

Knowledge Organiser

Year 7

Term 3
2024/25



The Abbey
School

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Term 3 Year 7 Skellig

Term Focus

- Explore how a writer creates a successful narrative
- Craft and organise your own writing to produce a successful narrative
- Understand how a poem is put together
- Analyse how a writer presents meaning through their choice of language



Prior Learning Links

- 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.
- Creative writing tasks will continue to develop the stamina to write at length.
- Revision of subject terminology including language techniques and the effects on the reader

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
Aspirin: a type of pain relief.	Narrative Hook: used at the opening of a story to engage the reader
Arthritis: A condition causing pain and swelling in the joints.	Narrative Arc: the structure and shape of a story.
Ailment: An illness, typically a minor one.	Genre: a style or category of art, music, or literature.
Bluebottles: an insect and large fly.	Cliché: an overused phrase.
Daedalus: a figure from Greek mythology – crafted wings for his son Icarus.	Inference: the reader makes conclusions and decisions based on the evidence presented in the text.
Demolition: the act of destroying completely.	Deduction: the process of reaching a conclusion - it's like solving a puzzle by putting together the pieces you already have
Derelict: In very poor condition because of disuse and neglect.	Simile: A comparison of two things using the words, like or as.
Dilapidated: In a state of disrepair or ruin due to age or neglect.	Metaphor: A metaphor is a creative way of describing something by comparing it to something else that is not literally true.

Famished: extremely hungry.	Foreshadowing: an advance sign or warning of what is to come.
Fossil: the remains of a one living organism	Setting: the time and place in which the story takes place; provides the backdrop to the story and helps create mood.
Stench: an offensive, distinctly unpleasant smell	Tension: refers to the feeling of suspense, excitement, or anxiety that a writer creates in a story
Wilderness: an area of land which has been untouched and grows wildly	Motif: a recurring image, symbol, theme, character type.

1. What is the effect of a narrative hook?

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Genre

Genre is a type or category: for example, books, music and films are sorted in genres. Each genre is characterised by similarities in form, style and content – a genre has its own themes and conventions which gives each genre a clear distinction from the other.

Examples

Romance, Horror, Adventure, Mystery, Fantasy. Do you know any other genres?

Narrative Hook

A **narrative hook** is a device used by a writer to engage the interest of the reader. Narrative hooks are often used at the **beginning** of a novel to draw the reader into the story.

Examples

The Hunger Games by Suzanne Collins:

- 'When I wake up, the other side of the bed is cold' – [What type of narrative hook is this?](#)

The Hobbit by J.R.R. Tolkien:

- 'In a hole in the ground there lived a hobbit' – [What type of narrative hook is this?](#)

Narrative Arc

Climax: suspense is at its highest and matters are most threatening.

Complicating action: the lives of the characters are complicated in some way.

Falling action: the character/s work to solve the problem / conflict.

Exposition: the opening sets the scene and introduces characters.

Narrative Arc

Resolution: a solution for the complication is introduced – it may not be a happy one!

2. What makes an effective setting?

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Key Quotations: Chapter 2 and 3

Key quotations

“they took one look at the place and said they wouldn't go in it”

“the bricks were crumbling”

“Pile of bricks”

“old chests of drawers and broken wash basins and bags of cement”

“the door creaked and cracked”

“Rusty nails were scattered on the floor”

“kitbags that hung from the roof”

“million woodlice”

“Everything was covered in dust and spiders' webs”

“ancient newspapers and magazines”

GOMASSIVE

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 **ainted** delicate white pictures on the ground as it fell gently from the sky*

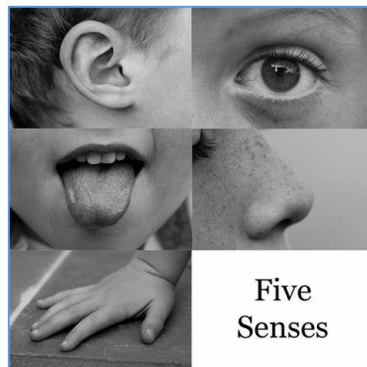
Pathetic fallacy: giving human feelings to something non-human.

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

Senses

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.

3. What makes an effective description of a character?

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Cliché

A cliché is a phrase that has been overused and has lost its imaginative effect.

- Don't judge a book by its cover.
- Home is where the heart is.
- Actions speak louder than words.

Simile

A comparison of two things using the words, like or as.

Example

On her first day at school Jane was as cool as a cucumber.

Metaphor

A metaphor is a creative way of describing something by comparing it to something else that is not literally true.

Example

Noah has the heart of a lion.

4. What makes effective inference and deduction?

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Inference

Inference means the reader makes conclusions and decisions based on the evidence presented in the text.

Inference means reading between the lines and understanding the deeper meanings of the text that are not explicitly stated by the writer.

A reader will **infer** ideas from the text using their background knowledge and clues from the text to interpret and understand the underlying messages.

Deduction

Deduction is the process of reaching a conclusion - it's like solving a puzzle by putting together the pieces you already have.

Tension

Tension refers to the feeling of suspense, excitement, or anxiety that a writer creates in a story to keep readers engaged and on the edge of their seats.

Tension makes readers eager to know what happens next and keeps them invested in the narrative.

5. What makes effective verbs?

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Verb

A **verb** is an action or doing word.

An **effective verb** will vividly convey an action will enhances the impact, and engagement of your writing.

Examples

Instead of walked, use: strolled, marched, or tiptoed.

Which is more effective?

The thunder was **loud**.

The thunder **roared**.

6. What is the effect of description, dialogue and action?

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Description = how the character looks, feels, behaves.

Dialogue = what the characters say.

Action = what the characters do.

APE

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 ...  <small>©HMSPELACH</small>	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...  <small>©HMSPELACH</small>	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...  <small>©HMSPELACH</small>
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7. What is foreshadowing? What is a motif?

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Foreshadowing

Foreshadowing is a structural technique used by the writer to give hints or clues about what will happen later in the story.

Foreshadowing creates anticipation and prepares the reader for future events, often building tension.

Motif

A motif is a recurring image, symbol, theme, character type, or other narrative detail, that informs the reader of the main themes or a text. Motifs contribute to the overall meaning of a narrative.

Examples in Skellig

Birds and wings: The motif of birds and wings symbolises freedom, change, and the connection between heaven and earth. Skellig's physical wings and his connection with owls highlight this motif, representing the potential for change and growth.

Family: The motif of family and support is presented through Michael's relationship with his parents and the arrival of his poorly baby sister. This motif highlights the importance of love, care, and the strength found in family relationships during times of crisis.

Angels and spirituality: Angelic imagery and references to angels in Skellig emphasises the themes: hope, protection, and heaven. Skellig's unclear character blurs the line between humans and angels and encourages the reader to explore spiritual ideas.

Which other motifs can you identify in Skellig?



8. What makes effective metaphors?

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Reminder

Metaphor

A metaphor is a creative way of describing something by comparing it to something else that is not literally true.

The Schoolboy by William Blake

Highlight the metaphors.

I love to rise in a summer morn
When the birds sing on every tree;
The distant huntsman winds his horn,
And the sky-lark sings with me.
O! what sweet company.

But to go to school in a summer morn,
O! it drives all joy away;
Under a cruel eye outworn,
The little ones spend the day
In sighing and dismay.

Ah! then at times I drooping sit,
And spend many an anxious hour,
Nor in my book can I take delight,
Nor sit in learning's bower,
Worn thro' with the dreary shower.

How can the bird that is born for joy
Sit in a cage and sing?
How can a child, when fears annoy,
But droop his tender wing,
And forget his youthful spring?

O! father & mother, if buds are nip'd
And blossoms blown away,
And if the tender plants are strip'd
Of their joy in the springing day,
By sorrow and care's dismay,

How shall the summer arise in joy,
Or the summer fruits appear?
Or how shall we gather what griefs
destroy,
Or bless the mellowing year,
When the blasts of winter appear?

9 What makes a successful essay? APE

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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.

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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9. Paragraphs

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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. Powerful Vocabulary

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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 words.

11. Skellig Chapter's 1-15 Summary

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Chapter 1-3:

- Michael and his family move into a run-down house. Michael's parents are preoccupied with his baby sister, who is very ill. Michael explores the dilapidated garage and discovers a mysterious creature.

Chapter 4-6:

- Michael returns to the garage and offers food and drink to the creature, who seems human yet not entirely. Michael meets Mina, a curious and intelligent girl who is home-schooled. They begin to form a friendship.

Chapter 7-9:

- Michael's concern for the creature grows, and he enlists Mina's help. Together, they discover that the creature has wings. Michael learns more about Mina's unique perspective on life and nature.

Chapter 10-12:

- Michael's baby sister's health worsens, causing stress and worry in the family. Michael continues to care for the creature. Michael and Mina name him Skellig.

Chapter 13-15:

- Skellig begins to reveal more about himself and his mysterious nature. Mina and Michael try to keep him a secret, balancing their interactions with their personal struggles and responsibilities.

HOME LEARNING TASKS

Task Description	Done?
Research who William Blake.	
Practise creating your own similes and metaphors.	
Reading of your library book 15-20 minutes every day and complete quiz.	
Write a poem based on a theme or character from Skellig.	
Research the concept of angels in different cultures.	

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

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- **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

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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

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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

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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.**



7. Spellings

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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

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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

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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 3

Unit 4 – Decimals and measures

Unit 5 – Fractions and percentages

TERM FOCUS –

How do we calculate with decimals?

How do we measure the size of a 2D shape?

Prior Learning Links

Identify that value of each digit in numbers given to 3 decimal places and multiply numbers by 10, 100 and 1000.

Multiply whole numbers by a number with two decimal places

Round to specific degrees of accuracy

Use common factors to simplify a fraction.

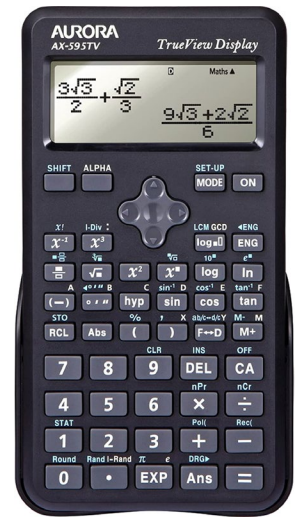
Compare and order fractions.

Future Learning Links

Links to Year 8 – Unit 6 Decimals.

Year 8 focuses more on the idea of ratio with decimals, so a solid understanding of decimals is needed.

Furthermore, decimals come up in other areas such as standard form, error intervals and FDP.



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.

1. How do I order decimals?

Red Amber Green

Ordering Decimals

0.3, 0.21, 0.305, 0.38, 0.209

Add zero's so that they all have the same number of decimal places and line them up.

0.300
0.210
0.305
0.380
0.209

Then they can be placed in order:

0.209, 0.21, 0.3, 0.305, 0.38

If asked for ascending order, arrange from smallest to largest.

If asked for descending order, arrange from largest to smallest.

2. How do I round decimals?

Red Amber Green

1 ← 1.1 1.2 1.3 1.4 | 1.5 1.6 1.7 1.8 1.9 → **2**

If the tenths digit is 1, 2, 3 or 4, we round down to the nearest whole number. If the tenths digit is 5, 6, 7, 8 or 9, we round up to the nearest whole number.

1.1 ← 1.11 1.12 1.13 1.14 | 1.15 1.16 1.17 1.18 1.19 → **1.2**

If the hundredths digit is 1, 2, 3 or 4, we round down to the nearest tenth. If the hundredths digit is 5, 6, 7, 8 or 9, we round up to the nearest tenth.

Rounding to the nearest 1000

2000 ← 2499 | 2500 → 3000

round down round up

Rounding to the nearest 10 000

20 000 ← 24 999 | 25 000 → 30 000

round down round up

Stay or round up? CHECK

1.36801

1.37

1.36801 (2dp) = 1.37

Stay or round up? CHECK

2.79

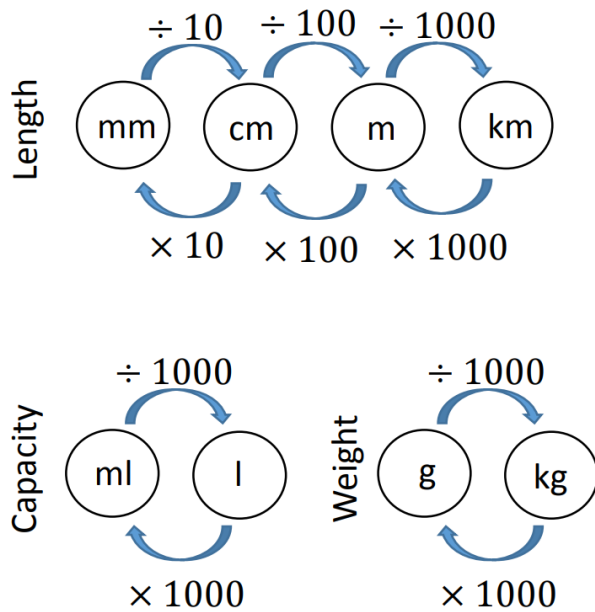
2.8

2.79 (1dp) = 2.8

Find your place, then look next door; If it's 5 or greater, add one more. If it's 4 or less, just ignore

3. How do I convert metric units?

Red Amber Green



4. How do I add and subtract decimals?

Red Amber Green

Column addition and subtraction

$$\begin{array}{r} 5.649 \\ + 39.27 \\ \hline 44.919 \end{array}$$

Addition: Starting with the digit on the right, add each column in turn. Regroup tenths, tens, hundreds etc as required.

$$\begin{array}{r} 3.47 \\ - 1.59 \\ \hline 1.88 \end{array}$$

You must remember to borrow if you can't subtract with the numbers you have.

Subtraction: Starting with the digit on the right, subtract each column in turn. Exchange tenths, tens, hundreds etc as required.

5. How do I multiply with decimals?

Red Amber Green

Column multiplication

Question: 1.54×2.6

Now 154×26

1	5	4	
×	2	6	
	9	2	4
3	0	8	0
4	0	0	4
1	1		

We multiplied by 1000 to get rid of the decimal points because there are 3 numbers in total after the point in the question.

Multiply the whole numbers.

Divide your answer by 1000.

Answer = 4.004

6. How do I divide with decimals?

Red Amber Green

Division: Set up your question as shown. Starting from the left divide the number under the bus stop by the number on the outside. Any remainders must be carried to the next value along. Continue this process until you have got to the end of the number you are dividing.

$8.12 \div 4$

	2	0	3
4	8	1	2

You must carry any remainders here.

$0.5 \overline{) 6.85}$

To divide a decimal by a decimal we need to multiply both values until the number we are dividing by is a whole number. Then we would divide as before.

$5 \overline{) 68.5} \rightarrow 5 \overline{) 68.5}$

don't need

7. How do I multiply and divide by powers of 10?

Red Amber Green

Key Concept

Multiply/Divide by powers of 10

10 000	1000	100	10	1	•	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$
					•			

<p>Multiplying</p> <p>X 10 digits move LEFT 1 space X 100 digits move LEFT 2 spaces X 1000 digits move LEFT 3 spaces</p> <p style="text-align: center;">←</p>		<p>Dividing</p> <p>÷ 10 digits move RIGHT 1 space ÷ 100 digits move RIGHT 2 spaces ÷ 1000 digits move RIGHT 3 spaces</p> <p style="text-align: center;">→</p>
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Helpful Tips



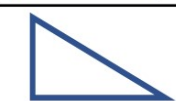


Moving left for multiplication makes the number larger.

Moving right for division makes the number smaller.

8. What are the different 2D shapes that I need to know?

Red Amber Green

2D Shapes

	Parallelogram
	Trapezium
	Right-angled triangle
	Isosceles triangle
	Equilateral triangle

9. What is the difference between area and perimeter?

Red Amber Green

Key Words

Area: The amount of square units that fit inside the shape.

Perimeter: The distance around the outside of the shape.

Dimensions: The lengths which give the size of the shape.

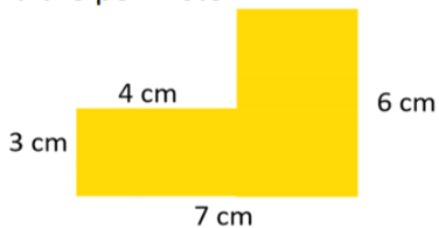
Shapes:

Rectangle, Triangle, Parallelogram, Trapezium, Kite.

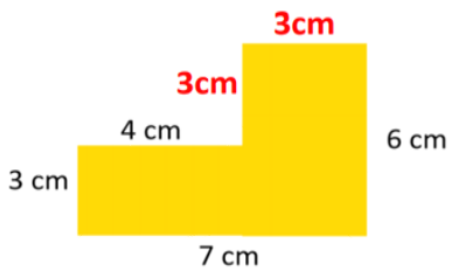
10. How do I find the perimeter of a shape?

Red Amber Green

Find the perimeter



Step 1 – Find the missing lengths.



Step 2 – Add the lengths

$$3 + 4 + 3 + 3 + 6 + 7 = \underline{26 \text{ cm}}$$

11. How do I find the area of different shapes?

Red Amber Green

Key Concepts
Area

$A = l \times w$
 $A = b \times h$
 $A = \frac{1}{2} (b \times h)$
 $A = \frac{1}{2} (a + b)h$

12. Key examples of calculating area and perimeter

Red Amber Green

Examples

$Area = 2 \times 4 = 8m^2$
 $Area = \frac{1}{2} (10 \times 12) = 60cm^2$
 $Area = 5 \times 14 = 70mm^2$
 $Area = (5 \times 3) + (2 \times 5) = 25cm^2$

HOME LEARNING TASKS

Task Description	Done?
Decimal place value M522	
Using a written method to multiply decimals M803	
Using a written method to divide by integers to get a decimal answer M262	
Rounding decimals M431	
Finding areas using grids M900	
Finding perimeters using grids M920	
Finding the area of rectangles M390	
Finding the perimeter of rectangles and simple shapes M635	
Finding the area of compound shapes M269	
Finding the perimeter of compound shapes M690	
Finding the area of triangles M610	
Finding the area of compound shapes containing triangles M996	

Finding the area of parallelograms M291	
Finding the area of trapeziums M705	

Science Year 7 Block 4 – Energy stores and transfers

TERM FOCUS – Energy stores and transfers

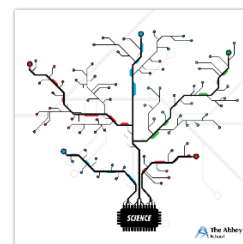
Big Ideas –

Prior Learning Links

KS2 – Properties and changes of materials
KS2 and 3 – Working scientifically

Future Learning Links

KS4 - Energy



1. What is energy and how is energy stored?

Red

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Types of Energy:

1. **Kinetic Energy:** The energy an object has due to its motion.
2. **Potential Energy:** Stored energy due to an object's position or state (e.g., gravitational potential energy, chemical potential energy).
3. **Thermal Energy:** The energy of particles in motion, related to temperature.
4. **Chemical Energy:** Stored in the bonds of chemical compounds, like food, fuel, and batteries.
5. **Electrical Energy:** Energy stored in electrical charges and used to power devices.
6. **Nuclear Energy:** Stored in the nucleus of atoms and released during nuclear reactions.
7. **Radiant Energy:** Energy carried by electromagnetic waves (e.g., light, radio waves).

How is Energy Stored?

