

# Knowledge Organiser Booklet

Year 8 Spring Half Term 1

**Ignorance is the curse  
of God; knowledge is  
the wing wherewith we  
fly to heaven.**



*William Shakespeare*

Name: \_\_\_\_\_

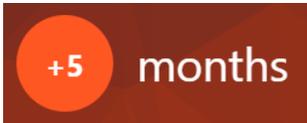
Tutor group: \_\_\_\_\_

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- Home learning timetable
- Instructions on how to use a knowledge organiser
- English
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Education  
Endowment  
Foundation



**+5 months**

Research carried out by the Education Endowment Foundation proved that: Homework has a positive impact on average of + 5 months, particularly with pupils in secondary schools.

## Home learning timetable

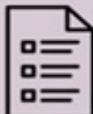
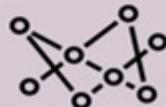
The table below details which days each subject will set home learning on each week. Students will have one week to complete home learning tasks for each subject.

Group	Monday	Tuesday	Wednesday	Thursday	Friday
8N	Art Humanities	Maths MFL	Science English	L&E Science	Music Reading
8E	Art Humanities	Maths English	L&E Science	Science MFL	Music Reading
8W	Humanities English	Art Maths	MFL Science	Science L&E	Music Reading

Please note you have two science teachers; science home learning will be set by both teachers

These knowledge organisers have been created by your teachers to support your learning both in class and for home learning. They are also a valuable revision tool for you to use independently when preparing for assessments. It is important that you make good use of your knowledge organisers by learning how to use them in different ways.

## How to use a knowledge organiser – step by step guide

	Look, Cover, Write, Check	Definitions of Key Words	Flash Cards	Self Quizzing	Mind Maps	Paired Retrieval
Step 1	<p>Look at and study a specific area of your KO.</p> 	<p>Write down the key words and definitions.</p> 	<p>Use your KO to condense and write down key facts or information onto flash cards.</p> 	<p>Use your KO to create a mini quiz. Write down your questions using your KO.</p> 	<p>Create a mind map with all the information you can remember from your KO.</p> 	<p>Ask a friend or family member to have the KO or flash cards in their hands.</p> 
Step 2	<p>Cover or flip the KO over and write down everything you can remember.</p> 	<p>Try not to use your KO to help you.</p> 	<p>Add pictures to help support. Then self-quiz using the flash cards. You could write questions on one side, and answers on the other!</p> 	<p>Answer the questions and remember to use full sentences.</p> 	<p>Check your KO to see if there are any mistakes on your mind map.</p> 	<p>They can test you by asking you questions on different sections of your KO.</p> 
Step 3	<p>Check what you have written down. Correct any mistakes in green pen and add anything you have missed. Repeat.</p> 	<p>Use your green pen to check your work.</p> 	<p>Ask a friend or family member to quiz you on the knowledge.</p> 	<p>Ask a friend or family member to quiz you using the questions.</p> 	<p>Try to make connections, linking the information together.</p> 	<p>Write down your answers,</p> 



## Poetry and Place

*Year 8 - focusing on the form, structure and language of poetry*

### FLIRT

### The Poems and their Meaning

### Key Words:

#### Find the meaning

What is the main message of the writer or speaker?

#### 'Island Man' by Grace Nichols

The character wakes to the sounds of the city, blended with the memory of his island.



#### Language

What words add to the meaning of the poem or create a specific effect?

#### 'The Lamb' by William Blake

The religious connotation of the poem is a reflection of innocence and the romantic theme of nature created by God.



#### Imagery

What image is created of sound, smell, touch, taste, emotion, sight, character or speaker?

'The Moors' by Ide Crawford - the poem creates an image of the moors surrounding Macclesfield. The poem uses an array of senses to create a strong image of nature.



#### Rhyme and rhythm

What rhyming words or rhythm add to the meaning of the poem?

'The Tyger' by William Blake - the speaker directly addresses the tiger, questioning Who was responsible for its power and symmetry.



#### Theme

Is there an atmosphere of romance, hate, time etc. that runs through the poem?

#### 'The Cloud' by Percy Bysshe Shelley

The speaker, a personified cloud, boasts of its power, beauty and fearless nature.

**Imagery** - an image created by the use of language (words) in relation to the senses.

**Analyse** - to examine the meaning behind language and poetic devices; to examine the writer's intention.

**Contrast** - when one thing is different to another.

**Poetic devices** - techniques used by poets to create a specific meaning, rhythm, mood or feeling in a poem.

**Semantic field:** a collection of words related to each other through meaning or an abstract idea.



## Techniques

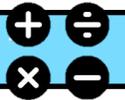
Alliteration	Repeated first letter across a number of words.
Assonance	Repeated vowel sound across a number of words.
Colloquial Language	Casual, informal language.
Emotive	Appeals to your emotions.
Extended Metaphor	A metaphor that unfolds across multiple lines or even paragraphs.
Hyperbole	Exaggeration for deliberate impact.
Imagery	Something used to describe something else.
Internal Rhyme	Rhyme that is on the same line of the poem.
Metaphor	Something is described as being something else to draw on a comparison between the two.
Mood	The atmosphere of the text.
Onomatopoeia	A verb that sounds like the sound it makes.
Personification	A non-human thing is given human qualities.
Rhyme	Words that sound the same often found at the end of poetry lines.
Semantic Field	Words that are about or linked to the same thing/theme.
Sibilance	A repeated 's' sound.
Simile	A comparison is made between two things using the words 'like' or 'as'.
Symbolism	Some representing something else.
Tone	The emotions / feelings coming from the text/poem.

