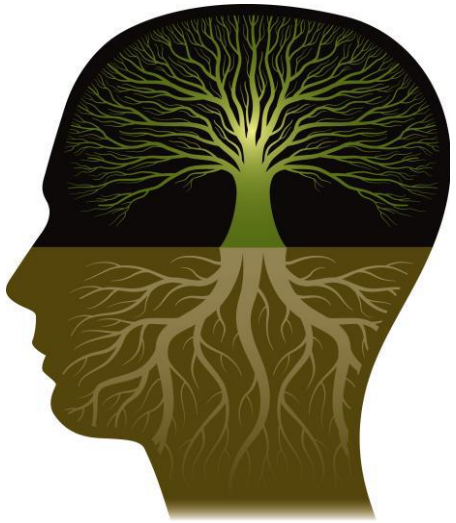

Knowledge Organisers

Year 9

Autumn Term 2024

Name: _____

Instructions for how to use your Knowledge Organiser

After school, every day, you should learn knowledge from **TWO** subjects on your knowledge organiser each night. Your class teacher may set you specific tasks on Satchel One, linked to the knowledge that you will be expected to learn. The timetable below tells you which subjects you should focus on each night. It doesn't matter if you don't have that particular subject on that day, just follow the timetable for your home learning. You should spend **half an hour** on each subject. You may use your purple homework book to complete tasks neatly.

TIMETABLE OF SUBJECTS

Monday: English and Geography
Tuesday: Science and Art / DT / Food
Wednesday: Maths and History
Thursday: RE and Computer Science
Friday: MFL and Music / Drama

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Reading at home

There is also an expectation that you should read a book of your choice for 30 minutes everyday. This should be signed off in your planner by a parent.

How to learn knowledge from my knowledge organiser:

- Look at the work, cover it over, write it out again and check it.
- Look. Cover. Write. Check.
- Ask someone to test you and ask you questions about the topic
- Create mind maps on the topic
- Create flashcards on the topic
- Try writing out the key words or new vocabulary into new sentences
- Create a mnemonic
- Draw a diagram of the process
- Read further around the subject

English Year 9 Autumn Term: Frankenstein by Mary Shelley

Mary Shelley:

Shelley published her most famous novel *Frankenstein* in 1818 when she was just twenty years old. She generated the idea for the novel on a summer trip to Lake Geneva in Switzerland with her husband (also a very famous Romantic writer) Percy Bysshe Shelley and their friends. Amongst this group was another famous writer, Lord Byron, who suggested they have a competition to see who could write the best ghost story. The story of *Frankenstein* then came to her in a nightmare.

Context:

Shelley wrote Frankenstein during an age where scientific advances were exploding rapidly; throughout the 19th century as a whole, science was a point of avid intrigue. For example the discovery of such concepts as electricity had the power to effectively shake the foundations of previously established constructs and truths about the natural world.

Luigi Galvani was an Italian physician, physicist, biologist and philosopher who, in 1780, discovered that the muscles of dead frog's legs twitched when struck by an electrical spark. In 1803, his nephew, Giovanni Aldini, followed in his uncle's footsteps and experimented on the corpse of executed criminal George Forster by adding electrical current to his body and watched the muscles move.

Another consequence of this interest in science was the act of body snatching; William Burke and William Hare are infamous for their role in this. Selling the bodies to scientists, Burke and Hare originally began grave robbing, digging up fresh corpses from the ground. But when they realised that they could earn significant money, chose to murder innocent people and sell their bodies to anatomists.

The subtitle of Frankenstein is 'The Modern Prometheus'. Prometheus is a figure from Greek mythology who is known for shaping man out of clay and going against the order by stealing fire for man and teaching them the skill of metalwork. Consequently, his ambitions left him punished when Zeus ensured that everyday an eagle ate the liver of Prometheus who was helplessly chained to a rock.

Glossary:

Revenge – seeking to harm someone in return for harm suffered at their hands

Epistolary – a text written in the form of letters

Grotesque – repulsively ugly; disfigured; distorted

Creator – a person that brings something into existence

Charnel house – a building in which corpses or bones are piled

Benevolence – the quality of being moral and kind; "all good

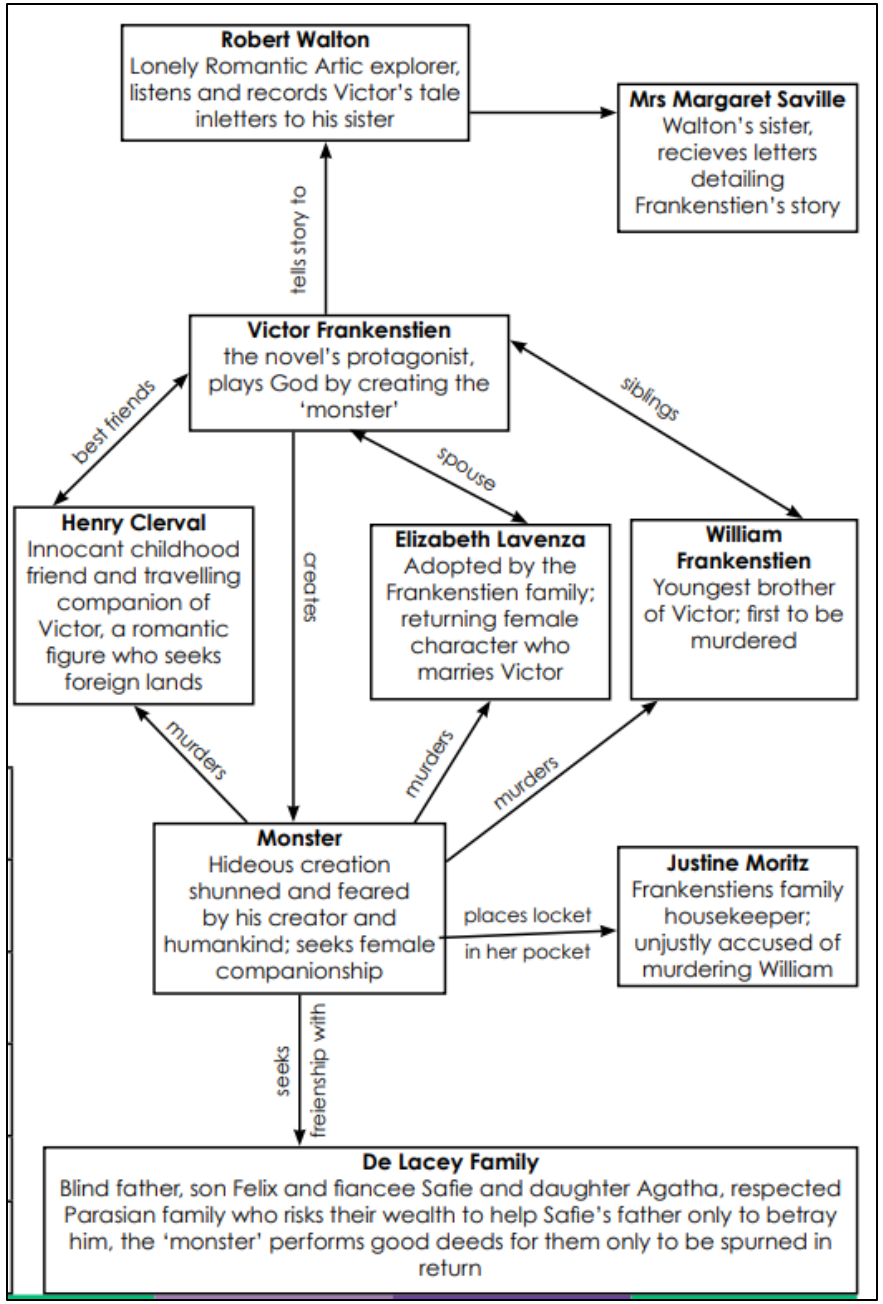
Sublime – of great beauty; perfection; magnificent

Chimera – a thing that is hoped for but is illusory, fundamentally impossible to achieve

Frame narrative – a story in which another story is embedded

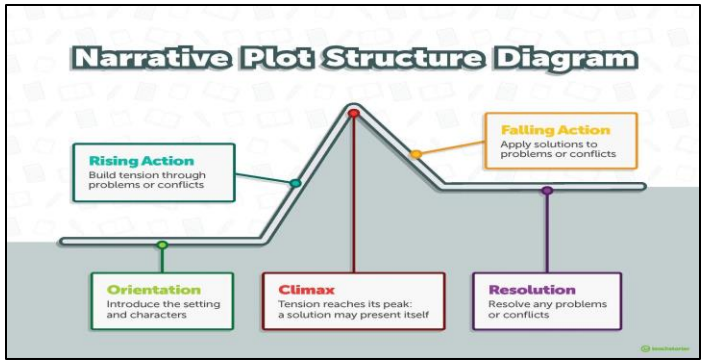
Nature vs Nurture – the debate which discusses to what extent our biology or our environment determine our character.

Obsession/addiction	Family/love	Death
Science vs Nature	Nature vs Nurture	Innocence vs guilt



English Year 9 Autumn Term 2 Writing an epistolary narrative

Gothic genre: Haunted houses, shadowy corridors, windswept moors, supernatural suspicions and the beast within. Gothic fiction is rooted in blending the old with the new, hence its undeniable popularity in the 19th century. The strange pairing of ancient settings and modern science create a bizarre and uncanny uneasiness in the reader.



Epistolary: a literary work in the form of letters

Narrative perspective: whose point of view the narrative is being told from and the way they tell the story.

Tone: reflects the speaker's attitudes towards the subject matter.

Register: level of formality of language

Characterisation: a description of the distinctive nature of a character, helping the reader to understand that character.

Model extract from *Frankenstein* by Mary Shelley – The Creature's Narrative

'Frankenstein! you belong then to my enemy—to him towards whom I have sworn eternal revenge; you shall be my first victim.'

The child still struggled and loaded me with epithets which carried despair to my heart; I grasped his throat to silence him, and in a moment he lay dead at my feet. I gazed on my victim, and my heart swelled with exultation and hellish triumph; clapping my hands, I exclaimed, 'I too can create desolation; my enemy is not invulnerable; this death will carry despair to him, and a thousand other miseries shall torment and destroy him.'

As I fixed my eyes on the child, I saw something glittering on his breast. I took it; it was a portrait of a most lovely woman. In spite of my malignity, it softened and attracted me. For a few moments I gazed with delight on her dark eyes, fringed by deep lashes, and her lovely lips; but presently my rage returned; I remembered that I was forever deprived of the delights that such beautiful creatures could bestow and that she whose resemblance I contemplated would, in regarding me, have changed that air of divine benignity to one expressive of disgust and affright.

Can you wonder that such thoughts transported me with rage? I only wonder that at that moment, instead of venting my sensations in exclamations and agony, I did not rush among mankind and perish in the attempt to destroy them.

