# KNOWLEDGE ORGANISER

## YEAR 9 – TERM 1

THOMAS HALL SCHOOL

Think Like An
**Environmentalist**

Community, Collaboration and Challenge

# ATTENDANCE MATTERS

## EVERY DAY COUNTS
Missing just 1 day every 2 weeks is the same as missing 10% of the school year.

## LEARNING
Being in school allows you the best opportunity to learn.

## WELLBEING
Attending school supports your mental and emotional health.

## FUTURE SUCCESS
Regular attendonce at school is vitol for building the key skills needed for future employment

# EQUIPMENT


# SCHOOL DAY

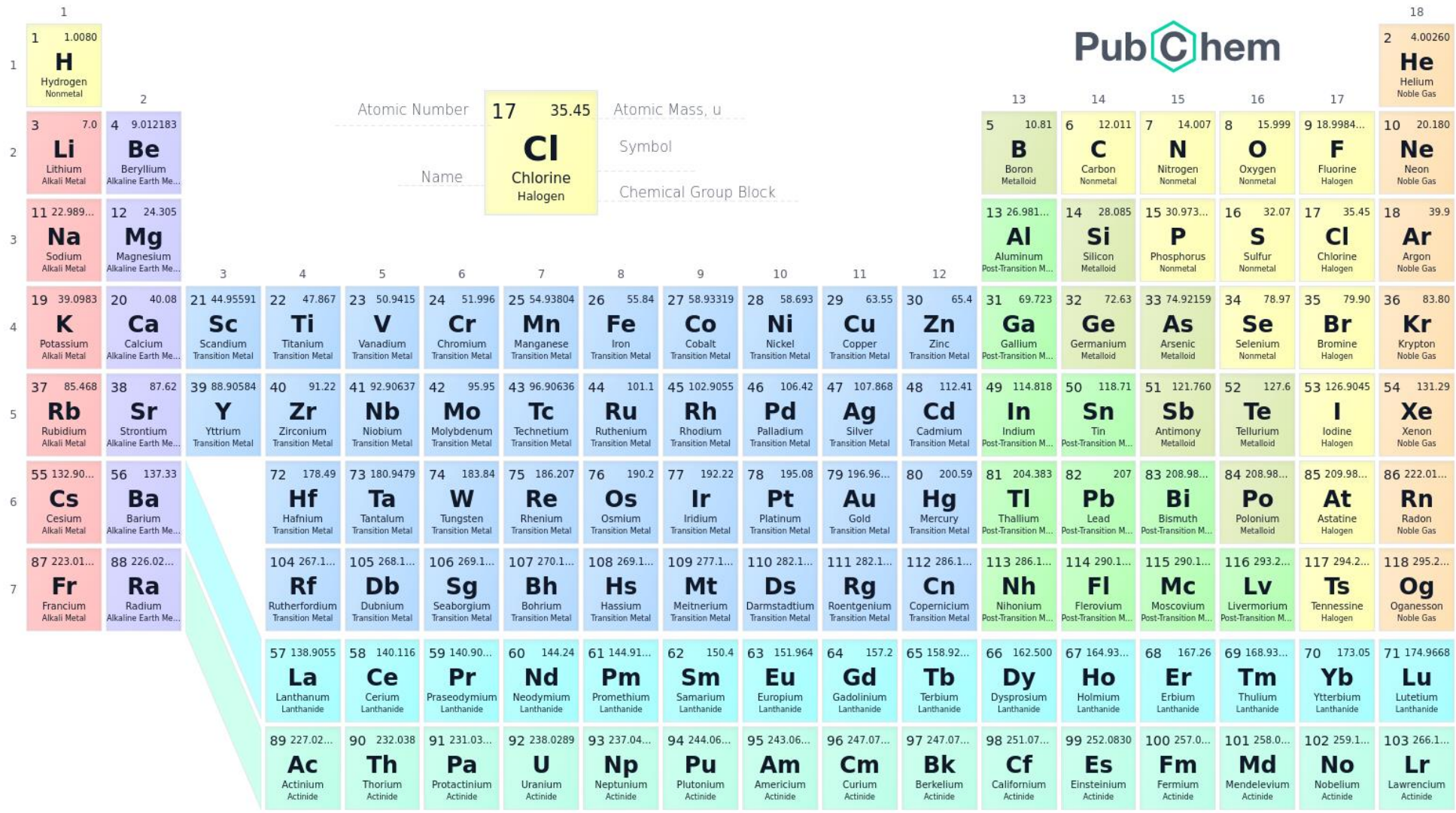
| | |
|---|---|
| 9:00–9:05 | AM Reg |
| 9:05–10:20 | Lesson 1 |
| 10:20–11:35 | Lesson 2 |
| 11:35–12:05 | Break 1 |
| 12:05–13:20 | Lesson 3 |
| 13:20–13:50 | Break 2 |
| 13:50–15:05 | Lesson 4 |
| 15:05–15:30 | PM Reg – assembly or guided reading |

# Multiplication Grid

| × | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 2 | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 24 |
| 3 | 3 | 6 | 9 | 12 | 15 | 18 | 21 | 24 | 27 | 30 | 33 | 36 |
| 4 | 4 | 8 | 12 | 16 | 20 | 24 | 28 | 32 | 36 | 40 | 44 | 48 |
| 5 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 |
| 6 | 6 | 12 | 18 | 24 | 30 | 36 | 42 | 48 | 54 | 60 | 66 | 72 |
| 7 | 7 | 14 | 21 | 28 | 35 | 42 | 49 | 56 | 63 | 70 | 77 | 84 |
| 8 | 8 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 | 88 | 96 |
| 9 | 9 | 18 | 27 | 36 | 45 | 54 | 63 | 72 | 81 | 90 | 99 | 108 |
| 10 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 |
| 11 | 11 | 22 | 33 | 44 | 55 | 66 | 77 | 88 | 99 | 110 | 121 | 132 |
| 12 | 12 | 24 | 36 | 48 | 60 | 72 | 84 | 96 | 108 | 120 | 132 | 144 |

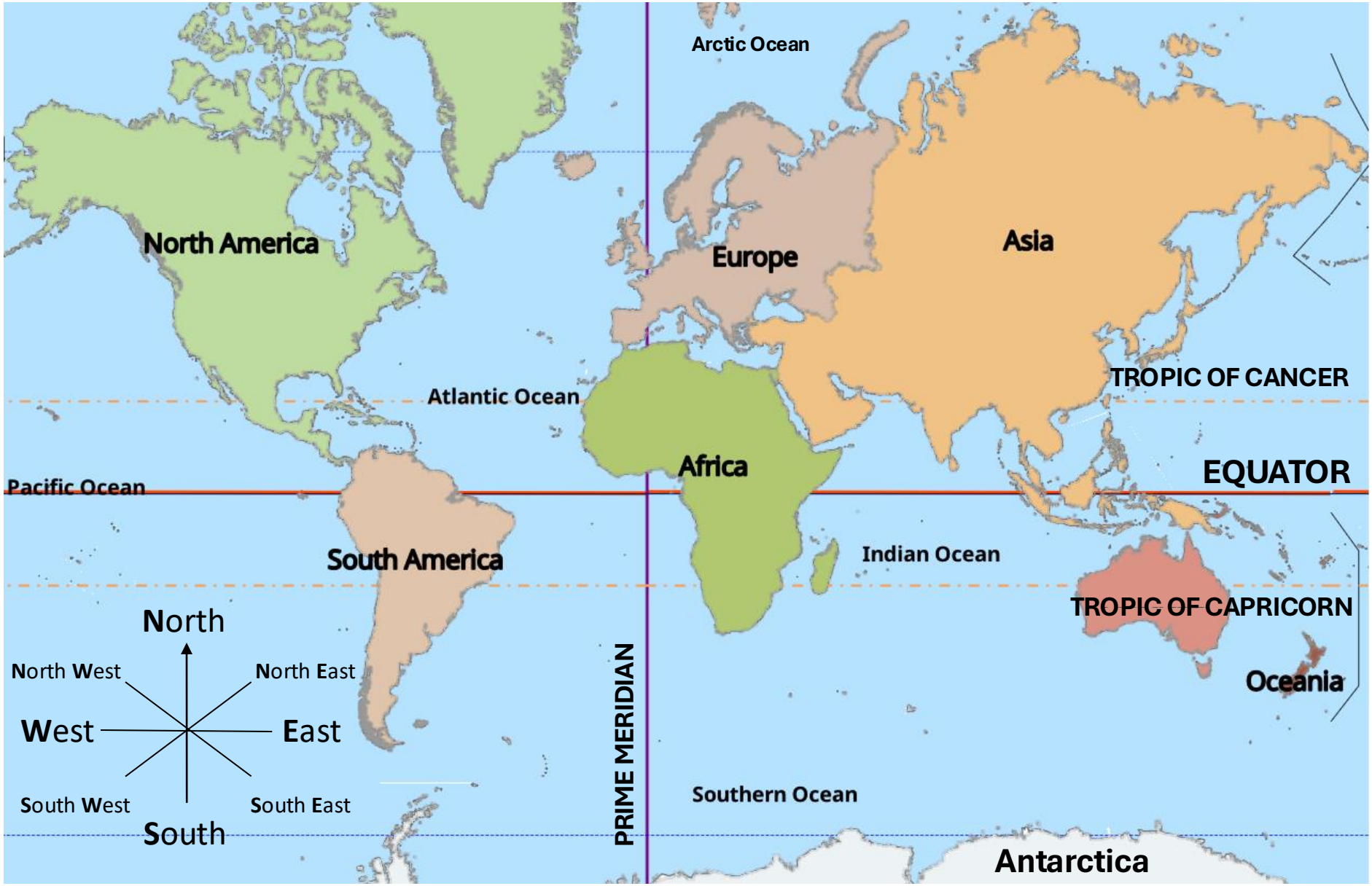
# PERIODIC TABLE OF ELEMENTS

## Chemical Group Block




01 Adjectives
THAT DESCRIBE:
age: young, old
colour: red, blue
condition: new, used
size: large, medium
speed: fast, slow
etc.
COMPARATIVE:
smaller, better...
SUPERLATIVE:
the smallest,
the worst,
the best...
02 Adverbs
PLACE:
here, there,
outside, everywhere,
upstairs, nowhere,
somewhere....
TIME:
ago, before, since,
yet, for, still,
afterwards...
FREQUENCY:
often, never,
sometimes, always
MANNER:
just, quite,
quickly, hardly,
well, carefully,
barely, almost,
scarcely,
beautifully...
03 Conjunctions
COORDINATING:
and, or, but,
yet, nor, for, so
CORRELATIVE:
both... and...,
either... or...,
just as... so...,
whether... or...,
neither... nor...,
not only... but also...
SUBORDINATING:
after, since, if,
while, although,
before, because,
unless
04 Determiners
TELLS US WHICH:
each, every,
some, none,
all...
TELLS US WHOSE:
my, your, her, his, its,
our, your, their (= possessive
adjectives or determiners)
05 Nouns
COMMON NOUNS: house, dog, laptop...
PROPER NOUNS:
(Capitalised)
London, Paris,
James, William,
Julia, Jennifer...
> VERBAL:
swimming...
> COLLECTIVE:
choir, jury...
> COMPOUND:
mother-in-law...
> COUNTABLE:
book, day...
> UNCOUNTABLE:
traffic, calm...
> ABSTRACT V. CONCRETE:
wit vs. road...
06 Prepositions
PLACE / DIRECTION:
in, at, on,
under, above,
across,
among,
between...
TIME:
in, at, on,
over, until, about,
during, before,
after, while,
through...
OTHER (agent,
phrase...):
by, with, on, over,
to, up, within,
beyond, for...
07 Pronouns
PERSONAL
(subject):
I, you, he, she, it,
we,
you, they
PERSONAL
(reflexive):
myself, yourself,
himself, herself,
itself, ourselves,
yourselves,
themselves
DEMONSTRATIVE:
this, these,
that, those
PERSONAL
(object):
me, you, him, her,
it, us, you, them
POSSESSIVE:
mine, yours, his,
hers, its, ours,
yours, theirs
INTERROGATIVE:
how, where,
when, which...?
INDEFINITE:
somebody,
anyone...
RELATIVE:
that, which,
whose, whom...
08 Verbs
ACTION:
to run, to organise,
to read, to think...
> Transitive
or
> Intransitive
LINKING:
to be,
to look, to appear,
to seem, to smell...
HELPING
(= AUXILIARY):
can, may,
will, must,
should, to be,
to have...
Word Classes

# World Map


Arctic Ocean
North America
Europe
Asia
Atlantic Ocean
TROPIC OF CANCER
Africa
EQUATOR
Pacific Ocean
South America
Indian Ocean
TROPIC OF CAPRICORN
Oceania
North
North West
North East
West
East
South West
South East
South
PRIME MERIDIAN
Southern Ocean
Antarctica

# Art

## *Year 9 Facial Features* Art Term 1

- **Topic:** Portraiture
- **Focus Areas:** Drawing skills, proportion, tonal values, mixed media, identity, artist analysis
- **Objective:** Understand the historical and cultural relevance of portraits.
- **Activity:** Class discussion and visual analysis of famous portraits

**Proportions of the Face**

- **Objective:** Learn facial proportions (e.g., eyes halfway down head, spacing, etc.).
- **Activity:** Draw front-facing face using guidelines.

**Features – Eyes**

- **Objective:** Study eye anatomy and shading.
- **Activity:** Tonal eye drawings using pencil.

**Features – Nose**

- **Objective:** Understand light, shadowand form on the nose.
- **Activity:** Pencil tonal studies of noses.

**Features – Mouth**

- **Objective:** Understand shape,symmetry, and volume.
- **Activity:** Drawing different mouthexpressions.

**Features – Ears & Hair**

- **Objective:** Understand ear placementand hair texture.
- **Activity:** Hair & ear sketchingtechniques.

**Drawing the Whole Face**

- **Objective:** Combine features with proportion rules.
- **Activity:** Full face portrait from photo reference.

**Week 8: Tone and Shading Techniques**

- **Objective:** Explore tonal range and blending.
- **Activity:** Tonal value scales and shading exercises.

**Identity in Portraiture**

- **Objective:** Understand how artists express identity and personality.

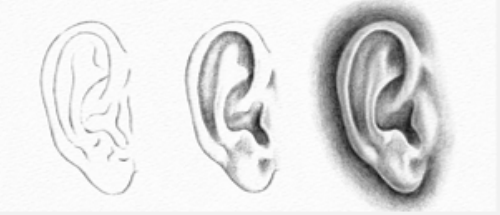
**Planning Own Portrait**

- **Objective:** Develop ideas for self-portrait or portrait of someone significant.
- **Activity:** Thumbnail sketches and composition plans.

**Objective:** Refine chosen concept, materials, and pose.
**Activity:** Detailed planning sheet and test drawings.
Create a personal portrait that expresses identity or style.