## Structure

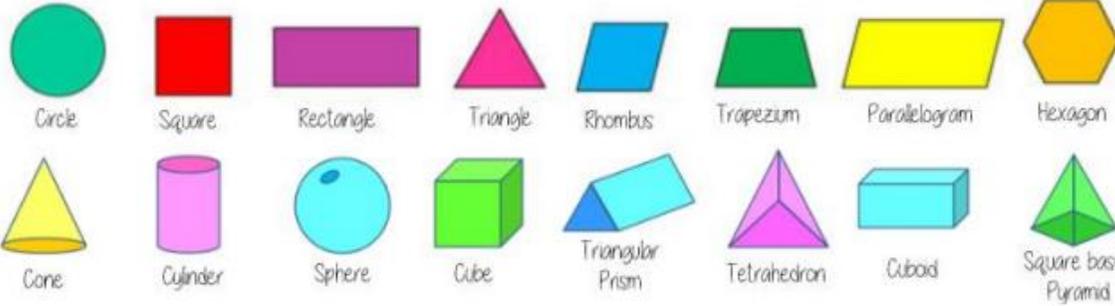
Chronological	When a poem is organised in order of time.
Caesura	A break in the middle of a line.
Enjambment	A sentence runs over more than one line.
Juxtaposition	Deliberately placing two things together to create a contrasting effect.
Layout	Position of lines / words / stanzas on a page.
Anaphora	Repeating the first few words at the start of lines.
Oxymoron	Two opposite words next to each other.
Rhyme scheme	The organisation of the rhyme.
Rhyming couplet	Two lines that rhyme next to each other.
Stanza	A verse in a poem.
Volta	The turning point of a poem (usually a sonnet).
Repetition	Something appears more than once – a particular word, image, phrase of theme.

## Form

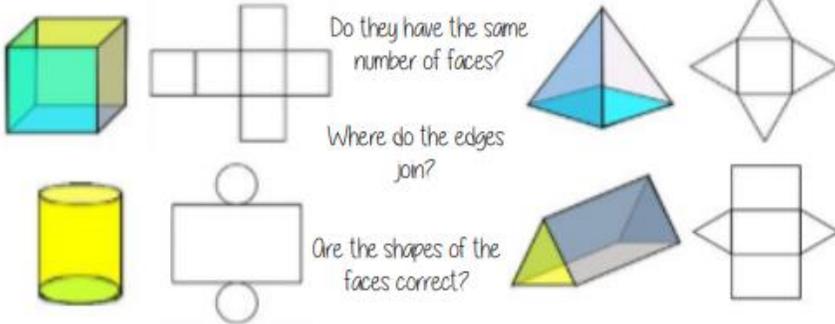
Auto-biographical	The poem is about the poet's life experience, relationships, etc.
Ballad	Story poem - often organised into four-line stanzas.
Blank verse	Verse with no rhyme.
Dramatic monologue	When a poet adopts the role of a first-person character and speaks to the reader.
Free verse	A poem with no regular rhyme or rhythm.
Lyrical	Emotional or beautiful. Poetry often involving descriptions of nature.
Narrative	A story.
Rhetoric	Persuasive poetry that uses a variety of devices.
Sonnet	14 lined poem that follows specific structural features.



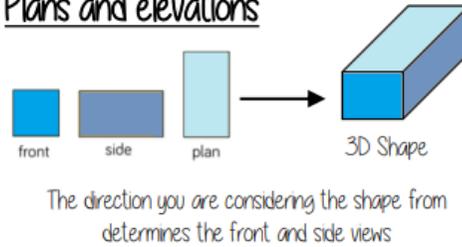
Name 2D & 3D shapes



Sketch and recognise nets



Plans and elevations



Volumes

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

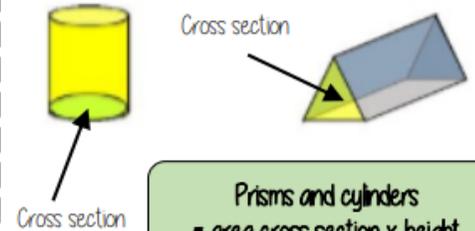


Counting cubes

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**

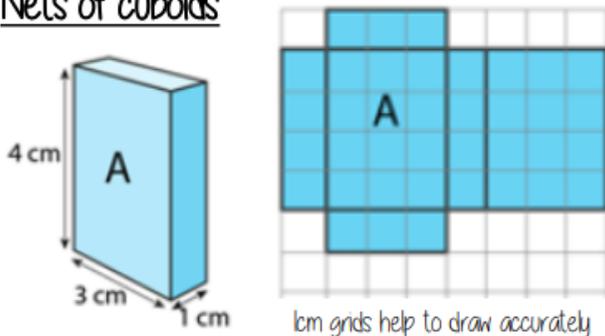
Remember multiplication is commutative



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

Height can also be described as depth

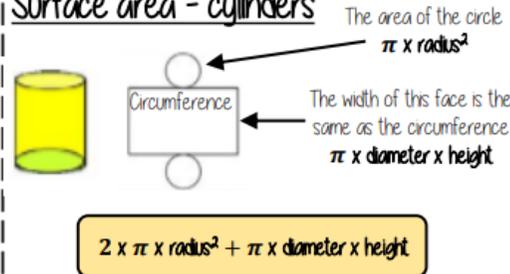
Nets of cuboids



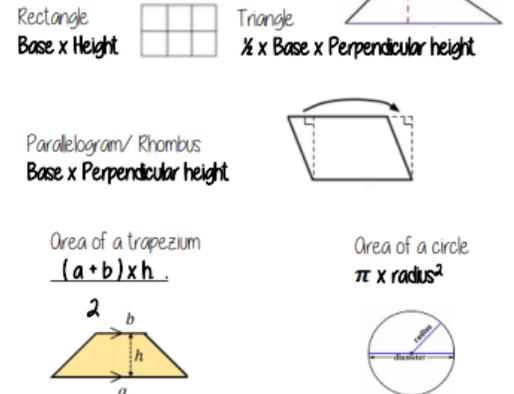
Visualise the folding of the net. Will it make the cuboid with all sides touching