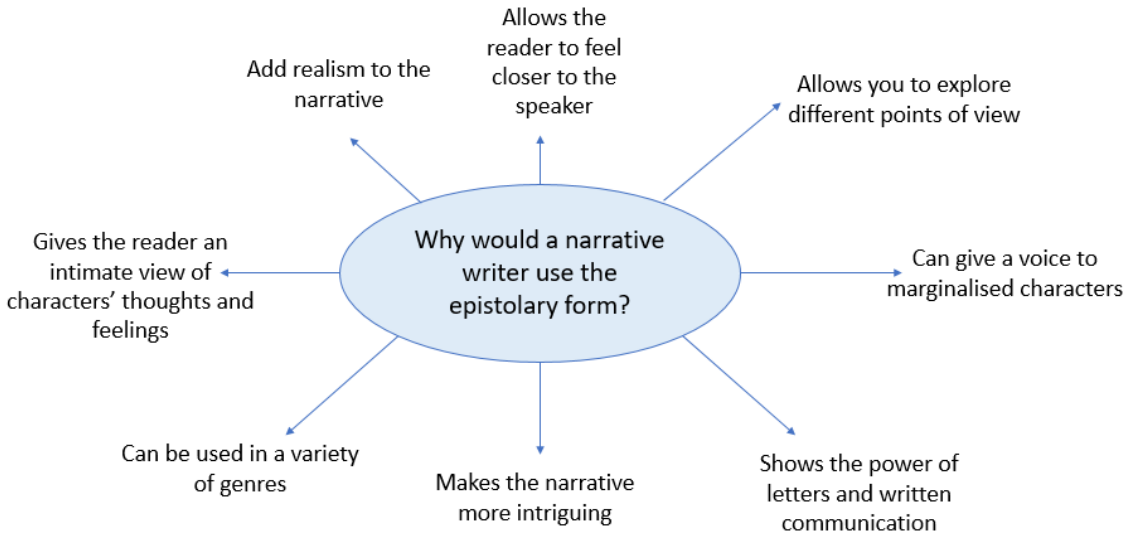
While I was overcome by these feelings, I left the spot where I had committed the murder, and seeking a more secluded hiding-place, I entered a barn which had appeared to me to be empty. A woman was sleeping on some straw; she was young, not indeed so beautiful as her whose portrait I held, but of an agreeable aspect and blooming in the loveliness of youth and health. Here, I thought, is one of those whose joy-imparting smiles are bestowed on all but me. And then I bent over her and whispered, 'Awake, fairest, thy lover is near—he who would give his life but to obtain one look of affection from thine eyes; my beloved, awake!'

TASK:

Inspired by the writing style of Mary Shelley, write an epistolary narrative from the perspective of "the monster".

Success criteria:

- ❑ Establish a distinct narrative voice
- ❑ Use the epistolary form
- ❑ Utilise gothic tropes and conventions
- ❑ Include a range of figurative language devices (simile, metaphor, personification etc)
- ❑ Use ambitious vocabulary
- ❑ Use a range of punctuation ? ! ; : - () "



Maths Year 9 Autumn Term 1: Number

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Glossary

- Estimation
- Factors, Multiples and Primes
- Indices
- Standard Form
- Surds

Surds are irrational numbers that cannot be simplified to an integer from a root.

Examples of a surd:
$\sqrt{3}, \sqrt{5}, 2\sqrt{6}$

Simplify:

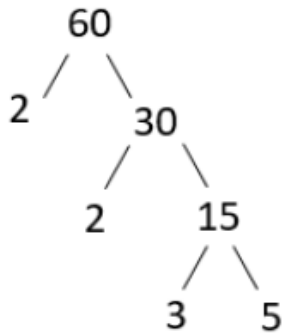
$$4\sqrt{20} \times 2\sqrt{3} = 8\sqrt{20 \times 3}$$
$$= 8\sqrt{60}$$
$$= 8\sqrt{4}\sqrt{15}$$
$$= 16\sqrt{15}$$

Key words

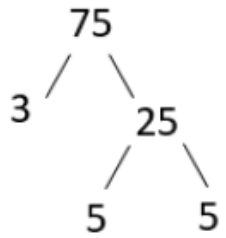
Integer, number, digit, negative, decimal, addition, subtraction, multiplication, division, remainder, operation, estimate, power, roots, factor, multiple, primes, square, cube, even, odd, surd, rational, irrational standard form, simplify

Examples

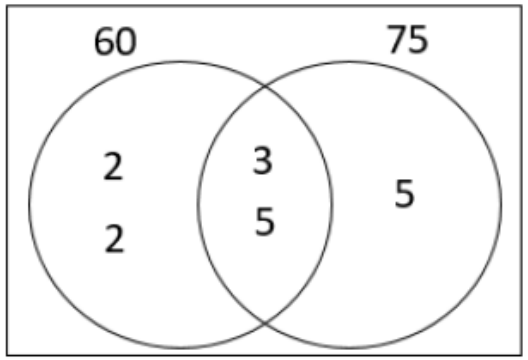
Find the **highest common factor** and **lowest common multiple** of 60 and 75:



$2 \times 2 \times 3 \times 5$
$2^2 \times 3 \times 5$



$3 \times 5 \times 5$
3×5^2



HCF – Mulitiply all numbers in the intersection
$= 3 \times 5 = 15$

LCM – Multiply all numbers in the Venn diagram
$= 2 \times 2 \times 3 \times 5 \times 5 = 300$

Maths Year 9 Autumn Term 1: Number

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Key Concepts

$a^m \times a^n = a^{m+n}$

$a^m \div a^n = a^{m-n}$

$(a^m)^n = a^{mn}$

$a^{-m} = \frac{1}{a^m}$

$a^{\frac{m}{n}} = \sqrt[n]{a^m}$

$a^{-\frac{m}{n}} = \frac{1}{\sqrt[n]{a^m}}$

Examples

Simplify each of the following:

1) $a^6 \times a^4 = a^{6+4}$
$= a^{10}$

2) $a^6 \div a^4 = a^{6-4}$
$= a^2$

3) $(a^6)^4 = a^{6\times4}$
$= a^{24}$

4) $(3a^4)^3 = 3^3a^{4\times3}$
$= 27a^{12}$

5) $a^{-3} = \frac{1}{a^3}$

6) $2a^{-4} = \frac{2}{a^4}$

7) $a^{\frac{1}{2}} = \sqrt[2]{a^1} = \sqrt{a}$

8) $a^{-\frac{1}{2}} = \frac{1}{a^{\frac{1}{2}}} = \frac{1}{\sqrt{a}}$

9) $\left(\frac{25}{16}\right)^{-\frac{1}{2}} = \left(\frac{16}{25}\right)^{\frac{1}{2}}$
$= \sqrt{\frac{16}{25}}$
$= \frac{4}{5}$

Mathswatch Videos

- Estimation 91
- Factors, Multiples and Primes 28
- Indices 29/82/154/188
- Standard Form
- Surds 207a/207b/207c

Key Concepts

We use standard form to write a very large or a very small number in scientific form.

Must be $\times 10$
b is an integer

$a \times 10^b$

Must be $1 \leq a < 10$

Examples

Write the following in **standard form**:

1) $3000 = 3 \times 10^3$

2) $4580000 = 4.58 \times 10^6$

3) $0.0006 = 6 \times 10^{-4}$

4) $0.00845 = 8.45 \times 10^{-3}$

Calculate the following, write your answer in **standard form**:

1) $(3 \times 10^3) \times (5 \times 10^2)$

$3 \times 5 = 15$
$10^3 \times 10^2 = 10^5$
15×10^5
$= 1.5 \times 10^6$

2) $(8 \times 10^7) \div (16 \times 10^3)$

$8 \div 16 = 0.5$
$10^7 \div 10^3 = 10^4$
0.5×10^4
$= 5 \times 10^3$

Maths Year 9 Autumn Term 2: Simplifying Expressions and Substitution

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Key Concepts

When collecting like terms involving addition or subtraction, add/subtract the numbers in front of the letters.

If the like terms are multiplied, multiply the numbers in front of the letters and put the letters next to each other.

If the like terms are divided, divide the numbers in front of the letters.

Examples

Simplify the following expressions:

1) $4p + 6t + p - 2t = 5p + 4t$
2) $3 + 2t + p - t + 2 = 5 + t + p$
3) $f + 3g - 4f = 3g - 3g$
4) $f^2 + 4f^2 - 2f^2 = 3f^2$
5) $6a \times 3b \times 2c = 36abc$
6) $\frac{9b}{3} = 3b$
7) $C = \frac{5(F-32)}{9}$ is a formula (involves more than on letter and includes an equal sign)

5) Find the value of $3x + 2$ when $x = 5$

$(3 \times 5) + 2 = 17$

6) Where $A = b^2 + c$, find A when b = 2 and c = 3

$A = 2^2 + 3$

$A = 4 + 3$

$A = 7$

Mathswatch clips
A6, 95

Key Words

Simplify
Term
Collect
Formulae
Substitution

Questions

Simplify:

1) $7p + 3q + p - 3q$
2) $5 + 4t + 3p - 2t + 7$
3) $m - 8g - 5m$
4) $b^2 - 7b^2 + 2b^2$
5) $2a \times 5b \times 4c$
6) $8m \times 3n \times 2m$
7) $\frac{36p}{12}$
8) $\frac{6t}{18}$
9) Find the value of $5x - 7$ when $x = 3$
10) Where $A = d^2 + e$, find A when d = 5 and e = 2

5) 40abc 6) 48m²n 7) 3p 8) $\frac{t}{3}$ 9) 8
10) A = 27

Maths Year 9 Autumn Term 2: Expand and factorise

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Key Concepts

Expanding brackets
Single: Where each term inside the bracket is multiplied by the term on the outside of the bracket.
Double: Where each term in the first bracket is multiplied by all terms in the second bracket.

Factorising expressions
Putting an expression back into brackets. To "factorise fully" means take out the HCF.

Difference of two squares
When two brackets are repeated with the exception of a sign change. All numbers in the original expression will be square numbers.

Examples

Linear expressions

Expand and simplify where appropriate

1) $7(3 + a) = 21 + 7a$

2) $2(5 + a) + 3(2 + a) = 10 + 2a + 6 + 3a$

$5a + 16$

3) Factorise $9x + 18 = 9(x + 2)$

4) Factorise $6e^2 - 3e = 3e(2e - 1)$

Quadratic expressions

Expand and simplify:

1) $(p + 2)(2p - 1)$

$= 2p^2 + 4p - p - 2$

$= 2p^2 + 3p - 2$

2) $(p + 2)^2$

$(p + 2)(p + 2)$

$= p^2 + 2p + 2p + 4$

$= p^2 + 4p + 4$

Factorise:

3) $x^2 - 2x - 3$

$= (x - 3)(x + 1)$

Factorise and solve:

4) $x^2 + 4x - 5 = 0$

$(x - 1)(x + 5) = 0$

Therefore the solutions are:

Either $x - 1 = 0$

$x = 1$

Or $x + 5 = 0$

$x = -5$

Mathswatch clips

93, 94, 134a, 134b, 157

Key Words

Expand
Factorise
Simplify
Product
Solve

1) Expand and simplify (a) $3(2 - 7f)$ (b) $5(m - 2) + 6$ (c) $3(4 + t) + 2(5 + t)$

2) Factorise (a) $6m + 12t$ (b) $9t - 3p$ (c) $4d^2 - 2d$

3) Expand $(5g - 4)(2g + 1)$

4) (a) **Factorise** $x^2 - 8x + 15$ **(b) Factorise and solve** $x^2 + 7x + 10 = 0$

ANSWERS: 1) (a) $6 - 21f$ (b) $5m - 4$ (c) $22 + 5t$ 2) (a) $6(m + 2t)$ (b) $3(3t - p)$ (c) $2d(2d - 1)$ 3) $10g^2 - 3g - 4$ 4) (a) $(x - 3)(x - 5)$ (b) $x = -2$ or $x = -5$

Science Year 9 Autumn Term 1

Atomic Chemistry and The Periodic Table

GLOSSARY:
Atomic Chemistry and Periodic Table:

CHEMICAL SYMBOL: The letters on the periodic table that give the name of each element. Every element has its own chemical symbol.