**Mixed Media Exploration**

- **Objective:** Experiment with collage,acrylic, ink, pastels.
- **Activity:** Create 2–3 test pieces usingdifferent materials.
- **Objective:** Show skills learned in a controlled portrait drawing.
- **Activity:** Produce final tonal pencil portrait from photograph.



# Art

## Year 9 Mixed Media Portraits Art Term 1

**Unit Title:** Mixed Media Portraits
**Focus:** Observational drawing, experimentation, media layering, creative expression through portraiture

- Develop techniques through experimentation
- Use a range of materials purposefully
- Improve mastery of drawing, painting, collage, and mixed media
- Suggested Artists: **Wangechi Mutu**, **Kehinde Wiley**, **Frida Kahlo**, **Vik Muniz**, **Loui Jover**
- Teesha Moore, Tim Marrs, Hannah Hoech

**Media Exploration: Collage and Texture**

- Objective: Experiment with collage techniques
- Activities:
  - Use found materials to build backgrounds or textures
  - Try torn paper, magazine collage, patterned materials
- Sketchbook Task: Create a collage portrait experiment


**Media Exploration: Paint and Ink**
Objective: Layer paint/ink over collage or drawing
Activities: Test layering of acrylic, watercolor, or ink. Explore wash techniques, resist, spatter
Task: Create a test portrait section using paint + collage

**Media Exploration: Stitching / Thread**

- Objective: Add tactile elements and stitching
- Activities:
  Try hand-stitching paper, adding fabric or textured papers
  Mixed media surface building
- Extension: Students experiment in sketchbooks or create mini sample portraits

**Objective: Plan final piece**

- Activities:
- Thumbnail sketches of layout
- Decide on media combinations
- Annotate process and influences
- Homework: Finalize portrait reference (photo/mirror/digital)

**Begin final mixed media portrait**

- Draw basic layout/composition
- Begin applying initial layers (collage/paint/texture)

- **Final Touches and Evaluation**
- Objective: Finish portrait and self-assess
- Activities:
- Add final detail, highlights, and textures
- Peer assessment and gallery walk


# Computing

## Binary Addition

### The Rules of Binary Addition

Work Right to Left and apply these simple rules:

1. 0 + 0 = 0
2. 0 + 1 = 1
3. 1 + 0 = 1
4. 1 + 1 = 0 *Carry 1*
5. 1 + 1 + 1 = 1 *Carry 1*

```
  1 1
    1 1 1 0   14
+   1 1 0 0   12
= 1 1 0 1 0   26
```

## Hardware

Computer hardware refers to the **physical parts of a computer and related devices.** Internal hardware devices include motherboards, hard drives, and RAM.

## Computer Components

Motherboard

Hard Disk Drive

CPU (Central Processing Unit)

Fan

PSU (Power Supply Unit)

RAM (Random Access Memory)

## Types of Computer Storage

Storage is a **mechanism that enables a computer to retain data**, either temporarily or permanently. **Storage** is among the key components of a computer system and can be classified into several forms, although the types we cover are:

### Internal Storage:

Most often refers to a **computer's internal** hard drive. This is the primary storage device used to store a user's files and applications. The computer's internal memory, **RAM (Random Access Memory)** and **ROM (Read Only Memory)** is also classed as internal storage.

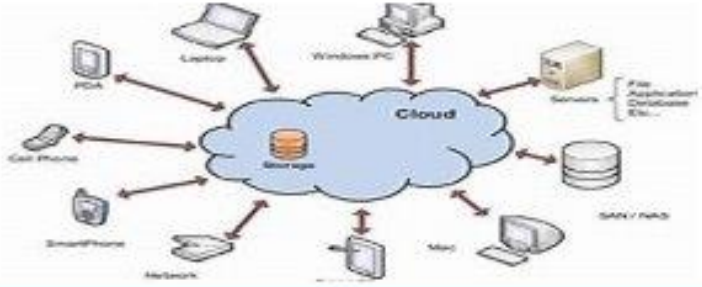
### External Storage:

Commonly referred to as an external drive, external storage is storage that's not part of the internal parts of a computer. These drives often connect to the computer using a connection, such as USB (Universal Serial Bus).

Common types of external storage are **Flash Drives (USB Sticks)** and **DVDs.**

### Cloud Storage

Cloud storage is a cloud computing model in which data is stored on remote servers accessed from the internet, or "cloud".




## Software

Computer software refers to the programs and other operating information used by a computer.

The main piece of software on a computer is the

### Operating System

The part of the operating system we see on screen is known as the User Interface.

- Graphical User Interface (GUI).
  The most popular type of system. They combine menu driven interfaces with icons.
- Command Line Interface (CLI).
  Users need to learn the commands to make it work.
- Menu Driven Interface.
  A list of options organised under various headings or menus

### Most used Operating Systems (OS)

- Microsoft – Windows
- Apple – IOS
- Google - Android




Apple

# Drama

**Year 9** | **Drama** | **Term 1**

## Performance style

- **Verbatim Theatre** is a form of **documentary drama** that uses **real people's words** from interviews or testimonies.
- Every line spoken on stage is taken **word-for-word** from real speech – no fiction added.
- It aims to present **truthful stories**, often about **social issues, injustice, or lived experience**.

## Source material and further reading

**Living Newspapers** from 1930s America
Boston Marathon bombing court transcripts
Polar Bear news article
**Monkey Bars** by Chris Goode
**London Road** by Alecky Blythe
**Little Revolution** by Alecky Blythe

## Themes and Intentions

Common themes include:

- **Injustice** (e.g. discrimination, poverty)
- **Resilience** (e.g. survivors' stories)
- **Social change** (e.g. protest or activism)

## Reflection and Evaluation

- Was it **truthful and respectful**?
- Did it **communicate a message clearly**?
- What **impact** did it have on the audience?
- How could the **delivery** be improved?

## Key Techniques

**Recorded Delivery** – Actors wear headphones and repeat the exact recording live, capturing tone, pace, and pauses.
**Editing/Testimony Collage** – Choosing and arranging quotes to create a powerful narrative.
**Multi-roling** – One actor playing several characters.
**Changing context** – putting the verbatim text into a different scenario.

## Performance Skills

- **Listening** carefully to natural speech patterns (hesitation, repetition, emotion).
- Using **vocal tone, pitch, pace**, and **physicality** to match real people's mannerisms.
- Keeping staging simple and **truthful** – avoiding exaggeration or comedy unless used respectfully and intentionally.

Good verbatim should **honour the original voice.**

## Verbatim Theatre

# Drama

## Year 9 Drama Term 1

### Analysis Structure

**What?** *(e.g The actor playing Tom marched downstage)*
**Why?** *(e.g To show that they were angry)*
**How?** *(e.g They used a straight posture and stomped their feet, with an angry facial expression.)*
**Successful?** *(This successfully showed their anger)*

### Vocal and Physical Skills

**Vocal**
- Accent
- Pitch
- Pace
- Pause
- Diction
- Power

**Physical**
- Posture
- Facial Expression
- Tension
- Gait
- Gesture
- Eye Contact

### Stage Positions

| | | |
|---|---|---|
| Upstage Right | Upstage | Upstage Left |
| Stage Right | Centre Stage | Stage Left |
| Downstage Right | Downstage | Downstage Left |

### Lighting Design Terminology

**Light positions:**
Front Light
Back Light
Side Light
Up Light
Top Light
**Gel** – changes light colour
**Blackout** – no light at all
**Crossfade** – move from one lighting state to another
**Fixture** – a theatre light
**Warm wash** – full stage coverage of light in a warm colour (orange, yellow etc.)
**Cold wash** – full stage coverage of light in cold colour (pale blue).
**Spotlight** – a single light focused on a particular person or part of the stage.

### Set Design Terminology

**Staging type:** end-on, traverse, thrust, proscenium arch, in-the-round, promenade.
**Naturalistic or non-naturalistic**
**Stage Flat** - a wooden structure to make walls
**Rostrum** - a raised platform
**Painted Backdrop** - a decorated back cloth
**Cyclorama** - a white backdrop that can be lit or projected onto
**Static set** - cannot be moved or changed
**Flexible set** - can change location
**Fly rail** - bars in the ceiling for hanging items
**Stage Furniture** - large items on the stage (e.g table)
**Set dressing** - small items to decorate the set

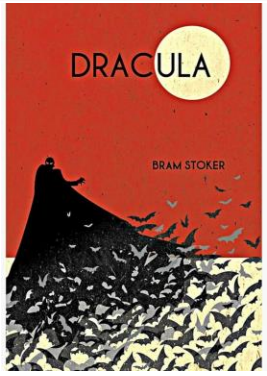
## Theatre Evaluation

# English

# Dracula

## 3. Key Terminology

| | |
|---|---|
| **Gothic fiction** | Refers to a style of writing that is characterised by elements of fear, horror, death, and gloom and extreme emotions. |
| **epistolary novel** | A novel written as a series of documents, usually in the form of letters. Although newspaper clippings, diary entries and other documents can be used e.g. police reports, doctors notes. |
| **literary Conventions** | Defining features of particular literary genres, such as novel, short story, ballad, sonnet, and play. |
| **characterisation** | A literary device in which in an author builds up a character in a narrative. |
| **setting** | The time and place in which the story takes place in a piece of literature. Setting can establish the mood or atmosphere of a scene or story. |
| **tone** | The choice of writing style the writer employs to convey specific feelings, emotions or attitudes. |
| **mood** | The feelings or atmosphere perceived by a reader in a piece of literature, established by the writer's methods e.g. through language or setting. |
| **symbolism** | The use of symbols to express ideas or qualities. |





## 3. Key Terminology

| | |
|---|---|
| **motif** | A dominant or recurring idea in an artistic work. |
| **exposition** | Refers to part of the story used to introduce background information about events, settings, characters etc. to the reader. |
| **rising action** | A related series of incidents in a literary plot that build toward the point of greatest excitement/interest. |
| **climax** | The point of highest tension in a narrative. |
| **falling action** | Occurs immediately after the climax, when the main problem of the story has been resolved. |

## 2. Key Characters

**Count Dracula**: *a mysterious Transylvanian nobleman. Lives in an old, crumbling castle in the Carpathian Mountains.*

**Abraham Van Helsing**: *a Dutch professor, described as one of the most advanced scientists of his day.*

**Jonathan Harker**: *a solicitor whose firm sends him to Transylvania to complete a real estate business deal with Dracula. Engaged to Mina Murray.*

**Mina Murray**: *Jonathan Harker's fiancée. She works as a schoolmistress.*

**Lucy Westenra**: *Mina's best friend. She is a beautiful and lively young woman.*

**Arthur Holmwood**: *Lucy's fiancé and friends with Seward, Morris and Harker. Arthur is the son of Lord Godalming and inherits that title upon his father's death.*

**John Seward**: *a talented young doctor, and a former student of Van Helsing's. Seward is the manager of an insane asylum. A suitor for Lucy.*

**Quincey Morris**: *a straight talking American from Texas. Another suitor for Lucy.*

**Renfield:** *a patient at Seward's mental asylum.*

**Mrs. Westenra**: *Lucy's mother.*

## 4. Key Vocabulary

| | Definition |
|---|---|
| **insidious** | Something dangerous or unpleasant gradually and secretly causing harm. |
| **redemption** | The action of saving, or being saved from sin, error or evil. |
| **supernatural** | A manifestation or event attributed to some force beyond scientific understanding or the laws of nature. |
| **superstition** | A widely held but irrational belief in supernatural influences, especially as leading to good or bad luck. |
| **asylum** | An institution for the care of people who are mentally ill. |
| **aquiline** | Describing a person's nose as hooked or curved like an eagle's beak. |
| **pallor** | an unhealthy pale, appearance |
| **prodigious** | Unnatural or abnormal |
| **malignant** | Evil in nature or effect; malevolent. |
| **macabre** | Used to describe something that is strange or disturbing as it is connected with death or gruesome acts. |
| **melodramatic** | Showing much stronger emotions than are necessary or usual for a situation. |
| **grotesque** | Repulsively ugly or distorted, especially in a comical or frightening way. |
| **Feminism** | The belief that women should be allowed the same rights, opportunities and power as men. |
| **New Woman** | A feminist ideal that became popular in the late 19th century and influenced feminism in 20th century. |
| **repulsion** | A feeling of intense distaste or disgust. |

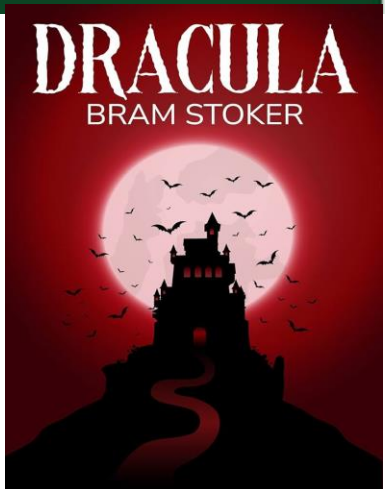
# English

## 1. Context

**Author:** Bram Stoker (1847-1912)
**Nationality:** Irish
**Other notable works:** *'The Jewel of Seven Stars', 'The Lair of the White Worm'*
**Dates:** written between 1891-1897, published in 1897
**Era:** Victorian, late 19th Century
**Genre:** Gothic, horror
**Set:** Transylvania, Romania; London; Whitby, North Yorkshire
**Form:** Epistolary

**Author biography**

- Bram Stoker was born in Dublin, Ireland, in 1847.
- Studied maths at Trinity College and graduated in 1867.
- Joined the Irish civil service and also worked as a freelance journalist and drama critic.
- Married an actress, Florence Balcombe, and had one son, Noel.
- Moved to London where he moved in literary circles, which included figures such as Oscar Wilde, Arthur Conan Doyle, and Alfred Lord Tennyson.
- His early novels and short stories did not achieve much success.
- His greatest literary achievement came with the publication of Dracula in 1897.
- The novel was not an immediate popular success but is now regarded as a classic.
- *Dracula* has been in print continuously since its first publication and has inspired countless films and other literary works.




countless films and other literary works.

**Social, Historical & Literary context**

**Vampires**

- Vampire legends have been a part of popular folklore in many parts of the world since ancient times.
- From the Middle Ages to the modern era, reports of corpses rising from the dead with supernatural powers achieved widespread acceptance.
- The Dracula family is based on a real fifteenth-century family.
- Most famous vampire was The Prince of Wallachia ,Vlad Dracula, or Vlad the Impaler as he was commonly known.
- Count Dracula is supposed to be a descendant of Vlad, and not the prince himself.

