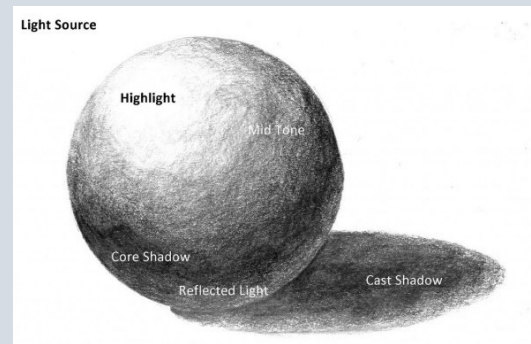
Amber

Green

Become proficient in drawing, painting sculpture and other art, craft and design techniques:

I will learn how to develop...

- my knowledge and understanding of tone and mark making
- my observational drawing skills
- my higher order thinking skills



5. Why is it important to look closely when drawing from direct observation?

Red

Amber

Green

Become proficient in drawing, painting sculpture and other art, craft and design techniques:

I will learn to record...

- images and information appropriate to a given theme using drawing media to closely observe objects and pictures

I will learn how to develop...

- my knowledge and understanding of tone and mark making
- my observational drawing skills
- my higher order thinking skills



6. What is proportion?

Red

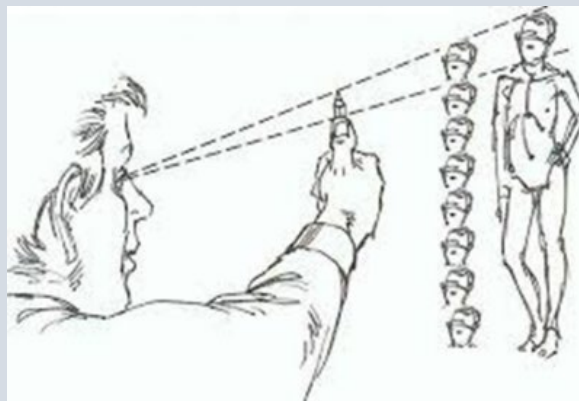
Amber

Green

Become proficient in drawing, painting sculpture and other art, craft and design techniques:

I will learn how to develop...

- my observational drawing skills
- my higher order thinking skills



7. Can you combine Tone/Mark making/Shape/Form/Line in your own artwork?

Red

Amber

Green

Produce creative work exploring their ideas and recording their experiences:

I will learn how to develop...

- my knowledge and understanding of tone and mark making
- my observational drawing skills
- my use of images and information to create ideas using mark making and tone
- ideas in response to a given theme, linking to artists work.
- my higher order thinking skills

8. Can you realise intentions through a final outcome?

Red

Amber

Green

Produce creative work exploring their ideas and recording their experiences:

I will learn how to refine...

- through exploring a range of techniques and media including paint e.g. making different tones from light to dark, contrasting images and tone, mark making and line techniques.
- by selecting ideas to adapt and improve using Tone, Mark making, Shape, Form and Line.
- developing a piece of work using tone in different ways

I will learn how to produce a finished outcome...

- using observation and tone

9. Why is it important to evaluate?

Red

Amber

Green

Evaluate and analyse creative work using the language of art, craft and design:

I will learn how to evaluate...

- by reflecting on the development of my own work
- making connections between my own and artists' work
- suggesting ways I could I improve

How does my work link to the artist?

What has gone well and how have I challenged myself?

What could I do even better and challenge myself more?

What does someone else think about my work?

What new words have I learned?

How have I used the Formal Elements?

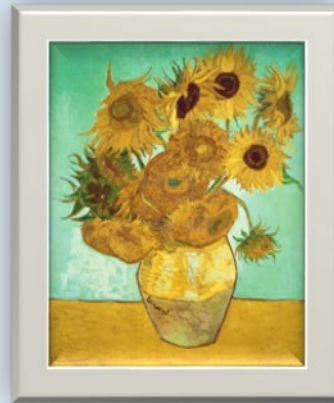
LINE / SHAPE / TONE / FORM / TEXTURE /

COLOUR / SCALE / PATTERN /

Homework Booklet 1 'Vase of Twelve Sunflowers by Vincent Van Gogh

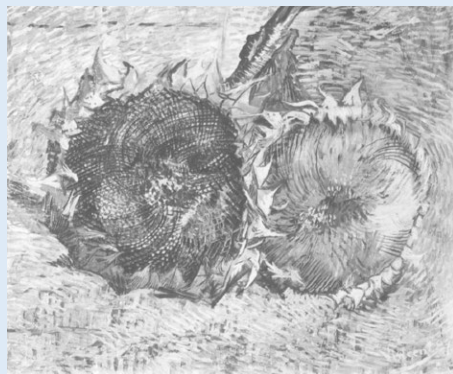
(artist links to project through use of mark making)

Duration- 30 minutes minimum on each of the 7 tasks (approx. 30 minutes per two-week cycle)



How do artists use observation and tone?

Use pencil tone and mark making to draw these examples of Sunflowers by Van Gogh



Can you list 3 types of drawing media?

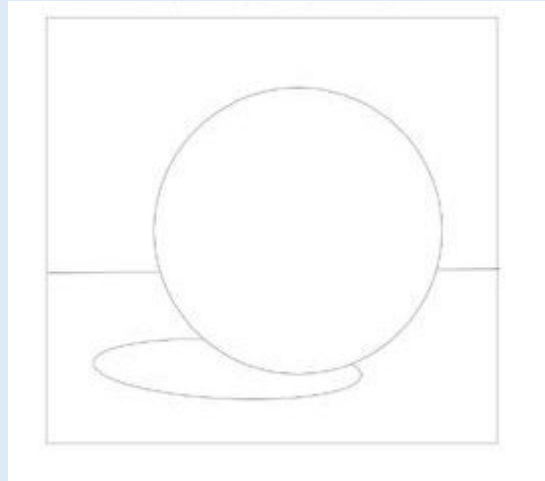
Use your writing pen to draw the above images

What is mark making?

Use a pencil to draw the above images using only mark making and no shading

How does light and dark affect shape and form in a drawing?

Turn the circle into a 3D Sphere the draw the ball using the same process to make it appear 3D.



Why is it important to look closely when drawing from direct observation?

2 Minute drawing exercises looking at same picture, time yourself doing the following drawing exercises:

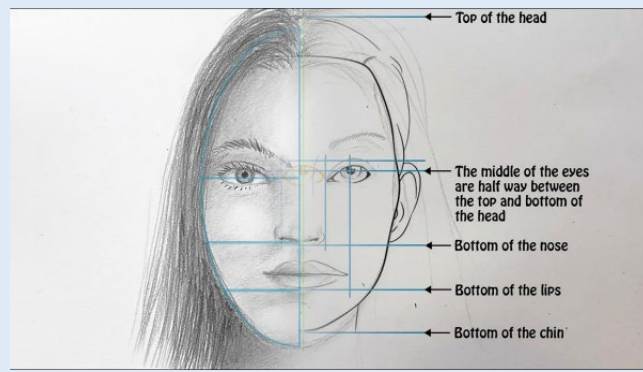
- 2 Minutes Continuous Line (do not lift pencil off the paper)
- 2 Minutes drawing without looking at the paper
- 2 Minutes drawing without looking at the picture
- Speed draw each picture in 20 seconds

Follow up with a 10/20 a minute observational drawing of one of the pictures. Consider how your observation skills have been impacted by these exercises?



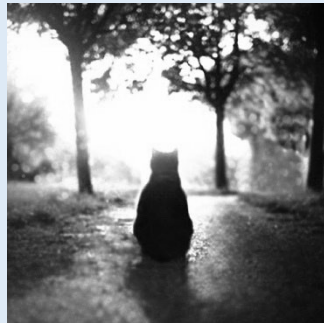
What is proportion?

Draw and finish this face as an extension draw yourself or another person using correct proportions.



Can you combine Tone/Mark making/Shape/Form/Line in your own artwork?

Use the pencil and mark making skills you have learned to draw Percy the cat. Aim to complete X2 roughs (practice pieces) and one best.



Why is it important to evaluate?