NUCLEUS: The centre part of an atom that contains the protons and neutrons.

PROTON: Sub-atomic particle that makes up the nucleus of an atom. Has a mass of 1 a.m.u. and a charge of +1.

NEUTRON: Sub-atomic particle that makes up the nucleus of an atom. Has a mass of 1 a.m.u. and a charge of 0.

ELECTRON: Sub-atomic particle found orbiting the nucleus in an electron shell. Has a mass of almost 0 and a charge of -1.

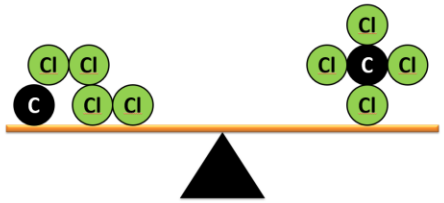
ELECTRONIC STRUCTURE: A diagram showing how the electrons are arranged in the electron shells. The 1st shell can have a maximum of 2 electrons, the others can hold up to 8 electrons.

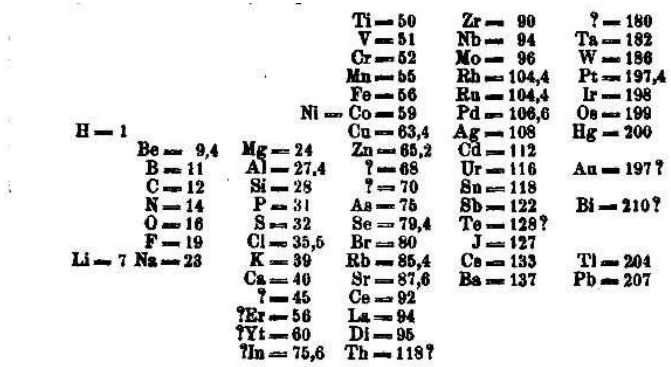
GROUP: The columns of the periodic table represent different groups of elements. Elements with similar properties are in the same group

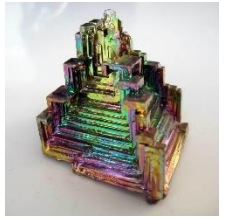
ISOTOPE: Atoms of the same element with the same number of protons but a different number of neutrons.

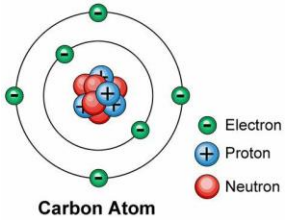
PERIODIC TABLE: Table of elements arranged in order of atomic number and such that elements with similar properties are in the same column (group).

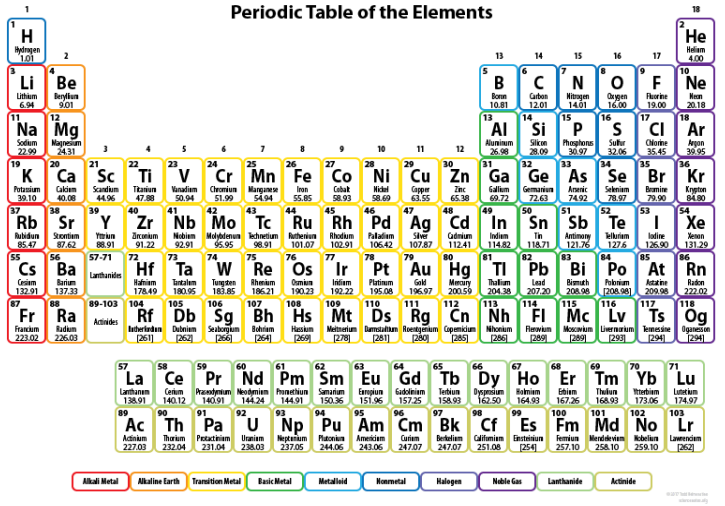
$C + 2Cl_2 \rightarrow CCl_4$



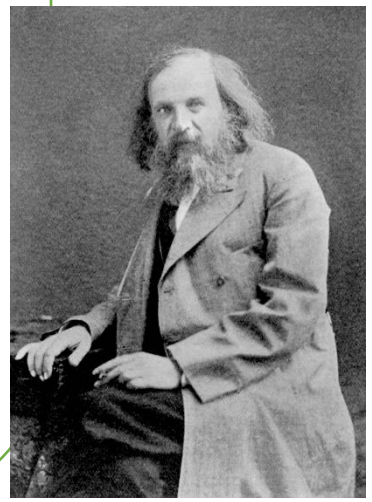


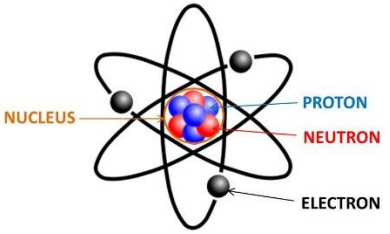


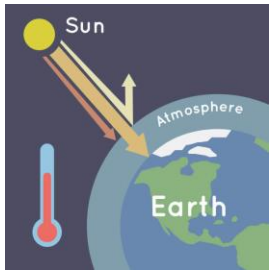


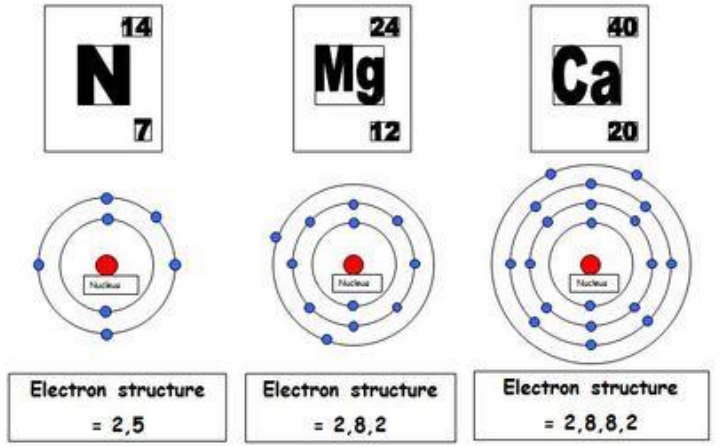


Dmitri Mendeleev was a Russian Scientist responsible for the first, modern Periodic Table – in 1869! He studied at St. Petersburg University









Maths Year 9 Autumn Term 2: Solving Equations and Rearranging Formulae

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Key Concepts

Solving equations:
Working with inverse operations to find the value of a variable.

Rearranging an equation:
Working with inverse operations to isolate a highlighted variable.

In solving and rearranging we **undo the operations** starting from the last one.

For each step in solving an equation we must do the **inverse** operation

Solve:

$5(x-3) = 20$

Expand

$5x - 15 = 20$

+15 +15

$5x = 35$

÷5 ÷5

$x = 7$

Solve:

$12 = 3x - 18$

+18 +18

$30 = 3x$

÷3 ÷3

$x = 10$

Solve:

$7p - 5 = 3p + 3$

-3p -3p

$4p - 5 = 3$

+5 +5

$4p = 8$

÷ 2 ÷ 2

$p = 2$

Examples

Rearrange to make r the subject of the formulae :

$$Q = \frac{2r-7}{3}$$

×3

× 3

$$3Q = 2r - 7$$

+7 +7

$$3Q + 7 = 2r$$

÷ 2 ÷ 2

$$\frac{3Q+7}{2} = r$$

Mathswatch clips

135a, 135b, 146

Key Words
Solve
Rearrange
Term
Inverse operation

1) Solve $7(x + 2) = 35$
2) Solve $4x - 12 = 28$
3) Solve $4x - 12 = 2x + 20$

4) Rearrange to make x the subject:

$$y = \frac{3x+4}{2}$$

ANSWERS: 1) $x = 3$ 2) $x = 10$ 3) $x = 16$ 4) $x = \frac{2y-4}{3}$

Maths Year 9 Autumn Term 2: Forming and Solving Equations

Key Concepts

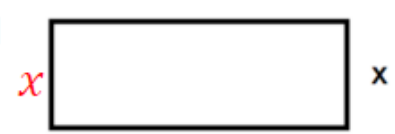
Algebra can be used to support us to find unknowns in a **contextual problem**.

We can always apply a letter to an unknown quantity, to then **set up an equation**.

It will often be used in area and perimeter problems and angle problems in geometry.

Solve to find the value of x when the perimeter is 42cm.

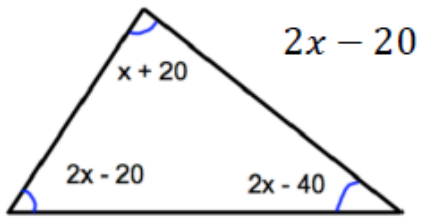
HINT: Write on all of the lengths of the sides.



We know the perimeter is 42cm

$$2x + 3 + 2x + 3 + x + x = 42$$
$$9x + 6 = 42$$
$$6x = 36$$
$$x = 6$$

Angles in a triangle sum to 180°



$$2x - 20 + x + 20 + 2x - 40 = 180$$
$$5x - 40 = 180$$
$$5x = 220$$
$$x = 45$$

Examples

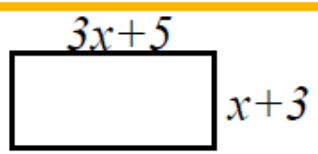
Jane is 4 years older than Tom.
David is twice as old as Jane.
The sum of their ages is 60.
Using algebra, find the age of each person.

Tom = x → 12
Jane = $x + 4$ → $12 + 4 = 16$
David = $2x + 8$ → $(2 \times 12) + 8 = 32$

$$x + x + 4 + 2x + 8 = 60$$
$$4x + 12 = 60$$
$$4x = 48$$
$$x = 12$$

Mathswatch clips 137

Key Words
Solve
Term
Inverse operation



1) If the perimeter is 40cm. What is the length of the longest side?

2) Jane is 12 years older than Jack.
Sarah is 3 years younger than Jack.
The sum of their ages is 36.
Using algebra, find the age of each person.

ANSWERS: 1) $x = 3$ therefore the longest length is 14cm 2) Jack = 9, *Jane = 21, Sarah =6*

Maths Year 9 Autumn Term 2: Sequences

Key Concepts

Arithmetic or linear sequences increase or decrease by a common amount each time.

Geometric series has a common multiple between each term.

Quadratic sequences include an n^2. It has a common second difference.

Fibonacci sequences are where you add the two previous terms to find the next term.

Linear/arithmetic sequence:

-3 +3 +3 +3 +3

+1 4 7 10 13 16.....

a) State the nth term

$3n + 1$

Difference — The 0th term

b) What is the 100th term in the sequence?

$3n + 1$

$3 \times 100 + 1 = 301$

c) Is 100 in this sequence?

$3n + 1 = 100$

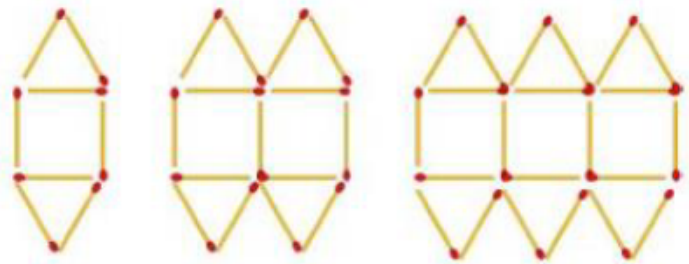
$3n = 99$

$n = 33$

Yes as 33 is an integer.

Examples

Pattern 1 Pattern 2 Pattern 3



Linear sequences with a picture:

State the nth term.