Energy can be stored in various ways depending on its type. Here are some common methods of storage:

1. **Chemical Energy Storage:**
 - **Batteries:** Store electrical energy chemically in rechargeable or non-rechargeable cells. When the battery is used, the chemical reactions release energy as electricity.
 - **Fuels (e.g., gasoline, natural gas):** Store chemical energy that is released through combustion (burning).
 - **Food:** Stores chemical energy that can be converted by our bodies into kinetic energy for movement or thermal energy for heat.
2. **Mechanical Energy Storage:**
 - **Spring Mechanisms:** A compressed spring stores potential energy, which can be released as kinetic energy when the spring returns to its original position.
 - **Flywheels:** Store rotational kinetic energy, which can be released when needed (used in some power systems).
3. **Gravitational Potential Energy:**
 - **Water reservoirs (e.g., in hydroelectric dams):** Water stored at a height has gravitational potential energy, which can be converted to kinetic energy to drive turbines and generate electricity when released.
 - **Elevated objects:** Lifting an object to a certain height stores gravitational potential energy, which is released when the object falls.
4. **Thermal Energy Storage:**

- **Hot water or molten salt systems:** Store heat energy, which can be used later for heating or power generation.
 - **Phase change materials:** Substances that absorb or release energy when they change states (e.g., from solid to liquid). These can store thermal energy effectively.
5. **Electrical Energy Storage:**
- **Capacitors:** Store electrical energy in an electric field and release it quickly when needed (useful in short bursts of energy).
 - **Supercapacitors:** Like capacitors but with a much higher energy density, allowing for longer energy storage.
6. **Nuclear Energy Storage:**
- **Nuclear fuel:** Energy is stored in the nuclei of atoms and released during nuclear reactions (e.g., fission in nuclear power plants or fusion in the sun)

2. What is useful and wasted energy and how can energy be conserved?

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Useful Energy is the energy that is transferred or converted into a desired form that is useful for the task or process at hand. It is the energy that does work, such as:

- **In a light bulb:** The useful energy is the light it emits.
- **In a car engine:** The useful energy is the mechanical energy used to move the car.

Wasted Energy refers to energy that is not converted into the desired form and is lost to the surroundings, often in forms like heat, sound, or light that do not contribute to the intended work. For example:

- **In a light bulb:** The wasted energy is the heat emitted by the bulb.
- **In a car engine:** Wasted energy is the heat produced by friction and combustion.

Energy conservation involves reducing energy consumption by using less energy or making processes more efficient. Here are several ways energy can be conserved:

1. Improve Efficiency:

- Use energy-efficient appliances (e.g., LED lights, energy-efficient HVAC systems).
- Insulate buildings to prevent heat loss and maintain temperature with less energy.
- Use efficient engines and machines that minimize wasted energy, such as electric motors with high energy conversion efficiency.

2. Reduce Energy Waste:

- Turn off electrical appliances when not in use.
- Use devices that can be programmed to automatically shut off, like smart thermostats or lights.
- Unplug electronic devices that consume power even when turned off (standby power consumption).

3. Use Renewable Energy:

- Shift to renewable energy sources like solar, wind, and hydro power, which are more sustainable and less wasteful in their energy production compared to fossil fuels.

4. Behavioral Changes:

- Encourage habits like walking or cycling instead of driving for short trips.
- Use public transportation or carpool to reduce fuel consumption.
- Adjust thermostats to more energy-efficient settings (e.g., lowering heat in winter and using fans in summer).

5. Energy Recovery:

- Implement systems that capture and reuse wasted energy, like heat recovery ventilators in buildings or regenerative braking systems in electric vehicles.

3. How is energy efficiency calculated?

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Energy efficiency is a measure of how well energy is used to perform a task, and it is often expressed as a percentage. In KS3 science, the calculation of energy efficiency involves comparing the useful energy output to the total energy input. Here's the basic formula:

Steps to Calculate Energy Efficiency:

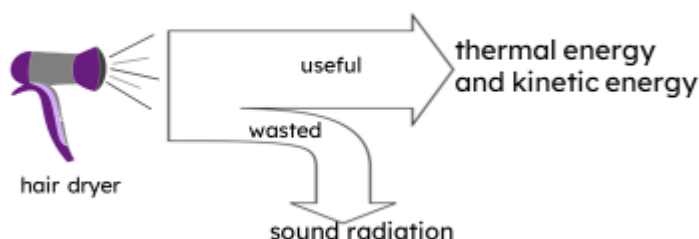
1. **Identify the Useful Energy Output:** This is the energy that is used to perform the desired task (e.g., light energy from a light bulb, kinetic energy from a car).
2. **Identify the Total Energy Input:** This is the total amount of energy supplied to the system (e.g., electrical energy provided to the light bulb or the car's engine).
3. **Apply the Formula:** Divide the useful energy output by the total energy input and multiply by 100 to get the efficiency as a percentage.

Example:

If a light bulb uses 100 joules of electrical energy (input) and produces 20 joules of light energy (useful output), the energy efficiency can be calculated as:

This means the light bulb is 20% efficient at converting electrical energy into light, and the rest is lost as heat or other forms of energy.

When energy is transferred in a system, some transfers can be 'wasted' to unwanted energy stores.



Wasted energy is often **dissipated** as infrared radiation heating the thermal energy store of the surroundings or by sound radiation.

4. How is energy transferred through conduction?

Red

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Conduction is the process by which energy, typically heat, is transferred through a material without the material itself moving. It happens in **solids** (mainly metals), where particles are tightly packed together.

Here's how **energy is transferred through conduction**:

1. **Heating the material:** When one part of a solid object is heated (for example, the end of a metal spoon in a hot drink), the particles at that end gain energy.
2. **Particle vibration:** The heated particles begin to vibrate more quickly because they have more energy. These particles collide with their neighboring particles, transferring some of their energy to them.
3. **Energy transfer:** This process continues as the energy is passed from one particle to the next. Each particle vibrates and passes on the energy to the particles next to it.
4. **Spread of energy:** Over time, the energy spreads through the material, causing it to heat up. This continues until the whole object is at the same temperature, or the heat source is removed.

5. How can we investigate thermal energy transfer by conduction?

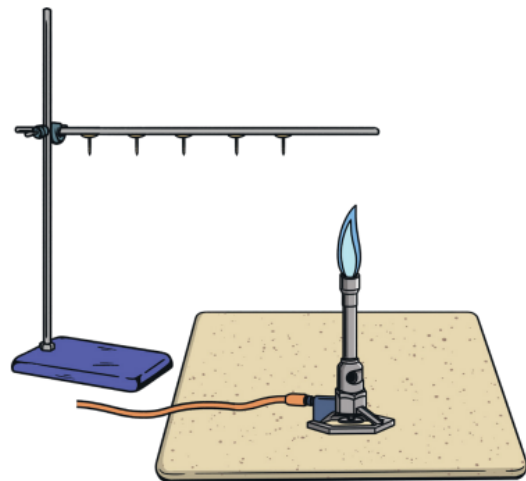
Red

Amber

Green

Method

1. Attach the metal rod to the clamp stand.
2. Dip the head of a drawing pin into the petroleum jelly and stick it to the underside of the metal rod, near to the clamp stand.
3. Repeat for the other four drawing pins, using the ruler to place them at regular intervals along the metal rod.
4. Place the Bunsen burner onto the heatproof mat underneath the free end of the metal rod.
5. Light the Bunsen burner and start the timer. Record the time taken for each drawing pin to fall.



6. How is energy transferred by convection?

Red

Amber

Green

Convection is a method of heat transfer that occurs in **fluids** (liquids and gases). It happens when the warmer part of the fluid rises and the cooler part sinks, creating a cycle that transfers energy. Here's how it works:

1. **Heating:** When a fluid (like water or air) is heated, the particles in the fluid gain energy and start moving faster. This makes the particles spread out, causing the heated part of the fluid to become **less dense**.
2. **Rising of warm fluid:** Because the warm fluid is less dense, it rises to the top, pushing the cooler, denser fluid down.
3. **Cooling:** As the warm fluid rises, it starts to lose heat and cool down. The cooler fluid, which is denser, sinks back down.
4. **Cycle:** This process creates a circular movement known as a **convection current**. The fluid is constantly being heated, rising, cooling, and sinking, transferring heat energy throughout the fluid.

Example:

- **In water:** If you heat a pot of water, the water near the bottom heats up, rises to the top, and cooler water sinks to take its place. This cycle continues, distributing heat throughout the pot.
- **In the atmosphere:** Warm air near the ground rises and cooler air sinks, which can lead to wind and weather patterns.

Convection is important in various natural processes like ocean currents, weather systems, and even the heating of your home using radiators.

7. How is energy transferred through radiation?

Red

Amber

Green

Energy transfer through radiation refers to the way heat or energy is transferred through electromagnetic waves, such as light, infrared radiation, or other types of radiation, without needing a medium (like air or water) to travel through. This is different from other types of heat transfer, such as conduction (through solids) and convection (through liquids and gases), where particles are involved.

Here's how it works:

1. **Electromagnetic Waves:** Radiation transfers energy in the form of electromagnetic waves. These waves can travel through a vacuum (space) or through air. Unlike conduction and convection, radiation doesn't require particles or matter to carry the energy.
2. **Infrared Radiation:** Most of the heat we feel from objects (like the Sun or a heater) is transferred via infrared radiation. All objects emit infrared radiation, and the amount of energy emitted increases with the temperature of the object. This is why we feel warmth from things even when we aren't touching them.
3. **No Need for a Medium:** Radiation can travel through a vacuum (space), unlike conduction and convection, which need a material to transfer the energy. This is why energy from the Sun can travel through the vacuum of space to Earth.
4. **Absorption:** When radiation reaches an object, it can be absorbed, reflected, or transmitted. If the object absorbs the radiation, its energy increases, and it may become warmer.
5. **Examples:**
 - The Sun's energy reaches Earth through radiation.
 - A fire gives off heat, which radiates in all directions.
 - A radiator or heater radiates infrared energy, warming the air and objects around it.

In summary, radiation transfers energy in the form of electromagnetic waves, which travel through space or air, and is absorbed by objects that then get warmer.

8. What is insulation and how can insulators be used?

Red

Amber

Green

Insulation refers to materials or substances that reduce the transfer of heat, sound, or electricity. In the context of heat insulation, it helps prevent heat from moving in or out of a space, making buildings warmer in winter and cooler in summer. For electric insulation, it stops the flow of electrical current and prevents short circuits.

How Insulators Work:

1. **Heat Insulation:** Insulating materials trap air in small pockets. Air is a poor conductor of heat, so the trapped air prevents heat from passing through. This is why materials like wool, foam, and fiberglass are used in homes, jackets, and other items to keep warmth in.

2. **Electric Insulation:** Materials like rubber, plastic, and glass are used to cover wires and electrical equipment to keep the electricity flowing safely within the circuits. These materials don't allow electricity to pass through, preventing shocks or fires.

Types of Insulators and Their Uses:

- **Heat Insulators:**
 - *Wool, fiberglass, and foam* are used in home insulation (e.g., in walls, lofts, and windows) to keep heat from escaping.
 - *Thermal jackets or thermal blankets* use insulating materials to keep the heat close to the body.
- **Electric Insulators:**
 - *Plastic or rubber* is commonly used to cover wires, plugs, and electrical devices to prevent electric shocks.
 - *Glass* can be used in power lines and other electrical components for the same reason.
- **Sound Insulators:**
 - Materials like *foam or carpet* can also block sound from traveling through walls or floors, making rooms quieter.

Why Insulators are Important:

- **Prevent Energy Loss:** Insulators help prevent the loss of heat or energy, making systems more efficient. This can be important in both everyday life (like keeping homes warm) and in scientific contexts (like keeping liquids at a certain temperature in experiments).
- **Safety:** In electrical circuits, insulators ensure that current only flows where it is meant to, preventing accidents.
- **Energy Conservation:** Using insulators effectively helps conserve energy, which can have environmental and economic benefits.

Understanding how different materials can be used as insulators teaches students about energy transfer, efficiency, and safety in practical applications.

9. What materials make the best insulators? Red Amber Green

Insulation Investigation Method

Equipment

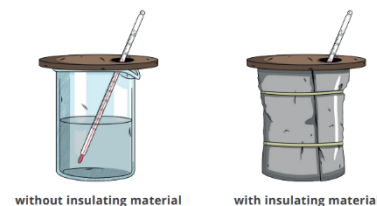
5 beakers
 insulating materials (e.g. bubble wrap, newspaper, cotton wool, fabric)
 5 cardboard lids with holes for thermometers
 5 thermometers
 stopwatch/timer
 sticky tape or elastic bands
 kettle

Risk Assessment

Hazard	Harm It Can Do	How You Will Minimise the Risk
broken glassware	The sharp edges can cause cuts to the skin.	Ensure the floor is clear of obstacles. Dispose of any broken glass in the glass bin and sweep the surface clear.
hot water	The hot water can cause burns or scalds. There is a risk of falls if water is spilt on the floor.	Do not touch the beakers once the hot water has been poured in. Ensure the floor is clear of obstacles. Place the beaker away from the edge of the bench. Mop up any spills immediately. Place any scalds under running water immediately and tell the teacher.

Method

1. Fully wrap the sides of four of the beakers with insulating material and secure with a small piece of sticky tape or an elastic band. Use a different material for each beaker. Leave one beaker without any insulating material.
2. Use the kettle to heat some water.
3. Carefully pour hot water into each beaker so that it is half full. Use the same volume of water for each beaker.
4. Place a lid on top of each beaker and put the thermometer through the hole in the lid.
5. Measure and record the start temperature of the water in each beaker.
6. Start the timer and record the temperature of the water in each beaker after 15 minutes.



10. What is power and what is its relationship to energy? Red Amber Green

Power and **energy** are related but different concepts.

What is Power?

Power is the rate at which energy is transferred or converted. It measures how quickly work is done or energy is used. The unit of power is the **watt (W)**, where 1 watt is equal to 1 joule of energy transferred per second.

What is Energy?

Energy is the ability to do work or cause change. It exists in various forms, such as heat, light, sound, and kinetic (movement) energy. The unit of energy is the **joule (J)**.

The Relationship Between Power and Energy:

The relationship between power and energy can be described with the formula:

$$\text{Power} = \frac{\text{Energy}}{\text{Time}}$$

This means that:

- If a device uses a lot of energy quickly, it has high power.
- If the same amount of energy is used slowly, the power is lower.

For example:

- A light bulb that uses 100 joules of energy in 1 second has a power of 100 watts.
- If the same 100 joules of energy were used over 10 seconds, the power would be 10 watts.

In summary, **power** tells us how fast energy is being used, while **energy** tells us how much work can be done.

11. How is energy used in the home and how much does it cost?

Red

Amber

Green

In the home, energy is used in various ways to power appliances, heat the space, and provide hot water. Here's a breakdown of how energy is used in the home and its cost:

1. Heating

- **Energy Source:** Gas, electricity, oil, or renewable sources (e.g., solar panels, heat pumps).
- **How it's used:** Energy is used to heat the home, either through central heating systems (radiators, underfloor heating) or electric heaters.
- **Cost:** Heating is often the biggest energy cost in a home, especially during winter. The cost depends on the energy source used and how much heat is needed.

2. Lighting

- **Energy Source:** Electricity.
- **How it's used:** Energy is used to power light bulbs, such as LED, fluorescent, or incandescent bulbs, in the home.
- **Cost:** Lighting costs are typically lower than heating but can add up depending on the number of lights and how long they are on.

3. Cooking

- **Energy Source:** Gas or electricity.
- **How it's used:** Energy is used in the kitchen for cooking on gas stoves, electric cookers, ovens, or microwaves.
- **Cost:** The cost depends on the type of appliance used (gas is often cheaper than electricity) and how often it is used.

4. Hot Water

- **Energy Source:** Gas, electricity, or renewable energy.
- **How it's used:** Energy is needed to heat water for showers, baths, washing dishes, and other daily activities.
- **Cost:** Heating water can be a significant cost, especially if electric water heaters are used.

5. Appliances

- **Energy Source:** Electricity.
- **How it's used:** Energy is used to power household appliances like refrigerators, washing machines, dishwashers, and televisions.
- **Cost:** Energy-efficient appliances use less electricity, reducing costs, but large appliances (like fridges or washing machines) that run often can still add up.

6. Electronics and Devices

- **Energy Source:** Electricity.
- **How it's used:** Energy is used to power devices like computers, phones, tablets, gaming consoles, and more.
- **Cost:** The cost can vary, but chargers and devices that stay plugged in or in standby mode use energy, known as "standby power."

Energy Costs

The total cost of energy depends on factors like:

- **Energy prices:** These vary depending on location and the provider.
- **How much energy you use:** The more energy you use, the higher the costs.
- **Efficiency:** Using energy-efficient appliances and insulating your home can reduce the amount of energy needed, which lowers costs.

Example Cost Breakdown

- **Heating:** A typical gas central heating system can cost around £600-£1,500 per year, depending on the size of the home and usage.
- **Lighting:** LED bulbs use less energy than traditional incandescent bulbs, which can cost around £20 per year to power in a typical household.

- **Cooking:** Gas cooking can cost around £100-£300 per year, depending on usage.
- **Hot Water:** Heating water for a family can cost £200-£500 per year, depending on energy source and consumption.

Note: Energy prices vary and may change over time, so it's important to keep an eye on your energy bill and look for ways to reduce energy use, like switching to energy-efficient appliances or using less heating.

12. What are renewable and non-renewable energy resources?

Red

Amber

Green

Energy resources are divided into two main types: renewable and non-renewable. Here's a simple breakdown:

Renewable Energy Resources:

These are energy sources that **can be replenished naturally** and are **not limited in supply**. They are considered more environmentally friendly because they produce less pollution compared to non-renewable resources.

Examples include:

1. **Solar Energy** – Energy from the sun, captured using solar panels.
2. **Wind Energy** – Energy generated by the movement of air, captured by wind turbines.
3. **Hydroelectric Energy** – Energy produced from flowing water (like rivers or dams).
4. **Geothermal Energy** – Heat from the Earth's interior, often used for heating or electricity generation.
5. **Biomass** – Energy from organic materials, such as wood, plant matter, or animal waste, that can be burned or processed into biofuels.

Non-Renewable Energy Resources:

These are **limited** resources that take millions of years to form and **cannot be replaced** on a human timescale. Once they are used up, they are gone forever.

Examples include:

1. **Fossil Fuels** (coal, oil, natural gas) – These come from the remains of ancient plants and animals and are burned to produce energy.
2. **Nuclear Energy** – Energy produced by splitting atoms of uranium or plutonium in a nuclear reactor. Although it doesn't burn fossil fuels, the raw materials are finite and have environmental risks.

Key Differences:

- **Renewable resources** can be used repeatedly without running out.
- **Non-renewable resources** are limited and will eventually be exhausted.

HOME LEARNING TASKS

Task Description

Done?

1. Investigate the energy costs and energy efficiency in your own home using BBC Bitesize to help you. Use the following questions to help guide your investigation:

How is energy used in your home?

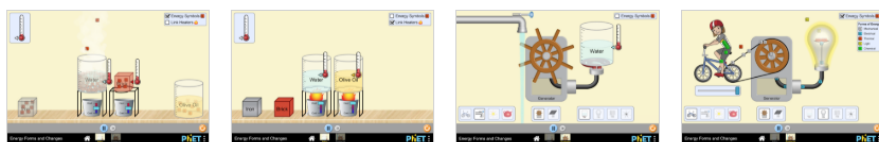
At what time in the day is more energy being used? Why is this?