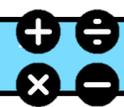
1cm grids help to draw accurately

Surface area - cylinders



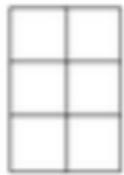
Area of 2D shapes



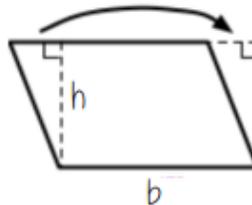


## Area – rectangles, triangles, parallelograms

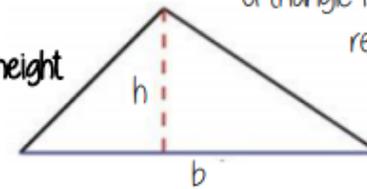
Rectangle  
Base x Height



Parallelogram/ Rhombus  
Base x Perpendicular height



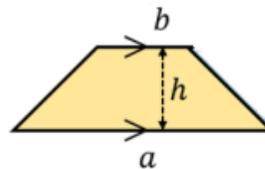
Triangle  
 $\frac{1}{2} \times \text{Base} \times \text{Perpendicular height}$



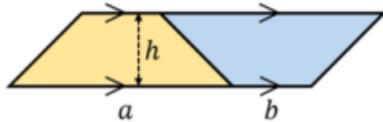
A triangle is half the size of the rectangle it would fit in

## Area of a trapezium

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



Why?

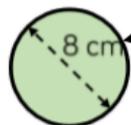
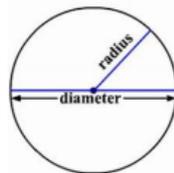


- Two congruent trapeziums make a parallelogram
- New length  $(a + b) \times \text{height}$
- Divide by 2 to find area of one

## Area of a circle (Non-Calculator)

Read the question – leave in terms of  $\pi$  or if  $\pi \approx 3$  (provides an estimate for answers)

Area of a circle  
 $\pi \times \text{radius}^2$



Diameter = 8cm  
 $\therefore$  Radius = 4cm

$$\begin{aligned} \pi \times \text{radius}^2 &= \pi \times 4^2 \\ &= \pi \times 16 \\ &= 16\pi \text{ cm}^2 \end{aligned}$$

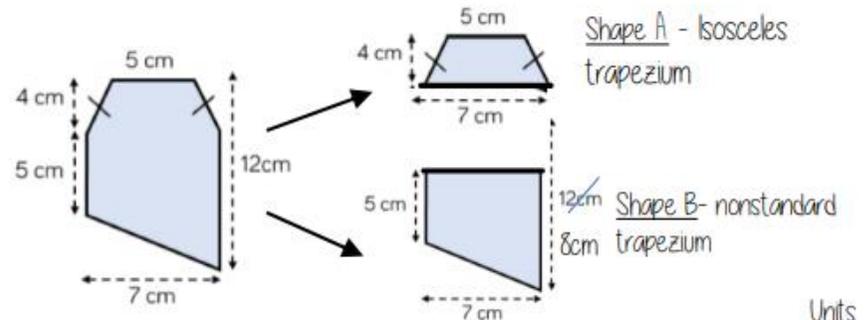
Find the area of one quarter of the circle



Circle Area =  $16\pi \text{ cm}^2$   
Quarter =  $4\pi \text{ cm}^2$

## Compound shapes

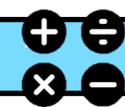
To find the area compound shapes often need splitting into more manageable shapes first. Identify the shapes and missing sides etc. first.



Shape A + Shape B = total area

$$\frac{(5+7) \times 4}{2} + \frac{(5+8) \times 7}{2} = 24 + 45.5 = 69.5 \text{ cm}^2$$

Units



### Name 2D & 3D shapes



Circle



Square



Rectangle



Triangle



Rhombus



Trapezium



Parallelogram



Hexagon



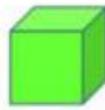
Cone



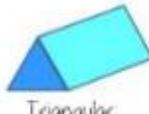
Cylinder



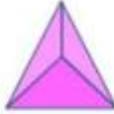
Sphere



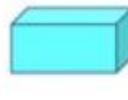
Cube



Triangular Prism



Tetrahedron



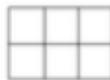
Cuboid



Square based Pyramid

### Area of 2D shapes

Rectangle  
Base x Height

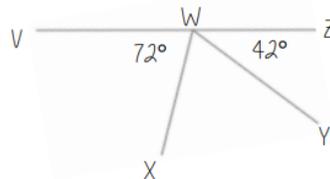


Triangle  
 $\frac{1}{2} \times \text{Base} \times \text{Perpendicular height}$



### Sum of angles on a straight line

Adjacent angles that share a common point on a line add up to  $180^\circ$



Find angle XWY

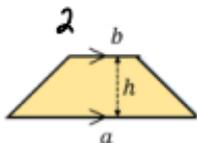
$$72^\circ + 42^\circ = 114^\circ$$

$$180^\circ - 114^\circ = 66^\circ$$

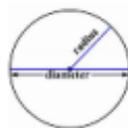
Parallelogram/ Rhombus  
Base x Perpendicular height



Area of a trapezium  
 $(a+b) \times h$



Area of a circle  
 $\pi \times \text{radius}^2$



### Volumes

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

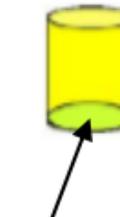


#### Counting cubes

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

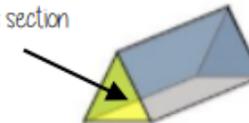
**Cubes/ Cuboids = base x width x height**

Remember multiplication is commutative



Cross section

Cross section



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

Height can also be described as depth

### Sum of angles at a point

The sum of angles around a point is  $360^\circ$



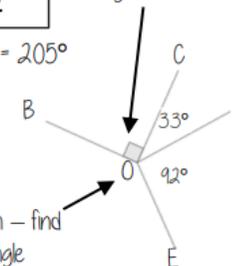
Find angle BOE

$$90^\circ + 33^\circ + 92^\circ = 205^\circ$$

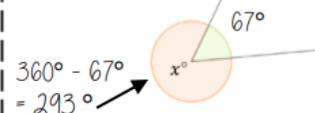
$$360^\circ - 205^\circ$$

$$\text{BOE} = 155^\circ$$

Angle notation –  $90^\circ$



Angle notation – find this missing angle



$$360^\circ - 67^\circ = 293^\circ$$



**Acids** – All acid compounds have salt in them. The three main acids are hydrochloric acid, sulfuric acid and nitric acid.