Hint: Firstly write down the number of matchsticks in each image:

$7n + 1$

Pattern 1	Pattern 2	Pattern 3
8	15	22

+1 -7 +7 +7

Geometric sequence e.g. ×3 ×3 ×3

4 12 36 108...

Quadratic sequence e.g. $n^2 + 4$ Find the first 3 numbers in the sequence

First term: $1^2 + 4 = 5$ Third term: $3^2 + 4 = 13$

Second term: $2^2 + 4 = 8$

Mathswatch

37, 102, 104

Key Words

Linear
Arithmetic
Geometric
Sequence
Nth term

1) 1, 8, 15, 22, ...

a) Find the nth term b) Calculate the 50th term c) Is 120 in the sequence?

2) $n^2 - 5$ Find the first 4 terms in this sequence

ANSWERS: 1a) $7n - 6$ b) 344 c) 18 so yes as n is an integer 2) -4, -1, 4, 11

Science Year 9 Autumn Term 1

Atomic Chemistry and The Periodic Table

GLOSSARY:
Atomic Chemistry and Periodic Table:

CHEMICAL SYMBOL: The letters on the periodic table that give the name of each element. Every element has its own chemical symbol.

NUCLEUS: The centre part of an atom that contains the protons and neutrons.

PROTON: Sub-atomic particle that makes up the nucleus of an atom. Has a mass of 1 a.m.u. and a charge of +1.

NEUTRON: Sub-atomic particle that makes up the nucleus of an atom. Has a mass of 1 a.m.u. and a charge of 0.

ELECTRON: Sub-atomic particle found orbiting the nucleus in an electron shell. Has a mass of almost 0 and a charge of -1.

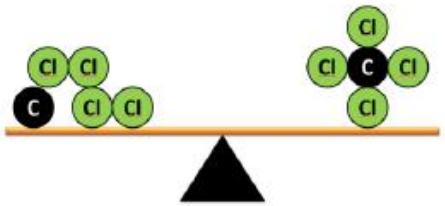
ELECTRONIC STRUCTURE: A diagram showing how the electrons are arranged in the electron shells. The 1st shell can have a maximum of 2 electrons, the others can hold up to 8 electrons.

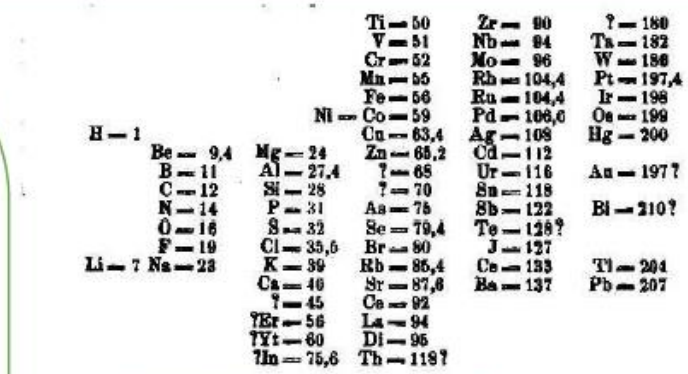
GROUP: The columns of the periodic table represent different groups of elements. Elements with similar properties are in the same group

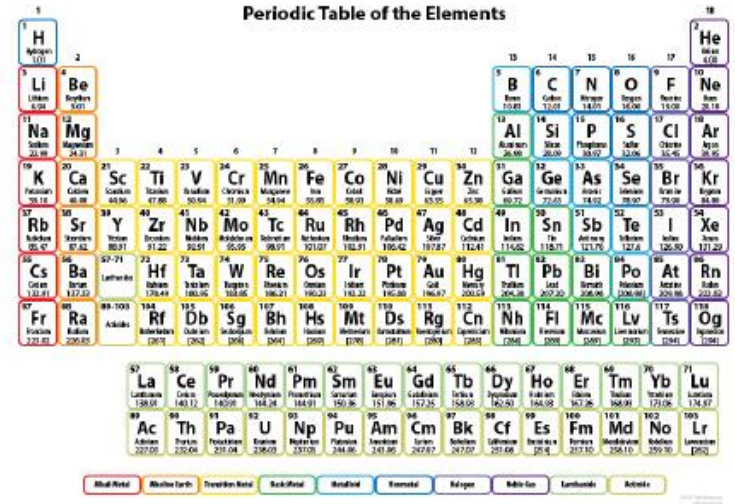
ISOTOPE: Atoms of the same element with the same number of protons but a different number of neutrons.

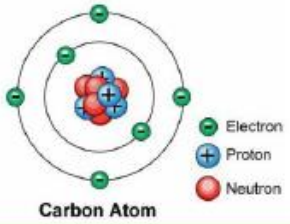
PERIODIC TABLE: Table of elements arranged in order of atomic number and such that elements with similar properties are in the same column (group).

$C + 2Cl_2 \rightarrow CCl_4$

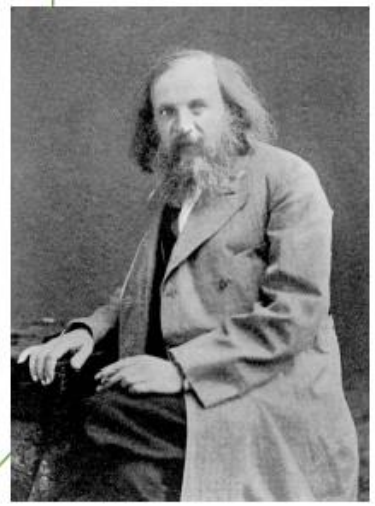


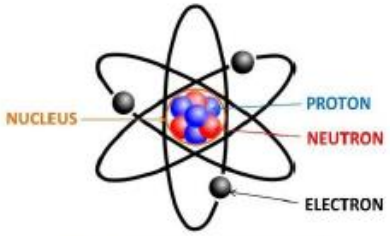


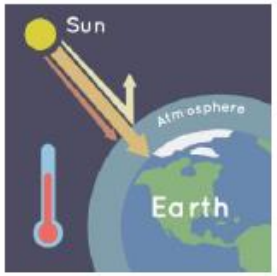


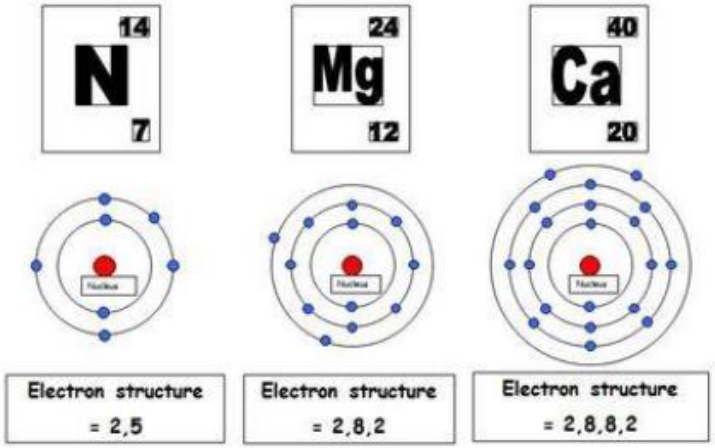


Dmitri Mendeleev was a Russian Scientist responsible for the first, modern Periodic Table – in 1869! He studied at St. Petersburg University









Science: Year 9 Autumn 2 :Force and Motion

Glossary

Force - A force is a push or a pull that acts on an object due to the interaction with another object.

Resultant Force - The overall force acting on an object

Newton - The unit of force. One newton is the force needed to accelerate 1kg by 1m/s^2

Balanced – If the forces on an object are balanced, there is no resultant force.

Unbalanced – If the forces on an object are unbalanced then there is a resultant force acting on the object.

Instantaneous Speed – The speed of an object at the very instant of being measured

Average Speed – the speed of an object measured over the whole journey

Velocity – Speed in a particular direction> Measure in Metres per second (m/s)

Terminal Velocity – When an object reaches terminal velocity it will move at a steady speed in a constant direction because the resultant force is 0.

Mass – A measure of how much matter there is in an object, measured in Kilograms (Kg).

Weight – A force due to the pull of gravity. Measured in Newtons (N).

Density – Mass per unit volume of an object. Measured in Kg m^{-3}

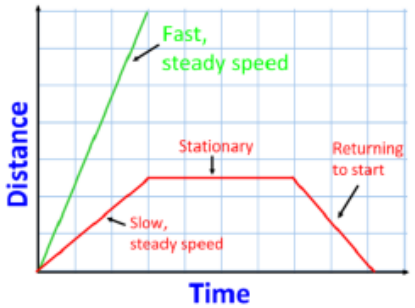
Pressure - A measure of how much force is acting on an area. Measured in Pascals (Pa)

Resultant Forces

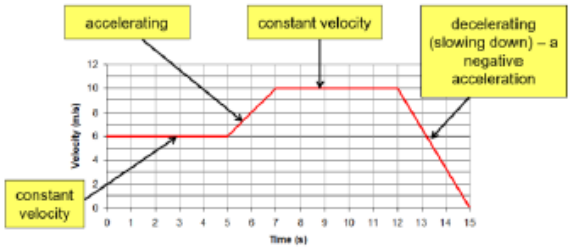
This object will either remain at rest, or continue to travel in the same direction at the same speed as there is no resultant force.

$$\text{Speed (m/s)} = \frac{\text{Distance (m)}}{\text{Time (s)}}$$

Distance Time Graph

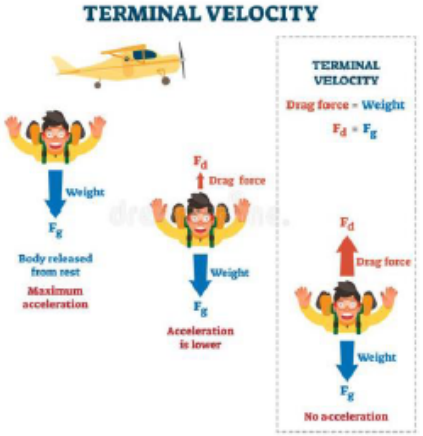


Velocity Time Graph



Terminal Velocity

As the velocity of a falling object increases due to weight, the air resistance increases. Eventually the drag becomes equal to the weight of the object, and it's velocity does not increase anymore.



Weight

Weight (N) = mass (kg) x gravity (N/kg)

Density

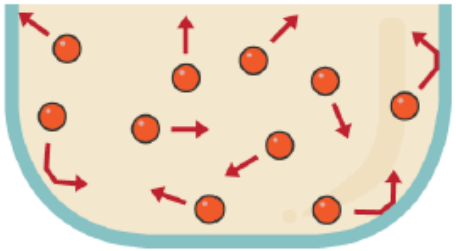
$$\text{Density (kg/m}^3\text{)} = \frac{\text{mass (kg)}}{\text{Volume (m}^3\text{)}}$$

Pressure

$$\text{Pressure (Pa)} = \frac{\text{force (N)}}{\text{area (m2)}}$$

Pressure in Gases

Gas pressure is caused when gas particles hit the walls of their container. The more often the particles hit the walls, and the faster they are moving when they do this, the higher the pressure.



Pressure in Liquids

The pressure in a liquid is different at different depths. Pressure increases as the depth increases. The pressure in a liquid is due to the weight of the column of water above. Since the partides in a liquid are tightly packed, this pressure acts in all directions.