What months throughout the year is energy consumption the highest in your home?

How much does the energy use cost in your home?

What changes could you make to conserve energy in your home?

2. Visit and interact with the Phet 'Energy Form and Changes' simulations.



Topics

- Conservation of Energy
- Energy Systems
- Energy Transfer
- Energy Conversion
- Heat Conduction

3. What careers can you think of rely on their knowledge of energy transfers to do their job? What did they have to do to be qualified to get that job? Did they need to go to university? What would the yearly salary (how much they are paid) be for the career you have researched? Do you think you would like to do any of the jobs you have discovered? If so, how could you start working towards it? If not, why not?

Science Year 8 Block 3 – Atoms, Elements, Compounds and Bonding

TERM FOCUS – What is all of the matter in the universe made of?

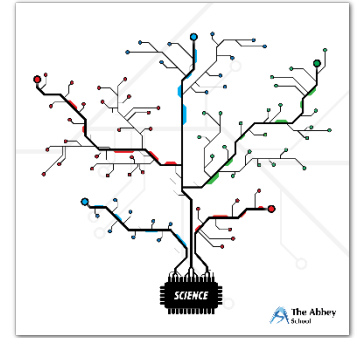
Big Ideas

Prior Learning Links

1. KS2 Particles
2. KS2 Atoms
3. KS2 Patterns of behaviour

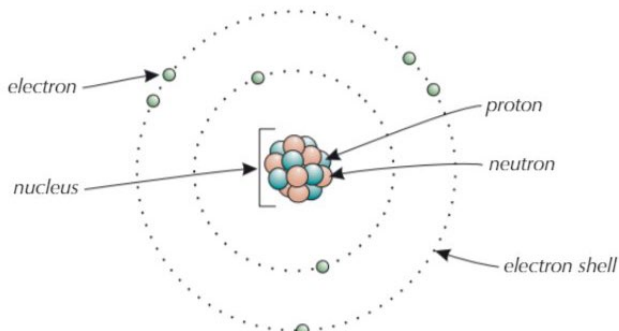
Future Learning Links

1. KS4 Chemistry, Atomic Structure
2. KS4 Chemistry, Bonding, Structure and properties of matter



1. What is the structure of an atom?

Red Amber Green

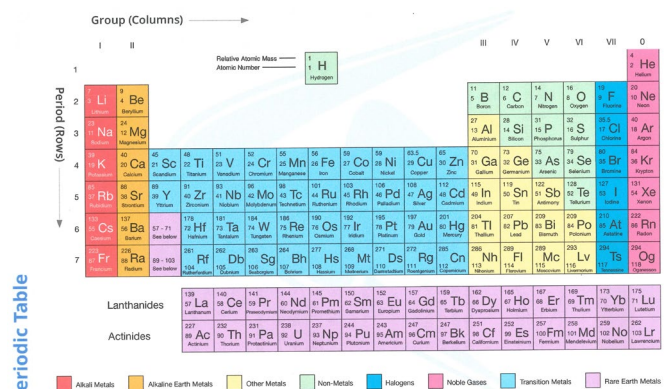


- Atoms are the smallest units of matter.
- They make up everything in the universe.
- They are formed from a central nucleus – this is where protons and neutrons are found.
- The shells around the atom are where we find the electrons..
- This model of the atom is not the first – Democritus (2000BC); John Dalton (1800's); Ernest Rutherford (1900's); Niels Bohr (1930's) have all improved on the model to get to this stage today.

2. How was the Periodic Table created and how is it organised?

Red Amber Green

- As in Biology, Scientists try to classify things and put them into groups with similar properties.
- This is the same thing with the periodic table.
- The person who managed to classify most of this was Dmitri Mendeleev.
- He arranged atoms initially in terms of their atomic weight but this was later changed to be their proton or atomic number.
- When the atoms are arranged in atomic number a set of repeating patterns show up.
- Examples of this include how the group 1 metals react with water.



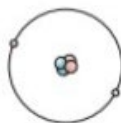
3. What is an element and how are they different from each other?

Red Amber Green

An atom with one proton in its nucleus is hydrogen.



An atom with two protons is helium.

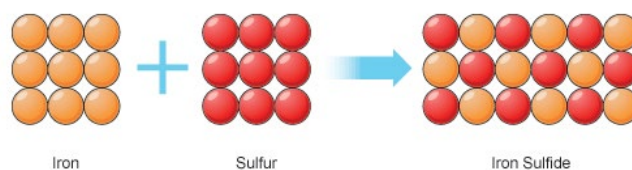


- Each element has its own individual number of protons – this gives the element its identity.
- The elements are arranged in terms of proton number in the periodic table.
- If the proton number for an atom is known then we can check its element name from the periodic table and vice versa.

4. What is a compound and how is it different from an element?

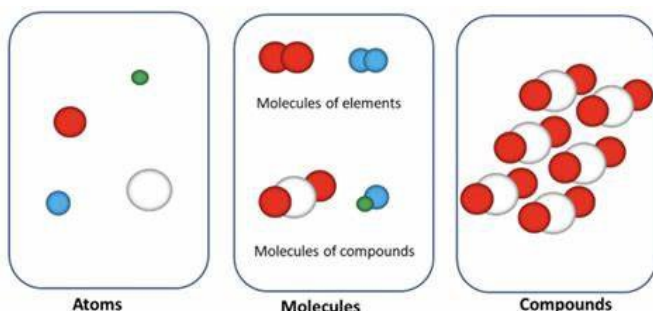
Red Amber Green

- A compound is made when different elements join together.
- They form strong chemical bonds between the elements to hold the compound together.
- The compound has very different properties from the original substances that it was made from.
- In the diagram Iron powder can be separated from Sulphur powder using a magnet.
- Once in compound form the Iron Sulphide is no longer magnetic and the iron and sulphur cannot be easily separated.



5. What are meant by the terms mixture, elements, compounds and pure substances?

Red Amber Green



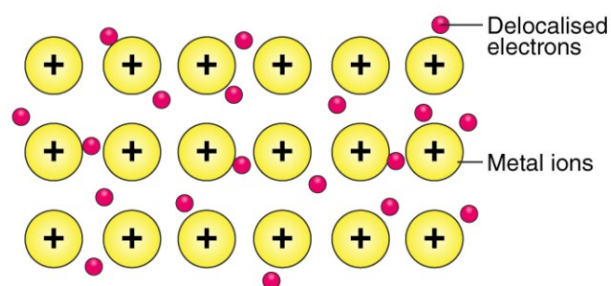
- A compound is made when two or more different atoms join together.
- A molecule is made when two or more atoms join together
- An element is made when all of the atoms in a molecule (or individual atoms) are exactly the same.

A substance is pure when all of the atoms are identical, when there are different atoms or elements or molecules present it is known as a mixture.

6. What are the key properties of metals and how do they behave?

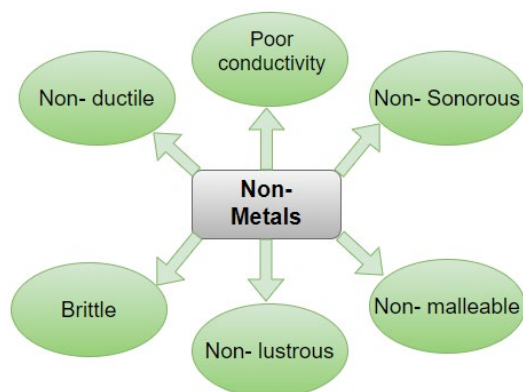
Red Amber Green

- Good conductors of heat – metals can transfer thermal energy quickly through their structure
- Good conductors of electricity – metals can conduct electrical energy due to the delocalised electrons.
- Metals are malleable – they can be hammered into a shape (example – A blacksmith making a horseshoe)
- Metals are ductile – they can be pulled into long shapes without breaking (example – a wire in a plug cable)



7. What are the key properties of non-metals and how do they behave?

Red Amber Green

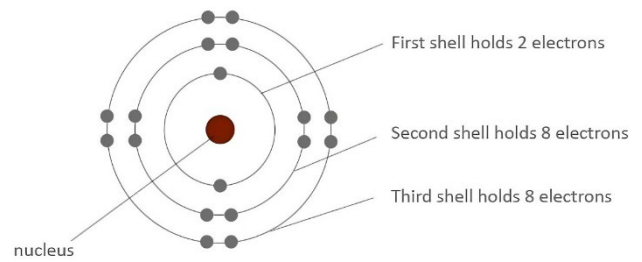


- Non Metals are poor conductors of heat and electricity, they are known as insulators.
- They are brittle (tend to snap when a force is applied) cannot be pulled into new shapes.
- They are not sonorous (have a ringing sound when hit).
- They are not shiny like metals usually are.

8. How are electrons arranged in an atom?

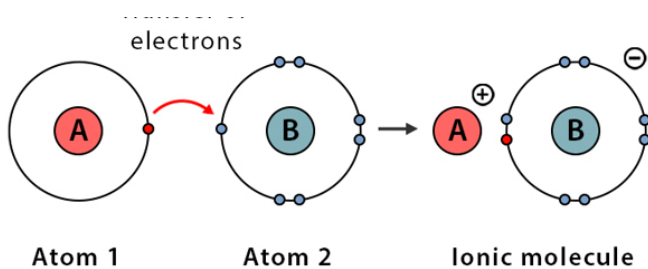
Red Amber Green

- In an atom the electrons fill the shells in a specific way.
- The first shell can hold a maximum of 2 electrons, once full move to the next shell out.
- The second shell can hold a maximum of 8 electrons, once full move to the next shell out.
- The third shell can hold a maximum of 8 electrons, once full move to the next shell out.
- The fourth shell can hold all the electrons for any atom you will get asked about right up to GCSE level.



9. What is an ionic bond and how is it formed?

Red Amber Green

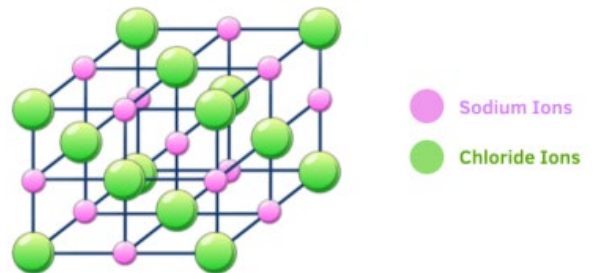


- An ionic bond is a type of bond that happens between metals and non-metals.
- The ionic bond occurs when electrons are transferred between atoms.
- The atom that loses an electron (the metal ion) becomes positively charged.
- The atom that gains an electron (the non-metal ion) becomes negatively charged.
- The two opposite charges attract to each other to form the bond.

10. What are the properties of ionic materials?

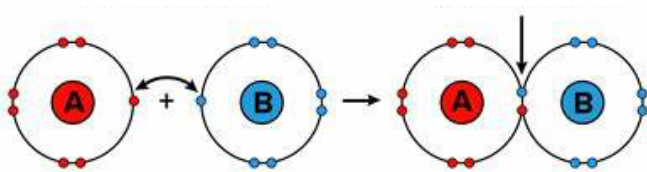
Red Amber Green

- Ionic materials form strong bonds with all other charged particles.
- These bonds hold the structure together with big forces so the ionic materials have very high melting and boiling points.
- They can usually dissolve in water (because water has a slight charge, the water can pull ions apart from each other).



11. What is a covalent bond and how is it formed?

Red Amber Green

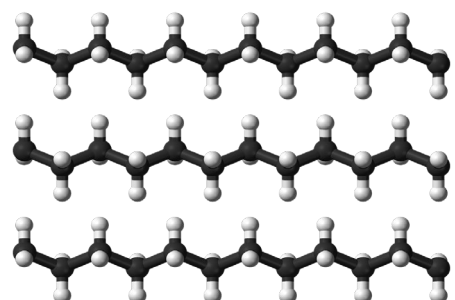


- This type of bonding happens between a non-metal and non-metals.
- Some elements for example Oxygen form their element molecules by sharing electrons with another Oxygen atom.
- Other compounds for example Methane are formed when different non-metals are bonded together (Methane = CH₄)
- The electrons in the outside shell are shared (this makes each atom appear to have a full outer shell of electrons which makes it stable)

12. How do polymers form and what are their properties?

Red Amber Green

- Polymers are long chains of carbon atoms that join together in a repeating pattern.
- Polymers are the basic structure that we use to make plastics.
- Different carbon units can be joined together to give polymers with different properties for example strength, flexibility, heat resistance giving the plastics many uses that are linked to these properties.



HOME LEARNING TASKS

Task Description	Done?
Learn the names and symbols of the first 20 elements in the periodic table – use look cover write check.	
Have a grown-up or friend draw out some circles, some joined together, some not, and decide which are atoms, elements, compounds or mixtures.	
Draw a diagram to show how Chlorine shares electrons to make a covalent bond	
Practice naming compounds from the list below:	
1. Iron + Sulphur →	
2. Magnesium + Oxygen →	
3. Calcium + Chlorine →	
4. Sodium + Nitrogen →	
5. Potassium + Fluorine →	
Complete a diagram showing the electron structure for Calcium.	
Describe with a dot and cross diagram how an ionic bond is formed.	

History Year 7 Term 3 – Middle Ages: Social

In this unit, students will explore the social changes in medieval England from 1066 to 1215, focusing on the Feudal System, the Church's influence, the Black Death, and the Peasants' Revolt. They will examine how these factors shaped the lives of different social groups, challenged the existing social order, and led to significant societal transformations. Throughout the unit, students will develop critical thinking skills by analyzing primary and secondary sources, comparing historical perspectives, and evaluating the interconnectedness of social, economic, and religious factors.



GCSE Pod

<https://members.gcsepod.com/shared/course/preview/37>

Prior Learning Links

- Year 7 Term 2: Middle Ages: Political

Future Learning Links

- Year 9 Term 1: Medicine Through Time

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: Social Generic Vocabulary

Authority: The power or right to give orders, make decisions, and enforce obedience.
Custom: A traditional and widely accepted way of behaving or doing something specific to a society, place, or time.
Epidemic: A widespread occurrence of an infectious disease in a community at a particular time.
Hierarchy: A system in which members of an organization or society are ranked according to their status or authority.
Influence: The capacity to have an effect on the character, development, or behavior of someone or something.
Institution: An established law, practice, or organization in society.
Serfdom: The social and economic system by which the owners of land had serfs - a class of people who had to work on a particular person's land and could not leave without that person's permission.
Social Structure: The organized pattern of relationships and social arrangements within a society.
Statute: A rule or law which has been made by a government or other organization and formally written down.
Taxation: The system by which a government takes money from people and spends it on public services or defence

Middle Ages: Social Specific Vocabulary

1. **Black Death:** The devastating plague that struck Europe in the mid-14th century, killing a large portion of the population and leading to significant social and economic changes.
2. **Canon Law:** The body of laws and regulations developed or adopted by ecclesiastical authority (Church leadership), governing the Church and its members.
3. **Chivalry:** The medieval knightly system with its religious, moral, and social code, which emphasized virtues such as bravery, courtesy, honor, and great respect for women.
4. **Clergy:** The body of all people ordained for religious duties in the Christian Church, including priests, monks, and bishops.
5. **Crusades:** A series of religious wars sanctioned by the Latin Church in the medieval period, mainly against Muslim territories in the Near East.

6. **Demesne:** Land attached to a manor and retained for the lord's own use, rather than being distributed to tenants.
7. **Excommunication:** The formal exclusion of a person from participation in the sacraments and services of the Christian Church, often used as a form of punishment for disobedience or heresy.
8. **Feudal System:** A hierarchical system of land ownership and duties where land was held by lords in exchange for military service to the king, and by vassals in exchange for service to the lords.
9. **Guild:** An association of artisans or merchants who controlled the practice of their craft in a particular town, playing a key role in local economies.
10. **Hundred Years' War:** A series of conflicts waged between the Kingdom of England and the Kingdom of France from 1337 to 1453, with significant social and political impacts on both nations.
11. **Inquisition:** A group of institutions within the Catholic Church tasked with combating heresy, particularly active in medieval Europe, known for its rigorous and often harsh methods.
12. **Journeyman:** A worker who has completed an apprenticeship and is fully educated in a trade or craft but works for an employer rather than running their own business.
13. **Knight:** A man who served his sovereign or lord as a mounted soldier in armor, often associated with the code of chivalry.
14. **Lollardy:** A pre-Reformation Christian religious movement led by John Wycliffe, which criticized the practices of the Catholic Church and emphasized reading the Bible in the vernacular.
15. **Manor:** The estate or domain of a lord, typically including the lord's house, lands, and the peasant village within it, forming the basic unit of territorial organization in the feudal system.
16. **Monasticism:** The religious way of life in which one renounces worldly pursuits to devote oneself fully to spiritual work, often practiced in monasteries.
17. **Papal Supremacy:** The doctrine of the Roman Catholic Church that the Pope has full, supreme, and universal power over the entire Church.
18. **Peasants' Revolt:** A major uprising across large parts of England in 1381, driven by social and economic grievances, particularly opposition to poll taxes and serfdom.
19. **Pilgrimage:** A religious journey to a sacred place as an act of devotion, common in medieval Christian practice.
20. **Relic:** An object considered holy because it belonged to, or was touched by, a saint or other venerated person, often housed in churches and used in medieval religious practices.
21. **Sacraments:** Sacred rites recognized as of particular importance and significance in the Christian Church, such as baptism, confirmation, and the Eucharist, essential to medieval religious life.
22. **Tithe:** A one-tenth part of something, paid as a contribution to a religious organization or compulsory tax to the government, often in the form of crops or produce in medieval times.
23. **Trial by Ordeal:** A judicial practice in which the guilt or innocence of the accused was determined by subjecting them to a painful, dangerous, or otherwise unpleasant experience, believed to be under divine control.
24. **Villein:** A serf or feudal tenant entirely subject to a lord or manor to whom he paid dues and services in exchange for land.
25. **Wattle and Daub:** A method of constructing walls in which a woven lattice of wooden strips (wattle) is daubed with a sticky material such as mud, used in medieval building techniques.