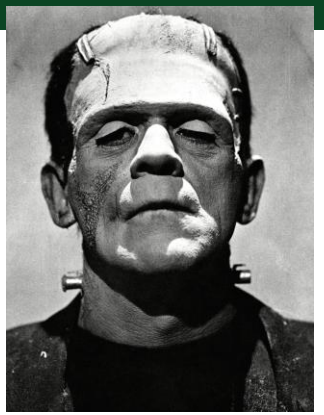
**The Gothic genre**

- The word 'gothic' was first applied to Horace Walpole's novel: *The Castle of Otranto 'A Gothic Story'*, published in 1764.
- The gothic genre became popular in the late 18th and 19th centuries, during a time of great discovery and change. Scientific discoveries were prompting people to question their previously held beliefs. People were prepared to suspend reason in search of new meaning.
- Gothic novels emphasised mystery, horror and the uncanny.
- Typical characteristics of the gothic genre are: castles, crumbling buildings, gloomy/remote locations, dark forests, damsels in distress, villains.
- Themes explored include: good versus evil; morality; beauty versus the grotesque; the struggle between reason and imagination.
- Gothic fiction shared some of the ideals of Romanticism which focused on the "sublime" power of nature.

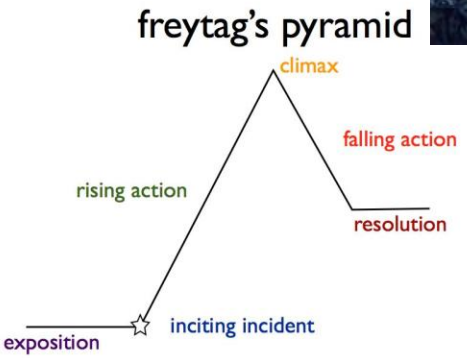
# Gothic Writing

# English

| Basic features | Definition |
|---|---|
| Capital Letters | These must be at the starts of names, starts of sentences and use the pronoun 'I'. |
| Full stops | Unless using another piece of punctuation, these need to be at the end of sentences. |
| Question marks | Instead of a full stop denoting a question. E.g. When do you use a question mark? |
| Commas | Used to separate items in a list or a dependent clause from an independent clause. E.g. If I had to choose, I like blue, red and green. |
| Apostrophes | Indicating a contraction or possessive. E.g. The pie wasn't Peter's to eat. |
| Consistent tense | The tense you begin writing in should usually stay the same throughout your writing. |
| Paragraphs | A break in writing indicates the topic, person, place, time or focus of your writing has changed. |
| Homophone spellings | Easily mistaken spellings like there, their and they're; to, too and two or your and you're. |
| Semi-colons | A punctuation mark that can separate two independent clauses instead of a conjunction or full stop. |
| Colon | Colon can separate an independent clause and a dependent clause or start a list. |
| Simple, compound and complex sentences | Use a variety of these to make writing interesting. Simple sentences are just an independent clause. Compound sentences are two independent clauses usually joined with a conjunction and a complex sentence is an independent and dependent clause. |



Horror




Supernatural

# Gothic Writing

# English

## Darkness

| Language Devices | Definition |
|---|---|
| Simile | A comparison using the words 'like' or 'as'. |
| Metaphor | A comparison that represent one thing as being the other. |
| Personification | When an object is represented as being human. |
| Onomatopoeia | Words that sound like a sound. |
| Alliteration | Two or more words starting with the same letter. |
| Imagery | A vivid, easy to imagine description. |
| Symbolism | When one thing is standing in the place of another. |
| Oxymoron | When two things are put together but are impossible. |
| Juxtaposition | When two opposing ideas or themes are used near each other. |
| Pathetic Fallacy | When nature creates a mood in a story. |

**LANGUAGE techniques (eg):**

List of 3
Onomatopoeia
Metaphor
Alliteration
Similes
Senses
Imagery
Very detailed
Emotive language

**Word classes:**

**Noun:** A naming word like: cat, kettle, pen

**Proper Noun:** Starts with a capital letter – person or place like: England, Shakespeare

**Adjective:**

A describing word like: beautiful, grotesque, awesome

**Verb:** A doing/ thinking/ feeling word like: run, imagine, believe

**Adverb:** Describes how the verb is being carried out like: quickly, slow, high.

## Isolation

# French

## Module 3- A loisir

### Point de départ

| | | | | | |
|---|---|---|---|---|---|
| Je regarde la télé<br><br>I watch TV | avant les cours - before lessons<br>tous les soirs - every evening<br>le weekend - at the weekend<br>dans le salon - in the living room<br>dans le bus - on the bus<br>dans ma chambre - in my bedroom<br>avec ma famille - with my family<br>seul(e) - alone | je regarde<br>I watch | des chaînes sur YouTube - YouTube channels<br>à la demande, sur Netflix - on demand on Netflix<br>sur mon smartphone - on my smartphone<br>sur mon ordinateur - on my computer<br>sur ma tablette - on my tablet | c'est<br>it is | varié<br>varied<br><br>facile<br>easy |
| | | | | ce n'est pas cher<br>it's not expensive | |
| J'aime<br>I like<br><br>Je n'aime pas<br>I don't like | les comédies – comedies<br>les dessins animés – cartoons<br>les documentaires – documentaries<br>les feuilletons – soaps<br>les infos – the news<br>les jeux (télévisés) – gameshows<br>les séries (policières) – (pólice) series<br>les émissions de cuisine / musique / sport / science-fiction / télé- réalité<br>- cookery/ music/ sport/ science fiction / reality programmes | | parce qu'ils /elles sont<br>because they are | ridicules – ridiculous<br>divertissant(e)s – entertaining<br>intéressant(e)s – interesting<br>passionnant(e)s – exciting<br>plein(e)s d'action – full of action<br>ennuyeux/euse – boring<br>nuls/nulls – rubbish<br>marrant(e)s – funny<br>bêtes – stupid | |

### Quels sont tes loisirs?

| | |
|---|---|
| je bavarde / parle avec mes copains | I chat with my friends |
| je fais du cyclisme / du vélo | I go cycling |
| je lis/ je fais de la lecture | I read |
| je nage / je fais de la natation | I swim |
| je ne lis pas beaucoup | I don't read much |
| je ne joue jamais à des jeux vidéos | I never play video games |
| je ne fais rien | I don't do anything |
| je télécharge des chansons | I download songs |
| je crée des playlists | I create playlists |

### Les mots essentiels

| | |
|---|---|
| **Possessive adjectives** | |
| mon/ma/mes | my |
| ton/ta/tes | your |
| son/sa/ses | his/her |
| **Negatives** | |
| ne...pas | not |
| ne...jamais | never |
| ne...rien | nothing |

### Tu as fait des achats?

| | |
|---|---|
| Tu as fait des achats?<br>Did you go shopping? | j'ai fait les magasins/des achats – I went shopping<br>j'ai lu une announce pour les soldes – I saw an advert for the sales<br>j'ai fait une balade/promenade – I went for a walk<br>j'ai attendu une demi-heure – I waited half an hour<br>j'ai dépensé trop d'argent – I spent too much money<br>j'ai découvert un café – I discovered a café<br>j'ai essayé plein de vêtements – I tried on lots of clothes |
| | je suis allé(e) au centre commercial<br>I went to the shopping centre |

# French

## Module 3- A loisir

### On va au cinéma

| | | | | | |
|---|---|---|---|---|---|
| Tu viens au cinéma?<br><br>Are you coming to the cinema? | Ça dépend. Qu'est-ce que tu vas voir?<br><br>It depends. What are you going to see?<br><br>Bonne idée! Je veux bien<br>Good idea! I'd like to | Je vais regarder<br>I'm going to watch | une comédie – a comedy<br>un film d'animation – an animated film<br>un film romantique – a romantic film<br>un film d'action – an action film<br>un film d'horreur – a horror film<br>un film de science-fiction – a sci-fi film<br>un film de superhéros – a superhero film | Rendez-vous où et à quelle heure?<br>Where and when shall we met? | chez moi/toi<br>at my house/your house<br><br>A 19h – at 7pm<br>A plus – See you later<br>A demain – See you tomorrow<br>A samedi – See you Saturday |
| | je n'ai pas envie - I don't want to<br>tu rigoles? - are you joking?<br>désolé(e) je ne peux pas ce soir - sorry I can't tonight | | | | |
| Je peux vous aider?<br>Can I help you? | Je voudrais trois billets pour deux adultes et un enfant – I'd like 3 tickets for 2 adults and a child<br>Ça fait combien? – How much is it?<br>C'est quelle salle? – Which screen? | | | | |

### Normalement, hier et demain

| | |
|---|---|
| Normalement – Normally | je vais au cinéma – I go to the cinema<br>j'écoute de la musique – I listen to music<br>je lis des BD – I read comics<br>nous jouons en ligne – we play online |
| Le weekend dernier – Last weekend | je suis allé(e) ... I went<br>j'ai choisi – I chose<br>j'ai visité – I visited |
| Le weekend prochain – Next weekend | je vais aller – I'm going to go<br>je vais visiter _I'm going to visit<br>on va prendre – we are going to take |

### Ma célébrité

| | | |
|---|---|---|
| Ma célébrité préférée est..<br>My favourite celebrity is..... | Il/Elle a beaucoup de talent<br>He/She has lots of talent | |
| il / elle est<br>he / she is | Il/Elle fait beaucoup de choses pour les bonnes causes<br>He/She does a lot for charity | |
| C'est mon chanteur/euse préféré(e)<br>He/She is my favourite singer | parce qu'ils/elles sont<br>because they are | ridicules – ridiculous<br>divertissant(e)s – entertaining<br>intéressant(e)s – interesting<br>passionnant(e)s – exciting<br>plein(e)s d'action – full of action<br>ennuyeux/euse – boring<br>nuls/nuls – rubbish<br>marrant(e)s – funny<br>bêtes – stupid |
| C'est un(e) de mes acteurs/actrices préféré(e)s – He/She is one of my favourite actors/actresses | | |

# French

## GRAMMAIRE
Regular present tense verbs

| ER VERBS e.g. Passer = to spend (time) | |
|---|---|
| Je pass**e** | *I spend* |
| Tu pass**es** | *You spend* |
| Il/Elle/On pass**e** | *He/She/One spends* |
| Nous pass**ons** | *We spend* |
| Vous pass**ez** | *You spend (form/pl)* |
| Ils/Elles pass**ent** | *They spend* |

| IR VERBS e.g. Finir = finish | |
|---|---|
| Je fini**s** | *I finish* |
| Tu fini**s** | *You finish* |
| Il/Elle/On fini**t** | *He/She/One finishes* |
| Nous fin**issons** | *We finish* |
| Vous fin**issez** | *You finish (form/pl)* |
| Ils/Elles fin**issent** | *They finish* |

| RE VERBS e.g. vendre = to sell | |
|---|---|
| Je vend**s** | *I sell* |
| Tu vend**s** | *You sell* |
| Il/Elle/On vend | *He/She/One sells* |
| Nous vend**ons** | *We sell* |
| Vous vend**ez** | *You sell (form/pl)* |
| Ils/Elles vend**ent** | *They sell* |

## GRAMMAIRE Irregular present tense verbs

| Faire = to do / to make | | Aller = to go | |
|---|---|---|---|
| Je fais | *I do* | Je vais | *I go* |
| Tu fais | *You do* | Tu vas | *You go* |
| Il/Elle/On fait | *He/She/One does* | Il/Elle/On va | *He/She/One goes* |
| Nous faisons | *We do* | Nous allons | *We go* |
| Vous faites | *You do (form/pl)* | Vous allez | *You go (form/pl)* |
| Ils/Elles font | *They do* | Ils/Elles vont | *They go* |

## GRAMMAIRE Modal verbs

| Vouloir = to want | |
|---|---|
| Je veux | *I want* |
| Tu veux | *You want* |
| Il/Elle/On veut | *He/She/One wants* |
| Nous voulons | *We want* |
| Vous voulez | *You want (form/pl)* |
| Ils/Elles veulent | *They want* |

| Pouvoir = to be able to | |
|---|---|
| Je peux | *I can* |
| Tu peux | *You can* |
| Il/Elle/On peut | *He/She/One can* |
| Nous pouvons | *We can* |
| Vous pouvez | *You can (for/pl)* |
| Ils/Elles peuvent | *They can* |

## Grammar

| | |
|---|---|
| Aujourd'hui | *Today* |
| Demain (soir) | *Tomorrow (night)* |
| Ce matin / ce soir | *This morning/evening* |
| Cet après-midi | *This afternoon* |
| La semaine prochaine | *Next week* |

⭐ **S'il fait beau**
*If the weather's nice*

⭐ **S'il fait mauvais**
*If the weather's bad*

⭐ **Si j'ai assez d'argent** *If I have enough money*

**Ça va être...**
*It's going to be*

cool / génial / sympa
*cool / great / nice*

## Qu'est-ce qu'on va faire? *What are we going to do?*

**Near Future Tense = Aller + infintive (going to do)**

**Je vais**
I am going

**On va / Nous allons**
*We are going*

Use the present tense of the verb ALLER from above ↗

| | |
|---|---|
| **aller** au parc | *to go to the park* |
| **visite**r le musée | *to visit the museum* |
| **manger** au resto | *to eat at a restaurant* |
| **acheter** un jeu vidéo | *to buy a videogame* |
| **voir** un spectacle | *to see a show* |
| **faire** les magasins | *to go shopping* |
| **prendre** le bus | *to take the bus* |

# French

| **Qu'est-ce que tu as fait le week-end dernier?** ***What did you do last weekend?*** | **J'ai / Nous avons…** ***I / We…*** | …passé (le week-end) *…spent (the weekend)* | …participé à une competition *…took part in a competition* | fait du vélo *…went cycling* |
|---|---|---|---|---|
| | …joué au tennis *…played tennis* | …fêté (mon anniv) *…celebrated my birthday* | *…regardé un match / film* *…watched a match / a film* | fait de la natation *…went swimming* |

| |
|---|
| Hier *Yesterday* |
| Avant-hier *The day before yesterday* |
| Le week-end dernier *Last weekend* |
| La semaine dernière *Last week* |
| Il y a deux semaines *Two weeks ago* |
| D'abord / Enfin *Firstly / Finally* |
| Ensuite / puis *Next / then* |
| Après *After* |
| Plus tard *Later* |
| ⭐ Après avoir (mangé) *After having (eaten)* |
| ⭐ Avant de (partir) *Before (leaving)* |

## The Past: The Perfect Tense with Avoir

We use the perfect tense to say what we did or have done in the past. To form it you need 2 parts:
**PART 1**: Avoir (the verb to have) **+ PART 2:** Past participle (e.g. visited/done/eaten)

| **PART 1: Avoir = *To have*** | | | **PART 2: The Past participle** | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | **ER verbs +é** | | **IR verbs +i** | | **RE verbs +u** | | **Irregulars** | |
| J'**ai** | *I have* | + | visité | *visited* | fini | *finished* | perdu | *lost* | fait | *did* |
| Tu **as** | *You have* | | regardé | *watched* | vomi | *vomited* | attendu | *waited* | pris | *took* |
| Il / Elle/ On **a** | *He / She has* | | écouté | *listened* | dormi | *slept* | vendu | *sold* | bu | *drank* |
| Nous **avons** | *We have* | | mangé | *ate /eaten* | | | | | vu | *saw* |
| Vous **avez** | *You all have* | | acheté | *bought* | | | | | lu | *read* |
| Ils / Elles **ont** | *They have* | | | | | | | | | |

| **Je suis allé(e) …** ***I went…*** |
|---|
| **Nous sommes allé(e) …** ***I went…*** |
| **au** parc / **au** stade *…to the parc / stadium* |
| **à la** piscine *…to the pool* |
| **aux** magasins *…to the shops* |