**Salts** – When the hydrogen in an acid is replaced by a metal, the compound is called a salt.



**Metal oxides** – Many metals will react with the oxygen in the air to produce a metal oxide.



**Metal hydroxide** – Very reactive metals react with cold water to produce a metal hydroxide and hydrogen.



### Types of salt

Hydrochloric acid produces chlorides (e.g. sodium chloride)

Sulfuric acid produces sulfates (e.g. copper sulfate)

Nitric acid produces nitrates (e.g. potassium nitrate)

### Testing for hydrogen

Collect in an upside down test-tube.

Insert a burning splint – there will be a 'squeaky pop' sound.

### State symbols

(s) Solid    (l) Liquid    (g) Gas

(aq) aqueous = dissolved in water

### Reactions with oxygen

Magnesium – burns vigorously

Zinc – burns less vigorously

Iron – burns if heated strongly, when cold will slowly form a layer of oxide on surface (rust)

Lead & Copper – Do not burn, when heated will form a layer of oxide on the surface

Increasing reactivity

**most reactive**

potassium

sodium

lithium

calcium

magnesium

aluminium

zinc

iron

lead

copper

silver

gold

**least reactive**



**Producer** – green plant/algae that makes its own food.

**Herbivore** – type of **consumer** that eats the producer.

**Carnivore** – type of **consumer** that eats other animals.

**Omnivore** – type of consumer that eats producers and animals.

**Prey:** an organism eaten by another organism.

**Predator:** an organism that eats another organism.

**Food chains** show the transfer of energy between organisms – the arrows represent the direction of energy transfer.

**Food webs** show how lots of food chains are connected in an ecosystem.

The number of **organisms** that live in the same area is called a **population**. Populations of organisms are constantly changing – this affects other populations in a food web.

**Interdependence** is when living organisms depend on each other to survive, grow, and reproduce.

**Ecosystem:** all the organisms found in a particular location, and the area they live in.

**Community:** the organisms in an ecosystem. Habitat: the area a community lives in.

**Niche:** the particular place or role that an organism has within an ecosystem. This reduces competition for resources.

### Food chain

**herbivore** – type of **consumer** that eats the producer

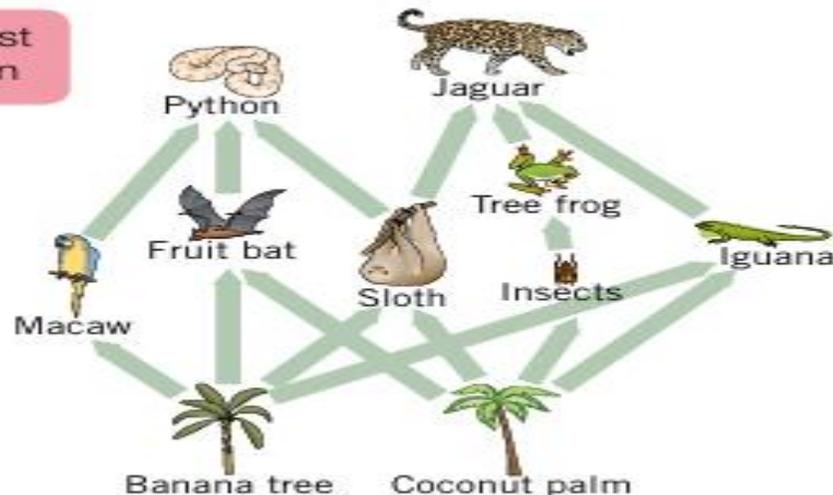
apex predator – last link in a food chain

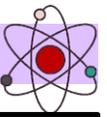


**producer** – green plant/algae that makes its own food

**carnivore** – type of consumer that eats other animals

### Food web





**Speed** is how far something moves in a certain time.

$$\text{Speed (m/s)} = \text{Distance travelled (m)} \div \text{Time taken (s)}$$

Speed can be measured in miles per hour (mph), metres per second (m/s) or kilometres per hour (km/h)

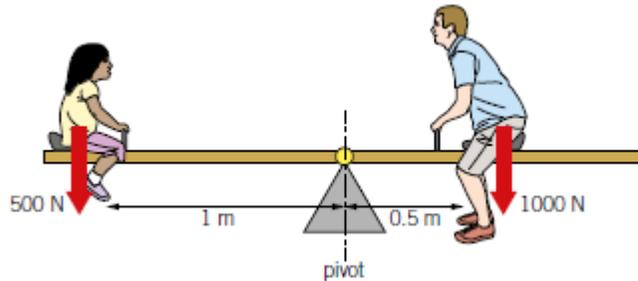
A **distance – time** graph shows when an object is stationary (horizontal line) or moving (angled line).

**Moments** are the turning effect of a force.

$$\text{Moment (Nm)} = \text{Force (N)} \times \text{Perpendicular distance from the pivot (m)}$$

### The law of moments

When an object is in **equilibrium** all the **clockwise moments** added together **equal** all the **anti-clockwise moments** added together.



**Pressure** is how much force in a certain area.

$$\text{Pressure (N/m}^2\text{)} = \text{Force (N)} \div \text{Area (m}^2\text{)}$$

Pressure is measured in newtons per metre squared (N/m<sup>2</sup>), or newtons per centimetre squared (N/cm<sup>2</sup>).

1 N/m<sup>2</sup> is also called 1 pascal (Pa)

**Solids** and **Liquids** are **incompressible**. This is because all the particles are touching.

Pressure can be transmitted **through a liquid**. This is used in hydraulics.

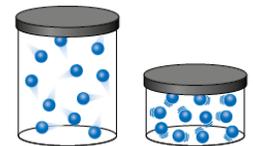
Pressure **increases with depth** in a **liquid**.