1. How did the Feudal System structure medieval society?	Red	Amber	Green
Are you able to explain the hierarchy of the Feudal System? Can you describe the roles and responsibilities of each social class within the system? Are you able to compare the Feudal System to modern social structures?			
2. What was the role of the Church in shaping medieval society?	Red	Amber	Green
Can you identify the various functions and powers of the medieval Church? Are you able to explain how the Church influenced daily life and governance? Can you analyse the Church's role in education, law, and social order?			
3. How did the lives of women in medieval society differ from the traditional "damsel in distress" image?	Red	Amber	Green
Are you able to describe the roles women played in medieval society? Can you identify examples of women who held power or influence during this period? Are you able to compare the societal expectations of women with the reality of their roles?			
4. What were the common beliefs and practices surrounding illness in medieval society, particularly during the Black Death?	Red	Amber	Green

Can you explain the medical theories and treatments used during the Black Death? Are you able to describe the religious and superstitious responses to the plague? Can you assess how these beliefs affected the spread and impact of the Black Death?			
5. In what ways did the Black Death lead to social and economic changes in medieval England?	Red	Amber	Green
Are you able to explain how the Black Death affected population and labour? Can you describe the changes in land ownership and economic practices after the plague? Are you able to analyse the long-term social consequences of the Black Death?			
6. What were the causes of the Peasants' Revolt of 1381?	Red	Amber	Green
Can you identify the social and economic grievances that led to the revolt? Are you able to explain how taxation and government policies contributed to the uprising? Can you analyse the role of leadership and communication in the spread of the revolt?			
7. How did the Peasants' Revolt challenge the existing social order?	Red	Amber	Green
Are you able to describe the actions taken by the rebels during the revolt? Can you explain how the revolt threatened the authority of the monarchy and nobility? Are you able to assess the immediate and long-term consequences of the revolt for English society?			
8. What were the key social and economic factors that led to the decline of the Feudal System?	Red	Amber	Green
Can you explain how changes in agriculture and labour contributed to the decline of feudalism? Are you able to describe the impact of the Black Death and other crises on feudal relationships? Can you analyse how the rise of towns and trade affected the traditional feudal structure?			
9. How did the Church respond to social unrest and change during this period?	Red	Amber	Green
Are you able to explain the Church's role in mediating or exacerbating conflicts? Can you describe how the Church maintained or lost influence during times of social upheaval? Are you able to assess the effectiveness of the Church's responses to challenges like the Peasants' Revolt?			
10. How did social changes in medieval England influence the overall development of society between 1066 and 1215?	Red	Amber	Green
Are you able to explain the key social changes that took place during this period? Can you describe how these changes influenced the structure and dynamics of medieval society? Are you able to analyse the long-term impacts of these social changes on England's development?			
11. In what ways were the different aspects of medieval life—such as the Feudal System, the Church, and social revolts—interconnected?	Red	Amber	Green
Can you identify the connections between the Feudal System, the Church, and social movements? Are you able to explain how these different aspects of medieval life influenced each other? Can you analyse the interplay between social, religious, and economic factors in shaping medieval society?			
12. How can understanding social changes in medieval England help us better comprehend the broader history of Europe during this time?	Red	Amber	Green
Are you able to compare the social changes in England with those in other parts of medieval Europe? Can you explain how these changes in England reflect or differ from broader European trends? Are you able to assess the significance of England's social changes in the context of European history?			
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 the Feudal System (4 marks)			
Exam Style Question: Describe two features of the role of the Church in medieval society (4 marks)			
Exam Style Question: Explain how the Black Death was able to spread through Medieval Europe so rapidly (12 marks)			
Exam Style Question: Write a narrative account of the Peasants' Revolt 1381 (8 marks)			

Geography Year 7 Term 3 – Stepping into Asia

Welcome to the fascinating world of Asia! Over the course of this term, you will explore the physical and human geography of the largest continent on Earth. From towering mountain ranges to sprawling cities, Asia is a land of extremes. You will learn about its countries, unique biomes, and how people have adapted to living in diverse environments. Along the way, we will uncover the challenges and opportunities faced by the people who call Asia home, from bustling megacities to remote mountain villages.



Prior Learning Links

- Latitude and Longitude lines from Term 2, and continuation of geographical description Term 1. Human and physical interrelationships examined in Term 2.

Future Learning Links

- Term 4 – physical and human interconnections
- Term 5 – rivers and flooding

KEY VOCABULARY

KEY WORDS

Continent: A large continuous mass of land; Asia is the largest continent.

Ocean: A vast body of saltwater; Asia is bordered by the Pacific, Indian, and Arctic Oceans.

Relief: The physical features of the land, including elevation, slopes, and terrain types.

Biome: A large natural area defined by its climate, plants, and animals (e.g., tundra, rainforest).

Population Density: The number of people living per unit of area, such as per square kilometre.

Sparsely: An area with few people living in it.

Densely: An area with many people living in it.

Social: Relating to people, communities, and how they interact.

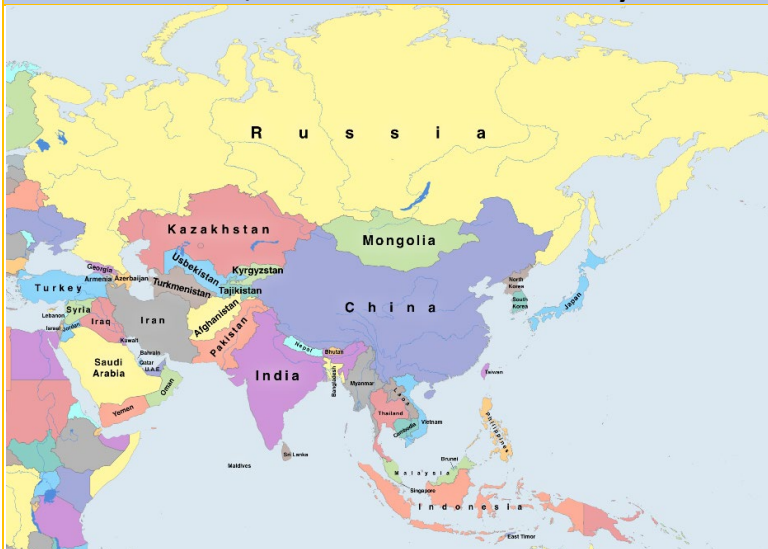
Economic: Related to money, trade, jobs, and resources.

Environmental: Connected to the natural world, including ecosystems and climate.

GDP (Gross Domestic Product): The total value of goods and services a country produces in a year.

1. Where is Asia, and what countries would you find there?

Red Amber Green



Asia is the largest continent on Earth, covering about 44.58 million square kilometres. It is located mainly in the eastern and northern hemispheres and is bordered by the Pacific Ocean to the east, the Indian Ocean to the south, and the Arctic Ocean to the north. Asia is home to 49 countries, including China, India, Japan, and Russia. Each country has its own unique culture, history, and geography. Some countries, like Russia, span two continents, while others, like Maldives, are tiny island nations.

2.

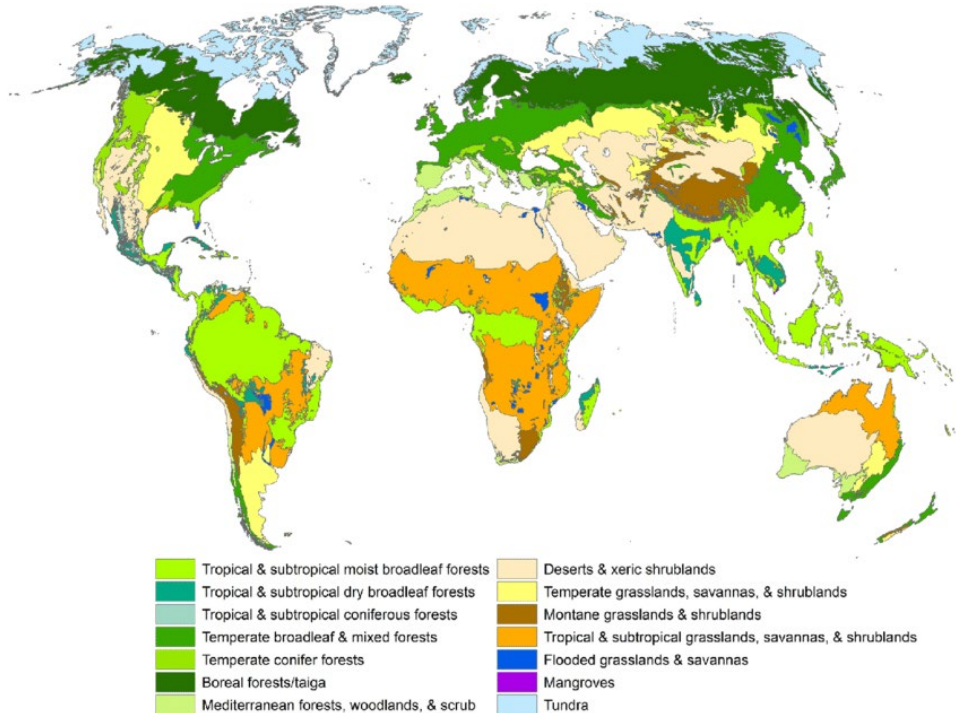
Red

Amber

Green

A biome is a large region defined by its climate, plants, and animals. Asia has an incredible variety of biomes due to its size and diverse climate:

- Cold Deserts: Found in areas like Mongolia's Gobi Desert, where temperatures drop below freezing in winter.
- Hot Deserts: Such as the Arabian Desert, known for its scorching heat.
- Steppes: Grasslands that stretch across Central Asia, ideal for grazing animals.
- Taiga: Dense coniferous forests found in Siberia.
- Tundra: Cold, treeless regions in the Arctic north.
- Temperate Forests: Found in East Asia, with distinct seasons.
- Mountains: Asia is home to the Himalayas, the tallest mountain range in the world.
- Warm Forests: Tropical rainforests in Southeast Asia, rich in biodiversity. (Include a biome map of Asia.)



3. Are China and India the most populated countries in the world?

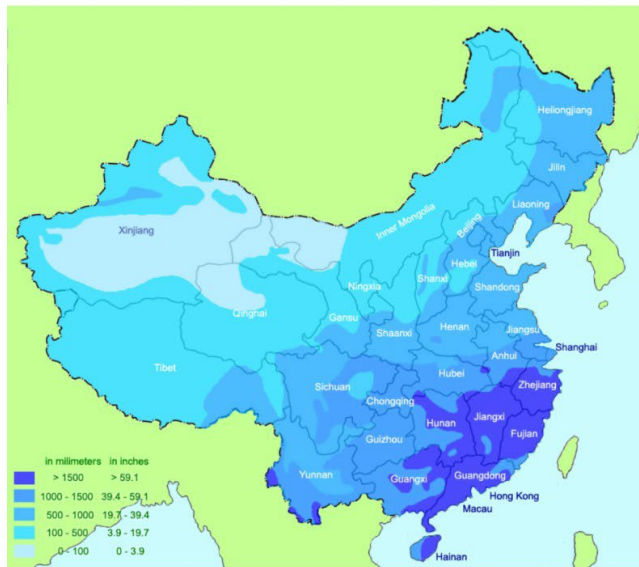
Red

Amber

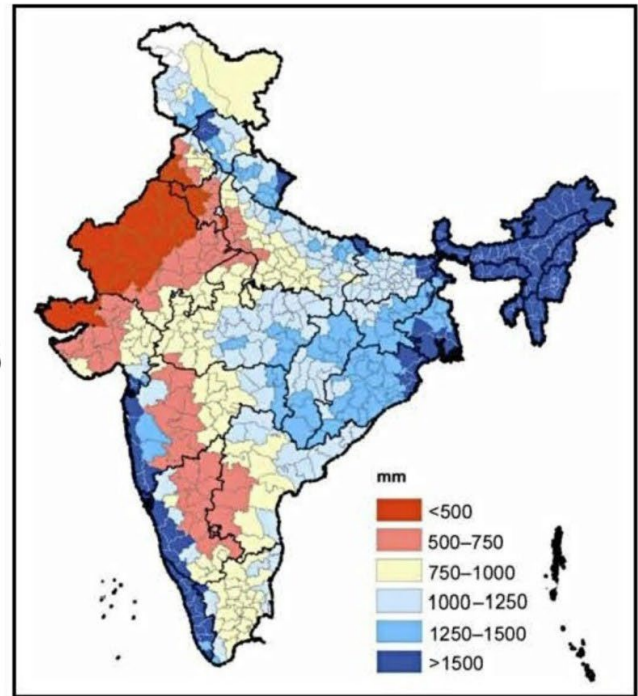
Green

Population density refers to how many people live in a given area. Some areas of Asia are densely populated, such as cities in China and India where many people live close together. There are also some areas of Asia which are sparsely populated, such as Siberia where few people live.

China has the highest population in the world, followed by India. Both countries have densely populated cities and sparsely populated rural areas. Both countries face challenges related to their large populations, such as providing sufficient resources, managing urban overcrowding, and addressing environmental impacts.



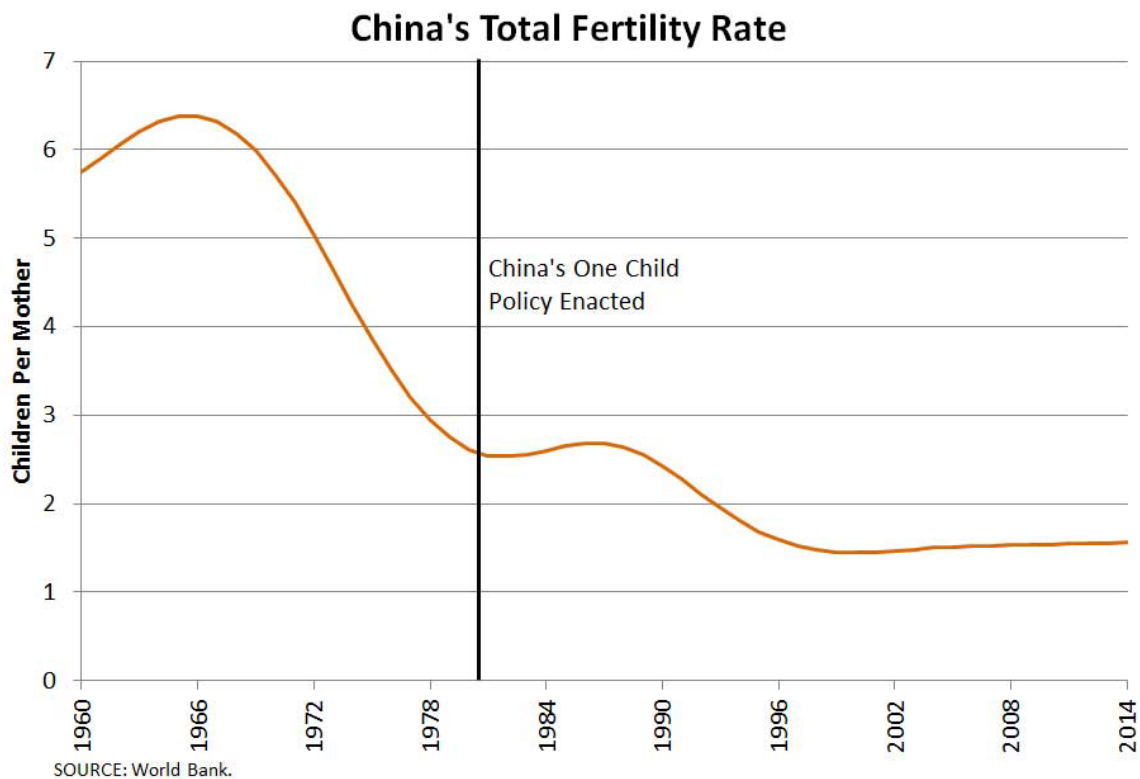
VS



4. Why did China have a one-child policy?

Red Amber Green

In 1979, China introduced the one-child policy to control its rapidly growing population. The government worried there were too many people for the country's resources. Families were encouraged or forced to have only one child. This decision was influenced by economic, social, and environmental challenges, including food shortages and limited housing. The policy ended in 2016, but it left long-term effects, such as an aging population and gender imbalances.



FEDERAL RESERVE BANK of ST. LOUIS

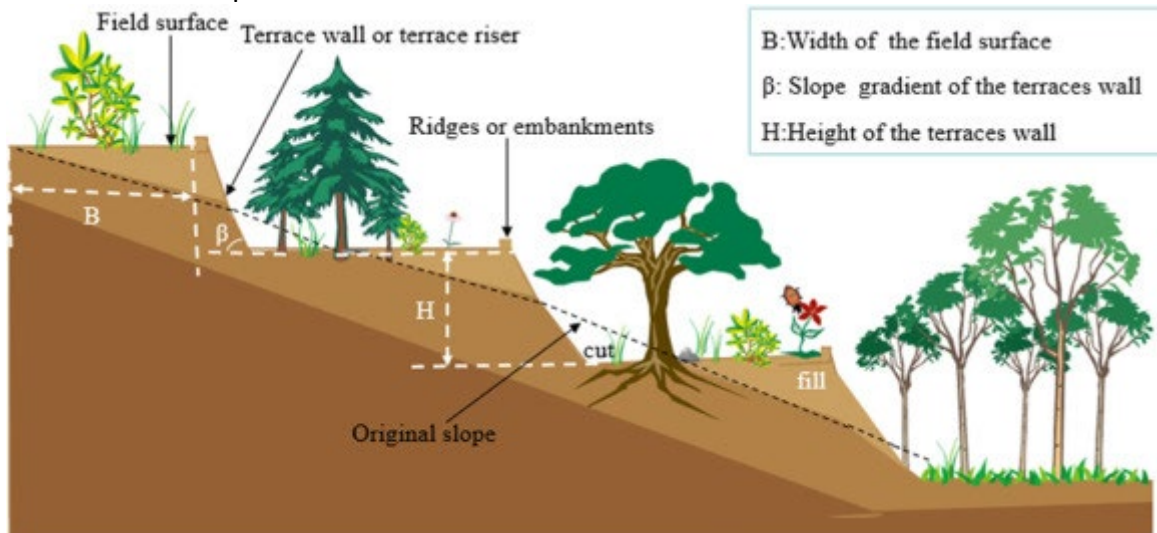
5. How does life adapt to mountains and monsoons?

Red Amber Green

Life in Asia's extreme environments requires adaptation:

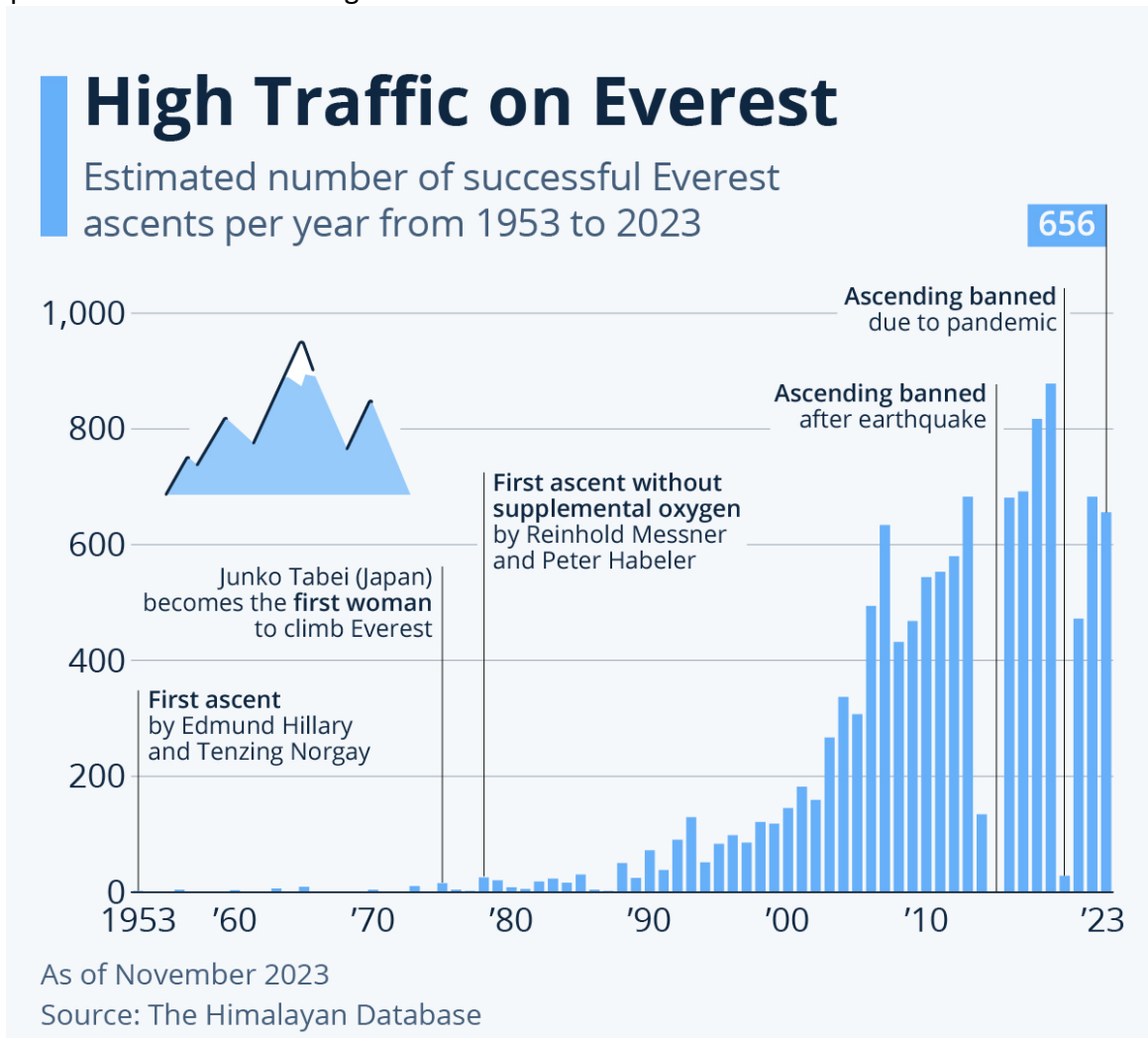
- Mountains: People in high-altitude areas, like the Himalayas, build terraced fields to farm on slopes and wear clothing suited to cold weather.