## The Past: The Perfect Tense with Être

Some specific 'special' verbs take **Être (To be)** instead of Avoir…
**Être verbs agree with the subject!** If it's feminine, add an '**e**'. If it's plural, add an '**s**'

| **PART 1: Être = *To be*** | |
|---|---|
| Je **suis** | *I am* |
| Tu **es** | *You are* |
| Il / Elle **est** | *He/She is* |
| Nous **sommes** | *We are* |
| Vous **êtes** | *You lot are* |
| Ils / Elles **sont** | *They are* |

| | **PART 2: The Past participle (+e) (+s)** | | | |
|---|---|---|---|---|
| + | allé(e)(s) | *went* | sorti(e)(s) | *went out* |
| | resté(e)(s) | *stayed* | parti(e)(s) | *left* |
| | arrivé(e)(s) | *arrived* | venu(e)(s) | *came* |
| | retourné(e)(s) | *returned* | revenu(e)(s) | *came back* |
| | rentré(e)(s) | *went back (home)* | devenu(e)(s) | *became* |

Grammar

# AQA French 90 Word Paper 4 Writing Mat

## Score 5 ingredients...

- ✓ **ALL** bullet points of task covered
- ✓ At least 2 opinions with a reason
- ✓ Past tense used
- ✓ Present tense used
- ✓ Future tense used
- ✓ Talk about self and at least 1 other person
- ✓ Connective used
- ✓ Adjective used
- ✓ DIFFERENT adjective to last used
- ✓ Adverb used
- ✓ Intensifier used
- ✓ Interesting vocabulary used


## Some Score 8 ingredients...

- ✓ Comparative used
- ✓ Conditional tense used
- ✓ An idiom used

## Opinions

**j'aime bien** - I like
**j'aime beaucoup** - I like a lot
**j'aime assez** - I quite like
**je n'aime pas beaucoup** - I don't much like
**je n'aime pas tellement** - I don't really like
**je n'aime pas trop** - I don't really like too much
**je n'aime pas du tout** - I don't like at all
**je déteste** - I hate

**Ça me plaît beaucoup** - I like it a lot
**Ça me plaît de m'amuser** - I like having fun
**Ça me plaît de sortir** - I like going out
**Ça me plaît de faire ...** - I like doing/going ...
**Ça me plaît d'aller ...** - I like going

| | |
|---|---|
| **chouette** | *great* |
| **affreux (euse)** | *horrible* |
| **ennuyeux (euse)** | *boring* |
| ***agréable*** | *pleasant* |
| **amusant (e)** | *funny* |
| **nul (le)** | *rubbish* |
| **dégoûtant (e)** | *disgusting* |
| **pratique** | *practical* |
| **dangereux (euse)** | *dangerous* |
| **parfait (e)** | *perfect* |
| **mauvais (e)** | *bad* |
| **passionnant (e)** | *fascinating* |

| | |
|---|---|
| **bête** | *silly* |
| **sympa** | *nice* |
| **une perte de temps** | *waste of time* |
| **laid (e)** | *ugly* |
| **fabuleux (euse)** | *fabulous* |
| **impoli (e)** | *rude* |
| **désastreux (euse)** | *desastrous* |
| **casse-pieds** | *annoying* |
| **pas mal** | *not bad* |
| **rien de spécial** | *nothing special* |
| **ordinaire** | *ordinary* |
| **effrayant (e)** | *scary* |

## Linking words...

| | |
|---|---|
| **et** | *and* |
| **mais** | *but* |
| **quand** | *when* |
| **ou** | *or* |
| **qui** | *who,which* |
| **parce que/ car** | *because* |
| **puisque** | *as,since* |
| **cependant** | *however* |
| **néanmoins** | *nevertheless* |
| **puis** | *then* |
| **si** | *if* |
| **donc** | *therefore* |
| **où** | *where* |
| **par conséquent** | *as a result* |
| **alors** | *then/ so /at that time* |
| **tandis que** | *whereas* |
| **par contre** | *on the other hand* |

## Intensifiers...

| | | | |
|---|---|---|---|
| **vraiment** | *really* | **tout à fait** | *completely* |
| **trop** | *too* | **un peu** | *a bit* |
| **incroyablement** | *unbelievably* | | |
| **très** | *very* | | |
| **assez** | *quite* | | |

## Comparatives...

**plus ...que** - *more ...than*
**je suis plus grand(e) que toi** - *I am bigger than you*
**moins ...que** - *less ... than*
**elle est moins grande que moi** - *she is less tall than me*

***BUT*** *good* = **bon** *better*= ***meilleur(e)***
*bad* = **mauvais(e)** *worse*= **pire**

## Adverbs...

| | |
|---|---|
| **malheureusement** | *unfortunately* |
| **heureusement** | *fortunately* |
| **d'abord** | *firstly* |
| **normalement** | *normally* |
| **généralement** | *generally* |
| **de temps en temps** | *from time to time* |
| **souvent** | *often* |
| **finalement** | *finally* |


## Giving reasons for opinions...

| | |
|---|---|
| **selon...** | - according to .. |
| **je pense que** | - I think that |
| **je trouve que** | - I think that |
| **je crois que** | - I believe that |
| **j'estime que** | - I reckon that |
| **a mon avis** | - in my opinion |
| **c'est** | - it is |
| **ce n'est pas** | - it isn't (it is not) |
| **ça peut être** | - it can be |
| **il/elle peut être** | - he/she can be |
| **je peux être** | - I can be |

## Idioms...

| | |
|---|---|
| **c'est dommage que** | - it's a shame that |
| **quand je m'ennuie** | - when I'm bored |
| **j'en ai marre** | - I'm fed up |
| **j'en ai marre de travailler** | - I'm fed up of working |
| **ça vaut le peine** (worth the effort) | - it's worth it |
| **une perte de temps** | - a waste of time |
| **une perte d'argent** | - a waste of money |
| **tant pis !** | - too bad ! |
| **ça m'est égal** | - I don't mind |

## Conditional...

| | |
|---|---|
| **Je voudrais** | I would like |
| **Ce serait** | It would be |
| **On pourrait + infinitive** | We could.. |
| **On devrait + infinitive** | We should |

## Content

- ❑ Cover **ALL** aspects of the task!
- ❑ Opinions
- ❑ A lot of information

## Response

- ❑ Variety of *appropriate* vocab (is it relevant?)
- ❑ Complexity
- ❑ Three time frames
- ❑ Clear message
- ❑ Does it fit the task?

# Don't forget to refer to THREE time frames...

## Present

### Time phrases...

**normalement** - normally
**quelquefois** - sometimes
**parfois** - sometimes
**d'habitude** - usually
**de temps en temps** - from time to time
**tous les jours** - every day
**toujours** - always
**souvent** - often
**en général** - in general
**généralement** - for the most part
**la plupart du temps** - most of the time
**maintenant** - now

| I | | HE/SHE/WE |
|---|---|---|
| Je vais | I go | Il/elle/on va |
| Je fais | I do/make | Il/elle/on fait |
| Je joue | I play | Il/elle/on joue |
| Je travaille | I work | Il/elle/on travaille |
| Je mange | I eat | Il/elle/on mange |
| Je bois | I drink | Il/elle/on boit |
| Je finis | I finish | Il/elle/on finit |
| Je prends | I take | Il/elle/on prend |
| Je voyage | I travel | Il/elle/on voyage |
| Je sors | I go out | Il/elle/on sort |
| Je dors | I sleep | Il/elle/on dort |
| Je parle | I talk | Il/elle/on parle |
| Je peux | I can | Il/elle/on peut |
| Je lis | I read | Il/elle/on lit |

### Score 5 Checklist:

- ✓ *ALL bullet points of task covered*
- ✓ *At least 2 opinions with a reason*
- ✓ *Past tense used*
- ✓ *Present tense used*
- ✓ *Future tense used*
- ✓ *Talk about self and at least 1 other person*
- ✓ *Connective used*
- ✓ *Adjective used*
- ✓ *DIFFERENT adjective to last used*
- ✓ *Adverb used*
- ✓ *Intensifier used*
- ✓ *Interesting vocabulary used*

## Past

### Time phrases...

**l'année dernière** - last year
**récemment** - recently
**l'autre jour** - the other day
**la semaine dernière** - last week
**hier** – yesterday
**L'été dernier** – last Summer
**le weekend dernier** - last weekend
**il y a deux ans** - ... 2 years ago
**Il y a une semaine** – a week ago
**Pendant les grandes vacances** – in the Summer holidays

| I | | HE/SHE/WE |
|---|---|---|
| Je suis allé(e) | I went | Il/elle/on est allé(e) |
| J'ai fait | I did | Il/elle/on a fait |
| J'ai joué | I played | Il/elle/on a joué |
| J'ai travaillé | I worked | Il/elle/on a travaillé |
| J'ai mangé | I ate | Il/elle/on a mangé |
| J'ai bu | I drank | Il/elle/on a bu |
| J'ai fini | I finished | Il/elle/on a fini |
| J'ai pris | I took | Il/elle/on a pris |
| J'ai voyagé | I travelled | Il/elle/on a voyagé |
| Je suis sorti(e) | I went out | Il/elle/on est sorti(e) |
| J'ai dormi | I slept | Il/elle/on a dormi |
| J'ai parlé | I talked | Il/elle/on a parlé |
| J'ai pu | I was able | Il/elle/on a pu |
| J'ai lu | I read | Il/elle/on a lu |

### *Opinions - past tense*

**j'ai bien aimé** - I liked
**j'ai beaucoup aimé** - I really liked
**je n'ai pas beaucoup aimé** - I didn't really like
**j'ai détesté** - I hated
**ça m'a beaucoup plu** - I really liked it

***Giving reasons - past tense***

**j'ai pensé que** - I thought that
**j'ai trouvé que** - I thought that
**j'étais de l'opinion que** - I was of the opinion that
**j'étais d'accord que** - I agreed that
**je n'étais pas d'accord que** - I didn't agree that
**c'était** - it was
**ce n'était pas** - it wasn't

## Future

### Time phrases...

**demain** - tomorrow
**la semaine prochaine** - next week
**le weekend prochain** - next weekend
**l'année prochaine** - next year
**après les examens** - after exams
**après avoir quitté le collège** - after leaving school
**à l'avenir** - in the future
**dans mes rêves** - in my dreams
**l'été prochain** - next Summer

**Points to note:**

- content
- quality
- needs detail
- opinions
- complexity
- time frames.

| I | | HE/SHE/WE |
|---|---|---|
| Je vais aller | I will go | Il/elle/on va aller |
| Je vais faire | I will do/make | Il/elle/on va faire |
| Je vais jouer | I will play | Il/elle/on va jouer |
| Je vais travailler | I will work | Il/elle/on va travailler |
| Je vais manger | I will eat | Il/elle/on va manger |
| Je vais boire | I will drink | Il/elle/on va boire |
| Je vais finir | I will finish | Il/elle/on va finir |
| Je vais prendre | I will take | Il/elle/on va prendre |
| Je vais voyager | I will travel | Il/elle/on va voyager |
| Je vais sortir | I will go out | Il/elle/on va sortir |
| Je vais dormir | I will sleep | Il/elle/on va dormir |
| Je vais parler | I will talk | Il/elle/on va parler |
| Je vais pouvoir | I will be able | Il/elle/on va pouvoir |
| Je vais lire | I will read | Il/elle/on va lire |

### *Giving reasons - future/conditional*

**ce sera** - it will be
**ce serait** - it would be

**Future tense expressions :**

**Quand je serai grand(e)** - When I'm older
**J'ai l'intention de + infinitive** - I intend to
**Je rêve de + infinitive** - I dream of

# AQA French 150 Word Paper 4 Writing Mat

## Score 8/9ingredients..

- ✓ **ALL bullet points of task covered**
- ✓ *At least 2 opinions with a reason*
- ✓ *Past tense used*
- ✓ *Present tense used*
- ✓ *Future tense used*
- ✓ *Talk about self and others*
- ✓ *Connective used*
- ✓ *Adjective used*
- ✓ *DIFFERENT adjective to last used*
- ✓ *Adverb used*
- ✓ *Intensifier used*
- ✓ *Interesting vocabulary used*
- ✓ *Comparative /superlative used*
- ✓ *Conditional tense used*
- ✓ *Imperfect tense used*
- ✓ *An idiom used*
- ✓ *Subjunctive used*
- ✓ *Modal verb used*
- ✓ *Après avoir/être used*
- ✓ *Si clause used*
- ✓ *Range of negatives used*
- ✓ *Direct object pronouns used*

## Opinions

**J'apprécie beaucoup** – I like a lot
**j'aime beaucoup** - I like a lot
**j'aime assez** - I quite like
**pour moi** - for me
**selon…** - according to ..
**je pense que** - I think that
**je trouve que** - I think that
**je crois que** - I believe that
**j'estime que** - I reckon that
**à mon avis** - in my opinion
**c'est** - it is
**ce n'est pas** - it isn't (it is not)
**ça peut être** - it can be
**il/elle peut être** - he/she can be
**je peux être** - I can be

| | |
|---|---|
| **chouette** | *great* |
| **affreux (euse)** | *horrible* |
| **ennuyeux (euse)** | *boring* |
| **agréable** | *pleasant* |
| **amusant (e)** | *funny* |
| **nul (le)** | *rubbish* |
| **dégoûtant (e)** | *disgusting* |
| **pratique** | *practical* |
| **dangereux (euse)** | *dangerous* |
| **parfait (e)** | *perfect* |
| **mauvais (e)** | *bad* |
| **passionnant (e)** | *exciting* |

**Ça me plaît beaucoup** - I like it a lot
**Ça me plaît de sortir** - I like going out

***Opinions - past tense***
**j'ai bien aimé** - I liked
**j'ai beaucoup aimé** - I really liked
**je n'ai pas beaucoup aimé** - I didn't really like
**j'ai détesté** - I hated
**ça m'a beaucoup plu** - I really liked it

| | |
|---|---|
| **bête** | *silly* |
| **sympa** | *nice* |
| **une perte de temps** | *waste of time* |
| **laid (e)** | *ugly* |
| **fabuleux (euse)** | *fabulous* |
| **impoli (e)** | *rude* |
| **désastreux (euse)** | *desastrous* |
| **Casse-pieds** | *annoying* |
| **pas mal** | *not bad* |
| **rien de spécial** | *nothing special* |
| **effrayant (e)** | *scary* |