Evaluate your portrait of Percy the cat:

What has gone well and how have I challenged myself?
What could I do even better and challenge myself more?
What does someone else think about my work?

Religion
Christianity

Year: 7
Term: 2

Big Questions

1 Who was Jesus and what did he teach?
2 How does belief in God influence action?

What are the reasons to pray?

Asking forgiveness
Praise
Thanksgiving
Asking for help

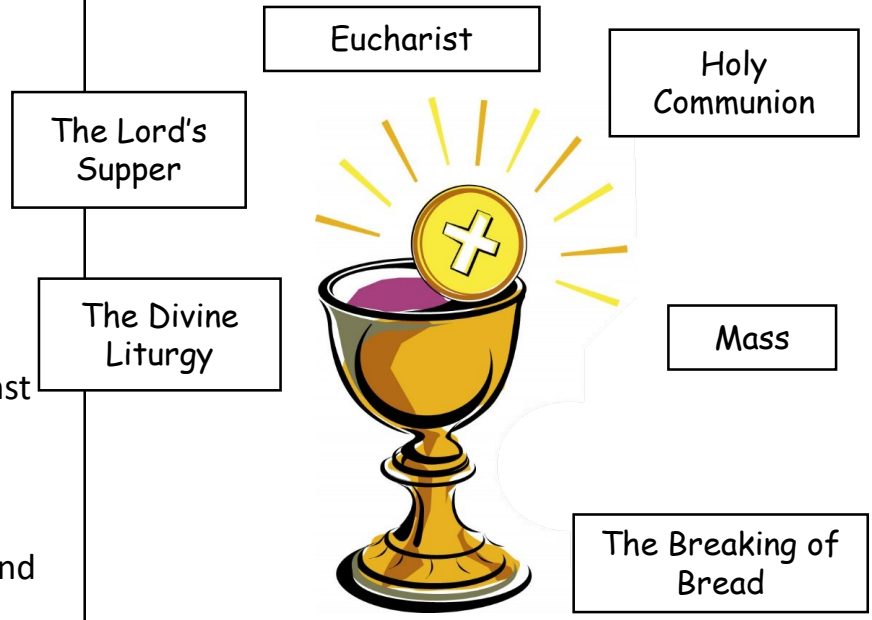
The Lord's Prayer

Our Father, who art in heaven,
hallowed be thy name.
Thy Kingdom come,
thy will be done,
in earth as it is in heaven
Give us this day our daily bread.
And forgive us our trespasses,
as we forgive them that trespass against
us.
And lead us not into temptation,
but deliver us from evil.
For thine is the kingdom, the power, and
the glory, for ever and ever.
Amen.

Holy Communion

Holy Communion is a re-enactment of the Last Supper, the final meal that Jesus Christ shared with his disciples before his arrest, and eventual crucifixion. At the meal, Jesus ate bread and wine and instructed his disciples to do the same in memory of him. The people taking part drink a sip of wine (or grape juice) and eat a small piece of bread/cracker, both are consecrated.

The different names given to Holy communion



The parable of the sheep and goats

A parable is a story that Jesus told to help people understand right from wrong. They are important because they directly come from Jesus and therefore they hold authority.

In the parable of the sheep and goats, Jesus uses sheep and goats as a metaphor for types of people.

Sheep – follow the shepherd (Jesus) and they help others.

Goats – ignore the shepherd and do not help others unless it benefits them.

Quick facts!

Holy book – The Bible (500CE)
Age of religion 2027 years old (roughly)
Place of worship – Church
Name of followers – Christians
Number in the UK - 31,479,876

Key words:

Faith – Believing in someone or something without having evidence or proof.

Miracles – an event that can't be described by science, therefore is often attributed to God/Gods.

Messiah – In Judaism, the Messiah was someone who would be sent by God to save the Jews. Christians believe that Jesus is the Messiah, Jews do not.

Sin – is a bad action or thought that goes against God and his rules.

Consecrated – Make something sacred; to dedicate it to a religious purpose. In Christian belief they consecrate (bread or wine) into the body or blood of Christ.

Parable - a story that Jesus told to help people understand right from wrong.

Music Year 7 Terms 1&2
Singing Skills

Term Focus

You will learn how to:

- sing and use your voice
- look after your voice and use it effectively as an instrument
- consider the elements of music and how they can enhance a musical performance



Prior Learning Links

- Play and perform in a variety of solo and ensemble contexts in primary school
- Use voices as a musical instrument
- Listen and recall sounds
- Listen to and appreciate a wide range of music from different traditions and from great composers and musicians

Future Learning Links

- Understand and explore how music is created and performed
- Understand how the elements of music affect a musical performance
- Find connections between melodies, harmonies and accompaniments

KEY VOCABULARY

KEY WORDS	KEY SUBJECT TERMINOLOGY
Singing: making musical sounds with your voice	Musical elements: the building blocks of music that include dynamics, tempo, texture, timbre and pitch
Dynamics: the volume that notes should be played/sung	Call and response: a phrase played or sung that is answered with the same or a different phrase
Tempo: the speed or pace of the music	Musical arrangement: altering or adapting an existing piece of music through changing musical elements, structure or the instruments used
Texture: how melody, harmony and rhythm are combined in music to create layers of sound	Body Percussion: using your own body to create rhythm. It could involve clapping, stomping or clicking
Timbre: the type of sound produced by an instrument or a voice	Vocal warm-ups: exercises to prepare the voice for singing. They help prepare the vocal cords and prevent strain or injury
Pitch: how high or low a note sounds	Musical accompaniment: the music that plays in the background to support a melody
Unison: one sound. Two or more people play/sing the same pitch	Musical structure: the order the different sections of a song or piece of music are played in (e.g. verse/chorus/intro)
Harmony: more than one note/pitch is played or sung at the same time	Musical ensemble: a group of people who perform instrumental or vocal music together
Canon: a melody is played and then imitated after a short delay	Musical conductor: keeps a musical ensemble in time and leads the performance, giving it shape
a capella: singing without instrumental accompaniment	

1. Why is it important to warm our voices up before singing?

Red Amber Green

Just as you would warm-up at the start of a PE lesson, you should also warm your vocal muscles up before you sing to avoid any strain or injury.

Some easy vocal warm-ups:

- Humming – it's easy to do and helps to stretch your vocal chords. Change the pitch of your voice as you hum
- Lip trills – make a motorboat sound by making your lips vibrate. You can also add pitch slides
- Vocal sirens – make an 'oooo' sound and go from the lowest pitch of your voice and slide up to the highest and back down again (like a siren!)
- Yawn/sigh – just yawn, take in air, and then exhale it slowly like a big sigh. This will relax your vocal cords

General tips for looking after your voice:

- Drink plenty of water
- Avoid chocolate just before you sing
- Avoid screaming/shouting
- Avoid being around smoke



2. What are the elements of music?

Red Amber Green

Pitch:
 Low → High

Dynamics:

Very quiet Quiet Moderately quiet Moderately loud Loud Very loud

pp *p* *mp* *mf* *f* *ff*

Pianissimo Piano Mezzo piano Mezzo forte Forte Fortissimo

Tempo:

ANDANTE walking pace 76 - 108 bpm	MODERATO moderately 108 - 120 bpm
ADAGIO slow & stately 66 - 76 bpm	ALLEGRO fast 120 - 168 bpm
LENTO / LARGO very slow 40 - 60 bpm	PRESTO very fast 168 - 200 bpm
GRAVE slow & solemn 25 - 45 bpm	PRESTISSIMO extremely fast >200 bpm

Texture:

thick
Lots of instruments or melodies

thin
Small amount of instruments or melodies

Timbre: The sound quality of an instrument – it helps us tell instruments apart from each other. You could describe an instrument or vocal sound as

- Bright
- Dark
- Brassy
- Wooden
- Harsh
- Mellow
- Shrill
- Smooth
- Nasal
- Screechy



3. What is call and response and why is it useful in learning a song?

Red

Amber

Green

Call and response singing is a musical form in which a leader sings or plays a phrase (the "call"), and a group or another performer responds with a corresponding phrase (the "response"). This interaction can be vocal, instrumental, or a combination of both. The structure creates a conversational style of music, often found in various cultural traditions including African, African-American, gospel, blues, and folk music. Call and response is useful for learning a song as short phrases can be repeated and memorised. It helps you to learn the lyrics and melody of a song. One example of a call and response warm-up that we do in lessons is:

I said "Boom chicka boom"
(I said "Boom chicka boom")
I said "Boom chicka boom"
(I said "Boom chicka boom")
I said "Boom chicka rocka chicka rocka chicka boom"
(I said "Boom chicka rocka chicka rocka chicka boom")

4. What is a musical canon (or round)?

Red

Amber

Green

A musical canon (or round) is where a melody is introduced by one voice and then imitated by one or more voices one after the other. Each voice enters at different times but follows the same melody line. You may have performed these nursely rhymes in a canon when you were younger:

- Frère Jacques
- Row, Row, Row Your Boat

The image shows musical notation for two songs in a canon format. The first staff is for 'Frère Jacques' with lyrics: 'Frè - re Jac - ques, Dor - mez - vous ? Son - nez les ma - ni - nes, Ding, dang, dong ! etc.'. The second staff is for 'Row, Row, Row Your Boat' with lyrics: 'Frè - re Jac - ques, Dor - mez - vous ? Son - nez les ma - ni - nes, etc.'. The third staff is for 'Frère Jacques' with lyrics: 'Frè - re Jac - ques, Dor - mez - vous ? etc.'. The fourth staff is for 'Row, Row, Row Your Boat' with lyrics: 'Frè - re Jac - ques, etc.'. The notation shows the melody for each song and how they are imitated by other voices.

5. What is the difference between singing in unison and singing in harmony?

Red

Amber

Green

1. Singing in Unison:

- When singers sing in unison, they all sing the same notes at the same pitch or in octaves.
- There is no variation in the melody or pitch between the voices.
- The result is a single, unified sound.
- Example: A group of people singing the melody of a song together.

2. Singing in Harmony:

- When singers sing in harmony, they sing different notes that complement each other, creating chords.
- The different notes are sung simultaneously to create a richer, more complex sound.
- Harmony adds depth and texture to the music by combining different pitches that blend well together.
- Example: A choir singing a hymn where different sections (soprano, alto, tenor, bass) sing different parts that harmonise with each other.



6. What is structure in a musical performance?

Red

Amber

Green

Structure provides shape to a piece of music and refers to the arrangement of different sections. In a song structure, sections can include:

- Intro:** The opening section that sets the stage for the rest of the piece.
- Verse:** A section where the melody may remain the same but the lyrics change with each repetition.
- Chorus:** A recurring section that usually contains the main theme and is often more memorable.
- Bridge:** A contrasting section that connects different parts of the song, providing variety and a break from the repetitive sections.
- Outro:** The concluding section that wraps up the piece.

Find more information here:



FURTHER LEARNING TASKS (OPTIONAL)

<u>Task Description</u>	Done?
Create a poster about how to look after your voice	
Research and describe a fun vocal warm-up	
Create a presentation/poster about your favourite song. You might want to include details such as: <ul style="list-style-type: none">- What instruments are used in the song?- Describe the song's structure- Explain the lyrics – what is the song about?- Describe the musical elements used in the song (pitch, tempo, dynamics, texture and timbre)- Why do you like this song?- How does this song make you feel?	

Drama Year 7 Term 2
An Introduction to Drama – Drama Techniques

Term Focus

You will learn how to:

- Develop your understanding of Drama techniques
- Create and perform your own performances whilst collaborating with others developing your teamwork, communication and problem-solving skills.
- Evaluate your own work in addition to the work of your peers.

Prior Learning Links

- Consolidates previously learned information and skills which underpin the curriculum. The level of experience in this subject will differ. This unit will allow all pupils to further develop a foundation knowledge of skills and techniques.

Future Learning Links

- Performance skills will continue to develop across KS3 and KS4. They are the foundation skills required for any performance.
- Pupils' command of vocabulary is the key to their learning and progress across the whole curriculum.
- Promotes confidence and resilience across the wider school.

KEY VOCABULARY

Drama Techniques are used to present an idea, highlight key concepts or to add interest to the performance.

Still Image	a frozen picture capturing a moment of a scene
Thought Track	A thought track is when a character steps out of a scene to address the audience about how they're feeling .
Mime	Acting without speech.
Physical Theatre	Actors use their bodies to create objects .
Organic Sound	The noises we can hear in a performance which are created by the actors themselves.
Choral Speaking	Speech spoken by more than one actor, incorporates both synchronised speech and actions.
Narration	A spoken commentary for the audience about the action onstage.

1. What transferrable skills will you develop in Drama?

Red Amber Green

Drama is a subject that allows you to develop key skills that you can use in all areas of your life. These skills are what employers look for when you are applying for a job. You may not be someone who would like to be an Actor but all the skills you will develop in your lessons are important life skills for the future.

Teamwork	Each lesson you will work in groups to complete a performance task. You will need to work with your peers. You will need to contribute ideas as well as listen to others to create a performance to perform to the class.
Creativity	You will be required to think of imaginative ideas to create a performance which is exciting for the audience.
Problem Solving	When given a challenging task, you will need to work with your peers to overcome any issues you face. You will also need to navigate working with a range of different people with a variety of skillsets. You will need to problem solve in order to get the task completed.

Leadership	Leadership skills will be developed when devising your own performances. Being able to take lots of ideas and find a way to move forwards with the task will encourage you to take charge.
Confidence	Confidence will be developed in a variety of ways. You will be expected to contribute ideas in class discussions, group work and when evaluating each others work. You will be expected to perform to your peers every lesson in addition to working with a variety of different people. Confidence is a key skills which will be developed.
Resilience	You will be challenged outside of your comfort zone but being able to continue to push yourself every lesson will result in your resilience developing. Performing to an audience, working with others and speaking
Communication	You will be expected to be able to communicate politely with one another in group work and class discussions.

2. What are drama techniques?

Red

Amber

Green

Abstract Theatre refers to a style of Drama which entails a narrative or idea being presented in a different/alternative way to an audience. Drama techniques are used within **Abstract Theatre** to either present an idea, highlight key concepts or to add interest to the performance. Drama techniques would NOT be used in a **naturalistic performance**.

This term we will be learning about the different drama techniques which can be incorporated into a performance.

3. What is a still image?

Red

Amber

Green

A **still image** is a frozen picture capturing a moment of a scene.

The frozen picture communicates meaning about what is going on during that one particular moment. It gives the audience an opportunity to really focus on this one moment in time.

It's sometimes called a **freeze frame**. It can provide further **insight** into what is happening in a scene with a clear focus upon use of space, levels, body language and facial expression.

A still image is an effective way of showing time within a performance, as they can be used to demonstrate the key moments without having to act out the entirety of a scene making it more engaging for the audience.

4. What is a thought track?

Red

Amber

Green

A **thought track** is when a character steps out of a scene to address the audience about how they're **feeling**. Sharing thoughts in this way provides deeper insight into the character for an audience.

It's an effective way of showing greater depth about one's character to the audience. Stopping the action and sharing thoughts enables the actor/audience to fully understand how the character thinks or feels at any given moment.

The character must **speak directly to the audience** and not the other characters in the scene.

5. What is mime?

Red

Amber

Green

Mime refers to **acting without speech**. Silent film star, Charlie Chaplin was one of the most famous performers to use mime in cinema.

Mime requires an actor to use physical performance skills to clearly demonstrate an idea without the presence of dialogue.

It is essential we consider the smaller details when performing a mime, to make our performance as realistic as possible.

6. What is Physical Theatre?

Red

Amber

Green

Physical Theatre is a drama technique whereby actors use their **bodies to create objects**. Physical theatre is a great way of incorporating objects into a performance without the need to use props or scenery. It saves time, money and allows the objects to become more interesting.

The technique is used in **abstract theatre** allowing objects to be presented in an interesting and engaging way to the audience.

7. What is choral speaking?

Red

Amber

Green

Choral speaking is a **speech spoken by more than one person**. Choral speaking incorporates both synchronised speech and actions.