**Gases** can be compressed. This is because there are gaps between the particles.

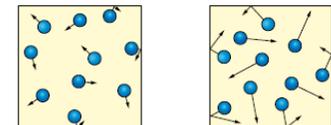
**Atmospheric Pressure** decreases with height above sea level.

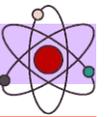
**Collisions** between gas molecules and their container produce **gas pressure**.

If you compress a gas there will be more frequent collisions and so a higher pressure.



If you heat a gas the particles move faster, there will be more frequent collisions and so a higher pressure.





**Static electricity:** by rubbing insulators together **electrons** are **transferred**, which gives the objects electrostatic charges.

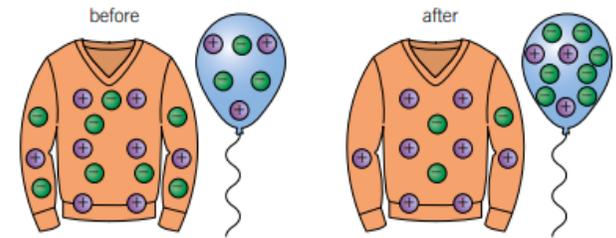
**Like charges** (+ and +) or (- and -) **repel**.

**Opposite charges** (+ and -) **attract**.

Charged objects have **electric fields** around them.

**Electric field lines** are used to show how a positive charge will act.

Only **electrons** are **transferred**.



**Current** is the amount of **charge flowing per second**.

- It is measured with an **ammeter** (connected in series).
- The **unit** for current is the **amp (A)**.

**Potential difference** is the amount of **energy transferred** by the **charges** in the circuit.

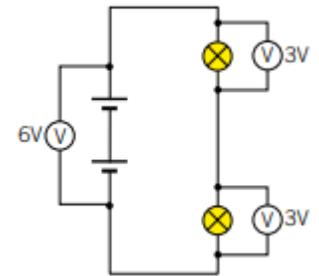
- It is measured with a **voltmeter** (connected in parallel).
- The **unit** for potential difference is the **volt (V)**.

**Resistance** is a measure of how easy it is to pass through a component.

- Resistance is calculated by measuring the potential difference and the current.
- The **unit** for resistance is the **ohm ( $\Omega$ )**.

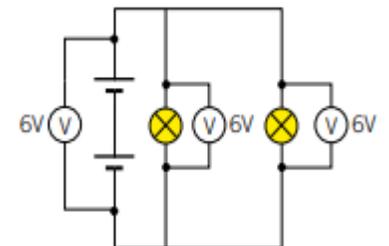
**Series circuits**

- contain only one loop
- the current is the same everywhere
- the potential difference across each component adds up to the potential difference across the battery
- if one component or wire breaks, current stops flowing everywhere.



**Parallel circuits**

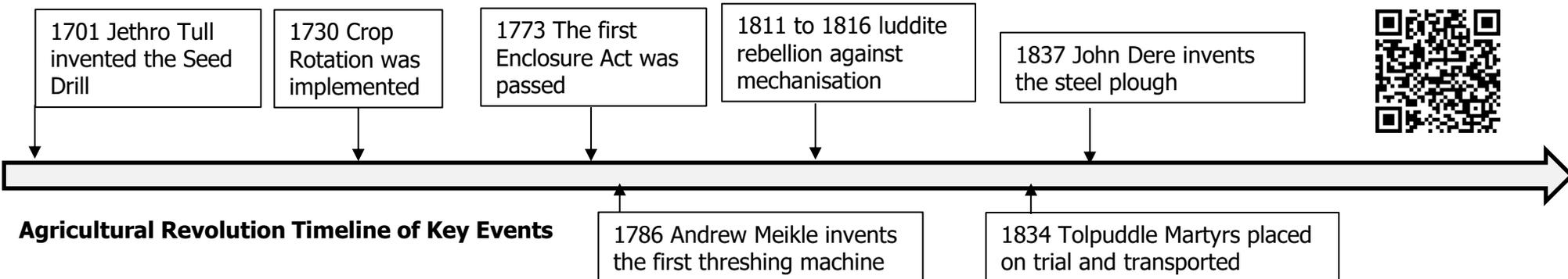
- contain multiple branches
- currents in all the branches add up to make the total current
- the potential difference across each component is the same as the potential difference across the battery





3.1 Agricultural Revolution Key Terms	Definition
<b>3.1.1. Field Strip System</b>	Strip cropping is a method of farming which involves cultivating a field partitioned into long, narrow strips which are alternated in a crop rotation system.
<b>3.1.2. Crop Rotation</b>	The practice of growing different types of crops in the same area over multiple growing seasons. It's an important technique to keep soil quality good.
<b>3.1.3. Subsistence Farming</b>	Agricultural activity to produce food which is mainly consumed by the farming household with little surplus available for sale or trade.
<b>3.1.4. Selective Breeding</b>	The process of artificially breeding plants and animals to develop specific traits e.g. bigger crop yields.
<b>3.1.5. Rural</b>	Of the countryside.
<b>3.1.6. Fallow</b>	The practise of leaving a field to rest so that nutrients can be restored.
<b>3.1.7. Enclosure Acts</b>	A series of acts passed by parliament in the nineteenth century to redistribute land from local communities to wealthy landowners.
<b>3.1.8. Mechanisation</b>	The introduction of machinery in agriculture.

3.2 Tolpuddle Martyrs	
<b>3.2.1 Tolpuddle Martyrs</b>	A group of farm workers from Dorset who stood up for their rights against their landowner for higher pay.
<b>3.2.2. Friendly Society</b>	An early trade union formed in secret by the Tolpuddle Martyrs
<b>3.2.3. Starvation Wages</b>	The low wages paid to the Dorset farm labourers
<b>3.2.4. Transportation</b>	A punishment were criminals were sent the Australia to work doing hard labour.
<b>3.2.5. Assizes</b>	Occasional courts where criminals were tried. The Dorset Assizes were at Shire Hall in Dorchester.
<b>3.2.6. Pardon</b>	The Tolpuddle Martyrs were pardoned in 1836.