## Direct object pronouns: avoid repetition

Find if the word you are refering to is **feminine**, masculine, or *plural* and choose your pronoun : **La**, Le, *Les then* follow the rules below
It goes in front of the verb: **Je les aime** = *I like them*
**Je l'aime** = *I like it, I like him, I like her*
In a negative sentence it goes between 'ne' and the verb:
**Je ne les aime pas**= *I don't love them*
**je ne l'aime pas** = *I dont love it, him, her*
When using a verb followed by an infinitive, the pronoun goes in front of the infinitive **Je veux la manger** = *I want to eat it*

In the perfect tense it goes in front of 'avoir'
**Je l'ai mangé(e)**= *I ate it* **je les ai vu(e)s** = *I saw them*

## Adding contrasting opinions

**mais** - but
**aussi** - also
**en plus** - also, in addition
**également** - equally, also
**c'est vrai que** - it's true that
**on dit que** - they say that
**il faut dire que** - you have to say that
**je suis d'accord** - I agree
**je ne suis pas d'accord** - I don't agree
**heureusement** - fortunately
**malheureusement** - unfortunately
**en fait** - in fact
**cependant** - however
**pourtant** - however

## Adverbs

**vraiment** - really (truly)
**tellement** - really (so)
**incroyablement** - incredibly
**extrêmement** - extremely
**particulièrement** - particularly
**seulement** - only
**certainement** - certainly

## Après avoir/être

**après avoir mangé** - after having eaten
**après avoir fini** - after having finished
**après avoir acheté** - after having bought
**après être rentré(e)** - after having returned home
**après être allé(e)** - after having gone…
**après être arrivé(e)** - after having arrived

## Opinions - past

**j'ai pensé que** - I thought that
**j'ai trouvé que** - I thought that
**c'était** - it was **ce n'était pas** - it wasn't

## Idioms

**c'est dommage que** - it's a shame that
**quand je m'ennuie** - when I'm bored
**j'en ai marre** - I'm fed up
**ça vaut le peine** - it's worth it (worth the effort)
**ça coûte les yeux de la tête** - it costs an arm and a leg
**une perte de temps** - a waste of time
**ça m'est égal** - I don't mind
**ce n'est pas grave** - it doesn't matter
**Il/elle a l'air triste** – he/she appears to be sad

## Subjunctive

**Bien que ce soit** – although it is
**Je ne pense pas que ce soit** – I don't think it is
**Il faut qu'on fasse** – we/you must do
**Pour que je puisse** – so that I can
**C'est dommage que l'équipe d'Arsenal ait perdu** – It is a shame that Arsenal lost

## Si Clauses

**Si j'avais su…….. .. j'aurais été….**- *If I had known, ……..I would have been*
**Si j'avais plus de temps/d'argent …je ferais/j'achéterais** - If I had more time/money..I would do/buy
**Si j'étais plus riche……je donnerais** - If I were more rich..I would give
**Si j'avais l'opportunité….je voyagerais** - If I had the opportunity…I would travel

## The Comparative and Superlative (the best, the worst, the biggest etc)

**plus …que** - *more …than* -
**je suis plus grand(e) que toi** -*I am bigger than you*
**moins …que** - *less … than* –
**elle est moins grande que moi** - *she is less tall than me*
**aussi …que** - *as….as-*
**nous sommes aussi grand(e)s que notre père** - *we are as tall as our dad*
***BUT*** *Good* - **bon** *better*- ***meilleur(e)*** *le/la meilleur(e)= the best*
*bad* - **mauvais(e)** *worse*- **pire** **le/la pire** - the worst

### Superlative

**Le sport le plus populaire** – the most popular sport
**La ville la plus visitée** – the most visited town
**les matières les plus intéressantes** : *the most interesting subjects*

Living World 1: Ecosystems
Paper 1, Question 2

# Geography

## Ecosystems: Tier 3

**Abiotic** – The non-living elements of an ecosystem e.g. climate, soil and water.

**Biotic** – Organisms found in an ecosystem e.g. plants, insects & animals.

**Ecosystem** – a community of plants and animals sharing an environment with non-living things.

**Producer** – A type of organism produce their own food usually by photosynthesis.

**Consumer** – Organisms that consume other organisms to obtain their energy.

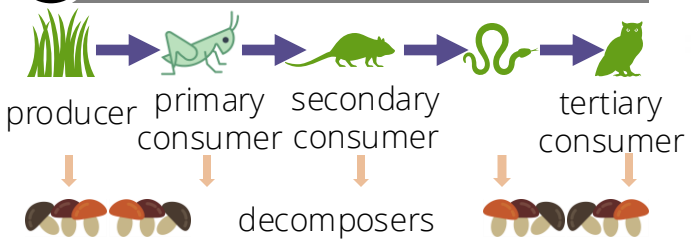
**Decomposer** – Organisms that break down dead plants and animals.

**Food chain** – The flow of energy from producer to tertiary consumer.

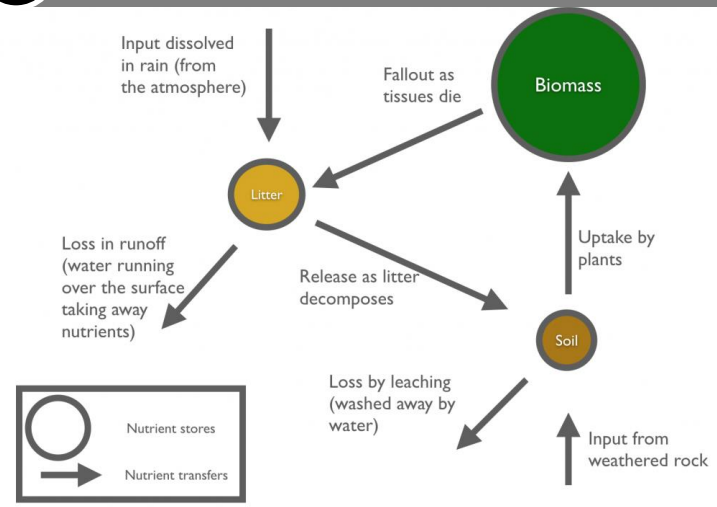
**Food web** – A diagram showing lots of food chains and how they overlap.

**Nutrient cycle** – The transfer of nutrients through an ecosystem.

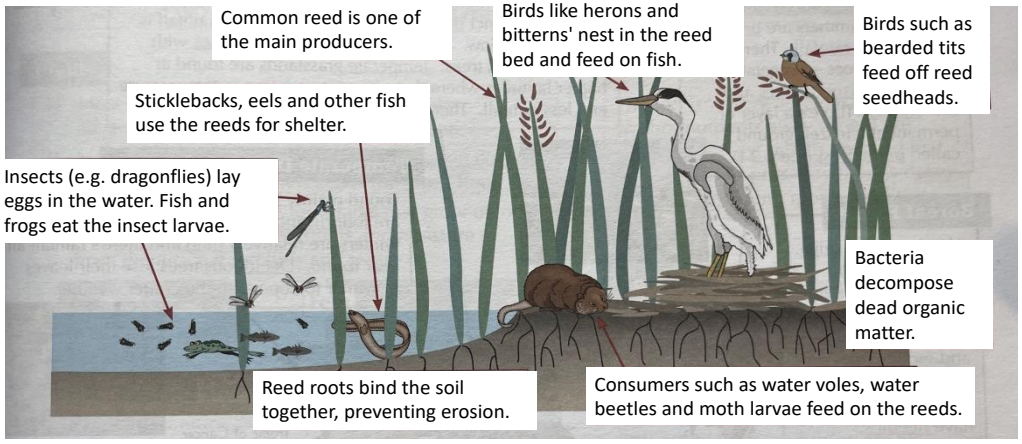
## Food Chain



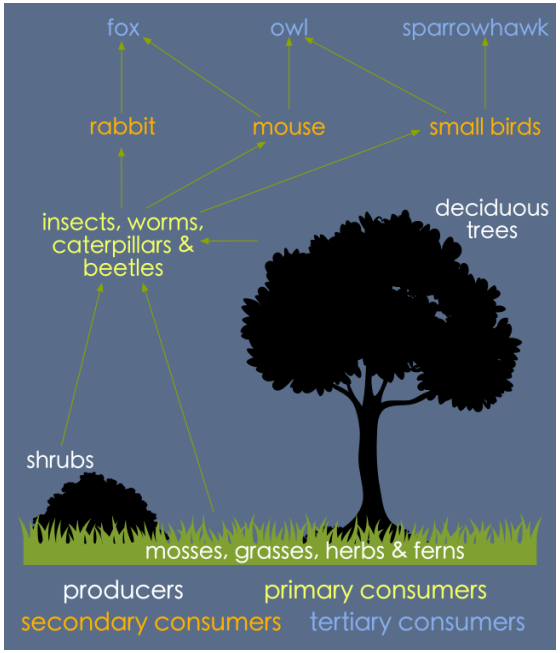

## The Nutrient Cycle




## Small Scale e.g.: Slapton Ley Reed Beds, Devon




## Food Web



Living World 1: T Rainforests
Paper 1, Question 2

# Geography

## Rainforests: Tier 3

**Biome** – Areas of the planet with a similar climate and landscape, where similar animals and plants live.

**Biodiversity** – The variety of life in the world or a particular habitat.

**Debt reduction** – National debt relief in return for protecting rainforests.

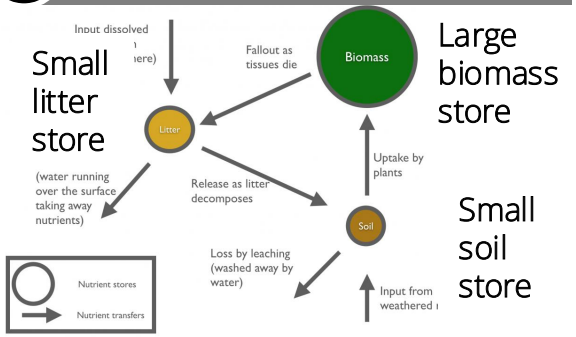
**Deforestation** – The chopping down and removal of trees.

**Ecotourism** – Responsible travel to natural areas that conserves the environment and benefits locals.

**Logging** – Cutting down trees and selling the timber.

**Soil erosion** – Removal of topsoil faster than it can be replaced.

## The Nutrient Cycle

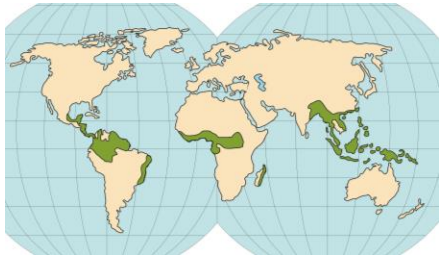



Small litter store

Large biomass store

Small soil store

## Location



10°N and 10°S of the Equator

South America (Amazon), the DRC (Africa), Indonesia & Malaysia (Asia)

## Characteristics

**Climate** - High temperatures (27°C) and high rainfall (2000mm +)

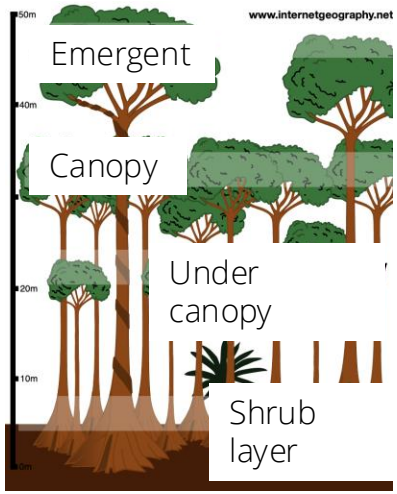
**Water** – Distinct wet season lasting several months. Leaching during this time.

**Soil** – Not very fertile. Nutrients concentrated in the topsoil & quickly absorbed.

**Biotic** – Highest biodiversity in the world. Thousands of species of plants and animals.

**People** – Traditional tribes live sustainably. Exploitation for $$ gain by non-indigenous.

## Adaptations




Emergents and **lianas** grow to reach the sunlight.

**Buttress roots** anchor the trees in the shallow soil.

**Smooth bark** to deter epiphytes.

Plants have **thick, waxy leaves** & **drip tips** to channel water.

**Poison Dart Frog** - bright colours deter predators.

**Sloths** - long, sharp claws that help them cling onto branches.

**Spider Monkey** - prehensile tail to be able to grasp the branches of trees.

**Jaguars** - large claws, which enable them to climb small trees and catch their prey.

## Value of Tropical Rainforests

### Services

- Carbon sink
- Water and nutrient cycling
- Protection against soil erosion
- Wildlife habitats
- Biodiversity
- Employment opportunities

### Goods

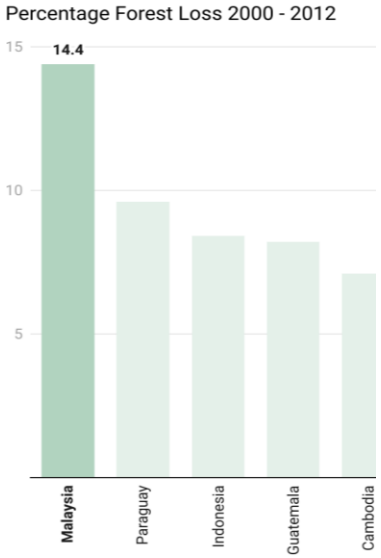
- Native food crops (fruit and nuts)
- Wild meat and fish
- Building materials (timber)
- Energy from hydro electric power
- Water
- Medicines

Living World 1: T Rainforests
Paper 1, Question 2

# Geography

## Malaysia Deforestation Rates

- Between **2000 and 2012** Malaysia had the **highest deforestation rate** in the world (by % area), losing **14.4% of its forest cover**.
- The rate of deforestation **fluctuated** between **2012 and 2015.**
- It steadily **declined between 2016 and 2020**.
- Between **2001 and 2021 17%** of rainforest cover was lost.




## Malaysia

- Malaysia is in southeast Asia.


- At 192,838 km², the Malaysian rainforest is the 24th largest in the world.

## Malaysia: Impacts of Deforestation

### Economic Development

- Raw materials used by processing industries increasing the value of exported products.
- Commercial farming and mining generate employment and tax income.
- Cheap, renewable energy = development.
- Loss of biodiversity affects tourism.
- Long-term economic losses due to forests being destroyed and rivers polluted.

### Social Impacts

- Education, health care and social conditions are improved from tax revenue.
- Decline in indigenous tribes e.g. Orang Asli.

### Environmental Impact

- Exposed land increases soil erosion
- Decline in biodiversity

### Climate Change

- Local environment becomes hotter and drier.
- Reduction in carbon sink due to deforestation.