- **Monsoons:** Seasonal rains that are vital for agriculture, but people must build flood-resistant homes and prepare for heavy downpours. Farmers in places like India depend on monsoons for rice and other crops.



6. What impact does tourism have on Mount Everest? Red Amber Green

Mount Everest, the tallest peak on Earth, lies on the border between Nepal and China. It was formed millions of years ago when tectonic plates collided. Over time, tourists have increasingly visited Mount Everest to climb the mountain. This has had positive and negative AQ1 impacts on physical environment and people in the area surrounding Everest.



Tourism has economic, social, and environmental impacts:

- **Economic:** Generates income for local communities.
- **Social:** Brings visitors from all over the world, but can strain local culture.
- **Environmental:** Increased waste and pollution harm Everest's fragile ecosystem.

7.

Red Amber Green

Bangladesh faces severe flooding due to heavy rainfall, monsoons, and its location on a delta with many rivers.



Flooding causes:

- Damage to homes, crops, and infrastructure.
- Health risks from waterborne diseases.
- Displacement of millions of people.

Despite the challenges, people build raised homes and use boats during floods. Floods also bring fertile

soil for farming.

8. How is urbanisation changing lives in cities in India?

Red Amber Green

Urbanisation is the movement of people from rural areas to cities. In India, cities like Mumbai and Delhi are rapidly growing. Urbanisation brings:

- Opportunities: Better jobs, education, and healthcare.
- Challenges: Overcrowding, pollution, and slum development.

Millions of people have adapted by creating informal settlements and finding innovative ways to work in busy cities. However, these informal settlements are overcrowded, poorly constructed, unsafe and lack basic amenities.

9. Is Dubai the richest city in the world?

Red Amber Green

Dubai, in the United Arab Emirates (UAE), is known for its skyscrapers, luxury, and innovation. It is located on the Arabian Peninsula and has become a global hub for trade and tourism. Dubai's wealth comes from:

- Oil production.
- Business and tourism.
- High GDP (Gross Domestic Product), which measures a city's or country's economic activity.

Dubai's success is remarkable, but it also faces challenges like extreme heat and a reliance on foreign workers.



HOME LEARNING TASKS

Task Description	Done?
1. Look – Cover – Check Asia countries in knowledge organiser.	
2. Create a factfile on a natural feature found in Asia.	
3. Learn key word terminology.	
4. Look – Cover – Check key facts in knowledge organiser	

5. Draw a table up of Social, Economic and Environmental impacts of flooding to a LIC.	
6. Visit The geography of Asia - BBC Bitesize and take quizzes.	

R.E. Year 7 Term 3 – Judaism Beliefs

In this unit, you will explore key figures, festivals, and beliefs in Judaism. You will learn about the covenant between Abraham and G-d, the life of Moses, and the significance of the Ten Commandments. You will examine Jewish festivals, including Passover, Hanukkah, and Sukkot, uncovering their historical and cultural importance. Through studying Jewish symbols, rituals, and teachings, you will understand how they shape identity and moral living. You will develop skills in analysing religious texts, evaluating the relevance of traditions, and comparing belief systems. This unit fosters respect for diverse faiths and enhances your ability to think critically and empathetically.



GCSE Pod – Scan me!

Prior Learning Links

- Year 7 Term 1–2 Understanding of Religion

Future Learning Links

- Year 7 Term 4 Judaism Practice

KEY VOCABULARY

Religious Education - Judaism Key Vocabulary

1. **Authority** - The power or right to give orders, make decisions, or enforce rules.
2. **Belief** - A feeling of being sure that something exists or is true, especially in a religious context.
3. **Covenant** - A formal agreement or promise, often made between G-d and humans in religious texts.
4. **Faith** - Strong trust or confidence in someone or something, especially in a religious context.
5. **Heritage** - Traditions, beliefs, or cultural elements passed down through generations.
6. **Identity** - The qualities, beliefs, or characteristics that make a person or group unique.
7. **Morality** - Principles or rules about what is right and wrong behaviour.
8. **Sacred** - Connected to G-d or religion and deserving of respect and reverence.
9. **Tradition** - Practices or beliefs handed down from the past within a culture or religion.
10. **Values** - Beliefs or ideas about what is important and what is right or wrong.

Judaism Key Terms

1. **Abrahamic** - Relating to the religions that trace their origins to the patriarch Abraham, including Judaism, Christianity, and Islam.
2. **Ark** - The sacred chest where the tablets of the Ten Commandments were kept, or the vessel built by Noah in biblical tradition.
3. **Canaan** - The ancient land promised by G-d to Abraham and his descendants, located in the region of modern-day Israel and Palestine.
4. **Commandments** - Rules or laws given by G-d, especially the Ten Commandments in Judaism and Christianity.
5. **Covenant** - A solemn agreement between G-d and His people, often involving promises and obligations.
6. **Diaspora** - The dispersion of the Jewish people beyond Israel, especially after the Babylonian Exile.
7. **Exodus** - The departure of the Israelites from Egypt, led by Moses, as described in the Bible.
8. **Festival** - A religious celebration or observance, often involving rituals and traditions.
9. **Haggadah** - The text recited during the Passover Seder, telling the story of the Exodus from Egypt.
10. **Hanukkah** - A Jewish festival celebrating the rededication of the Second Temple and the miracle of the oil lasting eight days.
11. **Israel** - The land promised to Abraham's descendants in the Bible, also the name of the modern Jewish state.
12. **Judaism** - The monotheistic religion of the Jewish people, based on the Hebrew Bible and rabbinic teachings.
13. **Menorah** - A seven-branched candelabrum used in the ancient Temple, or a nine-branched one used during Hanukkah.

14. **Messiah** - A savior or liberator promised in Jewish tradition who will bring peace and restoration.
15. **Mitzvah** - A commandment or good deed performed as a religious duty in Judaism.
16. **Moses** - A prophet in the Bible who led the Israelites out of slavery in Egypt and received the Ten Commandments.
17. **Passover** - A Jewish festival commemorating the Exodus and G-d's protection of the Israelites during the tenth plague in Egypt.
18. **Patriarch** - A founding father or male leader of a family or tribe, such as Abraham, Isaac, or Jacob in the Bible.
19. **Pesach** - The Hebrew term for Passover, marking the liberation of the Israelites from Egypt.
20. **Pharaoh** - The title of ancient Egyptian kings, often associated with the oppression of the Israelites in the Bible.
21. **Promised Land** - The land of Canaan, promised by G-d to Abraham and his descendants.
22. **Prophet** - A person chosen by G-d to deliver His messages and guidance.
23. **Seder** - A ritual meal held during Passover, involving readings, prayers, and symbolic foods.
24. **Sukkah** - A temporary hut built for the festival of Sukkot, symbolizing the shelters used during the Israelites' journey in the desert.
25. **Torah** - The central reference of the Jewish religion, consisting of the first five books of the Hebrew Bible.

1. What is the covenant between Abraham and G-d, and why is it significant?	Red	Amber	Green
Can you explain what promises Abraham made to G-d and what G-d promised in return? Are you able to describe how the covenant shaped Jewish identity and beliefs? Can you identify the symbols and practices that commemorate this covenant?			
2. Who is Moses, and what role did he play in Jewish history?	Red	Amber	Green
Are you able to summarize the key events in Moses' life, including the Exodus? Can you explain how Moses received the Ten Commandments and their importance? Can you evaluate why Moses is considered one of Judaism's greatest prophets?			
3. What are the Ten Commandments, and why are they important to Jews?	Red	Amber	Green
Can you list the Ten Commandments and explain their meanings? Are you able to explore how the commandments influence Jewish moral and ethical behavior? Can you explain how the Ten Commandments are relevant to modern life?			
4. What is Passover, and why is it significant to Jewish identity?	Red	Amber	Green
Are you able to recount the story of the Exodus and its connection to Passover? Can you describe the rituals and traditions observed during the Passover Seder? Can you evaluate the importance of Passover in maintaining Jewish heritage?			
5. What does the festival of Hanukkah commemorate?	Red	Amber	Green
Can you explain the historical events behind the festival of Hanukkah? Are you able to describe the rituals and symbols associated with Hanukkah? Can you discuss how Hanukkah reflects Jewish resilience and faith?			
6. What is Sukkot, and what does it symbolize?	Red	Amber	Green

Can you explain the origins and historical significance of Sukkot? Are you able to describe the construction and purpose of a sukkah? Can you explore how Sukkot reflects Jewish connections to nature and community?			
7. How do festivals help preserve Jewish cultural and religious identity?	Red	Amber	Green
Are you able to identify common elements across Jewish festivals? Can you evaluate how festivals strengthen the Jewish community? Can you explain how traditions passed through festivals maintain Jewish values?			
8. What is the Torah, and why is it central to Judaism?	Red	Amber	Green
Can you describe the structure and content of the Torah? Are you able to explain how the Torah guides Jewish beliefs and practices? Can you evaluate the role of the Torah in Jewish worship and study?			
9. What role do prophets like Abraham and Moses play in Jewish faith?	Red	Amber	Green
Can you identify the qualities that make someone a prophet in Judaism? Are you able to explain the messages and missions of Abraham and Moses? Can you discuss how the teachings of these prophets influence Jewish life today?			
10. How do Jewish teachings promote moral and ethical living?	Red	Amber	Green
Are you able to explain the connection between the commandments and Jewish ethics? Can you discuss how Jewish values influence daily decision-making? Can you provide examples of how Jewish ethics are practiced in modern contexts?			
11. Why is the concept of a 'Promised Land' important in Judaism?	Red	Amber	Green
Can you explain the biblical significance of the Promised Land? Are you able to describe the connection between the Promised Land and Jewish identity? Can you discuss the continuing relevance of this concept in Jewish thought?			
12. What symbols and rituals express Jewish beliefs and values?	Red	Amber	Green
Can you identify key symbols and their meanings in Jewish worship and festivals? Are you able to explain the purpose of rituals like the Seder and lighting the menorah? Can you evaluate how symbols and rituals strengthen Jewish faith and identity?			
HOME LEARNING TASKS			
Task Description	Done?		
Create a Fact File Research one of the festivals (Passover, Hanukkah, or Sukkot) and create a one-page fact file. Include its historical background, key rituals, and why it is significant to Jews today.			
Compare and Contrast Write a short paragraph comparing the Ten Commandments to a set of modern-day laws or school rules. How are they similar in promoting good behaviour, and how do they differ?			
Illustrated Timeline Create a timeline showing five key events in the story of Moses. Add a brief explanation and a small drawing for each event to consolidate your understanding.			
Explain a Ritual Imagine you are explaining the ritual of the Seder meal to someone who has never heard of it before. Write a step-by-step guide that includes its key elements and their symbolic meanings.			
Debate Preparation Write a short argument answering the question: "Are religious festivals more important for preserving culture or for personal faith?" Use examples from Jewish festivals to support your points.			
Core Vocabulary Use look cover say to revise the core vocabulary			
GSE Pod Use the QR code at the top of the page to complete the GCSE Pod Tasks			

Drama Year 7 Term 3
History of Theatre – Greek Theatre

Term Focus

You will learn how to:

- Develop your understanding of the history of theatre
- 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.

Synchronisation	When the same thing is performed at the same time. EG: Clapping in time
Canon	When the same thing is performed by one after another. EG: a Mexican wave
Ensemble	An approach to acting that aims for a unified effect achieved by all members of a cast working together EG: group acting
Amphitheatres	An open air theatre where performances would take place – built into a cliff side.
Chorus	Actors on stage which performed as a group.
Choral Speaking	Speech spoken by more than one actor, incorporates both synchronised speech and actions.
Greek Myths	Epic stories about Greek gods

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 is an Amphitheatre?

Red

Amber

Green

The performances in Greek Theatre were in **open air**. The theatres were outside and were built into a hillside.

These theatres attracted crowds of up to 20,000 people per performance. At first, Greek theatres were not used for plays. They were used for music, songs, and dances in honour of the Greek gods. The Greek architects built theatres on **hillsides**, this enabled them to position long benches in rows, one above the other, so that everyone could see what was happening on the stage.

The stage was located at the bottom of the hill to allow the audience to hear due to the funnel shape of the seating. Greek theatres the sound was projected

3. What is a Greek Theatre?

Red

Amber

Green

The Greeks pretty much invented theatre. The theatre of ancient Greece originates from around 532BC. It was the beginning of modern western theatre, and some ancient Greek plays are still performed today.

4. What types of play did the Greeks watch?

Red

Amber

Green

The ancient Greeks invented three types of plays.

- **Tragedies** always had a sad ending.

- **Comedies** told stories of everyday life and always had a happy ending with some funny and enlightening moments.

- **Satires** combined the two. In ancient Greece, it was illegal to poke fun at the gods. Punishment for mocking the gods was death. Comedies and tragedies entertained, but a well written satire could sway public opinion.

5. Who are the chorus?

Red

Amber

Green

The chorus in 'Greek Theatre' was a **group** of actors who described and commented upon the main action of a play with song, dance, and recitation. They played a vital role in adding extra information to a performance.

6. What is a Greek myth?

Red

Amber

Green

Created thousands of years ago, **Greek myths** were epic stories about **Greek gods**, passed down over generations. They often feature heroic battles and terrible creatures, and taught the importance of bravery, intelligence, and right and wrong. They showed that even the gods, like mortal men, could be punished or rewarded for their actions. Greek myths were a huge part of the **religion** in Ancient Greece, and offer a glimpse into the lives of the ancient people who told them.

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. Who are the Greek Gods?

Red

Amber

Green

The ancient Greeks had a particular set of beliefs that helped them to understand themselves and the world around them, and they believed in a variety of gods and goddesses. Each Greek god and goddess stood for something, and the ancient Greeks would worship specific gods for different reasons.

Ancient Greek religion was based on the belief that there were twelve gods and goddesses that ruled the universe from Mount Olympus, in Greece. They are:

- Zeus- God of the Sky
- Poseidon- God of the Sea
- Ares- God of War
- Aphrodite- Goddess of Love
- Hera- Goddess of Women
- Demeter- Goddess of Harvest
- Athena- Goddess of Strategy
- Apollo- God of the Sun, Music and Poetry
- Artemis- Goddess of the Hunt
- Hephaestus- God of Fire
- Hermes- the Messenger God
- Dionysus- God of Wine

HOME LEARNING TASKS

Task Description

Done?

Recapping Vocal Skills

Recapping Performance Skills

Character profiling

Recapping the Greek Gods

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

Create a character profile for your own Greek God. Consider the following:

- Your personality...
- The festival you would celebrate ...
- Your superpowers would be...
- What would you change your name to...
- What would you be famous for...

Below are listed 5 Greek God and Goddesses...Can you match what idea each of them stand for?

- | | |
|-------------|------------------------------------|
| ❖ Zeus | ❖ The sea |
| ❖ Poseidon | ❖ Love & Beauty |
| ❖ Aphrodite | ❖ War |
| ❖ Ares | ❖ Culture: Theatre, Music & Poetry |
| ❖ Apollo | ❖ The Sky |

Music Year 7 Terms 3&4
Keyboard Skills

Term Focus

You will learn how to:

- recognise notes on the keyboard and simple staff notation
- navigate basic keyboard functions
- play simple melodies on the keyboard
- play some simple chords on the keyboard

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
- Explore the elements of music and how they can enhance a musical performance





Future Learning Links

- Understand and explore how music is created and performed
- Develop an understanding of simple music notation
- Find connections between melodies, harmonies and accompaniments



KEY VOCABULARY

KEY WORDS	KEY SUBJECT TERMINOLOGY
Dynamics: the volume that notes should be played/sung	Musical elements: the building blocks of music that include dynamics, tempo, texture, timbre and pitch
Tempo: the speed or pace of the music	Melody: another word for the tune. A melody is a mixture of notes of different pitch, played one after the other
Texture: how melody, harmony and rhythm are combined in music to create layers of sound	Accompaniment: a musical part that provides rhythmic or harmonic support for the melody
Timbre: the type of sound produced by an instrument or a voice	Musical arrangement: altering or adapting an existing piece of music through changing musical elements, structure or the instruments used
Pitch: how high or low a note sounds	Tonality: music can be in a major (sounds happy) or minor (sounds sad) key. This can define the character of the music
Unison: one sound. Two or more people play/sing the same pitch	Musical accompaniment: the music that plays in the background to support a melody

Harmony: more than one note/pitch is played or sung at the same time	Musical structure: the order the different sections of a song or piece of music are played in (e.g. verse/chorus/intro)
Crotchet:  a note that lasts for one beat	Musical ensemble: a group of people who perform instrumental or vocal music together
Minim:  a note that lasts for two beats	Musical conductor: keeps a musical ensemble in time and leads the performance, giving it shape
Semibreve:  a notes that lasts for four beats	
Quaver:  a notes that lasts for half a beat	

1. What type of musical instrument is a keyboard?

Red Amber Green



An **electronic musical keyboard** is a versatile musical instrument that mimics the layout and functionality of a traditional piano but incorporates electronic sound generation and manipulation technologies. It is widely used in various musical genres and settings, from casual playing to professional performances and music production. They typically have 25-88 keys, so can be smaller than a traditional piano.

The keyboard offers a wide variety of instrument sounds (e.g., piano, strings, brass, synthesizers) and effects. It has built-in features such as:

- Rhythms and accompaniment tracks to create backing music.
- Sequencing capabilities for recording and layering performances.
- Digital effects like reverb, chorus, and delay.

2. What are the names of the notes on the keyboard?

Red

Amber

Green



The white notes on a **musical keyboard** are named after the first seven letters of the alphabet: **A, B, C, D, E, F, G**. After G, the sequence repeats. These notes correspond to the white keys on the keyboard.

3. What is a melody?

Red

Amber

Green

A keyboard **melody** is a sequence of musical notes played on a piano that forms the main tune or theme of a piece of music. It is often the part of the composition that is most recognizable and memorable. A melody typically consists of a combination of rhythm, pitch, and dynamics.