For more information on forces and motion follow this link

RE Year 9 Autumn Topic 1: Judaism Beliefs and Teachings

Key Words:
Covenant: A promise between God and man
Talmud and Tenakh: Jewish scripture
Shema: Jewish prayer
Synagogue: Jewish place of Worship
Torah Jewish Holy Scripture
Rabbi: Jewish religious leader
Yahweh: Jewish word for God

The Torah

SOA
'Hear O Israel, the Lord is our God, the Lord is One.' Shema

What is it?

- It is made up of the first 5 books of Moses: Genesis, Exodus, Leviticus, Numbers and Deuteronomy.
- These books contain the early history of the Jews, from the creation of the world to the death of Moses.

Why is it important?

- Describes creation of the universe.
- Explains how God chose the Jews as his special people.
- Contains the Ten Commandments and other important laws.
- Describes Jewish history and events.

Features of a Synagogue

	**Bimah:** This is the focus point. The Torah is placed on here
	**Menorah**: This a special candle holder
	**Yad:** This is a pointer used to read the Torah
	**Ner Tamid:** This a permeant light above the Ark to show God's presence
	**Ark:** This is a special place where the Torah scrolls are kept.

What is the Synagogue?

- It is the Jewish place of worship.
- There are differences between Orthodox and Reform Synagogues.
- It is often a centre for education and other activities such as charity events and youth clubs

Shema

The Shema is a special Prayer, it describe what Jewish people believe about God, It says that there is only one God

Mezuzah

The Mezuzah which is a wooden box with the words of the Shema
It is nailed to the right side of each doorpost.

SOA
'A multiple of people is a king's glory' Proverbs 14:28

Abraham and Isaac

What is the Story about?

- Abraham and his wife were unable to have children.
- God promised them a son and gave them one when Abraham was an old man.
- To test his faith, God asked Abraham to offer his son Isaac as a sacrifice.
- Just as he was about to this, God intervened and rewarded Abraham

Why is Abraham important?

- **Abraham was the founder of the Jewish faith and every Jew is a descendent of him.**
- **God made a covenant with Abraham promising him a great nation and the land of Canaan in return for all males to be circumcised and all Jews to worship God alone**

Do not worship any other Gods	Do not commit adultery
Do not make idols	Do not murder
Do not misuse God's name	Do not steal
Keep Sabbath day Holy	Do not lie
Honour father and Mother	Do not covert

Moses

Who was Moses?

- He was brought up believing he was the son of the Pharaoh. Hhe helped the Hebrews escape because God sent plagues and by separating the sea.
- God spoke to Moses on Mount Sinai and gave him the 10 commandments Moses (and every Jew ever to be born) entered a Covenant with God to obey the rules and worship God

Why is was this important?

- God chose him, spoke to him and helped him perform miracles.
- God trusted him enough to give him the 10 commandments

What is the Sabbath?

- **Sabbath is the Jewish holy day were the celebrate the creation of the world. It's a time were families gather, meals are eaten, prayers are said and there are strict rule to rest and worship.**
- **It starts on Friday eve and ends on Saturday evening.**

- What happens on Sabbath?
- On Friday eve, where the food is already prepared, the table set, the house clean and two loaves of bread called Challah are placed on the table covered with a special cloth called a Challah Decke.
- Just before Shabbat begins, the mother of the house lights the candles and, covering her eyes, says a blessing
- The Father of the house fills the Kiddush cup with wine. He lifts the cup and says an ancient prayer of blessing called the Kiddush.
- On Saturday, the family attend the Synagogue where he Torah is read
- When Shabbat is over. There is a ceremony called Havdalah.

RE Year 9 Topic 2:
Judaism Festivals and Rites of Passage

Key Words:

- **Covenant:** A promise between God and man
- **Talmud and Tenakh:** Jewish scripture
- **Shema:** Jewish prayer
- **Synagogue:** Jewish place of Worship
- **Torah** Jewish Holy Scripture
- **Rabbi:** Jewish religious leader
- **Yahweh:** Jewish word for God

Passover

- Reminds them of the Angel of Death passing over during their time of slavery in Egypt. (Ten plagues)
- Reminds them of their covenant with God
- Eat unleavened bread – doesn't rise – shows the hurry of the Jews leaving slavery.
- Sedar meal – everything is symbolic e.g. bitter herbs – to symbolise the bitterness of slavery.
- Sedar wine is drunk to remember God's four promises to Moses.

Rosh Hashanah

- Jewish New Year
- On this day God writes down his judgement on each person
- They reflect on their past year and making peace with others.
- Eat apples dipped in honey to symbolise a sweet new year.
- Shofar (ram's horn) is blown to remind Jews that God will judge them.
- Tashlikh: Jews empty their pockets to symbolise getting rid of sin.

Yom Kippur

- Day of Atonement
- Holiest day of the year, 10 days after Rosh Hashanah
- God makes his final judgement on whether they have been good/bad.
- Confessing wrongdoing is very important.
- Fast (don't eat or drink) for 25 hours.
- Wear white to show purity.
- Avoid make-up/perfume and bathing.
- Pray a lot of the day in the synagogue.

Why are festivals important?

- Helps bring the community together
- Strengthens their faith,
- Brings them closer to God
- Time to remember key parts of history
- Orthodox = continuing tradition is vital

'Live in booths for seven days.'

'Do not eat bread with yeast in'

'See I have set before you this day life and good, death and evil…choose life"

Bar/Bat Mitzvah

- Boys have a Bar Mitzvah at 13, girls a Bat Mitzvah at 12
- They are then responsible for their own actions and religious path.
- Boys can now lead a synagogue service, included in a minyan or read from the Torah. REFORM = girls also can do this.
- Boys must study and prepare a passage from the Torah to read during the ceremony. This means they must learn Hebrew. Girls must spend more time learning how to prepare for Shabbat, as well as learning a prayer to recite.
- After the service a special meal is eaten and shared, with big celebrations and parties for families and friends.

Marriage

- During the ceremony the couple stand underneath a canopy called a Chuppah, representing a new home.
- The Rabbi talks and offers advice.
- Seven blessings are said and then the plain metal rung is placed on the bride's finger.
- Orthodox: must be witnessed by two men. Reform: Men or women.
- After the contract is signed the groom stamps on a glass as a reminder of the destruction of the temple.
- The couple then have some time together before the meal and party.

'Then Jacob tore his clothes, out on sackcloth and mourned for his son for many days.' ***Genesis 37:34***

Funerals and Mourning

- Traditionally the bodies are buried. Reform may use cremation.
- Use a simple wooden coffin/white cloth.
- Should take place within 24 hours of death and the body should never be left alone.
- Family and friends pay respects, to the body covered in a shroud and tallit for the men.
- Can take place in a synagogue, at home or the cemetery.
- Services include readings, singing psalms and a eulogy.
- Everyone washes their hands in a ritual outside, symbolising leaving death behind.
- After the funeral there is a meal of consolation.
- Stones are left instead of flowers, because stones are permanent.
- The seven days after are an intense mourning period, where they stay at home, reject luxuries and fun activities and may wear a torn black ribbon or cut tie to show sorrow.

Birth and Brit Milah

- A baby girl is given her names in the synagogue after her father has performed a special reading from the Torah. Boys are names after eight days, during the circumcision.
- **BRIT MILAH**: symbolises the covenant made by Abraham.
- The baby boy has his foreskin removed at eight days old buy a specifically trained Mohel.
- One of the most observed mitzvot, ancient ritual.
- Shows God their loyalty and faith.

'Abraham circumcised his son Isaac at the age of eight days as God had commanded him.' ***Genesis 21:4***

Year 9 Autumn Term: Why was the 20th Century significant?

1. MAIN long term causes of WWI

Cause and Consequence

Modern

Key Words

Militarism- The belief that strong countries should have the biggest and strongest army and navy possible.

Alliances- Agreements between countries to work together.

Imperialism- The belief that a strong country must have a large empire.

Nationalism- Being extremely loyal to and proud of your country.

Assassination of Franz Ferdinand- Took place on July 24th in Sarajevo. Started a chain of events that start the First World War.

Consequences

1 Direct result of an event

2.. Long term/short term

- Social
- Economic
- The role of an individual and/or groups
- Political
- Technological
- Military

2. The Short term causes of WWI

Long Term Causes of WWI

The Great Powers divided themselves into two rival alliances, Triple Alliance (Germany, Austria-Hungary and Italy) and Triple Entente (France, Russia and Britain). They competed to have the biggest empires, navies and armies. As they built up their armies and navies they became powerful and dangerous rivals.

The Short term causes of WWI

The assassination of Archduke Franz Ferdinand by the Black Hand Gang.
Alliances triggered – Russia mobilises troops and Germany declares war.
Germany activated the Schlieffen Plan and invades neutral Belgium.
France and Britain mobilised their troops.
Within 6 weeks the Great powers and their empires were at war

3. Not all consequences are equal

Christopher Clark

We're looking at a Europe inhabited by great powers, each of which was . . . -- pursuing its own interests and each of which was willing, for the sake of the pursuit of its own interests, to take the risk of a major conflict.

28th June 1914	August 1914	July-Nov 1916	11th November 1918
Archduke Franz Ferdinand assassinated.	Britain declares war on Germany WWI starts	The Battle of the Somme	Armistice – end of WWI.

Key Events	
1914 – 1918 AD  	WWI – A glob **4. WWI Global War** 32 countries were involved in some capacity during the war. It was fought on 6 of the 7 continents. War was fought at sea. One in ten sailors for the Royal Navy lost their life at sea. 1198 Civilians were killed when the passenger liner, the Lusitania was sunk as it sailed to Britain from America. Empire troops from India, the Caribbean, Australia and New Zealand fought bravely for the British Empire. Over 4 million people from the colonies were mobilized (involved) in WWI.

https://www.youtube.com/watch?v=0PcPanwHzZ8

Key Events	
1st July 1916- November 1916    	The Battle o **5. The Somme – What went wrong** On 1st July 1916, along 30 km stretch of frontline, British troops began a series of attacks to try to break through the German lines. This became known as the Battle of the Somme. The attack began with a week long bombardment which was meant to destroy all the German machine gun posts defences such as barbed wire. Unfortunately this failed, as many of the German troops had taken shelter in the deep underground dug outs. When the British troops and their allies left the trenches to cross no-man's land they were cut down by machine gun fire. After the first day, casualty figures stood at approximately 60,000 and 20,000 deaths. By the end of the battle in November British casualties were put at 420,000. On survivor said, "we were two years in the making and ten minutes in the destroying.

3.How do Historians evaluate if an event is significant

significance

Etymology (origins of the word)

Sign: Latin – 'a mark.'

To determine how significant an event or someone is, Historians ask, is it;

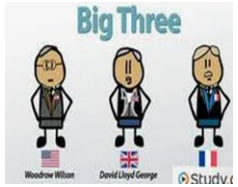
Remarkable – include the scale, numbers involved
Resulted in change – include what changes or developments occurred at the time and over time
Revealed – include what attitudes were at the time
Remembered – Include how do we remember today
Relevant – how does the event/person/development affect people today, what lessons can be learnt?