Choral speaking can be used to create dramatic effect

8. What is narration?

Red

Amber

Green

Narration is where there is a **spoken commentary** for the audience about the action onstage. A narrator is like a storyteller informing the audience about the plot.

Narration is useful in making a story more understandable for the audience. It also makes the drama **stylised**. This means that it becomes non-naturalistic because the audience are aware throughout that a story is being told and the **fourth wall** is broken. This is therefore used in abstract theatre.

Narration can also save time when information is given to the audience, rather than showing everything in scenes.

A narrator is not part of the plot themselves.

HOME LEARNING TASKS

Task Description

Done?

Recapping Vocal Skills

Recapping Performance Skills

Creating a thought track

Recapping stage positioning

Understanding of Vocal Skills: Complete the table below

P	
P ace	How fast or slow you speak.
P	
P	
T	
E	
A	
V	

Understanding of Performance Skills: Complete the table below

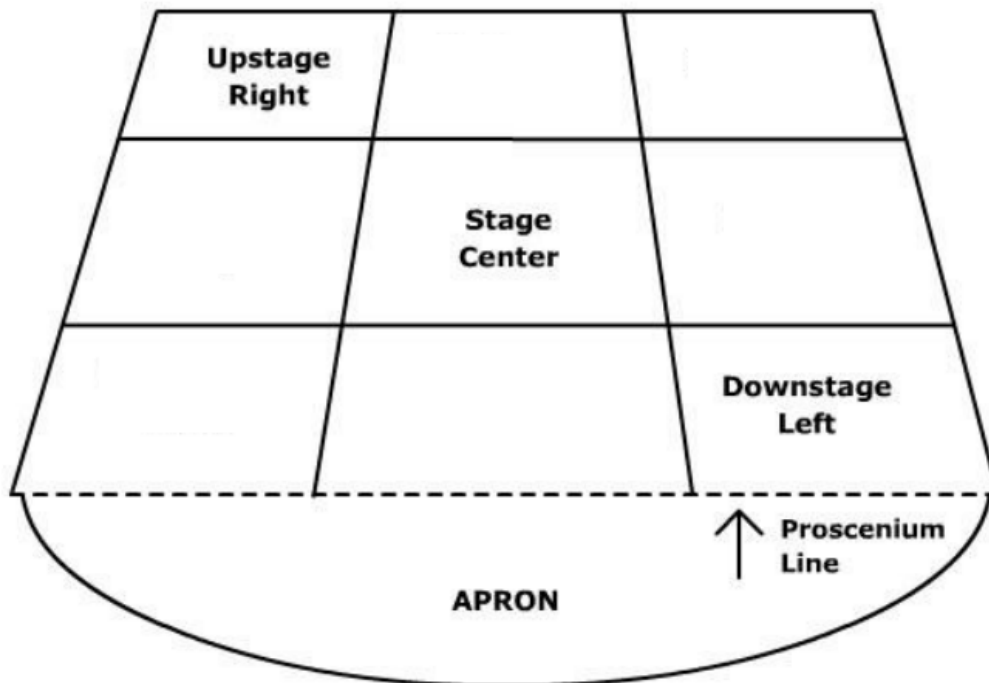
	P
	P
	P
	B
	E
	D
	S
	L
How loud or quiet you speak.	V olume
	G
	F

Creating a thought track: Read the extract below, create a thought track for one of the three pigs

'Quick, quick!' said the third little pig. 'He's climbing the tree. I think he's going to come down the chimney.'

The three little pigs got the biggest pan they had, and filled it full of water and put it on the fire to boil. All the time they could hear the sound of the wolf climbing the tree and then walking along the roof, they froze in fear....

Understanding positioning: Complete the stage below using the key words in the box.



- | | |
|------------------|------------------|
| Upstage centre | Stage left |
| Downstairs right | Downstage centre |
| Upstage centre | Upstage left |

Spanish Year 7 Term 2 – School

Term Focus – This term introduces you to the topic of school in Spanish. You will be able to talk about the following things:

- School items in your pencil case and bag
- What subjects you study
- What subjects you like and dislike and why



Prior Learning Links

- The verb ser
- Adjectival agreement

Future Learning Links

- School (Year 9)
- Adjectival agreement
- Giving and justifying opinions

1. What's in my school bag?

Red Amber Green

¿Qué hay en tu bolsa? (What is there in your bag?)

En mi bolsa (In my bag)	hay (there is)	un libro (a reading book)	una botella (a bottle)
		un cuaderno (an exercise book)	una calculadora (a calculator)
En mi mochila (In my pencil case)	no hay* (there isn't a)	un bolígrafo (a pen)	una goma (a rubber)
		un lápiz (a pencil)	una regla (a ruler)

*when using 'no hay' you then don't need the 'un' or 'una' in front of the noun.

2. What are articles?

Red Amber Green

An article is a word that comes before a noun to show whether it is specific or general. In English, we don't always need to include them but in Spanish they are used a lot! There are two types of articles that we will use this term:

	Definite Articles – THE		Indefinite Articles - A	
	Singular	Plural	Singular	Plural
Masculine	El	Los	Un	Unos
Femine	La	Las	Una	Unas

3. What are the colours?

Red Amber Green

	Singular (only 1)		Plural (more than 1)	
	Masculine	Feminine	Masculine	Feminine
Blue	azul	azul	azules	azules
Green	verde	verde	verdes	verdes
Brown	marrón	marrón	marrones	marrones
Grey	gris	gris	grises	grises
Black	negro	negra	negros	negras
Red	rojo	roja	rojos	rojas
Yellow	amarillo	amarilla	amarillos	amarillas
White	blanco	blanca	blancos	blancas
Purple	morado	morada	morados	moradas
Orange	Naranja (no change!)			
Pink	Rosa (no change!)			

4. How do I use colours?

Red Amber Green

Rule 1: Colours always come after the noun in Spanish.

E.g. un bolígrafo **rojo** = a pen **red**

Rule 2: Colours must agree with the gender and number of the noun that they are describing.

E.g. un bolígrafo **rojo** = a pen **red**

Una goma **roja** = a rubber **red**

5. How do I count in Spanish?

Red Amber Green

1 Uno	2 Dos	3 Tres	4 Cuatro	5 Cinco	6 Seis
7 Siete	8 Ocho	9 Nueve	10 Diez	11 Once	12 Doce

6. What do you study?

Red Amber Green

¿Qué estudias? (What do you study?)

<p>El lunes (On Monday)</p> <p>El martes (On Tuesday)</p> <p>El miércoles (On Wednesday)</p> <p>El jueves (On Thursday)</p>	<p>El viernes (On Friday)</p> <p>El sábado (On Saturday)</p> <p>El domingo (On Sunday)</p>	<p>estudio (I study)</p> <p>estudiamos (we study)</p>	<p>dibujo (art)</p> <p>teatro (drama)</p> <p>español (spanish)</p> <p>inglés (english)</p> <p>geografía (geography)</p> <p>historia (history)</p>	<p>música (music)</p> <p>educación física (PE)</p> <p>tecnología (technology)</p> <p>ciencias (science)</p> <p>matemáticas (maths)</p>
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7. What is the verb 'avoir'?

Red Amber Green

The verb 'tener' is a very important verb.

'tener' is the verb 'to have'

It is one that you will need to use every year that you study Spanish, so it is important that you are confident with it.

<p>Tener = To have</p> <p>Tengo = I have</p> <p>Tienes = You have (singular)</p> <p>Tiene = He has / She has / We have</p> <p>Tenemos = We have</p> <p>Tenéis = You have (plural)</p> <p>Tienen = They have</p>
--

8. What is your favourite subject?

Red Amber Green

¿Cuál es tu asignatura favorita? (What is your favourite subject?)

Mi asignatura favorita es (My favourite subject is)	el dibujo (art)	la música (music)		
Me encanta(n) (I love)	el teatro (drama)	la educación física (pe)	porque es (because it is)	aburrido/a(s) (boring)
Me gusta(n) (I like)	el español (spanish)	la tecnología (technology)	porque son (because they are)	difícil(es) (difficult)
No me gusta(n) (I don't like)	el inglés (english)	las ciencias (science)		divertido/a(s) (fun / funny)
Odio (I hate)	la geografía (geography)	las matemáticas (maths)		fácil(es) (easy)
	la historia (history)			importante s) (important)
				interesante(s) (interesting)
				útil(es) (useful)
				práctico/a(s) (practical)

***Plural subjects must add an -n to the opinion phrase.**

9. What is an opinion phrase?

Red Amber Green

An opinion phrase is anything that indicates how you feel about something.