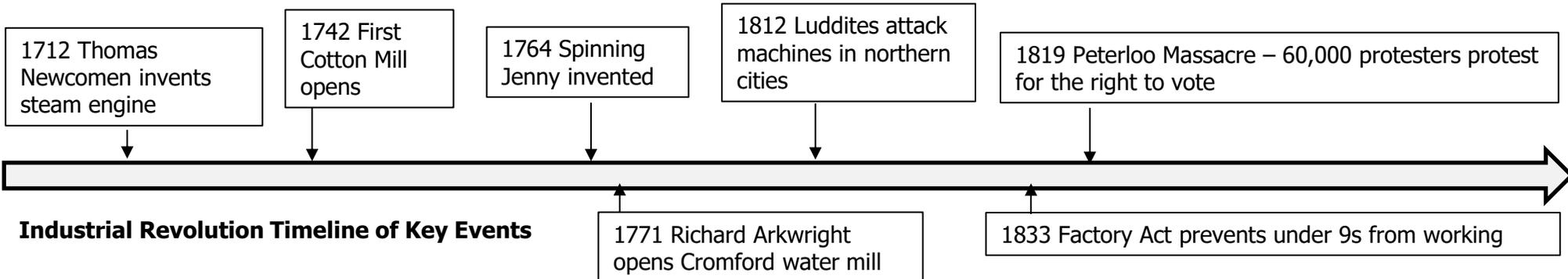


**3.3 Key Individuals**

<b>3.3.1. Abraham Darby</b>	He discovered that coke can be used to smelt iron instead of charcoal.
<b>3.3.2. Thomas Newcomen</b>	He invented the first steam powered engine, which was later improved by James Watt.
<b>3.3.3. James Hargreaves</b>	Invented the Spinning Jenny to completely transform cotton manufacturing.
<b>3.3.4. Richard Arkwright</b>	He transformed factories by introducing the 'Spinning Frame' powered by water and later Cromford Mill, also powered by water.
<b>3.3.5. George Stephenson</b>	He built the steam locomotive 'The Rocket' in 1829.
<b>3.3.6. Joseph Bazalgette</b>	The civil engineer who completely rebuilt the London sewer system which opened in 1865.
<b>3.3.7. Isambard Kingdom Brunel</b>	Engineer who famously built the Clifton Suspension Bridge, Thames Tunnel and the Great Western Railway.
<b>3.3.8. Queen Victoria</b>	Monarch who reigned the British Empire from 1837-1901.

**3.4 Key Information**

<b>3.4.1. Cholera</b>	A waterborne disease responsible for killing thousands of people during the rapid urbanisation of Britain in 19 <sup>th</sup> Century.
<b>3.4.2. Urbanisation</b>	The increase in population in Britain's towns and cities.
<b>3.4.3. Great Reform Act</b>	Act of Parliament that gave the right to vote to middle class men in 1832 (not women).
<b>3.4.4. The Factory Act</b>	This was a law that established regulations to improve working conditions for children in factories in 1833.
<b>3.4.5. Peterloo Massacre</b>	This was a violent government suppression of a peaceful protest in Manchester, England on August 16, 1819.
<b>3.4.6. Education Act</b>	This was the first time a provision was made to send children aged 5-12 to school in England and Wales.
<b>3.4.7. Rainhill Trials</b>	George Stephenson's 'Rocket' was the only train to complete the 1.6km journey along the Liverpool-Manchester railway.





## Ecosystems

### Key Vocabulary

Fragmentation  
Vegetation  
Coppicing  
Decline  
Hibernation  
Population  
Habitat  
Ecosystem

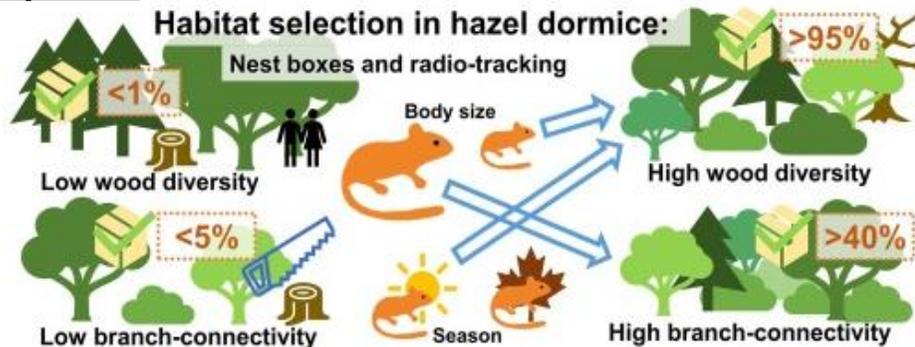
This topic is about dormice as a 'cornerstone' species. By looking after the dormice habitat, the whole woodland ecosystem benefits

**Habitat** Dormice prefer the new growth of woody vegetation that arises after woodland management such as coppicing, ride widening, thinning or glade creation. In the UK, they tend to favour old coppice woodland but they're also found in scrubland, old hedgerows and sometimes conifer plantations. Their range has shrunk significantly and they're now confined predominantly to southern England and Wales with a few scattered populations in the Midlands, Wales and Lake District. Even where dormice remain, their distribution is patchy.

**ID** The head and body of a hazel dormice is about 8cm long, with a tail length of about 6.5cm, They have relatively large eyes and small, round ears. Their weight varies through the year but it averages 19-20g. When they start to put on weight prior to going into hibernation they can weigh between 30g-40g. Their average lifespan is three years in the wild but they can live up to five years. They're the only small mammal in the UK with a furry tail because it is related to the squirrel.



### Species



**Diet** The diet of a hazel dormouse varies depending on the time of year. In autumn, they will feast on nuts, seeds and berries, in order to put on enough fat for them to survive the winter. Once they emerge from hibernation, they will eat the blossoming flowers of trees such as hawthorn and oak, also taking insects like caterpillars when summer arrives.