Key Events	
November 1916    	**6. The Somme – The results of the battle** Although battle seemed a disaster the British did manage to push the Germans back several miles and cause 500,000 German casualties. New technology such as the tank was developed and a creeping barrage instead of continual artillery bombardment was used so soldiers were better protected as they advanced. General Haig the British Commander in chief was severely criticised after the Somme as he could have called off the attack when it became clear the barbed wire wasn't broken. However, some historians argue that he used the tactics and knowledge available at the time. Nevertheless generals were criticised for their stubbornness and this led some to claim that "Lions had been led by donkeys"

1. Terms of the Treaty of Versailles

Terms of the Treaty of Versailles

G uilt. Germany and Germany alone was blamed for the war
A rmed forces reduced. Army of 100,000, no tanks, no subs, no planes, a navy of six battleships
R eparations. Germany was expected to pay for the damage caused by the war. The figure was later set at £6600million
G ermany lost land. Alsace Lorraine was returned to France, Germany was split in two by the Polish Corridor, Germany lost all its colonies.
Le ague of Nations. This was set up to avoid future wars. Nations would meet to avoid war by discussion of problems but the Allies were in no mood to compromise.



2. Aims of Big 3

Wilson USA	Lloyd-George Britain	Clemenceau France
• Fair peace. • League of Nations. • An end to all Empires.	• Make Germany pay compensation. • Reduce the size of Germany's navy. • Not punish too harshly so they can trade again.	• Make Germany pay compensation • Weaken Germany's (reduce army) • Take back Alsace Lorraine

3. Dunkirk

Nazis used Blitzkrieg (Lightning War) in the opening months of the war with great success. By May 1940, most of Europe was under Nazi control.
Nazi troops almost cut off and captured the British army. The British narrowly escaped after a nine day evacuation from Dunkirk. The government only believed only 25% of the army could be saved but after a coordinated evacuation involving the RAF, British navy and civilian boats, 338, 000 troops were rescued.
Within days France was defeated and was now occupied by German troops.

Disaster	Miracle
• Military defeat as the army retreated, left behind all their heavy equipment and artillery. • Germany gained control of the ports and airfields so could now attack Britain.	• 338,000 men evacuated, more than expected. • Prime Minister Winston Churchill called the evacuation at Dunkirk a "miracle" • Press highlighted the "Dunkirk spirit" – the never surrender attitude. This was probably to boost morale especially as it looked likely that Germany would now try to invade Britain. However the army and the RAF were not defeated and were able to defend Britain during the Battle of Britain.

Remarkable Results Remembered
There have been many films and documentaries made to remember the evacuation. More recently Christopher Nolan's 2017 Dunkirk re-enacted the evacuation and the role of all those involved.

4. Atomic Bomb

On 6 August 1945 American B-29 bomber plane called Enola Gay dropped an atomic bomb on the Japanese city of Hiroshima.
Around 80,000 people were killed as a direct result of the blast, and another 35,000 were injured. 9th August, another nuclear bomb was dropped by the Americans on the Japanese city of Nagasaki. At least 74,000 people died in the Nagasaki blast. 30% of the city. Those who survived suffered terrible injuries, or radiation sickness.
Shortly afterwards, on 15 August 1945, Japan finally admitted defeat and World War Two was over.

28th June 1919	1st September 1939	26th May-4th June 140	6th and 9th August 1945
Treaty of Versailles is signed	WW2 breaks when Germany invades Poland. Germany uses Blitzkrieg tactic to defeat most of Europe	Dunkirk evacuation	USA drops the Atomic bomb on Hiroshima and Nagasaki. WWII ends 14th August

Geography year 9 Autumn term 1 – Why has the world not developed evenly?

What do I need to know?

What is development?	
How does employment vary with development?	
Why is there a global development gap?	
How does population change with development?	
Why is Africa a diverse continent?	
Is Nigeria king of Africa?	
Which is the poorest country in the world?	
How does aid increase development?	
What is fair trade?	
How does climate change influence development?	

Skills to develop

Develop answers to extended questions

Development Scale

Examples

Developing	Emerging	Developed
CAR	India	UK
Nepal	Mexico	USA
Syria	Brazil	Germany

Development Indicators

Development indicators can be measured or given a value to tell us how developed a country is.

Life expectancy = The average age that people expect to live to

Birth rate = The number of births each year for every 1,000 people

Death rate = The number of deaths each year for every 1,000 people

GDP = The total value of goods and services produced within a country

Infant mortality rate = The number of deaths of children aged below one for every 1,000

Natural increase = The rate at which the population is growing

Adult literacy rate = The percentage of people over 15 who can read

Types of Employment

The types of employment in a country varies depending on development. As a country becomes more developed there are more tertiary jobs rather than primary jobs

Primary Sector: involves gathering raw materials

Secondary Sector: involves using raw materials e.g. manufacturing

Tertiary Sector: provides a service

Quaternary Sector: research and science

Why does development vary?

Historical

- War: money spent rebuilding
- Colonisation: Countries not able to benefit from development

Environmental

- Natural resources: some countries have more than others
- Climate: droughts or floods

Economic

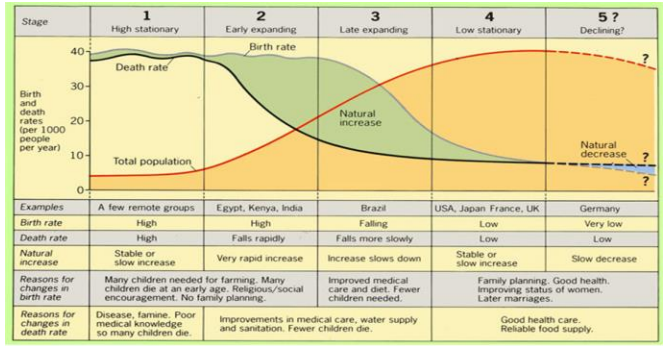
- MNCs: set up in developing countries, they don't benefit
- Export of raw materials: Rich countries want to pay as little as possible for materials

Physical

- Landlocked: can't trade with other countries
- Extreme weather: damages infrastructure

Geography year 9 Autumn term 1 – Why has the world not developed evenly?

Key Words	
Development	How rich or poor a country is compared to others. Development measures how economically, socially, culturally or technologically advanced a country is.
Developed Country	A country with very high human development (VHHD)
Emerging Country	A country with high and medium development (HMHD)
Developing Country	A country with a low human development (LHD); a poor country. Less then US $1,025 GDP per capita.
Birth Rate	The number of births each year for every 1000 people.
Death Rate	The number of deaths each year for every 1000 people.
Natural Increase	The rate at which population is growing
Life Expectancy	The average age people are expected to live to
Development Gap	Is the difference in levels of social well being and economic development between the poorest and the richest people on the planet, it can occur within the same country.
Aid	Something that provides help, support, or relief, such as money or supplies:
Fairtrade	Is when a country seeks to protect its own industry by placing restrictions on the goods of foreign countries, using import taxes, quotas and subsidies



Demographic Transition Model

The Demographic Transition Model (DTM) can show us how populations change over time with development. As a country develops the population will increase as birth rates and death rates change

\+ It can show us what we may expect to happen to population
\- It is mainly shows how European countries developed

Nigeria

Nigeria is located in North West Africa. One of the richest countries in Africa.

Become more developed because:
- A more stable government
- Production of oil
- Growth in the service sector

However, there are still issues with poverty as the rich are getting richer and this is not being passed down to those who are poorer.

Central African Republic (CAR)

CAR is located in central Africa. It is landlocked. One of the poorest countries in the world.

Low development because:
- Civil war, natural hazards, climate change

The impacts of this are:
- High malnutrition, 1.5 million children at risk of starvation, cannot go to school, people are forced to migrate

How does aid increase development?

What is aid?
When a country or NGO donates resources or money to help a country to develop

OXFAM

FAIRTRADE

Types of aid

Short term = Emergency help usually in response to a natural disaster, such as a flood or earthquake
Long term = Sustainable aid that seeks to improve resilience
Tied = Aid may be given with certain conditions
Voluntary = Money donated by the general public in richer countries and distributed by NGOs

YEAR 9
FRENCH Term 1A
KNOWLEDGE ORGANISER

3 Pillars of Language Learning
- Vocabulary
- Grammar
- Phonics

I like	J'aime
I love	J'adore
I don't like	Je n'aime pas
I hate	Je déteste
I can (am able)	Je peux
I must (have to)	Je dois
I prefer	Je préfère
I would like	Je voudrais
I am going (I go)	Je vais
I want	Je veux
You like	Tu aimes
You love	Tu adores
You don't like	Tu n'aimes pas
You hate	Tu détestes
You can (am able)	Tu peux
You must (have to)	Tu dois
You prefer	Tu préfères

aller	to go
jouer	to play
manger	to eat
danser	to dance
chanter	to sing
visiter	to visit
regarder	to watch
écouter	to listen
étudier	to study
adorer	to love
aimer	to like
sortir	to go out
avoir	to have
finir	to finish
faire	to do
boire	to drink
travailler	to work
voyager	to travel
choisir	to choose

The Near Future Tense
Aller – to go + Infinitive

Je vais	I go, I am going
Tu vas	You go, you are going
Il va	He goes, he is going
Elle va	She goes, she is going
Nous allons	We go, we are going
Vous allez	You go, you are going
Ils vont	They go, they are going

+ infinitive
manger – to eat

The perfect tense

1. Take the relevant part of the verb AVOIR in the present tense.

J'ai	I have
Tu as	You have
Il /Elle a	He has/She has
Nous avons	We have
Vous avez	You have
Ils /Elles ont	They have

2. Take the past participle.

ER VERBS
To form the past participle of ER verbs take ER off the infinitive to create the stem:
Parler – Parl

Add é to the stem to create the past participle – Parlé

RE VERBS
To form the past participle of RE verbs take RE off the infinitive to create the stem:
Vendre – Vend

Add u to the stem to create the past participle – Vendu

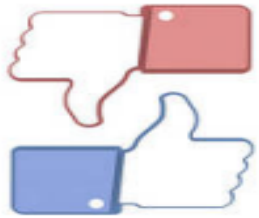
IR VERBS
To form the past participle of IR verbs take IR off the infinitive to create the stem:
Finir– Fin

Add i to the stem to create the past participle – Fini

MFL Year 9 Autumn Term

Viva 3 **Modulo 1 Somos así** Knowledge Organiser

¿Qué cosas te gustan? = What things do you like?
¿Qué cosas te encantan / te chiflan / te flipan / te molan? = What things do you love?
Me gusta (n) = I like
Me encanta (n) = I love
Me chifla (n) = I love
Me flipa (n) = I love
Me mola (n) = I love
No me gusta (n) nada = I really don't like



El baile = dance
El cine = cinema
El deporte = sport
El dibujo = drawing / art
El racismo = racism
El teatro = theatre / drama
La moda = fashion
La música = Music
La naturaleza = nature
La pesca = fishing
La violencia = violence
Los cómics = comics
Los insectos = insects
Los lunes = Mondays
Las artes marciales = martial arts
Las injusticias = injustice
Las taréas domésticas = household chores

Scan these codes to practise the present and preterite tenses

En mi tiempo libre = In my Free Time
Hago judo = I do judo
Hago natación = I go swimming
Voy al parque = I go to the park
Voy al polideportivo = I go to the sports centre
Voy de pesca = I go fishing
Soy miembro de un club = I'm a member of a club
Soy miembro de un equipo = I'm a member of a team

Expresiones de frecuencia = Expressions of frequency
a veces = sometimes
de vez en cuando = from time to time
dos veces a la semana = twice a week
a menudo = often
muy a menudo =very often
todos los días = everyday
casi todos los días = almost every day
todo el tiempo = all the time
siempre = always

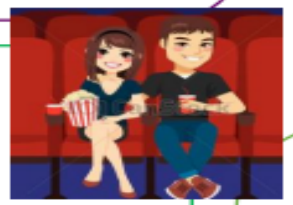
¿Cómo organizas tu semana?
Bailo Zumba = I dance Zumba
Cocino para mi familia = I cook for my family
Escribo canciones = I write songs
Juego en mi consola = I play on my games console
Leo revistas / libros = I read magazines / books
Monto en bici = I ride my bike
Navego por internet = I surf the internet
Preparo la cena = I prepare dinner
Saco fotos = I take photos
Toco el teclado = I play the keyboard
Veo un partido de fútbol = I watch a football match

MFL Year 9 Autumn Term

Viva 3 **Modulo 1 Somos así** Knowledge Organiser

¿Cuándo? = When?
después del insti =after school
este fin de semana = this weekend
los fines de semana = at the weekends
los lunes / martes = on Mondays / Tuesdays
los jueves por la tarde = on Thursday afternoons
mañana por la mañana = tomorrow morning
mañana por la tarde = tomorrow afternoon

En el Cine = At the Cinema
Voy a ver… = I'm going to see…
Una comedia= a comedy
Una película de acción = an action film
Una película de animación = an animation
Una película de aventuras = an adventure film
Una película de ciencia-ficción = a science-fiction film
Una película de fantasía = a fantasy film
Una película de superhéroes = a super-hero film
Una película de terror = a horror film
¿Vas a venir? = Are you going to come?
¿Vamos a ver? = Are we going to see?