E.g. I like, I hate, I love, I don't like.

10. What is a conjunction?

Red Amber Green

Definition: A word used to link two clauses or sentences.

Key Conjunctions: y (and), también (also), sin embargo (however), pero (but)

11. What is an adjective?

Red Amber Green

Definition: A word used to describe a noun.

12. What is an intensifier?

Red Amber Green

Definition: An intensifier is used before an adjective to add detail.

Key intensifiers: muy (very), bastante (quite), un poco (a little), demasiado (too)

HOME LEARNING TASKS

Task Description	Done?
Can you write a short paragraph describing what's in your pencil case?	
Can you write a short paragraph describing your school day?	
Can you use the sentence builders above to write sentences answering the questions? Can you improve these by adding conjunctions and intensifiers?	
Can you practise agreeing colours to different items in your pencil case?	
Practise the vocabulary in your knowledge organiser by using the look, cover, write, check method.	
Go to www.sentencebuilders.com and practise this term's vocabulary.	

French Year 7 Term 2 – School

Term Focus – This term introduces you to the topic of school in French. You will be able to talk about the following things:

- School items in your pencil case and bag
- What subjects you study
- What subjects you like and dislike and why



Prior Learning Links

- The verb être
- Adjectival agreement

Future Learning Links

- School (Year 9)
- Adjectival agreement
- Giving and justifying opinions

1. What's in my school bag?

Red

Amber

Green

Qu'est-ce qu'il y a dans ton sac ? (What is there in your bag?)

Dans mon sac (In my bag)	il y a (there is)	un livre (a reading book)	une bouteille (a bottle)
		un cahier (an exercise book)	une calculatrice (a calculator)
Dans ma trousse (In my pencil case)	il n'y a pas de* (there isn't a)	un stylo (a pen)	une gomme (a rubber)
		un crayon (a pencil)	une règle (a ruler)

*when using 'il n'y a pas de' you then don't need the 'un' or 'une' in front of the noun.

2. What are articles?

Red

Amber

Green

An article is a word that comes before a noun to show whether it is specific or general. In English, we don't always need to include them but in French they are used a lot! There are two types of articles that we will use this term:

Definite Articles - THE		
	Singular	Plural
Masculine	le	les
Feminine	la	les
Masculine or Feminine when before a vowel or the letter 'h'	l'	les

Indefinite Articles – A		
	Singular	Plural
Masculine	Un	Des
Feminine	Une	Des

3. What are the colours?

Red

Amber

Green

	Singular (only 1)		Plural (more than 1)	
	Masculine	Feminine	Masculine	Feminine
Blue	Bleu	Bleue	Bleus	Bleues
Green	Vert	Verte	Verts	Vertes
Black	Noir	Noire	Noirs	Noires
Grey	Gris	Grise	Gris	Grises
Red	Rouge	Rouge	Rouges	Rouges
Yellow	Jaune	Jaune	Jaunes	Jaunes
Pink	Rose	Rose	Roses	Roses
White	Blanc	Blanche	Blancs	Blanches
Purple	Violet	Violette	Violets	Violettes
Orange	Orange (no change!)			
Brown	Marron (no change!)			

4. How do I use colours?

Red Amber Green

Rule 1: Colours always come after the noun in French.

E.g. un stylo **rouge** = a pen **red**

Rule 2: Colours must agree with the gender of the noun that they are describing.

E.g. un stylo **bleu** = a pen **blue**

Une règle **bleue** = a ruler **blue**

5. How do I count in French?

Red Amber Green

1 Un	2 Deux	3 Trois	4 Quatre	5 Cinq	6 Six
7 Sept	8 Huit	9 Neuf	10 Dix	11 Onze	12 Douze

6. What do you study?

Red Amber Green

Qu'est-ce que tu étudies? (What do you study?)

Le lundi (On Monday)	Le vendredi (On Friday)	j'étudie (I study)	le dessin (art)	la musique (music)
Le mardi (On Tuesday)	Le samedi (On Saturday)		le théâtre (drama)	l'EPS / le sport (pe)
Le mercredi (On Wednesday)	Le dimanche (On Sunday)	on étudie (we study)	l'espagnol (spanish)	la technologie (technology)
Le jeudi (On Thursday)			l'anglais (english)	les sciences (science)
			la géographie (geography)	les maths (maths)
			l'histoire (history)	

7. What is the verb 'avoir'?

Red Amber Green

The verb 'avoir' is a very important verb.

'Avoir' is the verb 'to have'

It is one that you will need to use every year that you study French, so it is important that you are confident with it.

Avoir = To have

J'ai = I have

Tu as = You have (singular)

Il a / Elle a / On a = He has / She has / We have

Nous avons = We have

Vous avez = You have (plural)

Ils ont / Elles ont = They have

8. What is your favourite subject?

Red Amber Green

Quelle est ta matière préférée? (What is your favourite subject?)					
Ma matière préférée est (My favourite subject is) J'aime (I like) J'adore (I love) Je n'aime pas (I don't like) Je déteste (I hate)	le dessin (art)	la musique (music)	car (because)	on a trop de devoirs. (we have too much homework.) le / la prof est sympa. (the teacher is nice.)	
	le théâtre (drama)	l'EPS (pe)		la technologie (technology)	amusant (fun)
	l'espagnol (spanish)	les sciences (science)	car c'est (because it is)	intéressant (interesting)	facile (easy)
	l'anglais (english)	les maths (maths)		passionnant (exciting)	utile (useful)
	la géographie (geography)				
	l'histoire (history)				

9. What is an opinion phrase?

Red Amber Green

An opinion phrase is anything that indicates how you feel about something.

E.g. I like, I hate, I love, I don't like.

10. What is a conjunction?

Red Amber Green

Definition: A word used to link two clauses or sentences.

Key Conjunctions: Et (and), Aussi (also), Cependant (however), Mais (but)

11. What is an adjective?

Red Amber Green

Definition: A word used to describe a noun.

12. What is an intensifier?

Red Amber Green

Definition: An intensifier is used before an adjective to add detail.

Key intensifiers: très (very), vraiment (really), assez (quite), un peu (a little), trop (too)

HOME LEARNING TASKS

Task Description	Done?
Can you write a short paragraph describing what's in your pencil case?	
Can you write a short paragraph describing your school day?	
Can you use the sentence builders above to write sentences answering the questions? Can you improve these by adding conjunctions and intensifiers?	
Can you practise agreeing colours to different items in your pencil case?	
Practise the vocabulary in your knowledge organiser by using the look, cover, write, check method.	
Go to www.sentencebuilders.com and practise this term's vocabulary.	

Food and Nutrition Year 7 - Terms 1 and 2 – Introduction to food preparation and nutrition

Term Focus –

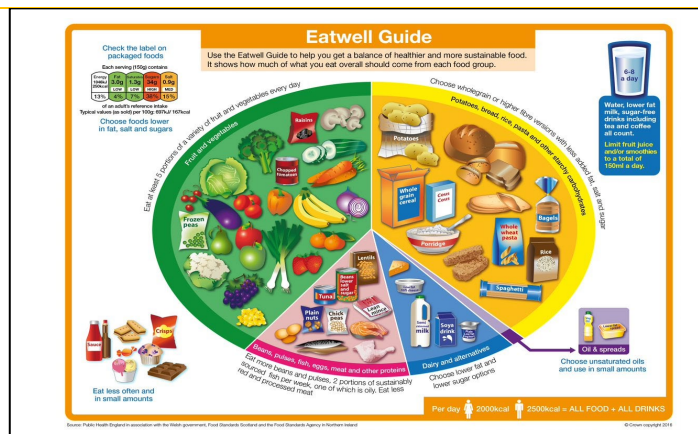
1. Food Safety, food hygiene, food skills, the senses
2. The Eatwell Guide, food groups, making food choices

Prior Learning Links

At KS2 and in the primary setting, the skills and knowledge gained is very varied due to the different teaching strengths of staff and variety of facilities available. Therefore, a very basic level of ability is assumed to enable all the cohort to access our curriculum.