## Malaysia Causes of Deforestation

**Agriculture** – Malaysia is the second-largest producer of palm oil in the world.

**Logging** – Hard wood (mahogany & teak) valued for furniture. Small trees pulped/charcoal.

**Road building** – Increased accessibility encourages development e.g. in Sarawak.

**Mineral extraction** – Bauxite mined in Peninsular Malaysia. Oil and Gas in Borneo.

**Energy development** – High rainfall creates ideal conditions for HEP e.g. Bakun Dam, Sarawak.

**Settlement and population growth** – Trans-migration Policy – 15000 ha rainforest cleared.

## Sustainable Management in T Rainforests

*Forest Stewardship Council (FSC) stamps sustainably sourced wood*

*International hardwood agreements*

*Costa Rica – largest source of income, led to 21% of country protected from development.*

*debt reduction*

*USA reduced Indonesia's debt by $29 million in exchange for conservation*

**Strategies**

*Conservation and education*

*Rainforest Alliance is teaching communities in Guatemala about sustainable livelihoods.*

*Selective logging and replanting*

*Only old trees are felled & helicopters drag wood not trucks to reduce soil damage -used in Sarawak, Malaysia*

# History

## 1. Historical Terms needed throughout the subject

| Tier 3 | Definition |
|---|---|
| source | Evidence created at the time of the event being studied |
| interpretation | An opinion based on evidence written after the event being studied |
| inference | To make a guess from a source (of evidence) |
| provenance | Information of who wrote a source and when |
| PANDA | Strategy to use to evaluate the provenance of a source |
| PEEL | Strategy for extended writing: Point, Evidence, Explain, Link |

## 2. Timeline of Hitler's Rise to Power – Loser to Leader

1919 Hitler joins the **DAP** (German Worker's Party), which later becomes the Nazi Party.

1919 **Treaty of Versailles**: Germany blamed for WWI, forced to sign this treaty and pay reparations, lost land, army reduced (100,000 men, 6 battleships), demilitarised the Rhineland – this crippled Germany.

1921 Hitler forms the **SA (Sturmabteilung/Brownshirts)**, led by Ernst Röhm.

1923 **Munich Putsch**: Failed Nazi coup in Munich – Hitler planned to seize control in Bavaria and Berlin; Hitler jailed.

1933 (Feb) **Reichstag Fire**: Communists blamed (Marinus van der Lubbe accepts the blame), Hitler imposes emergency rule so the Reichstag can be surpassed.

1933 (Mar) **Enabling Act**: Hitler given full powers for 4 years; democracy ends. This gave the Chancellor equal powers to the President.

1934 **Night of the Long Knives**: Hitler kills SA leaders, purging political rivals.

## 3. Tier vocabulary that describe key historical concepts

| Tier 2 | Definition |
|---|---|
| communist | A political party in Germany who were the Nazis biggest rivals. |
| constitution | A set of rules used to govern a country |
| President | Elected every 7 years, run the country |
| propaganda | Information designed to make people believe a certain thing: often in posters. |
| **Tier 3** | **Definition** |
| armistice | Ending of hostilities in a war |
| Reichstag | German parliament building |
| rearmament | Building an army up to be strong enough to protect in battle. |
| Aryan | Purity of German race, blonde hair blue eyes |
| Mein Kampf | Hitler's autobiography, written during his time in prison. |
| Fuhrer | Leader (used after 1926) |
| Gestapo | Secret state police set up in 1933 by Georing, imprisoned opposition to Nazis. |
| chancellor | Chosen by the president |
| Oath of allegiance | Hitler made the army swear this after the Night of the Long Knives to say they gave him 'unconditional obedience'. |
| NSDAP | The Nazi party, National Socialist German Worker's Party |

# Maths

## YEAR 9 – REASONING WITH ALGEBRA...

# Straight Line Graphs

@whisto_maths

### What do I need to be able to do?

**By the end of this unit you should be able to:**

- Compare gradients
- Compare intercepts
- Understand and use y= mx + c
- Find the equation of a line from a graph
- Interpret gradient and intercepts of real-life graphs

### Keywords

**Gradient:** the steepness of a line
**Intercept:** where two lines cross. The y-intercept: where the line meets the y-axis.
**Parallel:** two lines that never meet with the same gradient.
**Co-ordinate:** a set of values that show an exact position on a graph.
**Linear:** linear graphs (straight line) – linear common difference by addition/ subtraction
**Asymptote:** a straight line that a graph will never meet.
**Reciprocal:** a pair of numbers that multiply together to give 1
**Perpendicular:** two lines that meet at a right angle.

### Lines parallel to the axes (R)

All the points on this line have a x coordinate of 10

'a' can be ANY positive or negative value including 0

Intersection points

Lines parallel to the **y axis** take the form **x = a** and are **vertical**

Lines parallel to the **x axis** take the form **y = a** and are **horizontal**

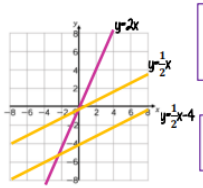
All the points on this line have a y coordinate of -2

e.g (3, -2) (7, -2) (-2, -2) all lay on this line because the y coordinate is -2

### Compare Gradients

$y = mx + c$

The **coefficient** of x (the number in front of x) tells us the gradient of the line




The **greater** the gradient – the **steeper** the line

**Parallel** lines have the **same** gradient

Positive gradients

Negative gradients

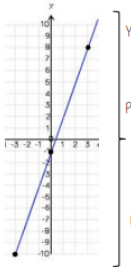
### Plotting y = mx + c graphs (R)

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

| x | -3 | 0 | 3 |
|---|---|---|---|
| y | -10 | -1 | 8 |

Draw a table to display this information

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



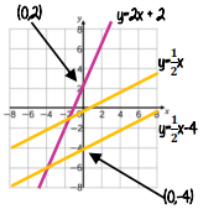
You only need two points to form a straight line

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

Remember to join the points to make a line

### Compare Intercepts

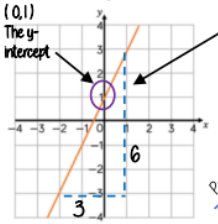
$y = mx + c$ ← The value of **c** is the point at which the line crosses the y-axis. **Y intercept**




The coordinate of a y intercept will always be (0,**c**)

Lines with the **same** y-intercept cross in the **same** place

### Find the equation from a graph




The Gradient $\frac{6}{3} = 2$

$y = 2x + 1$

The direction of the line indicates a positive gradient

Positive gradients

Negative gradients

### y = mx + c

The **coefficient** of x (the number in front of x) tells us the gradient of the line

$y = mx + c$ ← The value of **c** is the point at which the line crosses the y-axis. **Y intercept**

y and x are **coordinates**

The equation of a line can be rearranged. E.g

**y = c + mx**

**c = y – mx**

Identify which coefficient you are identifying or comparing

### Real life graphs

A plumber charges a £25 callout fee, and then £12.50 for every hour. Complete the table of values to show the cost of hiring the plumber.

| Time (h) | 0 | 1 | 2 | 3 | 8 |
|---|---|---|---|---|---|
| Cost (£) | £25 | | | | £125 |

The y-intercept shows the minimum charge. The gradient represents the price per mile

In real life graphs like this values will always be positive because they measure distances or objects which cannot be negative.

**Direct Proportion graphs** To represent direct proportion the graph must start at the origin

When you have 0 pens this has 0 cost. The gradient shows the price per pen

A box of pens costs £2.30
Complete the table of values to show the cost of buying boxes of pens.

| Boxes | 0 | 1 | 2 | 3 | 8 |
|---|---|---|---|---|---|
| Cost (£) | | £2.30 | | | |

# Maths

## YEAR 9 – REASONING WITH ALGEBRA...

# Forming and Solving Equations

@whisto_maths

### What do I need to be able to do?

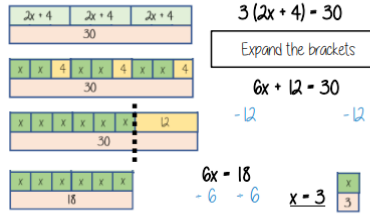
**By the end of this unit you should be able to:**

- Solve inequalities with negative numbers
- Solve equations with unknowns on both sides
- Solve inequalities with unknowns on both sides
- Substitute into formulae and equations
- Rearrange formulae

### Keywords

**Inequality:** an inequality compares who values showing if one is greater than, less than or equal to another
**Variable:** a quantity that may change within the context of the problem
**Rearrange:** Change the order
**Inverse operation** the operation that reverses the action
**Substitute:** replace a variable with a numerical value
**Solve:** find a numerical value that satisfies an equation

### Solve equations with brackets (R)




3 (2x + 4) = 30

Expand the brackets

6x + 12 = 30

- 12 - 12

6x = 18

÷ 6 ÷ 6

x = 3

### Form and solve inequalities (R)

Two more than treble my number is greater than 11

Find the possible range of values

3x + 2 > 11

Solve

x ← -3 ← -2 ← 11

x > 3

### Inequalities with negatives

**Method 1** Make x positive first

2 – 3x > 17

+ 3x + 3x

2 > 17 + 3x

- 17 - 17

-15 > 3x

÷3 ÷3

-5 > x

x is true for any value smaller than -5

Smaller ← → Bigger

-7 -5 -3

✓ CHECK IT!
2 – 3(-6) = 20
TRUE/ CORRECT

**Method 2** Keep the negative x

2 – 3x > 17

-2 -2

– 3x > 15

÷-3 ÷-3

x > -5

x is true for any value bigger than -5

This cannot be true...

x < -5

When you multiply or divide x by a negative you need to reverse the inequality

### Rearranging Formulae (one step)


x = y + z

Rearrange to make y the subject

y = x - z

y → +z → x

y ← -z ← x

Using inverse operations or fact families will guide you through rearranging formulae

Rearranging can also be checked by substitution

Language of rearranging...

Make XXX the subject

Change the subject

Rearrange

### Rearranging Formulae (two step)

In an equation (find x)

4x – 3 = 9

+3 +3

4x = 12

÷ 4 ÷ 4

x = 3

In a formula (make x the subject)

xy – s = a

+ s + s

xy = a + s

÷ y ÷ y

x = a + s / y

The steps are the same for solving and rearranging

Rearranging is often needed when using y = mx + c

e.g. Find the gradient of the line 2y -4x = 9

**Make y the subject first** y = (4x + 9)/2

Gradient = 4/2 = 2

### Equations with unknown on both sides

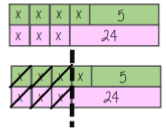
4x + 5 = 3x + 24

-3x -3x

x + 5 = 24

-5 -5

x = 19




### Inequalities with unknown on both sides

Solving inequalities has the same method as equations

5 ( x + 4) < 3 ( x + 2)

5x + 20 < 3x + 6

2x + 20 < 6

2x < - 14

x < - 7

Check it!

5 ( -8 + 4) < 3 ( -8 + 2)

5 ( -4 ) < 3 ( -6 )

-20 < -18

✓ -20 IS smaller than -18

### Formulae and Equations

**Formulae** – all expressed in symbols

Substitute in values

**Equations** – include numbers and can be solved

# Maths

## YEAR 9 – REASONING WITH ALGEBRA...

# Testing conjectures

@whisto_maths

### What do I need to be able to do?

**By the end of this unit you should be able to:**

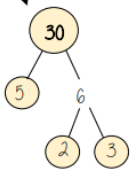
- Use factors, multiples and primes
- Reason True or False
- Reason Always, sometimes never true
- Show that reasoning
- Make conjectures about number
- Expand binomials
- Make conjectures with algebra
- Explore the 100 grid

### Keywords

**Multiples:** found by multiplying any number by positive integers
**Factor:** integers that multiply together to get another number.
**Prime:** an integer with only 2 factors.
**HCF:** highest common factor (biggest factor two or more numbers share)
**LCM:** lowest common multiple (the first time the times table of two or more numbers match)
**Verify:** the process of making sure a solution is correct
**Proof:** logical mathematical arguments used to show the truth of a statement
**Binomial:** a polynomial with two terms
**Quadratic:** a polynomial with four terms (often simplified to three terms)

### Factors, Multiples and Primes

Multiplication part-whole models




All three prime factor trees represent the same decomposition

**HCF – Highest common factor**

HCF of 18 and 30

18: 1, 2, 3, 6, 9, 18
30: 1, 2, 3, 5, 6, 10, 15, 30

Common factors are factors two or more numbers share

**LCM – Lowest common multiple**

LCM of 9 and 12

9: 9, 18, 27, 36, 45, 54
12: 12, 24, 36, 48, 60

Common multiples are multiples two or more numbers share

### True or False?

**Conjecture**

A pattern that is noticed for many cases

1, 2, 4, ...
The numbers in the sequence are doubling each time.

**Counterexamples**

This sequence isn't doubling it is adding 2 each time

Only **one** counterexample is needed to disprove a conjecture

### Always, Sometimes, Never true.

**Always** – Every value always supports the statement

**Sometimes** – Examples show the statement being true and counter examples to show when it is false

**Never** – No example supports the statement

Examples to try
- 0 and 1
- Fractions
- Negative numbers

### Show that

**Numerical verification** – Show the stages to a solution with numerical values

**Algebraic verification** – Show algebraic properties of the solution. You may want to use pictorial images to support this

**Proof** – Simple proofs using algebra

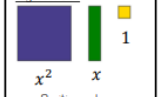
Compare the left hand side of an equation with the right hand side – are they the same or different?