### Habitats loss and fragmentation

The loss of ancient woodland and hedgerows across the UK is thought to be a major reason for this decline, as dormice will not leave the safety of trees to cross large, open spaces. This means populations become isolated, lose genetic diversity and are therefore more vulnerable to extinction

### Solutions

Coppiced woodlands are favourite habitat of Dormice. Coppicing increases the variety of heights of vegetation, which in turn encourages more biodiversity which provides food and shelter for the dormice.



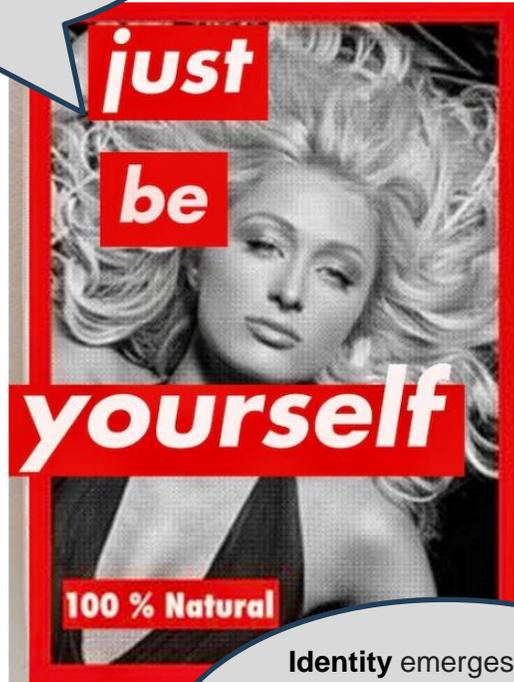


**Identity** is the set of beliefs, personality traits, appearance, and expressions that characterise a person or a group.



**ABSTRACT**

**TYPOGRAPHY**



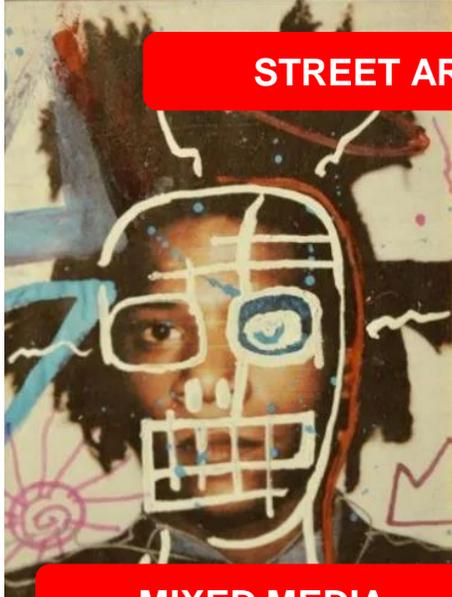
**just be yourself**

**100 % Natural**



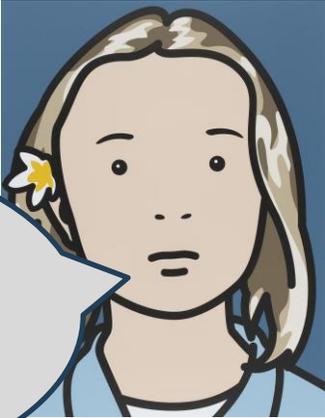
**COLLAGE**

**Identity** emerges during childhood as children start to comprehend their self-concept and is shaped by cultural factors and how others perceive and acknowledge us.



**STREET ART**

**MIXED MEDIA**



**Key vocabulary**

Popular culture
Primary colours
Block colour
Abstract
Mixed media
Graffiti
Collage
Typography
Commercial art
Motif
Repeat patterns
Irony
Self-concept
Group identity

*Artists we will study:* Peter Blake, Julian Opie, Picasso, Barbara Kruger, Jean-Michel Basquiat



1. The Musical Elements are the basic building blocks of all music

<b>Melody</b>		<b>Melody</b> is The tune; high and low <b>pitch</b> notes
<b>Articulation</b>		<b>Articulation</b> Is The way a note is played; <b>staccato</b> (short) or <b>legato</b> (smooth)
<b>Dynamics</b>		<b>Dynamics</b> are how loud or quiet the music is
<b>Texture</b>		<b>Texture</b> is how thick or thin the music is (how many instruments are playing)
<b>Structure</b>		<b>Structure</b> is the building blocks of music (How it is put together)
<b>Harmony</b>		<b>Harmony</b> is the effect of two or more notes sounding simultaneously; <b>chords, bass line</b>
<b>Instrument/ timbre</b>		<b>Timbre</b> is the specific sound an instrument makes
<b>Rhythm</b>		<b>Rhythm</b> is the pattern of long and short notes. <b>Duration</b> is how long or short the note is
<b>Tempo</b>		<b>Tempo</b> is how fast or slow the music is played

2. Note Durations

Semibreve 4 beat note	Minim 2 beat note	Crotchet 1 beat note	Quaver ½ beat note	Semi-quaver ¼ beat note

3. Accidentals

	Sharp	A sharp is the note a half step to the right of a given note on the keyboard
	Flat	A flat is the note a half step to the left of a given note on the keyboard

4. Note names on the stave

Right Hand (high notes)

**THE TREBLE CLEF**

Every Good Boy Does Fine FACE

5. Note names on keyboard

C D E F G A B



**TOURISTS GO HOME**

**Responsible TOURISM**

**DO'S + DON'TS**

- SUPPORT ARTISANS + SMALL BUSINESSES**
- RETHINK LARGE CRUISES TO POPULAR PORT DESTINATIONS**
- STAY LONGER TO EXPERIENCE MORE**
- AVOID DAY TRIPS TO OVERTOURISTED DESTINATIONS**
- RESPECT THE LOCAL CULTURE + ETIQUETTE**
- RECONSIDER USING HOMESTAY SERVICES SUCH AS AIRBNB**
- REDUCE, REUSE AND RECYCLE**
- REFRAIN FROM LEAVING LOVE LOCKS ON BRIDGES**
- TRAVEL OFF PEAK OR SHOULDER SEASON**
- RETHINK TRAVELLING IN LARGE GROUPS**
- TAKE DIRECT FLIGHTS OR USE LAND TRANSPORT**
- AVOID SUPPORTING ANIMAL EXPLOITATION**
- SEEK ALTERNATIVES TO POPULAR SPOTS**
- DON'T BE AN EASY TARGET FOR PICKPOCKETS**
- POST ETHICALLY TO SOCIAL MEDIA**
- LEARN SOME LANGUAGE BASICS**
- LEAVE NO TRACE**

**'BLEND IN' ON YOUR NEXT TRIP**

**ECOTOURISM** is a type of tourism that focuses on sustainability and the natural world. Here are five features of ecotourism:

**Minimal Impact** – Ecotourism aims to cause minimal impact on the environment and local people.

**Environmental Awareness** – Ecotourism builds environmental awareness and encourages stewardship of the natural environment.