Future Learning Links

Students will learn a range of practical skills whilst embedding their knowledge and understanding of key hygiene and safety points. Confidence will be boosted in the learning and developing of basic skills to progress through to more complex activities. We will look at the senses and discover why they play an important role in food selection. Food groups from the Eatwell Guide will assist in the learning of healthy, balanced diets and understanding nutritional needs.



Kitchen Safety Rules

- Always wash your hands before and after handling food.
- Tie back long hair.
- Wear an apron and roll up your sleeves.
- Keep food preparation surfaces clean.
- Wash fruit and vegetables under cold water before use.
- Always ask an adult before handling knives or going near hot things.
- Handle knives and other sharp equipment with care.
- When using a knife, always cut away from yourself or downwards on a chopping board to avoid cutting yourself.
- Turn handles of saucepans away from the front of the stove when cooking.
- Use oven mitts when taking hot dishes from the oven or microwave.
- Do not run around the room where food is being prepared.
- Wipe up food spills immediately.
- Store food appropriately in sealed containers. Always keep raw meat away from cooked meat at the bottom of the fridge.
- Wash kitchen and eating utensils after use in hot soapy water.

KEY VOCABULARY

KEY WORDS

I will learn the meaning of...

- Eatwell guide
- Balanced diet
- Nutrition
- Malnutrition
- Evaluate
- Bacteria
- Hygiene
- Hazard

KEY SUBJECT TERMINOLOGY

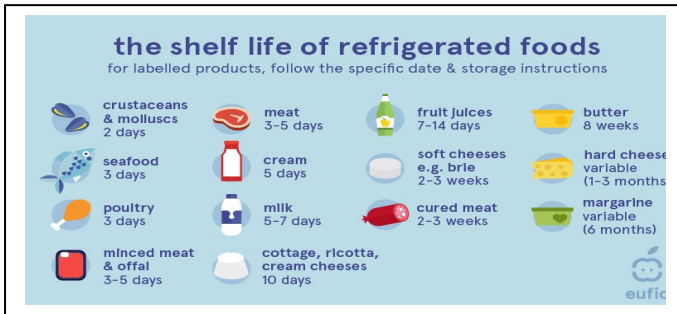
Hygiene and safety, the 4 C's in food preparation, key temperatures, using our senses, nutritional foods, modifying dishes.

1. What is Food Safety?

Red Amber Green

Know about: The rules surrounding food safety.

I will learn: How to store, handle and cook food



2. What simple dish can we produce to learn safe methods of using a knife? (Pizza toast)

Red Amber Green

Know about: The Bridge and claw method of cutting

I will learn: How to hold food and knives in a safe way to prevent accidents



□

Bridge hold and claw grip



Evaluate and suggest modifications to my food products

3. How do we make sure we are hygienic in a practical food room?

Red Amber Green

Know about: The actions we take to be hygienic in a practical food room

I will learn: Why it is important to be hygienic in a practical food room

4. How can we easily get fruit into our snacks? (Fruit kebab and French toast)

Red Amber Green

Know about: The Bridge and claw method of cutting

I will learn: How to use the bridge and claw knife safety method of cutting

Evaluate and suggest modifications to my food products

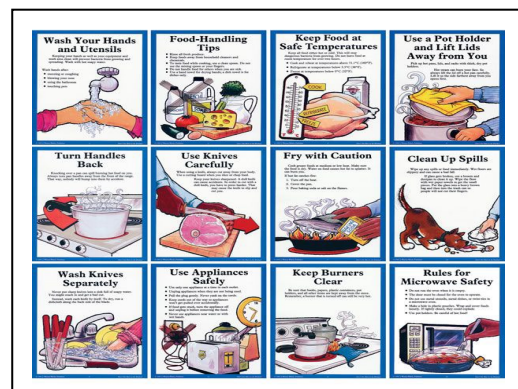


5. Why is it important to be Safe in a practical food room?

Red Amber Green

Know about: The actions we take to ensure safety in the food practical room

I will learn: Why it is important to always act in a safe way in a food practical room



6. Can you list 3 hygiene rules in the practical food room, why should we follow these rules? **Red Amber Green**

Know about: Issues relating to unhygienic practice in the food preparation area.

I will learn: The ways we ensure the food preparation area is hygienic and safe to use.



THE 4 C'S

COOKING

Cooking kills bacteria.

Food needs to be heated till steaming hot with the core temperature reaching:

- 60°C for 45 mins
- 65°C for 10 mins
- 70°C for 2 mins
- 75°C for 30 secs
- 80°C for 6 secs

CLEANING

Cleaning kills bacteria.

- Wash hands before, during & after food preparation
- Wash all worktops, utensils, chopping boards & equipment
- Rinse unwashed salad, fruit and vegetables

CHILLING

Chilling prevents microbial growth.

Cool food to below 5°C as quickly as possible & defrost food in the fridge.

Fridge - 1°C - 4°C
Freezer - -23°C or below

CROSS CONTAMINATION

Bacteria are transferred from one object to another.

- Keep raw and cooked food separate
- Never wash raw meat
- Keep raw meat & shellfish on the bottom shelf of the fridge

7. How do we use our senses when choosing our food? **Red Amber Green**

Know about: The way our senses have an effect on our food choices.

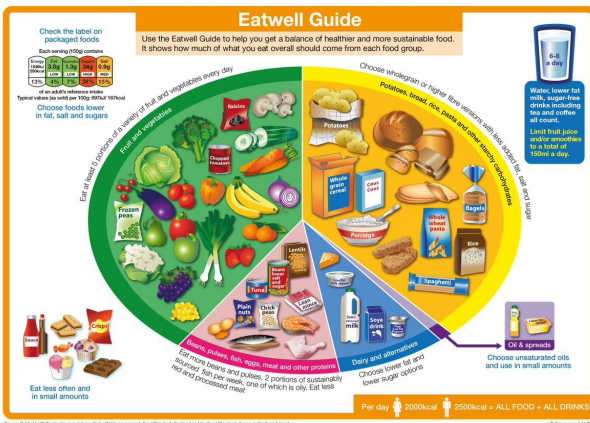
I will learn: The way we taste food is affected by the way we smell (Parma Violet experiment).



8. What is the Eatwell Guide and who is it for? How does the Vegan Eatwell Guide differ? **Red Amber Green**

Know about: The Eatwell Guide and why it was introduced

I will learn: How to balance meals based on food groups of the Eatwell Guide



Nutrients

Carbohydrates – Energy giving foods

Protein – For growth and repair

Vitamins and Minerals – Help prevent diseases

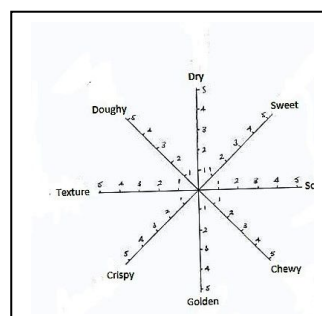
Fat – some energy, warmth and protection

9. What is an example of a carbohydrate rich snack? (Oaty biscuits) **Red Amber Green**

Know about: Carbohydrates

I will learn: The difference between starchy and sugary carbohydrate, why we need carbohydrates in our diet.

Evaluate and suggest modifications to my food products

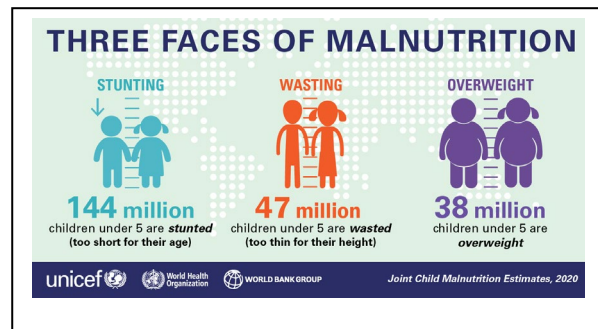
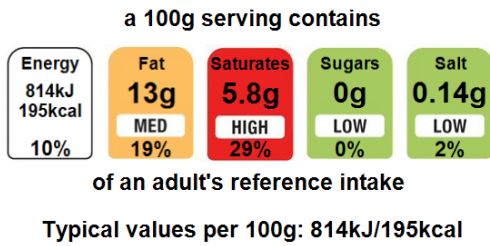


10. How can we tell if food is nutritionally good or bad? What is malnutrition/obesity?

Red Amber Green

Know about: The various reasons there are for making our food choices.