### Expanding binomials

$2(x + 2) \equiv 2x + 4$

Algebra tiles can represent a binomial expansion. Has two terms

Algebra tiles




Positive values

$(x + 3)(x + 3) \equiv x^2 + 6x + 9$

This is a quadratic. It has four terms which simplified to three terms

The order of the binomial has no impact on the outcome.
e.g. $(x + 3)(3 + x)$

### Conjectures

**Even** $(2n)$ – Multiple of 2

**Odd** $(2n + 1)$ – One more than any even

Use numerical verification first
Use pictorial verification – the representations of numbers of odd and even

### Exploring the 100 square

In terms of '$n$' is used to make generalisations about relationships between numbers

Positions of numbers in relation to $n$ form expressions
E.g one space to the right of $n$
$n + 1$

E.g One row below $n$
$n + 10$

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |

The size of the grid for generalisation changes the relationship statements

# Maths

## YEAR 9 – CONSTRUCTING IN 2D/3D...

# 3D Shapes

@whisto_maths

### What do I need to be able to do?

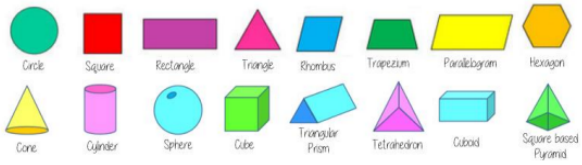
**By the end of this unit you should be able to:**

- Name 2D & 3D shapes
- Recognise Prisms
- Sketch and recognise nets
- Draw plans and elevations
- Find areas of 2D shapes
- Find Surface area for cubes, cuboids, triangular prisms and cylinders
- Find the volume of 3D shapes

### Keywords

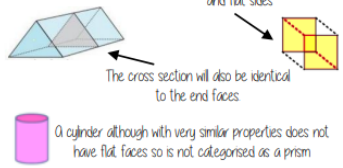
**2D:** two dimensions to the shape e.g length and width
**3D:** three dimensions to the shape e.g length, width and height
**Vertex:** a point where two or more line segments meet
**Edge:** a line on the boundary joining two vertex
**Face:** a flat surface on a solid object
**Cross-section:** a view inside a solid shape made by cutting through it
**Plan:** a drawing of something when drawn from above (sometimes birds eye view)
**Perspective:** a way to give illustration of a 3D shape when drawn on a flat surface

### Name 2D & 3D shapes




### Recognise prisms

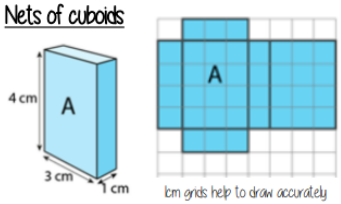
A solid object with two identical ends and flat sides



The cross section will also be identical to the end faces

A cylinder although with very similar properties does not have flat faces so is not categorised as a prism

### Nets of cuboids



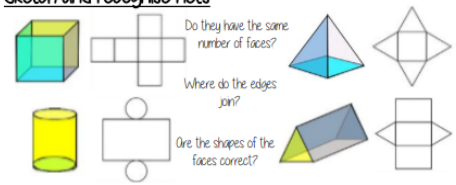




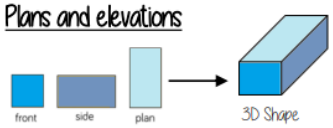
1cm grids help to draw accurately

Visualise the folding of the net. Will it make the cuboid with all sides touching

### Sketch and recognise nets




### Plans and elevations




The direction you are considering the shape from determines the front and side views

### Area of 2D shapes

R

Rectangle
**Base x Height**

Triangle
**½ x Base x Perpendicular height**

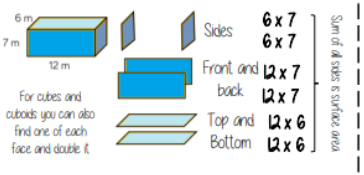
Parallelogram/ Rhombus
**Base x Perpendicular height**

Area of a trapezium
$\frac{(a+b)\times h}{2}$

Area of a circle
**$\pi$ x radius$^2$**

### Surface area

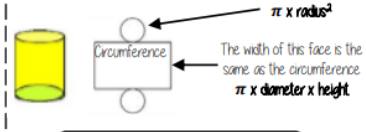
Sketching nets first helps you visualise all the sides that will form the overall surface area




For cubes and cuboids you can also find one of each face and double it

For other shapes - not all the sides are the same, so calculate the individually

### Surface area - cylinders




The area of the circle **$\pi$ x radius$^2$**

The width of this face is the same as the circumference **$\pi$ x diameter x height**

**2 x $\pi$ x radius$^2$ + $\pi$ x diameter x height**

### Volumes

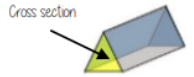
Volume is the 3D space it takes up – also known as capacity if using liquids to fill the space

**Counting cubes**
Some 3D shape volumes can be calculated by counting the number of cubes that fit inside the shape

**Cubes/ Cuboids = base x width x height**

Remember multiplication is commutative

Cross section



Cross section

**Prisms and cylinders = area cross section x height**

Height can also be described as depth

Areas – square units
Volumes – cube units

Areas and volumes can be left in terms of pi $\pi$

# Maths

## YEAR 9 – CONSTRUCTING IN 2D/3D...

# Constructions & congruency

@whisto_maths

### What do I need to be able to do?

**By the end of this unit you should be able to:**

- Draw and measure angles
- Construct scale drawings
- Find locus of distance from points, lines, two lines
- Construct perpendiculars from points, lines, angles
- Identify congruence
- Identify congruent triangles

### Keywords

**Protractor:** piece of equipment used to measure and draw angles
**Locus:** set of points with a common property
**Equidistant:** the same distance
**Discorectangle:** (a stadium) – a rectangle with semi circles at either end
**Perpendicular:** lines that meet at 90°
**Arc:** part of a curve
**Bisector:** a line that divides something into two equal parts
**Congruent:** the same shape and size

### Draw and measure angles (R)

Draw a 35° angle

Make a mark at 35° with a pencil and join to the angle point (use a ruler)

The angle

Make sure the cross is at the end of the line (where you want the angle)

### Scale drawings (R)

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

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

The car image is 10cm

| | Image | Real life |
|---|---|---|
| ×10 | 1cm | 30cm |
| | 10cm | 300cm |

### Locus of a distance from a point

All points are equidistant (the same distance) from the fixed point in the middle

Equipment needed
The radius is the distance from the fixed point

If the point is in the corner it can only make a quarter circle

### Locus of a distance from a straight line

All points are equidistant (the same distance) from line

The ends of the line are fixed points

Equipment needed
The line is straight so a ruler is used for the straight lines parallel to your original line

### Locus of a distance from two lines

Also an angle bisector
This cuts the angle in half

From the angle vertex draw two arcs that cut the lines forming the angle

Keep the compass the same size and use the new arcs as centres to draw intersecting arcs in the middle

Join the vertex to the intersection

### Constructing Triangles (R)

Link to steps

Side, Angle, Angle

Side, Angle, Side

Side, Side, Side

### Locus equidistant from two points

Also a perpendicular bisector
Because if the points are joined, this new line intersects it at a 90°

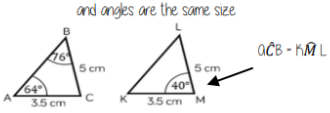
Keep the compass the same size and draw two arcs from each point

Join the intersections with a ruler
All points on this line are equidistant from both points

### Congruent figures

Congruent figures are identical in size and shape – they can be reflections or rotations of each other

Congruent shapes are identical – all corresponding sides and angles are the same size




$A\hat{C}B = K\hat{M}L$

Because all the angles are the same and AC=KM BC=LM triangles ABC and KLM are **congruent**

### Construct a perpendicular from a point

Point

Line

Use a compass and draw an arc that cuts the line. Use the point to place the compass

Keep the compass the same distance and now use your new points to make new interconnecting arcs

Connecting the arcs makes the bisector

If P is a point on the line the steps are the same

### Congruent triangles

**Side-side-side**
All three sides on the triangle are the same size

**Angle-side-angle**
Two angles and the side connecting them are equal in two triangles

**Side-angle-side**
Two sides and the angle in-between them are equal in two triangles (it will also mean the third side is the same size on both shapes)

**Right angle-hypotenuse-side**
The triangles both have a right angle, the hypotenuse and one side are the same

# Music

## Film Music

Students learn about the **different techniques** in creating film music. Film music sets **mood**, hints and **foreshadows** changes in the **plot** and **guides** our **emotions** without us noticing. A great score can make completely **transform** a film.

**"The sound and music are 50% of the entertainment in a movie,"**
George Lucas (Star Wars/Indiana Jones).

## 8 Key Words

**Leitmotif** – short theme linked to a character or idea.
**Diegetic** – sound the characters can hear.
**Non-diegetic** – only the audience hears.
**Mickey-mousing** – music that mirrors on-screen moves.
**Cue** – piece of music timed to a scene.
**Temp track** – placeholder music film editors use while putting the film together.
**Orchestration** – choosing instruments for each cue.
**Stinger** – sudden accent or chord hit for shock (typical in thriller or action films)

## Leitmotifs

Composers give each main **character** a catchy musical tag. When the **tag** returns, we **unconsciously** recall the character's **presence** or fate.

## Underscore vs Diegetic

**Underscore** sits under **dialogue** (only the audience hears), while **diegetic** music comes from a place that the **characters** can hear (e.g. a party or a band).

## James Bond Theme

Monty Norman's **surf-rock guitar** riff plus brass "**spy chords**" became the signature sound of cool danger (first heard **1962**). Researchers suggest it was inspired by a classical Indian music "**Raag Bhairavi**".

Every new Bond film **re-orchestrates** it, and **students** get a chance to **explore** and **interpret** this **motif** themselves.

## Timing & Mickey-Mousing

**Animators** and **action** scenes often **match** every punch or jump to **musical hits –** which is called '**mickey-mousing**.'

This is named after a **cartoon** that made almost all the music exactly **fit** the action. Too much feels contrived, but a well-placed hit-point sharpens **impact**.

Students experiment with scenes to **adapt** the **timing** of their scores to the film **precisely**.

## Modern Tools

**Synths**, **samples** and **temp tracks** let composers **sketch** ideas quickly and match tight deadlines.

**Modern** film and streaming **scores** mix **orchestra** with electronic layers for epic size and fresh textures.
(Picture - Delia Derbyshire)

Film Music

# Music

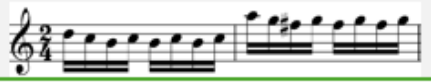
## Pop mixes and Variations

Students learn how pop songs are **built**, then are shown how **variations** (covers, remixes, key-changes, new textures) keep **familiar** material sounding **fresh**.

Students will learn to spot **hooks**, **verse-chorus** structures and common **variations** in the listening tasks and apply them by **re-arranging** a well-known tune.

## 9 Key Words

**Hook** – catchiest musical phrase.
**Verse–Chorus** – main pop structure.
**Bridge / Middle-Eight** – contrasting section.
**Cover** – new performance of an old song.
**Remix** – studio re-edit with fresh sounds.
**Mash-up** – two (or more) tracks mixed up.
**Modulation** – moving the whole song up or down in pitch.
**Sampling** – using a recorded snippet for use in a new track.
**Variation** – altering melody, harmony, rhythm or texture.

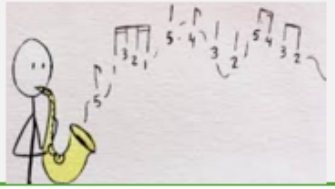


## Types of Variation

Change the **melody** (add or drop notes), **harmony** (shift to **minors**/**majors**), or the **texture** (strip to acoustic or add full band).

Change the **groove** by rephrasing the **rhythm** or change the type of **scale** (e.g. to blues) to **transform** the **mood** of the song.

Even **small tweaks** can give **new life** each time a **chorus** is **repeated**.



## 'Imperial March" theme reborn.

Although born in film, John William's Star Wars riff can be re-imagined as surf rock, disco, orchestral pop, jazz – whatever a student wants to explore.

Demonstrate how much variation a single motif can survive despite all the changes.

## Covers & Mash-ups

A **cover** keeps the song recognisable but changes the style e.g. a **punk** "Dancing Queen" or an **orchestral** "Iron Man"

**Mash-ups** push **variation** further by **splicing** two hits **together** into one track.

**Key-Change Lift -** A change in **pitch** of the song (called a **modulation**) is used to lift the final chorus – a very 1980s' pop idea.

The **Beatles** and others also used key changes – but generally more **artfully.**

## Studio Variations

Remixes began by **DJs** altering **tempo**, adding **beats** or **filtering** vocals to adapt to new dance floors styles.

This keeps a pop song **alive** in **clubs** long after **radio play** and popular **streaming** fades.

**Remixing** can now often mean a major **re-imagining** of the song – **recording** new elements and using **modern sound production** techniques like **spatial** sound.

# Pop Remixes and Variations

PE

# Year 9 Physical Education Term 1

1 **Cardiovascular Endurance**:
The ability of the **heart, lungs, and blood vessels** to deliver oxygen to working muscles over an extended period of time.

**Test**: Multi-stage fitness test (bleep test), where students run back and forth in time with beeps that get faster.

**Sport Example**: Marathon running, swimming, and football all require sustained aerobic fitness to maintain performance.

2 **Muscular Endurance**:
The ability of a muscle or muscle group to perform repeated contractions without getting tired.

**Test**: Sit-up or press-up test over a set time period (e.g. 1 minute).

**Sport Example**: Rowing, cycling, and circuit training require muscles to work continuously.

3 **Muscular Strength**:
The maximum force a muscle can generate in a single effort.

**Test**: Handgrip dynamometer, which measures the strength of the hand and forearm.

**Sport Example**: Weightlifting, rugby scrummaging, and wrestling all require strong muscles to perform effectively.

4 **Flexibility**:
The range of movement possible at a joint.

**Test**: Sit and reach test, which measures hamstring and lower back flexibility.

**Sport Example**: Gymnastics, dance, martial arts, and yoga all rely on flexibility for complex movements and injury prevention.

5 **Speed**:
The ability to move the body or parts of the body quickly.

**Test**: 30-metre sprint test, which measures how fast you can run a short distance.

**Sport Example**: Sprinters, footballers, and basketball players need speed to break away from opponents.

6 **Power**:
The combination of **strength and speed**, producing an explosive movement.

**Test**: Vertical jump test, where students jump as high as they can and measure the difference between standing and jump reach.

**Sport Example**: Basketball jumps, shot put, and volleyball spikes all require explosive power.

Components of Fitness

PE

# Year 9 Physical Education Term 1

7

**Agility:**
The ability to change direction quickly and under control.

**Test:** Illinois agility test, involving a timed course of sharp turns and sprints.

**Sport Example:** Netball, rugby, and tennis all require players to dodge opponents or change direction

8

**Balance**:
The ability to maintain the body's position, either static (still) or dynamic (moving).

**Test**: Stork stand test, where students balance on one leg with the other foot on the knee and hands on hips.

**Sport Example**: Gymnastics, skiing, skateboarding, and yoga all need good balance.

9

**Coordination**:
The ability to use two or more body parts together smoothly and effectively.

**Test**: Wall toss test, where students throw a ball against a wall and catch it with the opposite hand as many times as possible in 30 seconds.

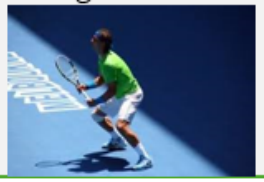
**Sport Example**: Tennis (hand-eye coordination), cricket catching, and basketball passing all need good coordination.

10

**Reaction Time**:
The time taken to respond to a stimulus.

**Test**: Ruler drop test, where a ruler is dropped and the student catches it as quickly as possible.

**Sport Example**: Sprint starts in athletics, goalkeeping in football, and receiving a serve in tennis.



11

**Body Composition**:
The ratio of body fat to lean body mass (muscle, bone, water).

**Test**: Skinfold callipers (pinch test) or BMI (Body Mass Index) calculation.

**Sport Example**: Sumo wrestlers may have higher body fat, while marathon runners aim for lower fat and more lean muscle.

12

**Skill-Related Fitness**:
Fitness components like **agility, balance, coordination, power, reaction time, and speed** that enhance performance in sport. These are essential for **sport-specific skills** such as dribbling, passing, sprinting, or changing direction.