Reacciones = Reactions
Claro que sí = Of course
De acuerdo = ok
Voy a ir = I'm going to go
No voy a ir = I'm not going to go
No, gracias = No thank you
¿Estás loco/a? = Are you crazy?
¡Ni en sueños! = Not in your dreams
¡Que rollo! = How boring!

¿Qué tipo de películas te gustan?
What type of films do you like?
Me encantan las comedias = I love comedies
No me gustan las películas de terror = I don't like horror films
Mi película favorita es… = My favourite film is…
¿Qué tipo de película es? = What type of film is it?
Es una comedia =It is a comedy
En mi opinión… = In my opinion…
Creo / Pienso que = I think that

¿Cómo fue tu cumpleaños? = How was your birthday?
Celebré mi cumpleaños = I celebrated my family
con mi familia / mis amigos = with my family / friends
¿Qué hiciste? = What did you do?
Fui / Fuimos al parque de atracciones = I went / we went to the theme park
Invité a mis amigos a pasar la noche en mi casa = I invited my friends to sleep over at my house
Bebí / Bebimos refrescos = I/we drank fizzy drinks
Comí / comimos tarta de cumpleaños = I/we ate birthday cake
Recebí muchos regalos = I received lots of presents
Fue alucinante / increíble = It was amazing /incredible

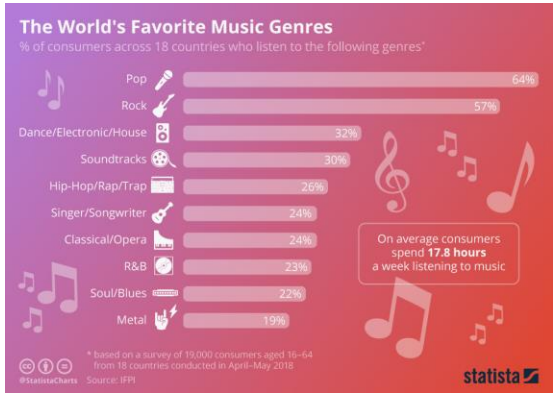
High Frequency Words

así que = so
casi = nearly / almost
primero = first of all
luego = then
después = afterwards
más tarde = later
o = or
por supuesto = of course
quizás = maybe
también = also

Year 9 Music Term 1: Pop Song Structure

GENRE: A style or category. There are thousands of different styles or genres and each style has it's own unique features e.g.

Pop
Rock
Hip Hop
Jazz
Blues
Metal
Country
Reggae
Dance
RnB



INTRO	the first section of a song which sets the mood of the song and is often an instrumental section
VERSES	has the same melody but different lyrics each time which helps develop the song's narrative and story
LINK	a optional short section often used to join different parts of a song together, often instrumental
PRE-CHORUS	an optional section of music that occurs before the CHORUS which helps the music move forward and "prepare" for what is to come.
CHORUS	occurs several times within a song and contains the most memorable HOOK/RIFF. Relays the message of the song and is repeated with the same melody and lyrics each time it is heard
MIDDLE 8/ BRIDGE	a section (often 8 bars in length) that provides contrasting musical material
CODA/ OUTRO	The final section of a popular song which brings it to an end

STRUCTURE: The way music is put together in sections. Pop Songs have typical sections e.g. verses/choruses, but there is no set order. Each artist likes to create their own structure

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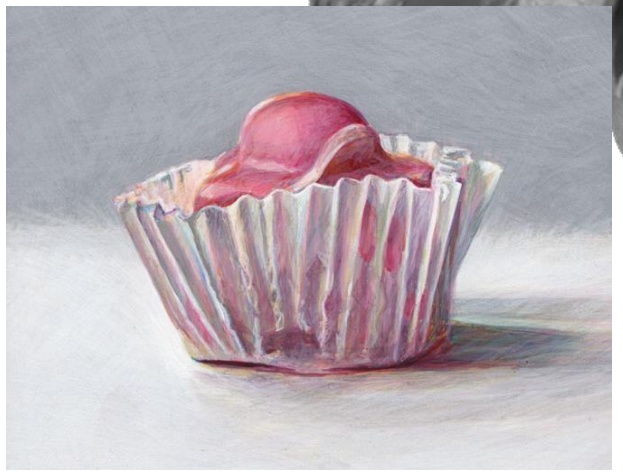
COMPOSITION KEYWORDS

Timing – triggering loops at the correct time
Texture – the number of layers at the same time e.g. 1 sample, 3 samples or 7 samples all playing at the same time
Contrasts – changing things so it sounds different to the original
Capturing Scenes – a method on Ableton Live where you group samples to make a new section
Muting - where a sample (or all samples) are silenced for a period of time.
Arrange – where you take something you did not create and put it together differently to make your own version

Art - Year 9 Autumn Term
Food Project

Looking at artists
Looking at a range of artist who are inspired by food: title page
Artist research pages: Joel Penkman
Drawings of her work
Reading across the curriculum: article and comprehension questions
Developing and experimenting
Design ideas
Experimenting with a range of shading techniques
Experimenting with different materials
Drawings
Observational drawings of food: pencil tone cake, coloured pencil crayon hotdog
Biscuit arrangement in watercolour
Mixed media meal: pen, pencil, coloured pencil
"Do Now" tasks and Homework tasks
Final Outcomes
Mixed media meal
Observational drawings of food



Food and Nutrition: Year 9 Autumn Term: World Cuisine and Food Science

- Seneca Online Learning - AQA Food and Nutrition - Class code: b797g0nf2i
- https://www.foodafactoflife.org.uk/
- BBC Food
- Food Standards Agency - https://www.food.gov.uk/food-safety
- https://www.ifst.org/lovefoodlovescience
- https://quizlet.com/240309265/gcse-food-preparation-nutrition-keywords-flash-cards/

Key Knowledge

Click to add text
Click to add text

- Cuisine relates to the established range of dishes and foods of a particular country or religion.
- Cuisine is also concerned with the use of distinctive ingredients and specific cooking and serving techniques.
- Cooking methods can achieve specific characteristics in food.
- Cooking food makes it safe, allows it to keep for longer and makes it more palatable.
- Heat is transferred by conduction, convection and radiation
- Dextrinisation is the term used to describe browning of starch caused by heat.
- Caramelisation is the browning of sugars caused by heat.

Quick Test (Use the internet to research your answers)

1. What religions traditionally do not eat pork?
2. Name two traditionally British dishes.
3. Explain the different factors that affect peoples food choices
4. Describe the various factors that influence a countries cuisine
5. Explain why Italian cuisine uses lots of fresh tomatoes, herbs and olive oil.
6. Name three types of heat transfer.
7. Why is food cooked?
8. What is the main heat transfer method when boiling food?
9. What sort of heat transfer commonly causes dextrinization?

Research the Key Words below and write an explanation for each

- **Cuisine**

_____
_____
_____
_____
_____

- **Climate**

_____
_____
_____

- **Conduction**

_____
_____
_____

- **Convection**

_____
_____
_____

- **Radiation**

_____
_____
_____

Read

Computing Year 9 Autumn Term 1: Business & ICT

Quiz

Market Research

There are two Types of Market Research Primary and Secondary.
Primary is doing it yourself e.g:
Survey
Focus Group
Secondary is someone else's' work
Internet Research
It's important as it tells businesses what people want to buy so you can ensure your selling what people want

Market Segmentation

There are different Market Segments:
Age
Gender
Lifestyle
Location
These are important because it lets the business target its products to the right people through advertising etc.

Key Terms

Market Research: This is carrying Out research of members of the public
Market Segmentation: Splitting Customers into target audience
Spreadsheet: Software designed To let you deal with numbers And calculations
Adobe Fireworks: Software to Let you do graphical work like Create a web page or poster
Web Design: Lets you design Website, can be done through Web authoring software or HTML
Word: Designed for typing and Formatting letters and other Documents that need to be Typed up

Spreadsheet

Spreadsheets are good as they allow you to carry out calculations quickly and accurately.

Formulas must start with = sign and use cell referencing- B4

1	/	Division	50	/	10	7.5
2	*	Multiplication	10	*	8	80
3	+	Addition	50	+	10	60
4	-	Subtraction	10	-	5	5

Fireworks

Adobe Fireworks has many tools Which can be used to change images:
-Remove Background
-Create Shapes
-Move parts of an image

HTML

This is the code used to create a website there is a 'tag' for instructions:
<img> means insert an image
<h1> means a main Heading
<P1> means a paragraph

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Read

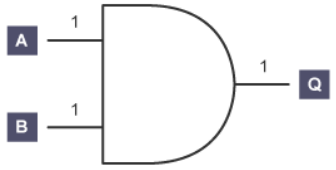
Computing Year 9 Autumn Term 2: Logic Gates

Quiz

Logic Gates

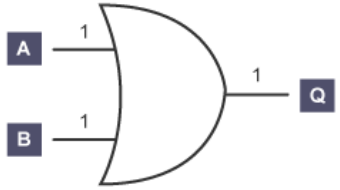
Logic Gates represent how a circuit Board within a computer works:

Truth Tables



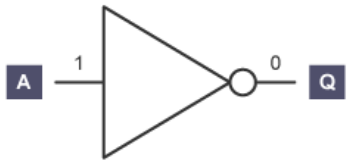
AND Gate

INPUT		OUTPUT
A	B	
0	0	0
1	0	0
0	1	0
1	1	1



OR Gate

INPUT		OUTPUT
A	B	
0	0	0
1	0	1
0	1	1
1	1	1



NOT Gate

INPUT	OUTPUT
A	
0	1
1	0

Key Terms

Binary: This is a number system that only uses two digits: 1 and 0. All information that is processed by a computer is in the form of a sequence of 1s and 0s.

Logic Gate: This is a circuit within a Computer

AND Gate: When both switches on the circuit are on the output will be on. Eg both light switches need to be on for the light to come on.

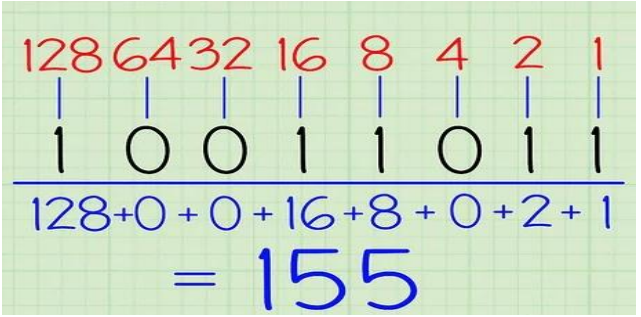
OR Gate: Only one switch needs to be on for the output to go on, eg in either a hall light switch or landing light switch is on the landing light will go on.