I will learn: How to use food labels for nutritional information.



11. What is an example of a well-balanced snack (Pitta Pockets)

Red Amber Green

Know about: The importance of a balanced diet

I will learn: How to produce a simple savoury snack which contains a balance of nutrients

Evaluate and suggest modifications to my food products



12. What ready made components could be used to produce a variety of simple baked snacks (cheesy triangle)

Red Amber Green

Know about: Ready made pastry

I will learn: How to shape/form into a suitable snack

Evaluate and suggest modifications to my food products

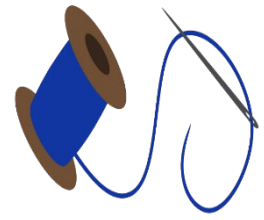


HOME LEARNING TASKS

Task Description	Done?
Make a fact sheet, PowerPoint or poster about the 4C's. Make it colourful and informative	
Look, cover, write the 5 main nutrients and their role for our health.	
Think of one of the dishes you have made and describe how you could modify and improve the dish to your own personal preference	
Look at the label of a food item, describe if it a healthy or unhealthy option using the traffic light information	
Design 4 food items using ready made puff pastry. 2 sweet options and two savoury options. Draw the items and label them to describe the filling and the shape you would make them into	
Write a short description of your favourite meal, using sensory adjectives.	

Textiles KS3 Term 1 & 2

- *Introduction to Textiles, health and safety, learning and using basic skills.*



Term Focus:

Following an Introduction to the subject and the health and safety required when using the basic hand sewing tools, students will be learning and demonstrating their skills whilst undertaking a basic task of sewing on a button, and then producing a small sampler.

In term 2 students will go on to design and plan to make a soft toy sea creature. They will go on to evaluate this soft toy.

Prior Learning Links

The national curriculum for design and technology aims to ensure that all pupils:

- *Develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world.*
- *Build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users.*
- *Critique, evaluate and test their ideas and products and the work of others.*

Future Learning Links

Students will use the skills learned in these two terms to design the packaging suitable for their soft toy sea creature.

KEY VOCABULARY

KEY WORDS

Needle	Pins
Scissors	Stitch
Sew	Stitch ripper
Thread	Silk
Cotton	Wool
Denim	Polyester

KEY SUBJECT TERMINOLOGY

Threading	Sampler
Sewing	Seam
Straight stitch	Hem
Back stitch	Button
Cross stitch	
Blanket stitch	

1. Do I know the potential hazards in the workroom?

Red

Amber

Green

I will learn to...

- Identify potential hazards to myself and others.
- Prevent accidents happening by following the rules.

2. Can I thread a needle and tie a simple knot?

Red

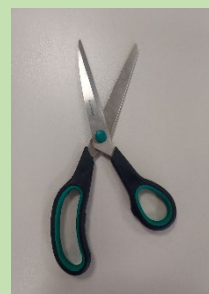
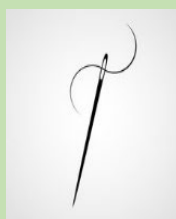
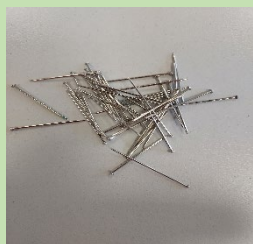
Amber

Green

I will learn to...

- Recognise thread.
- Use simple tools safely.

- Thread a needle.
- Tie a simple knot.



3. Can I sew on a button?

Red Amber Green

I will learn to...

- Sew a button successfully onto a piece of calico. This is a real life skill.
- Evaluate my success.

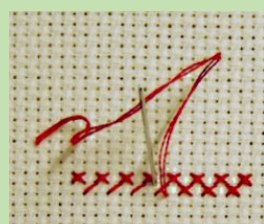
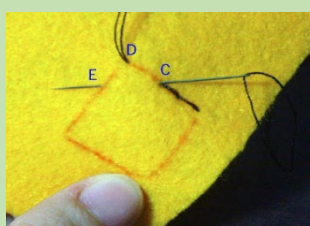
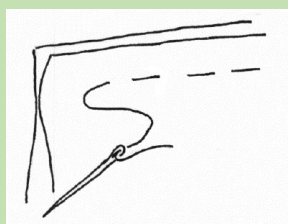
4. Can I demonstrate a range of simple stitches to make a sampler?

Red Amber Green

I will learn to...

- Demonstrate running/straight stitch.
- Demonstrate back stitch.
- Demonstrate cross stitch.
- Demonstrate blanket stitch.

All this will be done to produce a sampler.



5. Can I recognise the features of a sea creature?

Red Amber Green

I will learn to...

- Understand the different a variety features of a sea creature.
- Recognise the features I need to try to replicate in my toy.
- Identify which features are not going to be possible, but also which can be demonstrated using the skills I have learned and the resources that I have.



6. Can I design a sea creature to make into a toy?

Red Amber Green

I will learn to ...

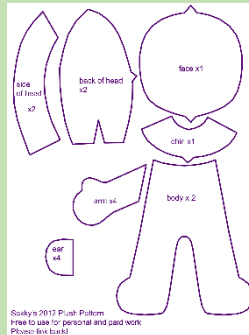
- Using the skills learned previously, design my soft toy sea creature using spatial awareness and drawing skills.

7. Can I make a functional paper pattern?

Red Amber Green

I will learn to...

- Draw up and make a function paper pattern using pencil and rulers.
- Be accurate in my measurements, understanding that this is important for the final product.



8. Can I use my paper pattern?

Red Amber Green

I will learn to...

- Pin the paper pattern to my chosen fabric.
- Cut out accurately using fabric scissors.

9. Can I start to make my soft toy sea creature?

Red Amber Green

I will learn to...

- Using the skills learned previously, to pin, tack and sew my soft toy sea creature.

10. Can I evaluate my soft toy sea creature?

Red Amber Green

I will learn to...

- Recognise my successes.
- Identify any faults or improvements that could be made if the soft toy was made again.

HOME LEARNING TASKS

	Done?
<p>Identifying Home Sewn textiles.</p> <ul style="list-style-type: none"> • Looking around your home, can you identify which items have been sewn either by machine or by hand? • Choose 2 to tell us about. Write on an A4 piece of paper, perhaps include a photograph if possible. 	
<p>Do you have any old toys or clothes that were made for you? Perhaps by a relative or close friend?</p> <ul style="list-style-type: none"> • If possible take a photo of the toy or piece of clothing. Alternatively draw it. • Write a paragraph about it and tell us why it is important to you. 	
<p>Could you sew a small needle/pin case to hold needles and pins at home?</p> <ul style="list-style-type: none"> • If you have a piece of spare felt or other fabric, cut a piece approximately 12cm x 8cm. Fold over. • Cut 2 other pieces of fabric 10cm x 6 cm and fold over. • Place the smaller pieces inside each other and then place both of these inside the larger piece to make it look like a book. • Use a needle and thread to sew down the 'spine' of the 'book'. This should hold them altogether. • You could use stitches and/or buttons to decorate the front cover or your needle case. Your needles and pins can be kept inside. 	
<p>Do you know any embroidery stitches?</p> <ul style="list-style-type: none"> • If you know any embroidery stitches you could use them to decorate your needle case. • Alternatively look on you tube to see if you can teach yourself to do chain stitch, or some fancy knot work. 	

Subject: Product Design Year 7 & 8

Term: 1 & 2

'Phone Stand'

Term Focus:

Through a series of activities, students develop skills in technical drawing using a variety of techniques specifically isometric drawing.