Some simple keyboard melodies to play:

London Bridge

G A G F E F G D E F E F G

3 4 3 2 1 2 3 1 2 3 1 2 3

G A G F E F G D G E C

3 4 3 2 1 2 3 2 5 3 1

Oh When the Saints Go Marching In

C E F G C E F G C E F G E C E

1 3 4 5 1 3 4 5 1 3 4 5 3 1 3

D E E D C C E G G G F E F G E C D C

2 3 3 2 1 1 3 5 5 5 4 3 4 5 3 1 2 1

4. What is a chord?

Red Amber Green

A **chord** played on the keyboard is a group of two or more notes sounded together to create harmony. Chords are fundamental to music and provide accompaniment for melodies.

How to play a triad (three note) chord:

L R

The Chord of C

RIGHT HAND

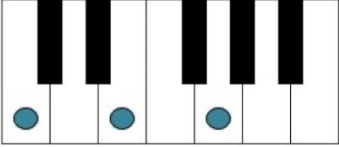
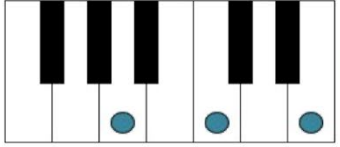
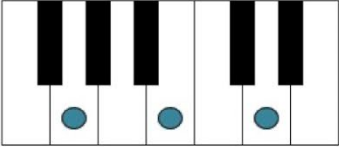
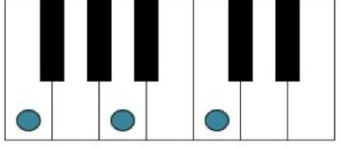
1 3 5

C E G

Chords typically consist of at least three notes, called a **triad**. The most common type of chord, the triad, consists of:

- A **root** note (the starting note of the chord).
- A **third** (an interval of three notes above the root).
- A **fifth** (an interval of five notes above the root).

5. What are the names of the chords in the four chord sequence? Red Amber Green

 <p>= C major (C, E and G)</p>	 <p>= A minor (A, C and E)</p>
 <p>= G major (G, B and D)</p>	 <p>= F major (F, A and C)</p>

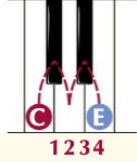
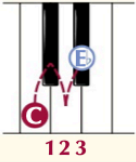
6. What is a major chord and a minor chord? Red Amber Green

Chord Types:

- **Major Chord:** Has a bright and happy sound. (Example: C major = C, E, G)
- **Minor Chord:** Has a darker and melancholic sound. (Example: A minor = A, C, E)

Triads Use Major and Minor Thirds

- 1) All triads have an interval of a third between each pair of notes.
- 2) The intervals can be major or minor thirds.
- 3) Different combinations of major and minor thirds give different types of triad:

<p>A <u>major third</u> is <u>four</u> semitones.</p>	<p>A <u>minor third</u> is <u>three</u> semitones.</p>
 <p>1 2 3 4</p>	 <p>1 2 3</p>

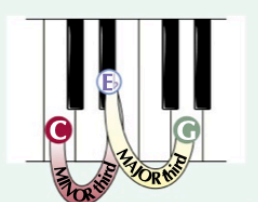
Major triads

- Major triads have a major third followed by a minor third.
- The major third goes between the root and the third.
- The minor third goes between the third and the fifth.



Minor triads

- Minor triads use a major and a minor third too, but in the opposite order.
- The minor third goes between the root and the third.
- The major third goes between the third and the fifth.



HOMEWORK TASK – choose ONE of the following projects

Task Description

Done?

Option 1: Create a Music Playlist

- **Task:** Create a playlist of 5–10 songs that reflect a specific mood, theme, or genre (e.g., "Relaxing Tunes," "Songs for Dancing," "Classical Favorites").
- **Details:**
 - Write a brief explanation (1–2 sentences per song) of why each piece fits your chosen theme.
 - Mention the song title, artist/composer, and genre for each entry.
- **Extension Idea:** Design a cover image or poster for your playlist.

Option 2: Research a Composer or Artist

- **Task:** Choose a famous composer (like Mozart or Beyoncé) or artist and create a fact sheet about them.
- **Details:**
 - Include their biography, famous works, and why they are important to music.
 - Add at least one fun or surprising fact.
 - Illustrate your fact sheet with drawings, photos, or symbols that represent their music.

Option 3: Make Your Own Music

- **Task:** Compose a short piece of music (8–16 bars).
- **Details:**
 - Use music software like GarageBand, Noteflight, or simply write it down on blank sheet music.
 - If possible, perform your composition or record it to share with the class.
- **Extension Idea:** Describe the inspiration behind your composition.

What to Submit:

1. A written or digital presentation of your project (poster, slideshow, or document).
2. Any supporting materials (e.g., playlist links, recorded music, or drawings).
3. A short reflection (2–3 sentences) on what you learned while completing the project.

French Year 7 Term 3 – Free time

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

- What you like and dislike doing in your free time
- What you do in your free and how often
- What you do in in your free time depending on the weather



Image: Flaticon.com

Prior Learning Links

- Conjunctions to link ideas
- Giving and justifying opinions
- Adjectival agreement

Future Learning Links

- Technology and Sports Year 8
- Free time, holidays, Healthy living GCSE
- Present tense
- Frequency expressions
- Giving and justifying opinions

1. How do I talk about what I like doing in my free time?

Red

Amber

Green

Qu'est-ce que tu aimes faire pendant ton temps libre? (What do you like doing in your free time?)

Pendant mon temps libre (In my free time)	j'adore (I love)	tchatter avec mes amis (to chat with my friends)	jouer aux jeux-vidéos (to play videogames)	parce que c'est (because it is)	intéressant (interesting)
	j'aime beaucoup (I like a lot)	écouter de la musique (to listen to music)	partager des vidéos (to share videos)		génial (great)
	je n'aime pas (I don't like)	envoyer des messages (to send texts)	regarder des films (to watch films)		amusant (fun)
	je n'aime pas du tout (I don't like at all)	lire (to read)	rencontrer mes amis (to meet up with my friends)		relaxant (relaxing)
	je déteste (I hate)		prendre de photos (to take photos)		ennuyeux (boring)
					nul (rubbish)

- We can translate those infinitive verbs in two ways: *to chat* or *chatting*
- When giving opinion about an activity, we will use the masculine singular form of the adjective: e.g. *intéressant, amusant*

2. What is an infinitive verb?

Red

Amber

Green

An **infinitive verb** is the base form of a verb, in English often preceded by the word "to". It is non-finite verb, which means it does not change to show who does the action (subject) or when the action is done (tense).

In French, instead of being preceded by the word "to", the infinitive verb ends with one of the following: **-er, -re, -ir**. Some of the infinitives we will use:

-er				Other endings and irregulars	
tchatter	envoy er	étud ier	rencontr er	prendre	faire
écouter	dans er	régard er	jou er	lire	avoir

3. How do I talk about what I normally do in my free time?

Red Amber Green

Que fais-tu normalement? (What do you normally do?)

Normalement (Normally)	j'écoute de la musique (I listen to music)	je joue au foot (I play football)	je danse (I dance)
Quand j'ai le temps, (When I have the time)	je danse (I dance)	je regarde la télé (I watch TV)	je partage des photos (I share photos)
Tous les jours (Every day)	je tchatte avec mes amis (I chat with my friends)	je chante (I sing)	je rencontre mes amis (I meet up with my friends)
Parfois (Sometimes)	je prends (I take)	je fais du sport (I do sport)	Je lis des livres (I read books)
Souvent (Often)			

4. What is the present tense?

Red Amber Green

We use the present tense to describe general habits or regular actions. It is often used with specific time expressions.

Normalement (Normally)	Souvent (Often)	Pendant la semaine (During the week)	Le mardi (On Tuesdays)	Le vendredi (On Fridays)
Quand j'ai le temps, (When I have the time)	Parfois (Sometimes)	Le week-end (On the weekend)	Le mercredi (On Wednesdays)	Le samedi (On Saturdays)
Tous les jours (Every day)	D'habitude (Usually)	Le lundi (On Mondays)	Le jeudi (On Thursdays)	Le dimanche (On Sundays)

5. How do I conjugate the present tense?

Red Amber Green

To **conjugate** a verb means to change the ending so that it matches the subject (who is doing the action). Those are the endings for the present tense.

Step 1:

Find the infinitive

Subject		-er
I	Je	joue
You	Tu	joues
He	Il	joue
She	Elle	
We	On	
We	Nous	jouons
You (pl)	Vous	jouez
They	Ils Elles	jouent

Step 2:

Remove the ending -er

Step 3:

Add the pronoun for the subject and the correct ending

1. Regarder
2. Regard
3. Il regarde

Subject		lire	prendre	faire
I	Je	lis	prends	fais
You	Tu	lis	prends	fais
He	Il	lit	prend	fait
She	Elle			
We	On			
We	Nous	lisons	prenons	faisons
You (pl)	Vous	lisez	prenez	faites
They	Ils Elles	lisent	prennent	font

6. What do they normally do?

Red Amber Green

Que font-t-ils normalement ? (What do they normally do?)

Pendant son temps libre (In his/her free time)	mon ami (my friend, m.)	regarde la télé (watches tv)	écoute de la musique (listens to music)	lis des livres (reads books)
	mon* amie (my friend, f.)	joue au volley (plays volleyball)	partage des vidéos (shares videos)	fait du sport (does sport)
Pendant leur temps libre (In their free time)	mes amis (my friends) (they)	jouent au tennis (play tennis)	rencontrent leurs amis (meet up with their friends)	font du sport (they do sport)
Normalement (Normally)	mon ami et moi (my friend and I) (we)	chantons (sing)	jouons au basket (play basketball)	faisons du sport (do sport)

7. How do I turn a sentence into negative?

Red Amber Green

In French we use the following negative words.

ne	verb	pas	Je ne joue pas au foot (I don't play football)
ne	verb	jamais	Je ne joue jamais au foot (I never play football)

8. How can I talk about the weather?

Red Amber Green

Quel temps fait-il? (What is the weather like?)

En été (In summer)	il fait chaud (it is hot)		Il y a du soleil (It's sunny)	
Au printemps (In spring)	il fait froid (it is cold)	il pleut (it rains)	il y a du vent (it's windy)	en France (in France)
En automne (In autumn)	il fait beau (it is good weather)	il neige (it snows)	il y a des orages (it's stormy)	en Angleterre (in England)
En hiver (In winter)	il fait mauvais (it is bad weather)		Il y a du brouillard (it's foggy)	

*We use *il fait* (it does)

9. What is a subordinate clause?

Red Amber Green

Definition: Also known as a dependent clause, is a group of words that cannot stand alone as a complete sentence.

They start with a subordinate conjunction: *because* (**parce que**), *when* (**quand**), *if* (**si / s'** (in front of a vowel))

E.g., **Quand il fait froid**,... (When it's cold, ...)

10. How do I talk about what I do depending on the weather?

Red Amber Green

Que fais-tu quand il fait chaud? (What do you do when it's hot?)

Quand (When)	il fait chaud (it is hot)	il y a du soleil (It's sunny)	je fais du vélo (I ride my bike)	je fais du sport (I do sport)	au parc (at the park)
	il fait beau (it is good weather)		je rencontre mes amis (I go out with my friends)	je joue au foot (I play football)	
Si / S' (If)	il fait froid (it is cold)	il pleut (it rains)	j'écoute de la musique (I listen to music)	je regarde la télé (I watch TV)	à la maison (at home)
	il fait mauvais (it is bad weather)		il neige (it snows)	je joue aux jeux-vidéos (I play videogames)	

11. What is a verb?

Red Amber Green

Definition: A word that expresses an **action** or a **state** of being.

E.g., *to live, to play, to do, to cook, to read, to be, to have*

12. What is a time expression?

Red Amber Green

Definition: A word or a phrase that indicates a **specific point in time**, a **period of time** or the **frequency** of an event.

E.g., *normally, often, in the morning, on Monday*

HOME LEARNING TASKS

Task Description	Done?
Can you use the sentence builders above to answer the questions?	
Can you write a short paragraph saying what like and dislike doing free time?	
Can you write a short paragraph saying what you normally do and what you don't do in your free time?	
Can you write a short paragraph saying what your friends do in their free time?	
Can you say what the weather is like today?	
Can you use write a short paragraph saying what you do depending on the weather?	
Can you improve the questions above by adding time expressions and justifications?	
Can you practise changing the endings of the verb depending on the subject (I, he, she, they)?	
Practise the vocabulary in your knowledge organiser by using the look, cover, write, check method.	
Write flash cards with the free time activities: one side French, one side English	
Go to www.sentencebuilders.com and practise this term's vocabulary.	

Spanish Year 7 Term 3 – Free time

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

- What you like and dislike doing in your free time
- What you do in your free and how often
- What you do in in your free time depending on the weather



Image: Flaticon.com

Prior Learning Links

- Conjunctions to link ideas
- Giving and justifying opinions
- Adjectival agreement

Future Learning Links

- The weather, technology, sports Year 8
- Free time, holidays, Healthy living GCSE
- Present tense
- The weather
- Giving and justifying opinions

1. How do I talk about what I like doing in my free time?

Red

Amber

Green

¿Qué te gusta hacer en tu tiempo libre? (What do you like doing in your free time?)

En mi tiempo libre (In my free time)	me encanta (I love)	chatear (to chat)	jugar a los videojuegos (to play videogames)	porque es (because it is)	interesante (interesting)
	me gusta mucho (I really like)	escuchar música (to listen to music)	navegar por internet (to surf the net)		guay (cool)
	no me gusta (I don't like)	mandar mensajes (to send texts)			divertido (fun)
	no me gusta nada (I don't like at all)	leer (to read)	ver la television (to watch TV)		relajante (relaxing)
odio (I hate)		escribir correos (to write emails)	salir con mis amigos (to go out with my friends)		aburrido (boring)
					tonto (silly)

- We can translate those infinitive verbs in two ways: *to chat* or *chatting*
- When giving opinion about an activity, we will use the masculine singular form of the adjective: e.g. *interesante, divertido*

2. What is an infinitive verb?

Red

Amber

Green

Definition: An **infinitive verb** is the base form of a verb, in English often preceded by the word “to”. It is non-finite verb, which means it does not change to show who does the action (subject) or when the action is done (tense).

In Spanish, instead of being preceded by the word “to”, the infinitive verb ends with one of the following: **-ar, -er, -ir**.

-ar			-er			-ir		
chatear	mandar	estudiar	leer			escribir		
escuchar	bailar	sacar	ver*			subir		
montar	tocar	jugar*	hacer*			salir*		

3. How do I talk about what I normally do in my free time?

Red

Amber

Green

Normalmente (Normally)	yo escucho música (I listen to music)	yo monto en bici (I ride my bike)	yo saco fotos (I take pictures)
Cuando tengo tiempo, (When I have the time)	yo bailo (I dance)	yo toco la guitarra (I play the guitar)	yo uso mi móvil (I use my phone)
	yo hablo con mis amigos (I talk to my friends)	yo canto (I sing)	yo juego* al fútbol (I play football)
Todos los días (Every day)	yo leo (I read)	yo veo* la television (I watch TV)	yo hago* deporte (I do sport)
A veces (Sometimes)	yo escribo correos (I write emails)	yo subo fotos (I upload pictures)	yo salgo* con mis amigos (I go out with my friends)
A menudo (Often)			

*The I form (-o) will have a small **irregularity** when comparing to the infinitive verbs: *hacer – hago, jugar,-juego*

4. What is the present tense?

Red

Amber

Green

We use the present tense to describe general habits or regular actions. It is often used with specific time expressions.

Normalmente (Normally)	A menudo (Often)	Durante la semana (During the week)	Los martes (On Tuesdays)	Los viernes (On Fridays)
Cuando tengo tiempo, (When I have the time)	A veces (Sometimes)	El fin de semana (On the weekend)	Los miércoles (On Wednesdays)	Los sábados (On Saturdays)
Todos los días (Every day)	Nunca (Never)	Los lunes (On Mondays)	Los jueves (On Thursdays)	Los domingos (On Sundays)

5. How do I conjugate the present tense?

Red

Amber

Green

To **conjugate** a verb means to change the ending so that it matches the subject (who is doing the action). Those are the endings for the present tense.

In Spanish we do not need to include the subject (yo, tú, él, ella, nosotros, nosotras...). The ending indicates who does the action.

Step 1: Find the infinitive (this will always end in R)

Step 1: Escuchar (to listen)

Step 2: Remove the –AR –ER –IR

Step 2: Escuch (listen)

Step 3: Add the endings from the correct subject

Step 3: Escucha (he listens)

Subject		-ar	-er	-ir	Subject		-ar	-er	-ir
I	Yo	escuch <u>o</u>	leo	escribo	We	Nosotros	escuch <u>amos</u>	le <u>emos</u>	escrib <u>imos</u>
						Nosotras			
You	Tú	escuch <u>as</u>	le <u>es</u>	escrib <u>es</u>	You	Vosotros	escuch <u>áis</u>	le <u>éis</u>	escrib <u>ís</u>
					(plural)	Vosotras			
He	Él	escuch <u>a</u>	lee	escrib <u>e</u>	They	Ellos	escuch <u>an</u>	leen	escriben
She	Ella					Ellas			

6. What do they normally do?

Red

Amber

Green

¿Qué hacen normalmente? (What do they normally do?)

En su tiempo libre (In their free time)	mi amigo (my friend, m.)	saca fotos (takes pictures)	lee libros (reads books)	sube fotos (uploads photos)
	mi amiga (my friend, f.)	estudia (study)	hace deporte (does sport)	sale con amigos (goes out with friends)
	mis amigos (my friends)	juega* al tenis (plays tennis)	hacen deporte (they do sport)	salen con amigos (they go out with friends)
Normalmente (Normally)	mi amigo y yo (my friend and I)	cantamos (we sing)	hacemos deporte (we do sport)	salimos con amigos (we go out with friends)

7. How do I turn a sentence into negative?

Red

Amber

Green

In Spanish we use the following negative words. We always use them in front of the verb.

No (not)	No juego al fútbol (I don't play football)	No leo libros (I don't read books)	No salgo con mis amigos (I don't go out with my friends)
Nunca (never)	Nunca juego al fútbol (I never play football)	Nunca leo libros (I never read books)	Nunca salgo con mis amigos (I never go out with my friends)

8. How can I talk about the weather?

Red

Amber

Green

¿Qué tiempo hace? (What is the weather like?)

En verano (In summer)	hace calor (it is hot)				
En primavera (In spring)	hace frío (it is cold)	hace buen tiempo (it is good weather)	llueve (it rains)	hay tormentas (there are storms)	en España (in Spain)
En otoño (In autumn)	hace sol (it is sunny)	hace mal tiempo (it is bad weather)	nieva (it snows)	hay niebla (there is fog)	en Inglaterra (In England)
En invierno (In winter)	hace viento (it is windy)				

--	--	--	--	--	--

*We use *hace* (it does)

9. What is a subordinate clause?

Red Amber Green

Definition: Also known as a dependent clause, is a group of words that cannot stand alone as a complete sentence.

They start with a subordinate conjunction: *because* (**porque**), *when* (**cuando**), *if* (**si**)

E.g., **Cuando hace frío...** (When it's cold, ...)