**Local Benefits** – Ecotourism provides economic benefits and empowerment to local people. It also provides direct financial benefits for conservation.

**Respect** – Ecotourism respects local culture, traditions and human rights.

**Education** – Ecotourism creates knowledge and understanding through education of visitors, staff and the visited.

**THE NATIONAL TRUST**

This is an organization which preserves our heritage- land and buildings – restoring them to enable them to become tourist attractions.

There is not a French version of the National Trust, but there are some similar organizations in France:

Fondation du Patrimoine

This foundation, established in 1996, helps preserve France’s heritage by assisting private owners to restore important buildings.

Adapté un Château

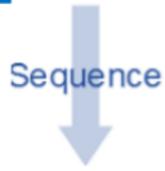
This association was founded by Julian Marquis, who said there was no equivalent to The National Trust. The association aims to save châteaux.

Ma Routine

Je me réveille 	Je me lève 	Je me douche 
Je me brosse les dents 	Je m'habille 	Je me couche 
Je déjeune 	Je prends le bus 	Je vais au collège 
Je rentre 	Je dîne 	Je fais mes devoirs 



## PROGRAMMING CONSTRUCTS



A Sequence is when there are programming steps that are carried out one after another.



Selection is where there are different paths in your code eg: IF, ELIF, ELSE



Iteration is when there is repetition (loops) in code. This could be a WHILE loop (do something WHILE a condition is met) or a FOR loop (do something for a set number of times)

## IMPORT

```
import turtle
turtle.shape("turtle")
```

Using 'Import' allows you to access code from an external program. In this case, we are importing the Turtle in order to create graphics.

## ALGORITHM

An algorithm is simply a set of instructions. It is usually a sequence of events.

## VARIABLES

A variable is something that can be used to store information or a value. The information that is stored can be changed throughout a program.

## MOVEMENT

```
python turtle.py - C:/Users/MrFong/Desktop/python
File Edit Format Run Options Window Help
import turtle

turtle.forward(100)
turtle.right(90)
```

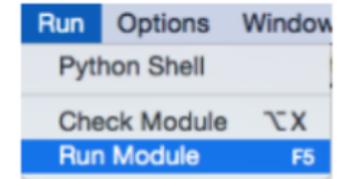
The Turtle understands commands 'Forward' 'Right' and 'Left' To turn, the code must state what degrees and direction.

## KEY COMMANDS

<code>turtle.forward()</code>	Moves turtle forward	<code>turtle.penup()</code>	Lifts pen up
<code>turtle.backward()</code>	Moves turtle backward	<code>turtle.pendown()</code>	Puts pen down
<code>turtle.left()</code>	Rotates turtle left	<code>turtle.color()</code>	Changes the pen colour
<code>turtle.right()</code>	Rotates turtle right	<code>turtle.bgcolor()</code>	Changes the background colour

## EXECUTING A PROGRAM

In order to run or test a program written in Python the user needs to go to Run and then Run Module. (F5)





### FOR LOOP

Used to repeat things a certain number of times.

```
for j in range(5):
    turtle.forward(100)
    turtle.right(72)
```

This would repeat the instructions 5 times. It would draw this shape.



### PRINT STATEMENTS

In order to display text in the shell, you need to use a Print statement

```
print ("Hello World")
print ("I am a programmer")
```

This is the output:

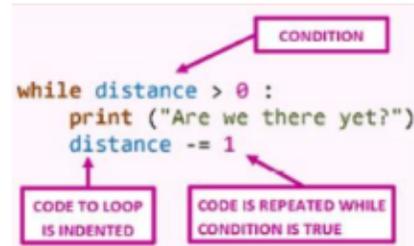
```
Hello World
I am a programmer
```

### KEYWORDS

<b>Algorithm</b> – A set of instructions	<b>Variable</b> – a value that can change
<b>Sequence</b> - following a particular order	<b>Debug</b> – The process of fixing errors
<b>Selection</b> – a decision that decides the course of action	<b>Syntax</b> – The grammar, structure and order of instructions
<b>Iteration</b> – Repeating of a section of code	<b>Data types</b> – Particular format of data

### WHILE LOOP

Performs a task while a certain condition is TRUE



### OPERATORS

==	Is equal to
! or <>	Is not equal to
<	Is less than
>	Is more than
>=	Is more than or equal to
<=	Is less than or equal to

### FUNCTIONS

We split problems in to smaller problems. We can do the same in programming.

### INPUT STATEMENTS

Using var = input () we can ask a user to input some information.

We can then print this back to the console window.

```
userName = input("what is your name?")
print ("Welcome ", userName)
```

userName is a variable. This means we can change the information stored. We can also name it whatever we want.

### IF STATEMENTS

IF statements can be used to select different options in a program depending on a condition. Also known as selection.

```
question = input("Are you revising?")
if question == "yes":
    print ("Well done!")
elif question == "no":
    print("Oh dear!")
else:
    print("I don't understand")
```

### USEFUL WEBSITES

Tutorials: <https://realpython.com/beginners-guide-python-turtle/>  
<https://www.geeksforgeeks.org/turtle-programming-python/>  
 Video Tutorials: <https://www.youtube.com/playlist?list=PLzMcbGfZo4-kfGgYZb9dwW3VhoBRG0h9c>