NOT Gate: This is the opposite, if the switch is on the light will be off and vice versa

Truth Table: This is a table which shows how the Logic Gate is working on is represented by 1 and 0 means it is off

Binary

Computers use something called binary code. Binary code is made up 1s and 0s.



Binary Addition

0 + 0 = 0

1 + 0 = 1

1 + 1 = 10

1 + 1 + 1 = 11

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Drama Year 9 Autumn Term: Lizzie Borden

Physical Skills

Posture	How someone stands and/or sits (slouched, upright)
Gesture	How someone uses their hands and arms when they are speaking
Facial expression	How the face is used to communicate feeling. (EG – open mouthed, scrunched eyes, pouted lips.)
Movement	How someone moves around the stage space. This also includes physical theatre movement (dance, unison movement.)
Gait	How someone walks (stride, leap, shuffle.)

Drama Techniques

Hot Seating: Answering key questions about your character/ storyline in role

Spontaneous Improvisation: Creating a piece of Drama, based on some prior knowledge, with little or no planning time.

Documentary-Drama: A style of Drama using re-enactments of real life events.

Vocal Skills

Accent	A way of pronouncing a language (country, area or social class)
Volume	How loud or quietly someone speaks
Pitch	How high or low someone speaks
Tone	How something is said – sarcastic tone, happy tone, sad tone
Timing	Use of pause or silence. The rhythm of the way you speak
Pace	How fast or slow someone speaks
Intonation	The rise and fall of the voice
Phrasing	How something is said for dramatic effect (pause, emphasise words)
Emotional range	Happy, sad, scared, shy, nervous (linked with tone)
Delivery of lines	Working with other actors (linked with timing) action - reaction

Dig Deeper Questions:

- What is a stimulus
- Can you give an example of a good stimulus for a piece of Drama.
- Why is a story like 'Lizzie Borden' a good stimulus for a piece of Drama?
- What is the difference between a 'motive' and a 'motif'?

Communication **Cooperation** **Creativity** **Confidence**

Year 9 Physical Education:

Enhancing skills and applying strategies

- Expectations
- Standards
- Skill/technique recap

Health Related Fitness - Benefits of Physical Activity

- Fitness testing
- Planning a training programme
- Principles of Training
- Anatomy Vocabulary

Wider Curriculum Competitive Sports & Activities

- Extra Curricular
- Inter-form
- Sports Day
- Community Links
- School trips

Sports/Activities taught

Netball
Football
Hockey
Handball
Cricket
Rounders
Basketball
Table Tennis
Badminton

Strategies to overcome opponents in competitive sport (Games)

- Teamwork
- Rules & regulations
- Sport specific skills whilst moving
- Tactics to overcome opponents
- Application of technique

Develop techniques and improve performance in other competitive sport. (Individual)

- Athletics: Race strategies (Pace)
- Trampolining: Basic Combinations

Outdoor & Adventurous Activities

- Team building
- Problem solving
- Oracy & Communication Skills
- Intellectual challenge
- Physical Challenge

- Desire to Improve: assessments will demonstrate improvements to achieve your personal best. Evaluation of Performance. Influencing the outcome and end result of the performance. Influencing the outcome & end result of the activity.
- Commitment, Resilience & Respect across the learning journey.

PSHE: Year 9 Autumn Term: Sexuality and Gender Identity

Glossary

Asexual	A person who generally does not experience sexual attraction to any group of people
Androgyny	A gender expression that has elements of both masculinity and femininity
Biological Sex	The physical anatomy and gendered hormones one is born with.
Bisexual	A person who experiences sexual, romantic, physical, and/or spiritual attraction to people of their own gender as well as another gender
Cisgender	A description for a person whose gender identity, gender expression, and biological sex all align
LGBTQ+	Lesbian Gay Bisexual Trans Queer / Questioning + = Other
Sexuality	A persons sexual preference or orientation. Who they are attracted to.
Gender Dysphoria	Where a person experiences distress due to a mismatch of their biological sex and their gender identity.
Heterosexual	A medical definition for a person who is attracted to someone with the other gender.
Homosexual	A medical definition for a person who is attracted to someone with the same gender.
Transvestite	A person who dresses as the opposite gender expression for any one of many reasons, including relaxation, fun, and sexual gratification.
intersex	A person with a set of sexual anatomy that doesn't fit within the labels of female or male (e.g., XXY phenotype, uterus, and penis)
Pansexual	A person who experiences sexual, romantic, physical, and/or spiritual attraction for members of all gender identities/expressions
Transgender	A person whose gender identity is the binary opposite of their biological sex, who may undergo medical treatments to change their biological sex
Transsexual	A person whose gender identity is the binary opposite of their biological sex, who may undergo medical treatments to change their biological sex
: Gender Identity	Gender identity is a way to describe how you feel about your gender. You might identify your gender as a boy or a girl or something different. This is different from your sex, which is related to your physical body and biology.

Important legal changes that have affected LGBTQ+ people in the UK

- **2000: Government lifts the ban on lesbians and gay men serving in the Armed Forces.**
- **2001: Age of consent for gay/bi men is lowered to 16.**
- **2002: Equal rights are granted to same-sex couples applying for adoption.**
- **2003: Repeal of Section 28 - Section 28 was a law that made it illegal to talk positively about homosexuality in schools.**
- **2003: A new law comes into force protecting LGBT people from discrimination at work. Until 2003 employers could discriminate against LGBT people by not hiring them or not promoting them, just because of their sexual orientation or gender identity.**
- **2004: Civil Partnership Act is passed.**
- **2004: Gender Recognition Act is passed - This Act allowed trans people to change their legal gender. This means that they can get a new birth certificate that reflects who they really are, which helps for future legal processes like marriage.**
- **2007: It becomes illegal to discriminate against people because of their sexual orientation or gender identity when providing them with goods or services.**
- **2008: The Criminal Justice and Immigration Act makes 'incitement to homophobic hatred' a crime.**
- **2009: A new law gives better legal recognition to same-sex parents.**
- **2013: The Marriage (Same-Sex Couples) Act is passed.**

Trans Teens and Children

If a child is under 18 and thought to have gender dysphoria, they'll usually be referred to a specialist child and adolescent Gender Identity Clinic (GIC). Treatment is arranged with a multi-disciplinary team (MDT). This is a group may include specialists such as mental health professionals and paediatric endocrinologists. Most treatments offered at this stage are psychological, rather than medical or surgical.

If the child is diagnosed with gender dysphoria and they've reached puberty, they could be treated with gonadotrophin-releasing hormone (GnRH) analogues. These are synthetic hormones that suppress the hormones naturally produced by the body. They also suppress puberty and can help delay potentially distressing physical changes caused by the body becoming even more like that of the biological sex, until they're old enough for other treatment options. The effects of treatment with GnRH analogues are considered to be fully reversible, so treatment can usually be stopped at any time. Teenagers who are 17 years of age or older may be seen in an adult gender clinic. They are entitled to consent to their own treatment and follow the standard adult protocols.

Gender Reassignment surgery will not be considered until a person has reached 18 years of age.

Schools and LGBTQ+ Students

All Schools are required to have a policy relating to LGBTQ+ Students and how they are supported in schools. However each case will be dealt with on an individual basis as to what is best for the students. Discussions will be conducted with Safe guarding team, parents, wellbeing teams and appropriate external agencies involved in the students care.

Where to get more help and support

- Parents and trusted family members
- Teachers and School Staff including School Nurse and Wellbeing Team
- Your Doctor or Community Nurse
- NHS Online
- Young Stonewall: https://www.youngstonewall.org.uk/
- The Proud Trust – Local Support groups: https://www.theproudtrust.org
- Friends and Family of Lesbians and Gays: https://www.fflag.org.uk/

PSHE Year 9 E-Safety & Digital Citizenship

Glossary

E-Safety Strategies and systems to help people stay safe online.

Digital Citizenship Accepted ways on behaving whilst engaging in online activity.

Cyber Bullying The use of electronic communication to bully a person, typically by sending messages of an intimidating or threatening nature

Hacking Gaining access to systems and computers which you do not have permission to access. Can be for malicious purposes.

Grooming When someone uses the internet to trick, force or pressure a young person into doing something they wouldn't normally do, this could be sexual behaviour or radical beliefs.

Digital Footprint The information about a particular person that exists on the internet as a result of their online activity. It can not be deleted.

Where to get more help and support

- Parents and trusted family.
- School Staff and Wellbeing Team
- Directly to the police.
- Report any inappropriate behaviour to the website.
- NSPCC - https://www.nspcc.org.uk
- Childline - Helpline: 0800 1111(24 hours, every day) / https://www.childline.org.uk
- CEOPS - https://www.ceop.police.uk/safety-centre/

10 strategies for staying safe online

1. Don't post any personal information online – like your address, email address or mobile number.
2. Think carefully before posting pictures or videos of yourself. Once you've put a picture of yourself online most people can see it and may be able to download it, it's not just yours anymore.
3. Keep your privacy settings as high as possible.
4. Never give out your passwords.
5. Don't befriend people you don't know.
6. Don't meet up with people you've met online. Speak to your parent or carer about people suggesting you do.
7. Remember that not everyone online is who they say they are
8. Think carefully about what you say before you post something online.
9. Respect other people's views, even if you don't agree with someone else's views doesn't mean you need to be rude.
10. 10.If you see something online that makes you feel uncomfortable, unsafe or worried: leave the website, turn off your computer if you want to and tell a trusted adult immediately.

Digital Footprints and Online Behaviour

A person's digital footprint cannot be deleted and can be accessed at any time through a simple social media or search engine search. To promote a positive digital footprint there are 5 simple rules:

1. Would you want your grandmother to see it? Is that photo/video/comment appropriate for the wider public audience? Would you want a future partner or employer to see it? Once something is online it stays forever.
2. Do you really think that is private? Just because your privacy settings are high doesn't mean that someone else can't repost or screenshot what you have posted.
3. Would you say it to someone's face? If you wouldn't say it to someone face, don't say it online. Portray yourself in a positive way as this may be seen by future friends, partners or employers.
4. Is this your work to publish/use? Reposting or using someone else's work if fine if you credit the original owner creator. If you don't it is plagiarism.
5. Would you want someone to do it to you? How would you feel if someone posted a picture of you or made a comments about you that you didn't like or want online?

Online Behaviour and the Law

- **The Computer Misuse Act 1990 says you can't impersonate or steal someone else's identity online. This means that writing a status on social media pretending to be your friend is technically against the law as it creating fake profiles or websites.**
- **It is a criminal offence under the Communications Act 2003 to send messages using any public electronic communications network, such as Twitter or Facebook, which are grossly offensive or of an indecent, obscene or menacing character.**
- **It is a criminal offence under the Criminal Justice and Courts Act 2015 for someone to disclose private sexual images of you online or offline without your consent with the effect of causing you distress. This is more commonly known as 'revenge porn'.**
- **There are a range of other offences which the police can investigate including harassment, harassment when someone fears violence, and stalking under the Protection from Harassment Act 1997.**

Each case will be taken on an individual basis looking at context and evidence to determine if a crime has been committed. If you believe you have been the victim of a crime screen shot the evidence and speak to the police.