10. How do I talk about what I do depending on the weather?

Red Amber Green

¿Qué haces cuando hace calor? (What do you do when it's hot?)					
Cuando (When)	hace calor, (it is hot)	hace buen tiempo, (it is good weather)	monto en bici (I ride my bike)	hago deporte (I do sport)	en el parque (at the park)
	hace sol, (it is sunny)		salgo con mis amigos (I go out with my friends)	juego al fútbol (I play football)	
Si (If)	hace frío, (it is cold)	hace mal tiempo, (it is bad weather)	toco la guitarra (I play the guitar)	juego a los videojuegos (I play videogames)	en casa (at home)
	llueve, (it rains)		veo la television (I watch TV)	descanso (I rest)	

11. What is a verb?

Red Amber Green

Definition: A word that expresses an **action** or a **state** of being.

E.g., *to live, to play, to do, to cook, to read, to be, to have*

12. What is a time expression?

Red Amber Green

Definition: A word or a phrase that indicates a **specific point in time**, a **period of time** or the **frequency** of an event.

E.g., *normally, often, in the morning, on Monday*

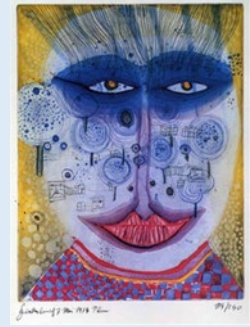
HOME LEARNING TASKS

Task Description	Done?
Can you use the sentence builders above to answer the questions?	
Can you write a short paragraph saying what like and dislike doing free time?	
Can you write a short paragraph saying what you normally do and what you don't do in your free time?	
Can you write a short paragraph saying what your friends do in their free time?	
Can you say what the weather is like today?	
Can you use write a short paragraph saying what you do depending on the weather?	

Can you improve the questions above by adding time expressions and justifications?	
Can you practise changing the endings of the verb depending on the subject (I, he, she, they)?	
Practise the vocabulary in your knowledge organiser by using the look, cover, write, check method.	
Write flash cards with the free time activities: one side Spanish, one side English	
Go to www.sentencebuilders.com and practise this term's vocabulary.	

Subject Art Year 7 Term 3 & 4 – 'Abstract and Colour'

Term Focus – **Abstract and Colour-** *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.*



In the last project students developed skills in observational drawing using a variety of materials, drawing techniques and processes. They investigated how artists use observation, mark making and tone to convey detail. They applied Formal Elements: **TONE, MARK MAKING, SHAPE, FORM, and LINE** to their own artwork.

Future Learning Links
Imagination and 3D- *Through a series of activities, students develop skills in drawing and 3D design, using a range of materials, techniques and processes. They investigate how artists show message and meaning in sculpture. They will use their knowledge of Formal Elements **FORM, SHAPE, SCALE and TEXTURE** to show how specific media can be used to create their own 3D work.*



KEY VOCABULARY

KEY WORDS	KEY SUBJECT TERMINOLOGY
<p>I will learn the meaning of... <i>Primary/Secondary/Tertiary/Complementary colours within the context of Abstract Art.</i></p>	<p>Record Develop Refine Outcome Evaluate</p>

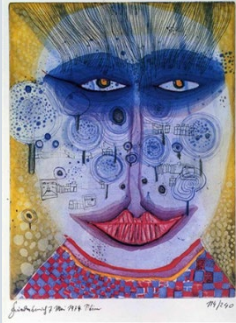
1. How do artists use colour?

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...

- increasing my knowledge and understanding of how abstract artists use 'Colour' to create meaningful work



Characteristics of Hundertwasser's art:

- Colourful
- Abstract
- Shapes
- He rebelled against straight lines
- He didn't plan his works
- People and places
- Swirls
- Childlike



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

2. Can you define the meaning of Abstract Art?

Red

Amber

Green

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!



3. What is special about the primary colours?

Red

Amber

Green

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

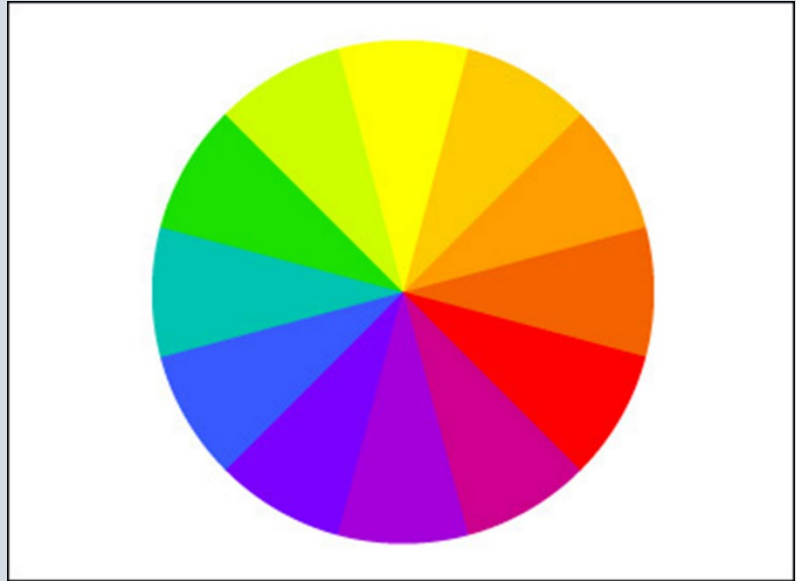
I will learn how to develop...

- my knowledge and understanding of colour theory
- my drawing and painting skills

Primary colours can be mixed together to make the secondary and tertiary colours.

The primary colours are red, yellow and blue.

They cannot be made by mixing other colours together. The primary colours sit equal distances apart on the colour wheel.



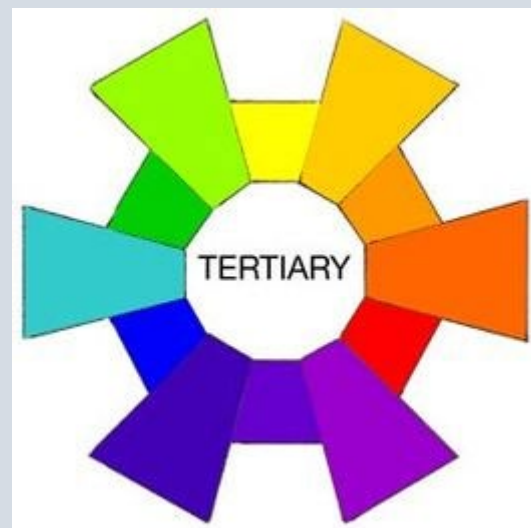
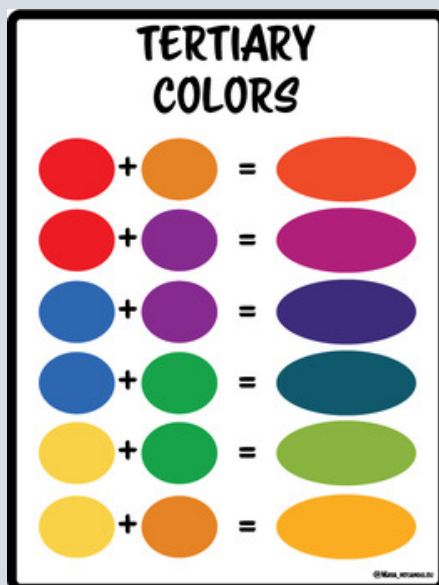
4. What is a tertiary colour?

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 colour theory
- my drawing and painting skills



Tertiary colours are a combination of a secondary colour and a primary colour next to it. They include yellow-orange, red-orange, red-purple, blue-purple, blue-green and yellow-green.

5. How do the complementary colours work?

Red

Amber

Green

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

I will learn how to develop...

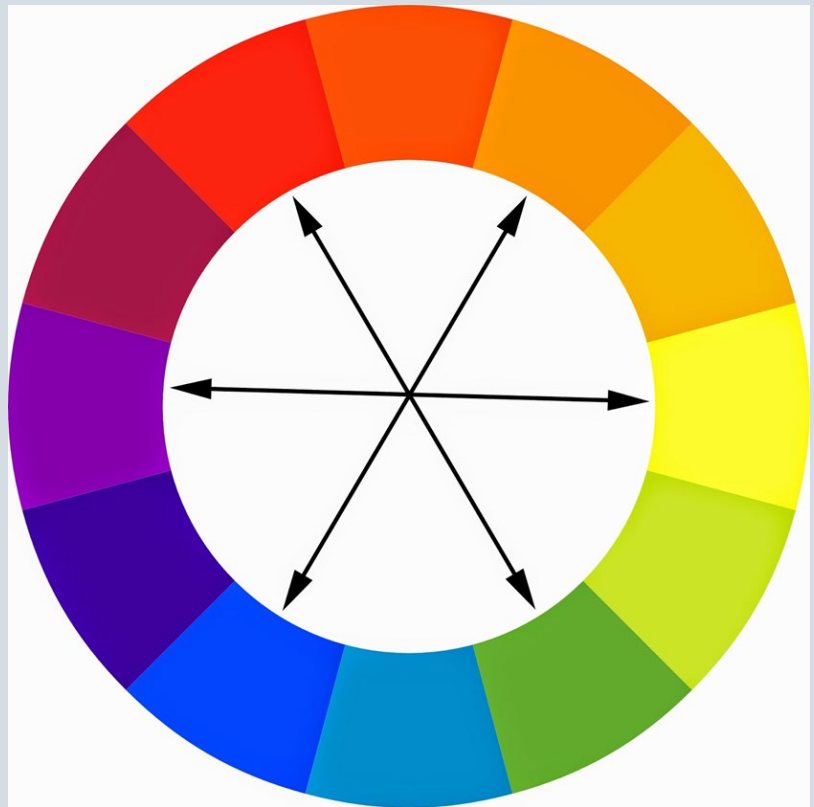
- my knowledge and understanding of colour theory
- my drawing and painting skills

Complementary colours are pairs of colours which, when combined or mixed, cancel each other out.

When placed next to each other, they create the strongest contrast for those two colours.

Complementary colours may also be called "opposite colours".

They are so called, because they sit opposite one another on the colour wheel.



6. Why is drawing important in a project?

Red

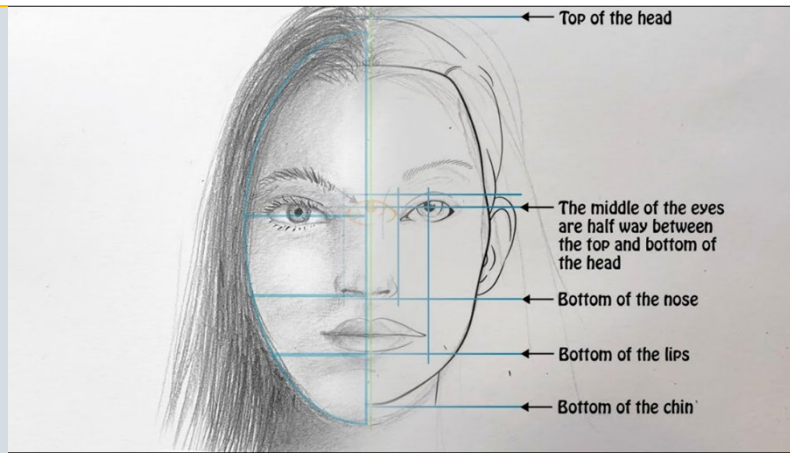
Amber

Green

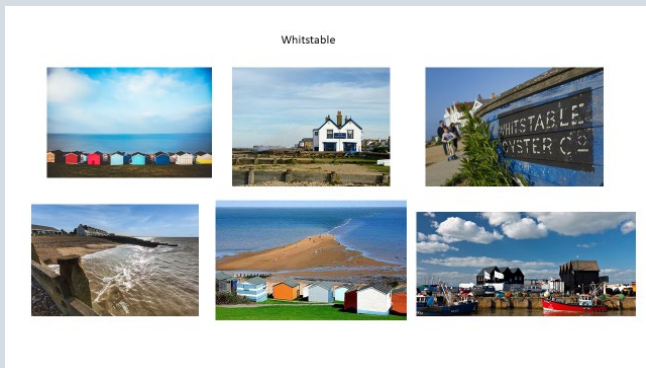
Become proficient in drawing, painting sculpture and other art, craft and design techniques:

I will learn to record...

- images and information appropriate to a given theme- **'People and Places'** inspired by Friedensreich Hundertwasser'



Faversham



Whitstable



Canterbury

7. What are the Warm and Cool colours? How can we use them effectively?



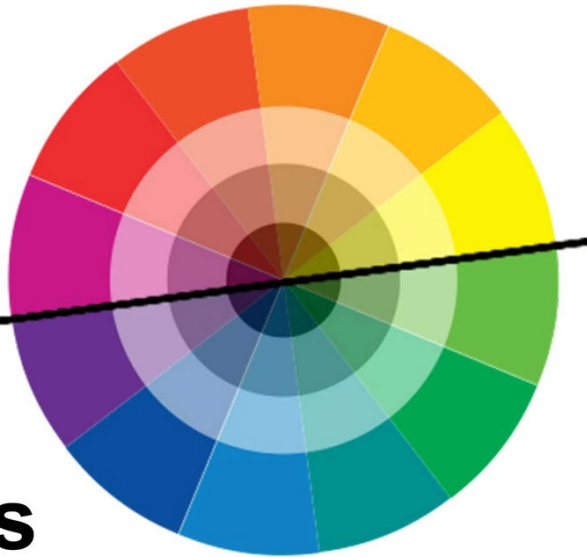
Become proficient in drawing, painting sculpture and other art, craft and design techniques:

I will learn how to develop...

- my knowledge and understanding of colour theory
- my drawing and painting skills
- my use of images and information to create abstract ideas
- ideas in response to a given theme, linking to artists work
- my higher order thinking skills

Warm Colors

Cool Colors



Warm and Cool Colours can be used to create the illusion of depth in the painting by using warmer colours in the foreground which gradually become cooler towards the background.

This organised arrangement of colours in a landscape is called Aerial Perspective. As shown in this painting by Andre Derain...



8. How does colour link to human emotion?

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 colour theory
- my drawing and painting skills
- my use of images and information to create abstract ideas
- ideas in response to a given theme, linking to artists work
- my higher order thinking skills

Red= anger

Orange=

excitement

Yellow= joy

Pink= love

Green= balance

Blue= sadness

Purple= calmness

Brown= comfort

Gray= maturity

White= hope

Black= strength



9. Can you create an Abstract composition?

Red

Amber

Green

Produce creative work exploring their ideas and recording their experiences:

I will learn how to refine...

- through exploring a range of media and techniques e.g. mixing secondary and tertiary colours, exploring colour harmonies, mix complementary colours together in order to create colour tone
- through exploring application of paint through techniques; wet into wet, wash, wet onto dry, dry brush etc. use of warm and cool colours to create depth/mood
- selecting ideas to adapt and improve using abstract composition
- by developing a piece of work using painting techniques and colour in different ways

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

- inspired by Abstract Art

10. 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 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 /

HOME LEARNING TASKS

Task Description

Done?

Homework Booklet 1 'Homage to Bleriot by Robert Delaunay

(artist links to project through use of colour and abstract theme)

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



How do artists use colour?

The picture opposite is called 'Blobs Grow in Beloved Gardens'

- Where can you see primary colours?
.....

- Which secondary colours can you see?
.....

- Are there any tertiary colours?
.....

- Can you identify use of complementary colour pairs?
.....

- As an extra challenge recreate the picture



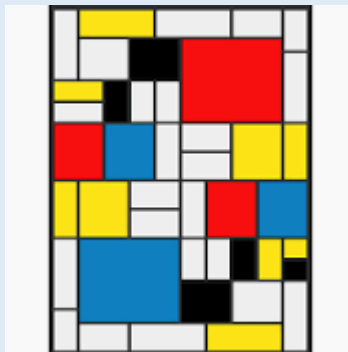
Can you define the meaning of Abstract Art?

Read me...

Abstract art that does not attempt to represent an accurate depiction of a visual reality but instead uses shapes, colours, forms and gestural marks to achieve its effect.

Complete me...

..... art that does not attempt to represent an depiction of a visual reality but instead uses, colours, forms and gesturalto achieve its effect.



- There are 3 pictures above that are not Abstract can you identify them?

.....

- As an extra challenge try recreating one or more of them...

What is special about the primary colours?

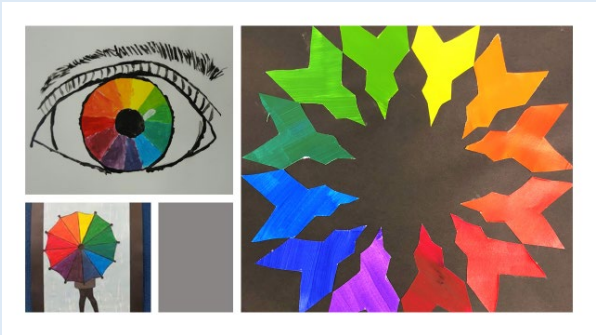
- List the 3 Primary colours

.....

- List the 3 Secondary colours

.....

- Produce a creative colour wheel using the images below for inspiration



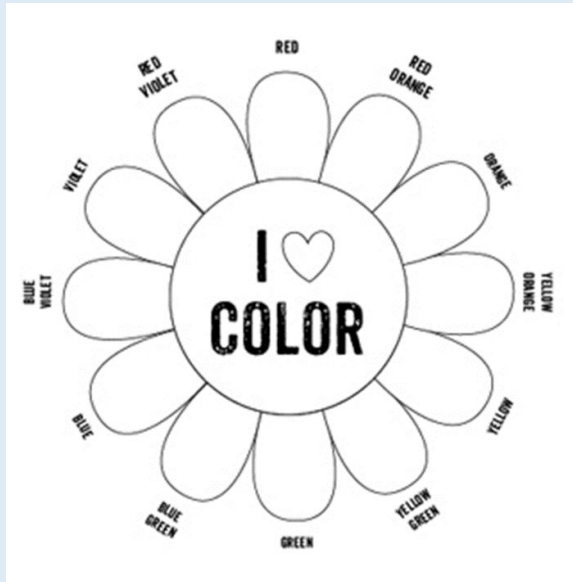
What is a tertiary colour?

- List the Tertiary colours

.....

.....

- Use the colour wheel to help you colour in these flower templates in colour wheel order



How do the complementary colours work?

List the complementary colour pairs that belong in the fruit bowl then add colour

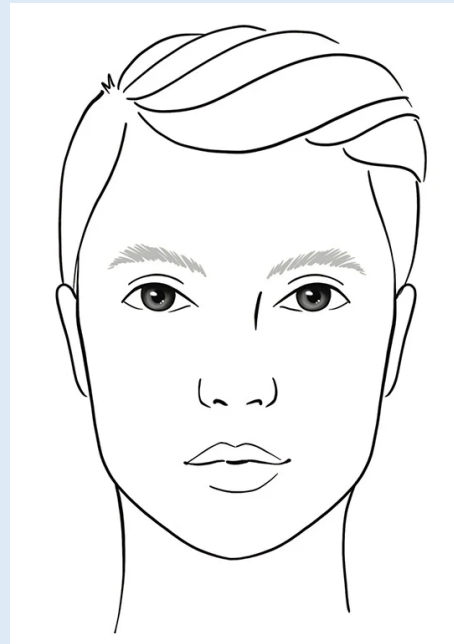
As an extra challenge draw a real bowl of fruit...



RED + GREEN / YELLOW + PURPLE / BLUE + ORANGE

Can you create an Abstract composition?