They investigate the iterative design process following through the initial ideas exploration through mind maps and sketches, then developing these with inspiration from their own hobbies and interests. Identifying ACCESS FM in their own artwork.

Prior Learning Links

In KS2 students will have looked through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts.

Understanding the base of design and what it means, how to turn 2D into 3D and a light evaluation covering what went well and what could be adapted.

Pupils should be taught:

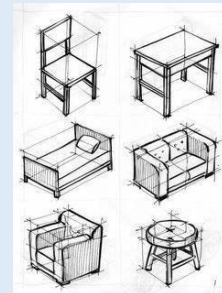
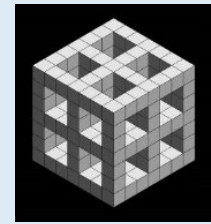
- How to use a booklet in order, keeping it neat and tidy to refer back to in later lessons.
- Follow the iterative design process
- Make a phone stand using the proper methods and processes
- Follow health and safety rules in the classroom

Future Learning Links

They would have had an introduction to CAD using 2D design, learning the basics ready to laser cut and engrave.

They also would have learned how to start off a project and follow the iterative design process.

Spent time learning to technically draw using isometric paper.



KEY VOCABULARY

KEY WORDS

I will learn the meaning of...

The iterative design process, how technical drawing can be beneficial to developing ideas as well as the practical aspects of designing and making a physical phone stand with finally how to evaluate it using ACCESSFM.

KEY SUBJECT TERMINOLOGY

- ACCESS FM
- Aesthetics
- Cost
- Customer
- Environment
- Safety
- Size
- Function
- Material

1. How do designers use technical drawing skills to represent ideas and influence their practical products?

Red Amber Green

I will be able to...

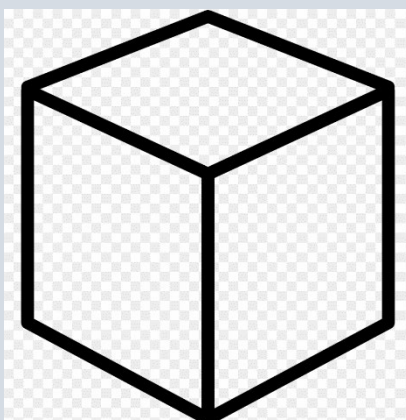
- Identify what isometric drawings look like from the angles used
- Understand who some designers are that have used these
- Find ways to influence others ideas and techniques into my own work
- Find examples of isometric outcomes I am already aware of

2. What is Isometric drawing?

Red Amber Green

I will learn to use...

Isometric drawings to better identify my intentions of the work I am going to create by following the lines in easy steps starting with a cube and developing to a crossy roads character and finally my design of the phone stand.



3. What is Rendering?

Red Amber Green

I will learn...

- New terminology such as rendering and be able to identify what it is and how to use it
- I will have an understanding of basic IT such as copy, paste, how to open 2D design, how to email and how to shut down a computer.
- Identify key logos I NEED TO KNOW



4. What is CAM? What is CAD?

Red Amber Green

I will learn and be able to explain and use...

- CAD (Computer Aided Design)
- CAM (Computer Aided Manufacture)

From the initial stages of logging in

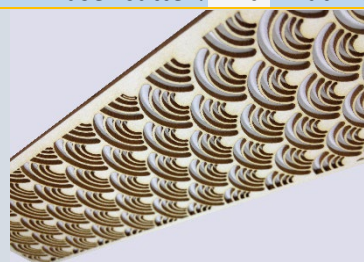
Being able to find the right software/ app

Executing the work positively well

Following instructions on how to vectorise, add text and use basic shape tools

5. What are the different marks and textures that can be programmed into the laser cutter? And what materials can be cut, scored or etched on a laser cutter?

Red Amber Green



I will learn...

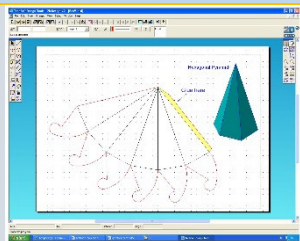
How to test different materials on the laser cutter

What materials can be used on the laser cutter (Plastics, woods, metals and textiles)

The difference between black and red lines and the theory behind these.

6. How do I use the 2D Design programme to adapt an existing image?

Red Amber Green



I will learn and be able to explain...

- How to vectorise images, both online and our own work
- What Grid Lock is and does
- How to change the size of the paper
- How to change from orthogonal to isometric
- Look at REL and what this is for

7. How do I use the 2D Design programme to create a bold original image?

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I will learn how to...

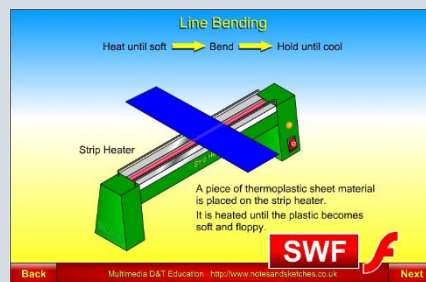
- Vectorise an image
- Use line and shape tools
- Adjust size, thickness and colour
- Recreate something from my booklet (Crossy Roads Character) on 2D Design following the same design methods

8. How do I bend/shape an acrylic sheet?

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I will learn how to...

- Be safe while using hot machinery
- What personal protective equipment to wear (PPE)
- What heat to have the line bender on
- How to bend the plastic to the correct angle.



9. How to evaluate using ACCESS FM

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We use ACCESS FM to help us write a specification - a list of requirements for a design - and to help us analyse and describe an already existing product.

ACCESS FM - Helpsheet

A is for Aesthetics		Aesthetics means what does the product look like? Why is it like that? Shape / Colour / Pattern / Texture / Finish / Weight / Size
C is for Cost		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?
C is for Customer		Customer means who will buy or use your product? What are the needs? Who will use your product? What is their Age / Gender? What are their likes / dislikes? What are their needs?
E is for Environment		Environment means will the product affect the environment? Is the product the problem? Recycled or Sustainable? Environmentally friendly? Spill or fire resistant?
S is for Size		Size means how big or small is the product? Is the product the problem? Recycled or Sustainable? Environmentally friendly? Spill or fire resistant?
S is for Safety		Safety means how safe is the product when it is used? Will it be safe to use? What are the risks? What are the correct or safe way to use the product? What are the risks?
F is for Function		Function means how does the product work? What is the product for? What does it do? What are the risks? Does it work? How could it be improved? Why is it like this way?
M is for Material		Material means what is the product made out of? What are the risks? What are the risks? What are the risks? What are the risks? What are the risks? What are the risks?

I will understand...

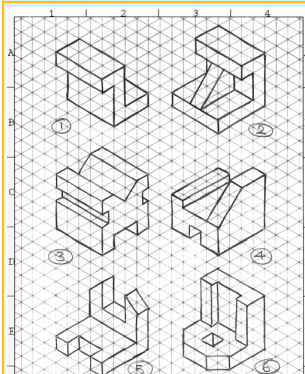
- The importance of ongoing reflection of my idea and work
- What ACCESS FM and what does it stand for
- How to use it to ensure your product is to the best of your ability but also still aligning to the client and the ideas of the 'brief'

Task Description

Done?

Homework booklet 1 'Isometric drawing practice'

Duration – 30 minutes minimum on each of the tasks



Draw the following images on plain paper using isometric styled drawing

Use a pencil and a RULER!!!!

Draw the following images on isometric paper (on teams to print or pick some up in class) using isometric styled drawing

Use a pencil and a RULER!!!!



Create a poster based on the ACCESS FM words (Link to all DT not just phone stands)



On plain paper (you can collect from C4).
 Fold the paper in half twice (so you have 4 pieces on each side).
 Draw out 8 different phone stand designs and what you think they should look like. Following different things your life (seasons, football, Olympics, animals, colours, school subject, your name, maybe one for a friend etc.



Create a mind map or list of different things you like and are interested in to help you develop ideas for your phone stand in class. Try and fill a whole A4 page.

Have a look at watching some 2D Design tutorials on YouTube specifically beginner ones to help you remember in class.

Write down key parts that you think would be helpful in class.

- How to vectorise an image
- How to change the size of the paper
- How to use the shape and lien tools
- How to fully delete and partially delete things.