**Example**: Footballers need speed and agility to avoid tackles and react quickly to play

Components of Fitness

# Science

## Keywords

| | |
|---|---|
| Hazard | Anything that has the potential to cause harm or damage |
| Risk | The harm or damage that could be caused by a hazard |
| Accuracy | The closeness of a measurement to its true value |
| Precision | How close measurements are to each other |
| Reliable | Similar data can be reproduced under same conditions |

## Scientific Method

**Hypothesis:** What you predict will happen, based on prior knowledge e.g. As X increases, Y will increase because…….

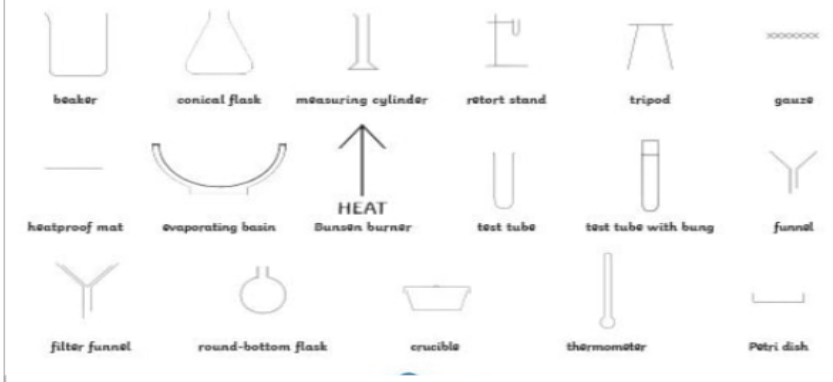
**Independent Variable:** The thing that is being changed
**Dependent Variable:** The thing that is being observed/measured
**Control Variables:** All the things that are being kept the same e.g. volume, concentration, mass, time

**Method:** Step by step instructions of how to change the independent variable, measure the dependent variable, control all other variables, repeat measurements, perform calculations on collected data

**Conclusion:** What have you found out? Was your hypothesis correct? Does your data support your hypothesis? Explain the results using scientific knowledge

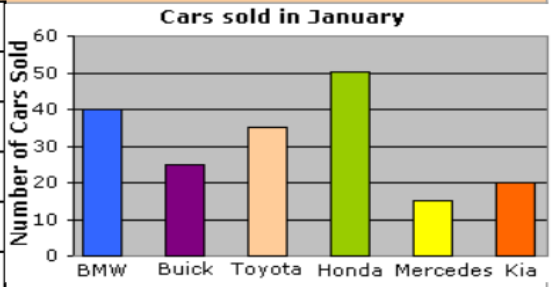
**Evaluation:** How reliable is your data (could someone follow your method and collect a similar set of results)? Are their anomalies? How could you make it more reliable?

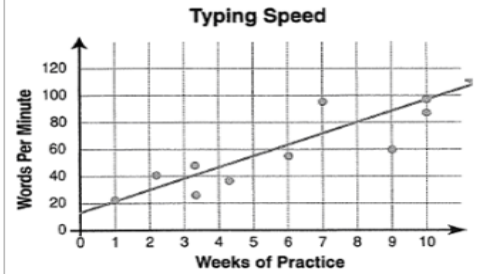
## Drawing Scientific Diagrams




## Presenting Data in a Graph

| | |
|---|---|
| S | Scale |
| P | Pencil & ruler |
| A | Axis |
| T | Title |
| U | Units |
| L | Line of best fit if appropriate |
| A | Accuracy |




**Bar Graph:**
Categoric/Discrete data

**Line Graph:**
Continuous data

Science Skills

# Science

## Keywords

| | |
|---|---|
| System | Organised collection of interdependent components, perform a function through transfer of energy and/or matter |
| Transfer | Change in location |
| Transformation | Change of state or form |
| Model | A representation or simulation of an object, system or event, that could be conceptual, mathematical or physical |

## Types of Scale

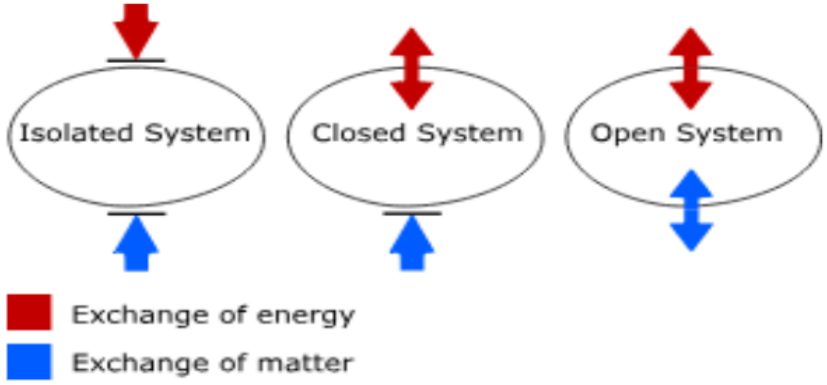
| | CATEGORIC | | CONTINUOUS | |
|---|---|---|---|---|
| Characteristic | NOMINAL | ORDINAL | INTERVAL | RATIO |
| IDENTITY | | | | |
| MAGNITUDE | | | | |
| EQUAL INTERVALS | | | | |
| ABSOLUTE ZERO | | | | |

## Evaluating Models

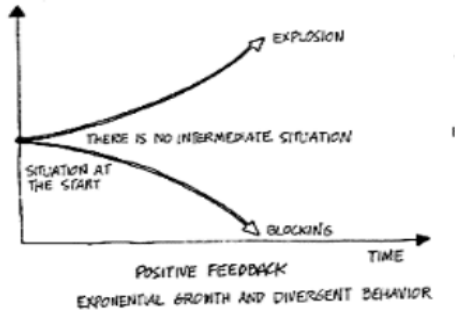
Advantages & Limitations:

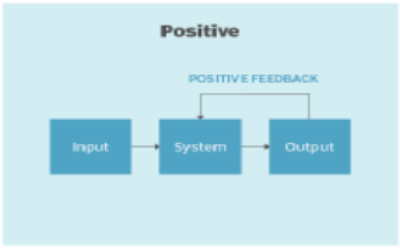
- Does it explain past observations?
- Does it agree with other models?
- Does it predict accurately?
- Does it contain an appropriate level of detail?
- Is it exact or approximate?
- Is it overly simplistic?

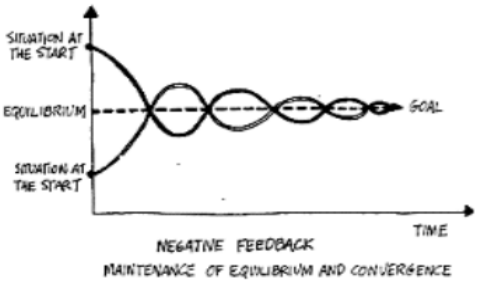
## Types of Systems

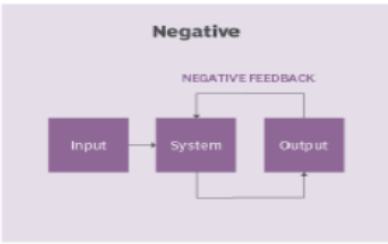



## Feedback Systems




Conceptual Science

# Science

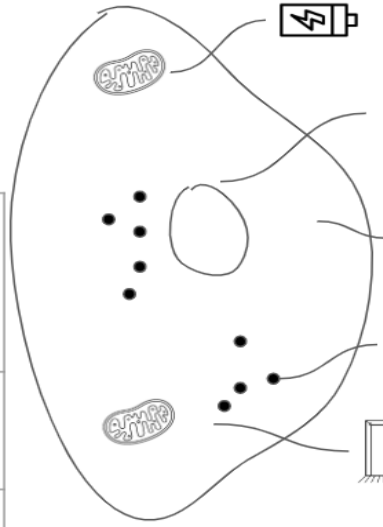
## B1 Cell Structure and Transport

### Prokaryotic cells

- ✓ Single cellular
- ✗ No nucleus or mitohonida
- ✓ Loops of DNA and plasmids

### Eukaryotic cells (have membrane bound organelles)

**Animal Cell**



**Mitochondria**: respiration

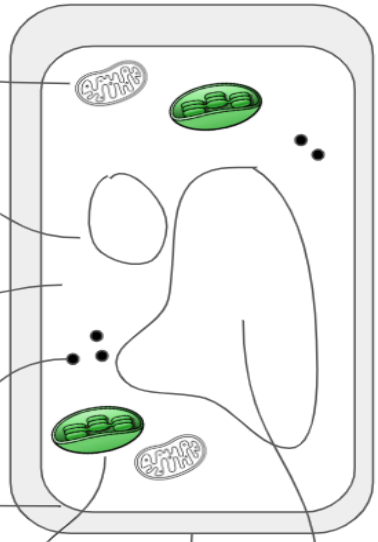
**Nucleus**: Contains DNA and controls cell

**Cytoplasm**: chemical reactions

**Ribosome**: make protein

**Cell membrane:** controls in and out

**Plant Cell**



**Chloroplasts**: photosynthesis

**Cell wall**: structure

**Vacuole**: cell sap & shape

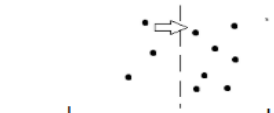
| Microscopes | Light | Electron |
|---|---|---|
| Resolution | low | high |
| £ Cost | Low | high |
| Magnification | X 2000 | X 2 000 000 |

Magnification = $\frac{\text{Image size}}{\text{Object size}}$

| Unit Conversions |
|---|
| 1km = 1000m |
| 1m = 100cm |
| 1cm = 10mm |
| 1mm = 1000µm |
| 1µm = 1000 nm |

## Cell Transport

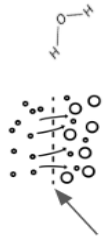
### Active Transport



low concentration → high concentration

Requires energy

### Osmosis



Diffusion of water

From a dilute to concentrated solution

Through a partially permeable membrane

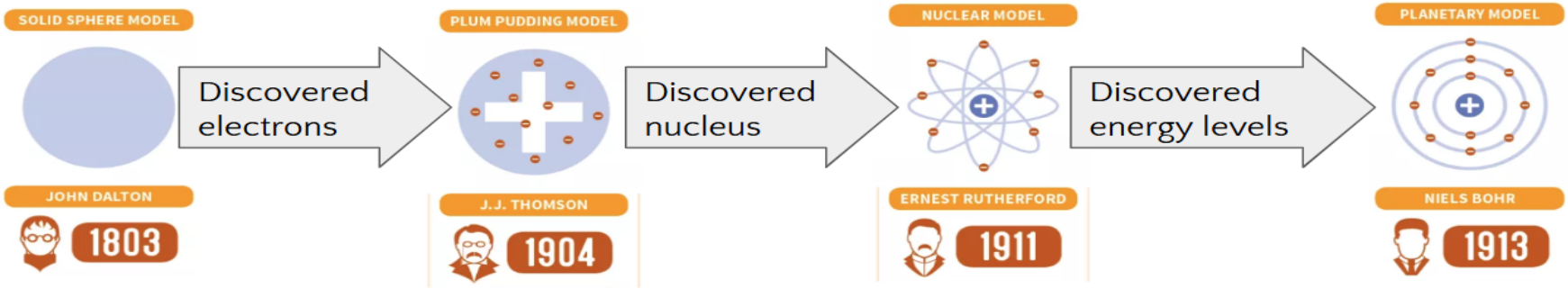
### Diffusion

spreading of particles from area of high to low concentration.

- ↑ **temperature** = ↑ diffusion
- ↑ **surface area** = ↑ diffusion
- ↑ **concentration** gradient = ↑ diffusion

# Science

## Models of the atom:



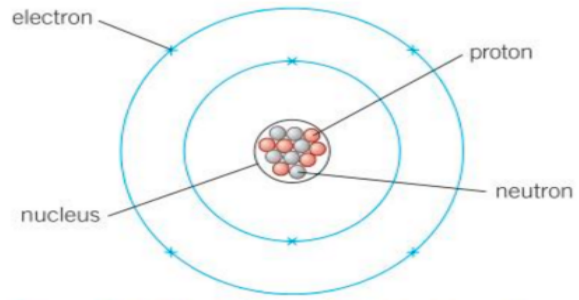

## Key definitions:

| | | | |
|---|---|---|---|
| Molecule: | 2 or more atoms bonded together | Compound: | Substance made from 2 or more types of atom bonded together |
| Element: | Substance made of 1 type of atom | Isotopes: | 2 atoms with the same number of protons and different numbers of neutrons |
| Solution: | A mixture of a liquid (solvent) and a soluble solid (solute) | Mixture: | 2 or more substances in the same place but not bonded together |

## Separating mixtures:

| | |
|---|---|
| Filtration | Separates an insoluble solid from a liquid |
| Crystallisation | Separating the solute (dissolved solid) from a solution |
| Distillation | Separates the solvent (liquid) from a solution |
| Fractional distillation | Separates miscible liquids because they have different boiling points. |
| Chromatography | Separates soluble substances using a solvent |

## Structure of the atom:




| Subatomic particle | Relative charge | Relative mass | Location |
|---|---|---|---|
| Proton | + | 1 | Nucleus |
| Neutron | nil | 1 | Nucleus |
| Electron | - | Almost 0 | Orbiting the nucleus |

C1 – Atomic Structure

# Science

## Development of the Periodic table

Dalton
- List of elements

Newlands
- Law of octaves

Mendeleev

Moseley
- Discovered protons

Arranged by mass

Arranged by properties

Arranged by atomic number

Left gaps

Swapped elements (Te - I)

## Arrangement of the Periodic table

Ordered by atomic number

The majority of the element are metals

- Metals react to form positive ions.
- Non-metals react to form negative ions.

Groups - Same electrons in outer shell (have similar chemical properties)I

Periods - Same number of shells

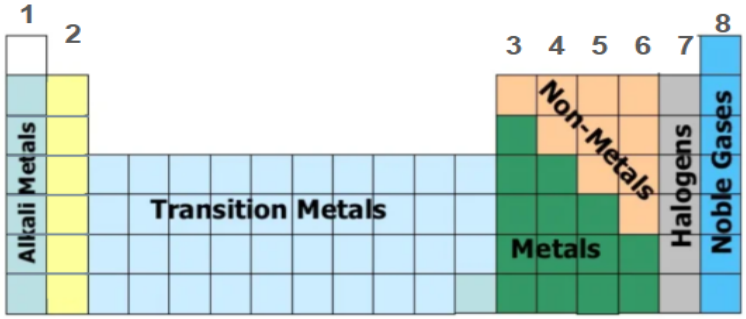
## Group 1 - Alkali metals

Li
Na
K
Rb
Cs

More reactive down group

**Because:**
More electron shells

Outer shell electron easier to remove




## Group 0- Noble gases

He
Ne
Ar
Kr
Xe

Unreactive

Full outer shell

Alkali metals have characteristic properties because of the single electron in their outer shell.

- Alkali metal + water → alkali metal hydroxide + hydrogen
- Alkali metal + chlorine → Alkali metal chloride
- Alkali metal + oxygen → Alkali metal oxide

## Transition Metals

Good conductors of electricity, hard and strong, high density, high melting points

Many transition elements have ions with different charges, form coloured compounds and are useful as catalysts.

## Group 7 - Halogens

F
Cl
Br
I
At

Less reactive down group

**Because:**
More electron shells

Harder to gain electron

Displacement

More reactive halogen displaces less reactive

Sodium iodide + chlorine → Sodium chloride + Iodine

C1b – Periodic Table


# Think Like An Environmentalist

Community, Collaboration and Challenge