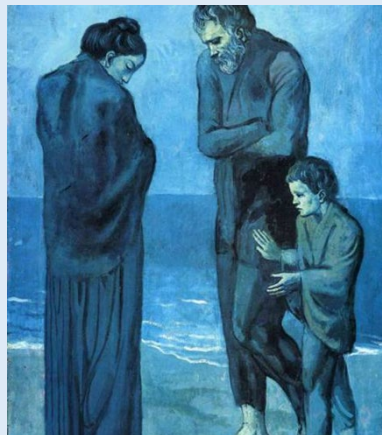
Turn these faces into Hundertwasser style portraits- using the characteristics of Hundertwasser to help you...



Create a self portrait inspired by Hundertwasser

How does colour link to human emotion?

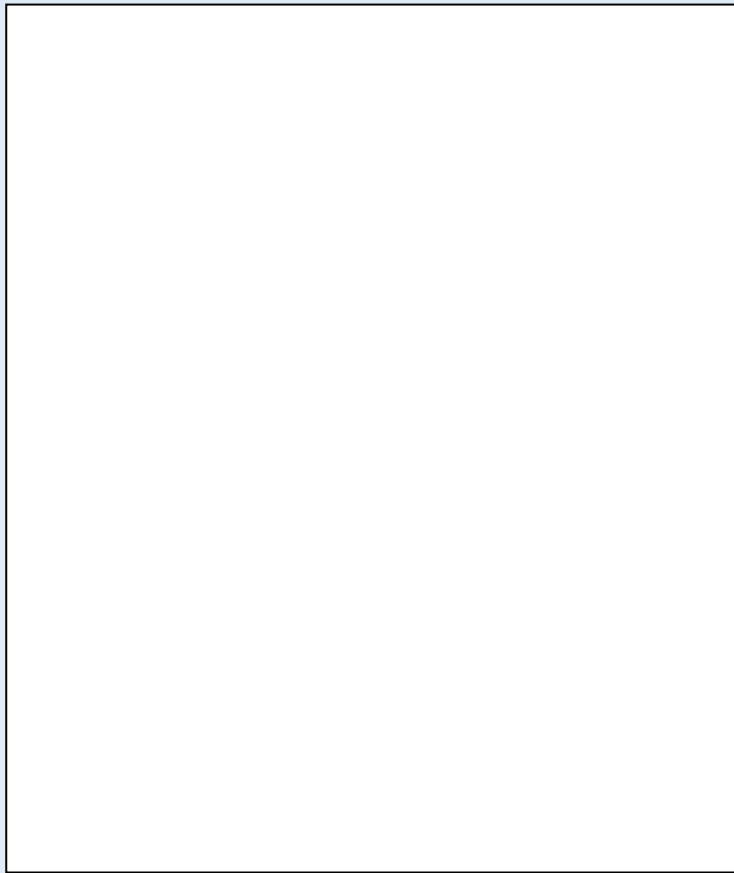
What kind of emotions are being shown in the picture opposite?



Use colour to show the emotions this person might be feeling...



As an extra challenge draw yourself using colour to show your emotions...

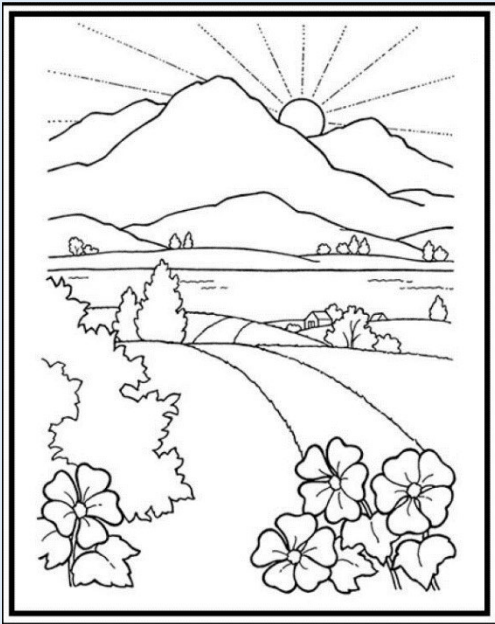


What are the Warm and Cool colours? How can we use them effectively?

Remember- Warm colours make things appear close and cool make things appear far.



Use warm and cool colours to create the illusion of near and far in these landscapes....



As an additional challenge draw and paint a landscape of your own

Why is it important to evaluate?

Evaluate your best work...

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?

Subject: Product Design Year 7 & 8

Term: 3 Extension of 'Phone Stand' Project

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:

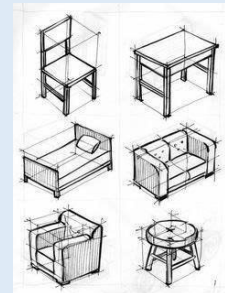
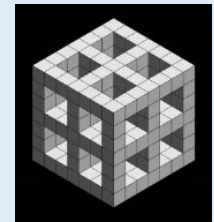
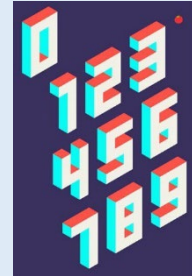
- How to use a booklet in order, keeping it neat and tidy to refer back to in later lessons.
- Follow the iterative design process
- Make a phone stand using the proper methods and processes
- Follow health and safety rules in the classroom

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...

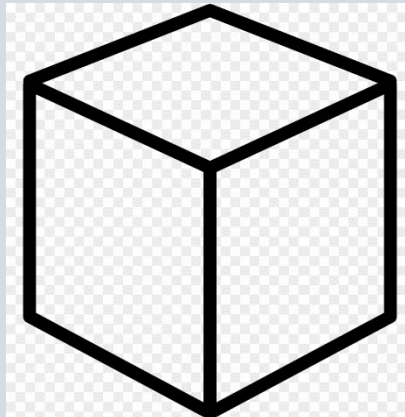
- Identify what isometric drawings look like from the angles used
- Understand who some designers are that have used these
- Find ways to influence others ideas and techniques into my own work
- Find examples of isometric outcomes I am already aware of

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

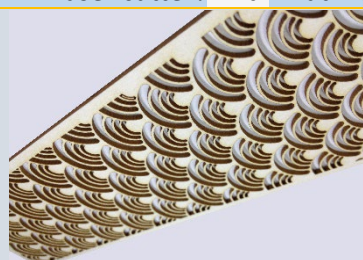
Being able to find the right software/ app

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...

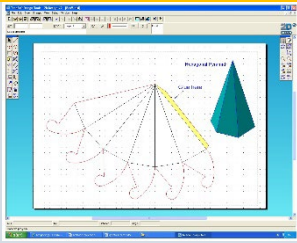
How to test different materials on the laser cutter

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?

Red Amber Green

I will learn how to...

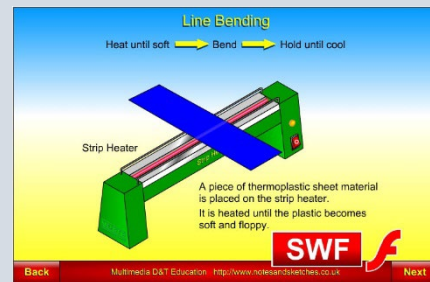
- Vectorise an image
- Use line and shape tools
- Adjust size, thickness and colour
- Recreate something from my booklet (Crossy Roads Character) on 2D Design following the same design methods

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

Red Amber Green

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

Red Amber Green

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 - Helpsheets

I will understand...

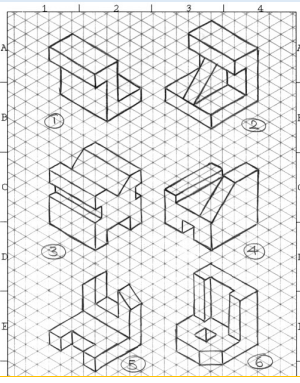
- The importance of ongoing reflection of my idea and work
- What ACCESS FM and what does it stand for
- How to use it to ensure your product is to the best of your ability but also still aligning to the client and the ideas of the 'brief'

A is for Aesthetics		Aesthetics means what does the product look like? Why is it like that? Shape / Colour / Pattern / Appearance / Build / Weight / Size
C is for Cost		Cost means how much does the product cost to buy? How much does it cost to produce? How much do the raw materials cost? Is it good value?
C is for Customer		Customer means who will buy or use your product? What are their needs? Who will use your product? What are their Age / Gender? What are their likes / dislikes? What are their needs?
E is for Environment		Environment means will the product affect the environment? In the process of production? In the use of the product? In the disposal of the product? What are the environmental impacts of the product?
S is for Size		Size means how big or small is the product? What is the size of the product in millimetres / centimetres? Is it the same size as other products? Is it smaller than / larger than / the same as other products? How big or small is it? How big or small is it? How big or small is it?
S is for Safety		Safety means how safe is the product when it is used? Will it be safe to use when it is used? Will it be safe to use when it is used? Will it be safe to use when it is used? Will it be safe to use when it is used?
F is for Function		Function means how does the product work? What is the product for? What is it used for? What is it used for? What is it used for? What is it used for?
M is for Material		Material means what is the product made out of? What are the materials used? What are the materials used? What are the materials used? What are the materials used?

Task Description

Done?

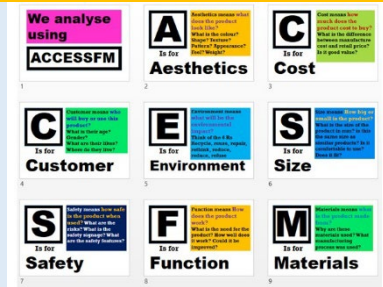
Homework booklet 1 'Isometric drawing practice'
Duration – 30 minutes minimum on each of the tasks



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.

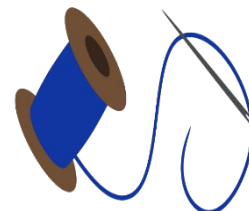
Have a look at watching some 2D Design tutorials on YouTube specifically beginner ones to help you remember in class.

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.

Textiles KS3 Term 3 & 4

- Using our hand sewing skills, and the soft toy construction, understanding of the use of a paper pattern and development of ideas based on a unique toy.
- Using our knowledge of SMART and E textiles, students will have developed their toy using the glow in the dark threads and beads. This will enable them to utilise ACCESS FM to complete their product, evaluate and suggest improvements.



Term Focus:

Following our designing of a soft toy sea creature, students will go on to construct and make the soft toy using hand sewing techniques learned in Term 1.

Once made, the students will look at SMART and E textiles to enhance their soft toy. They will go on to use ACCESS FM to design and construct the packaging for their 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 these basic skills to design and make a bag using calico embellished with their own design. But they will enhance previously learned skills in Terms 5 and 6 by learning how to use the sewing machines.

KEY VOCABULARY

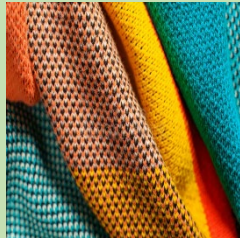
KEY WORDS		KEY SUBJECT TERMINOLOGY	
Needle	Pins	Threading	Sampler
Scissors	Stitch	Sewing	Seam
Sew	Stitch ripper	Straight stitch	Hem
Thread	Silk	Back stitch	Button
Cotton	Wool	Cross stitch	ACCESS FM
Denim	Polyester	Blanket stitch	
SMART textiles	Embellishment		
E Textiles			

1. Do I know the difference between synthetic and natural fabrics?

Red Amber Green

I will learn to...

- Identify the features of natural fabrics.
- Why they are different to the features of synthetic fabrics.
- Suggest suitable textiles for different scenarios.



2. Do I know what SMART textiles are?

Red Amber Green

I will learn to...

- Identify and suggest SMART textiles, how they can help us and what they might do for us in the future.



3. Do I know what E-Textiles are?

Red Amber Green

I will learn to...

- Identify E Textiles, what they are doing for us in our everyday lives and how they might enhance or improve our lives in the future.



4. Can I use my knowledge of SMART and E Textiles to embellish my soft toy sea creature?

Red Amber Green

I will learn to...

- Using my knowledge, I will learn how to enhance my own sea creature, making it a better product.
- Use a camera to produce photographs of my enhanced sea creature.



5. Do I know what ACCESS FM is? And how it is relevant to my work?

Red Amber Green

I will learn to...

- Understand what ACCESS FM is and how it is used to **Market** products around the world.
- How ACCESSFM can influence my design of packaging for my soft toy.

Design Specification:	
Aesthetics	<ul style="list-style-type: none"> •What will your packaging look like? •Describe shapes, colours, styles of lettering, illustrations.
Cost	<ul style="list-style-type: none"> •Do you believe your packaging will be affordable to produce. •How can costs be reduced?
Client	<ul style="list-style-type: none"> •Who are you aiming the product at? •Specify gender (male/female), age group and income (how much they are able to spend).
Environment	<ul style="list-style-type: none"> •What impact will the packaging have on the environment? •Can it be made from recycled fibres? •Can it be recycled once it is no longer needed?
Safety	<ul style="list-style-type: none"> •What will the health and safety considerations be? •How will your design avoid harming those who handle the packaging?
Size	<ul style="list-style-type: none"> •What size will your packaging be in relation to the souvenir it is intended to contain? •What allowances need to be made to provide space for cushioning the product/protecting it from damage?
Function	<ul style="list-style-type: none"> •Explain what is the purpose of your packaging? •Will it give information about the product it contains? •Will it aim to attract consumers? •Will it enable the product to be stored and transported safely?
Materials	<ul style="list-style-type: none"> •What materials will be used in your packaging? •How do you know they will be suitable?

6. Can I design packaging for my soft toy sea creature?

Red Amber Green

I will learn to ...

- Use basic geometry to design and draw up the packaging for my soft toy sea creature.



7. Can I construct the packaging for my soft toy sea creature?

Red Amber Green

I will learn to...

- Use my design to cut out and construct the packaging for my soft toy sea creature.

- Develop my special awareness of the packaging and its design to enable a successful outcome.
- I will be able to promote my soft toy sea creature appropriately on its packaging.
- I will understand the laws regarding advertising for soft toys in the UK and the EU.

8. Can I evaluate my soft toy sea creature and its packaging?

Red

Amber

Green

I will learn to...

- Identify where I could have improved my packaging and my soft toy sea creature.
- How the packaging was used to advertise my soft toy sea creature.

HOME LEARNING TASKS

	Done?
Identifying Home Sewn textiles. <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. 	
Do you have any old toys or clothes that were made for you? Perhaps by a relative or close friend? <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. 	
Could you sew a small needle/pin case to hold needles and pins at home? <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. 	
Do you know any embroidery stitches? <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. 	

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

Term Focus –

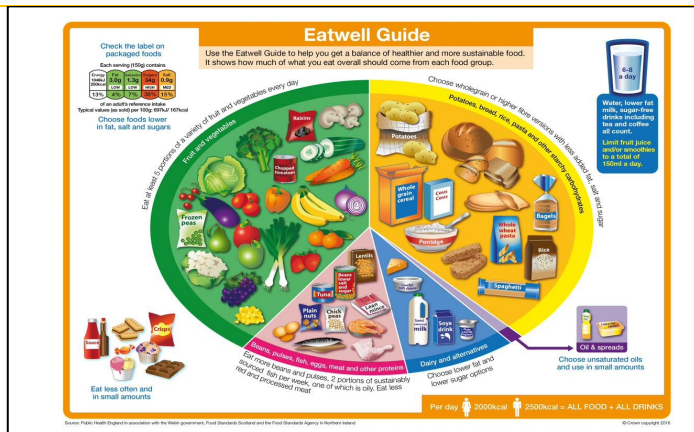
1. Food Safety, food hygiene, food skills, the senses
2. The Eatwell Guide, food groups, making food choices

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

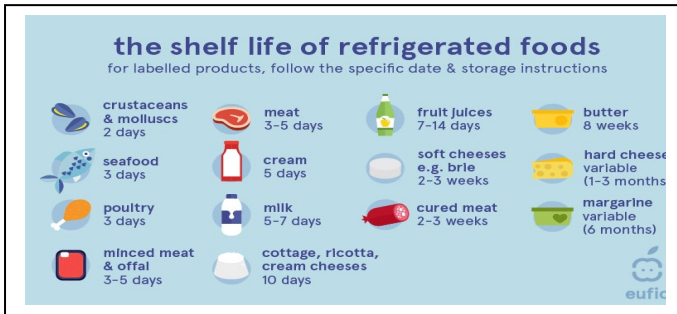
Hygiene and safety, the 4 C's in food preparation, key temperatures, using our senses, nutritional foods, modifying dishes.

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

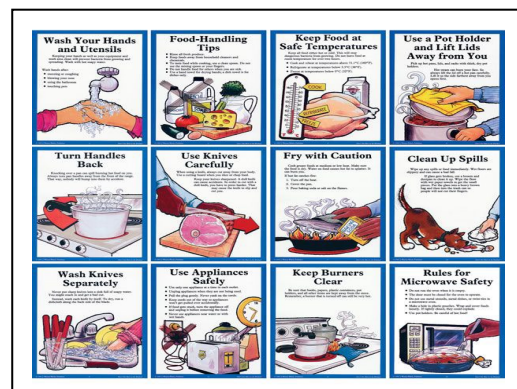


5. Why is it important to be Safe in a practical food room?

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.

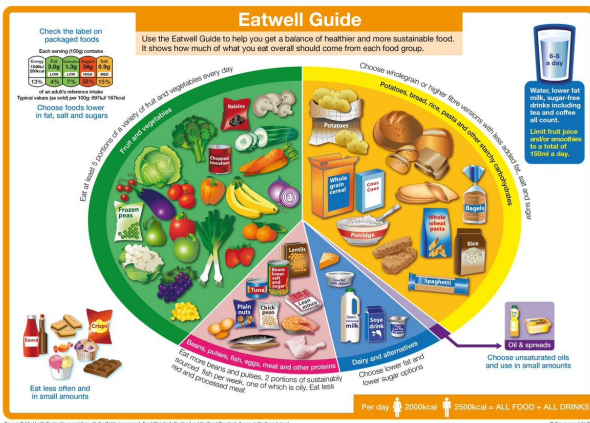
I will learn: The way we taste food is affected by the way we smell (Parma Violet experiment).



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

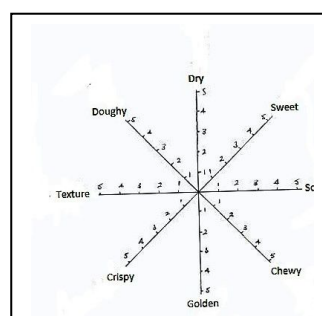
Fat – some energy, warmth and protection

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

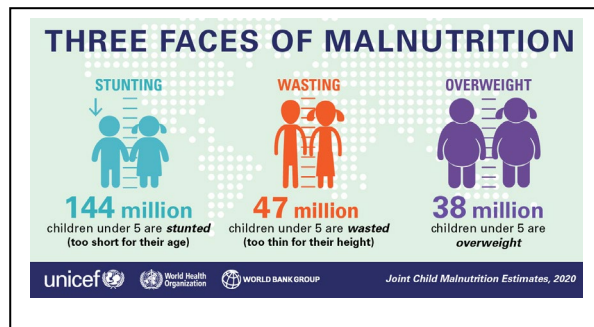
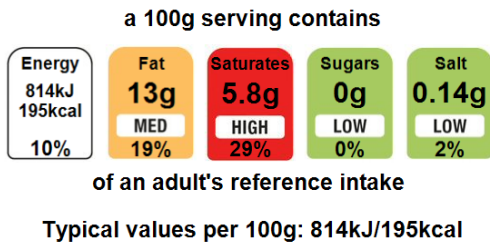


10. How can we tell if food is nutritionally good or bad? What is malnutrition/obesity?

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.	