










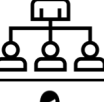


# LIGHT HALL KNOWLEDGE MATS

## Year 8 Summer 1



English	2
Maths	3 – 5
Science	6 – 9
History	10
Geography	11 – 12
French	13
Spanish	14
Life & Morality	15 – 16
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Technology	18 – 21
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*The best from everyone, all of the time.*

KEY WORD	DEFINITION	IMAGE	IN A SENTENCE	LOOK, COVER, WRITE, CHECK	LOOK, COVER, WRITE, CHECK
cynical	A distrust and criticism of others motivations.		He was a <b>cynical</b> person at Christmas time.		
morality	the distinction between right and wrong behaviour.		A person's <b>morality</b> can be judged by their actions.		
propaganda	information, <a href="#">biased</a> , used to promote a political view.		There was <b>propaganda</b> on TV near the election.		
revolution	Overthrow a government of social order.		A group of rebels planned a <b>revolution</b> to take over.		
communism	A political system whereby all of society shares equally.		Few countries in the world are <b>communist</b> .		
liberty	Being free in society from restrictions.		<b>Liberty</b> is a human right.		
torment	Severe physical or mental suffering.		The prisoner was <b>tormented</b> in their cell.		
commandment	A divine ruling from God.		Moses received the <b>commandments</b> .		
fable	A short story with animals as characters conveying morals.		Animal Farm is a <b>fable</b> about communism.		
hierarchy	A system in society where members are organised.		The Principal is the top of the school <b>hierarchy</b> .		
microcosm	A small group/society that has all the features of a large one.		A classroom is a <b>microcosm</b> of society.		
reinforce	Strengthen or support an opinion.		You need to <b>reinforce</b> your values.		

### Animal Farm- Summer A

1. **There is a list of key vocabulary linked to your studies this half term. Learn the key words and definitions.**
2. **Below there is a link of key knowledge. Understand what they all are.**

### Grammar Knowledge:

**Conjunctions [08/04/24]:** a conjunction is a part of speech that connects words, phrases, or clauses. Examples include: include and, or, but, because, for, if, and when.

**Simple, complex, compound [24/04/24]:** Simple sentences contain a single independent clause. Compound sentences also contain only independent clauses - two or more of them. Complex sentences have both an independent and one or more dependent clauses.

**Clauses[06/05/24]:** A **clause** is a group of words that contain a subject and a verb. You get the independent clause which can be a sentence by itself and does not need more information to clarify and a subordinate clause which depends on information from the independent clause to make sense.

Key Words

- **Equivalent** – of equal value
- **Improper fractions** – a fraction with a bigger numerator than denominator

Add/Subtract unit fractions *Some denominator*


$$\frac{1}{12} + \frac{1}{12} - \frac{1}{12} = \frac{2}{12}$$


$$\frac{1}{4} + \frac{1}{4} = \frac{2}{4}$$


With the same denominator ONLY the numerator is added or subtracted

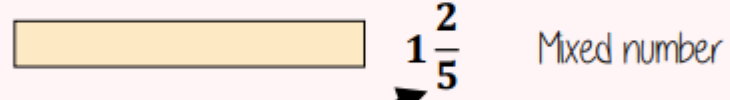
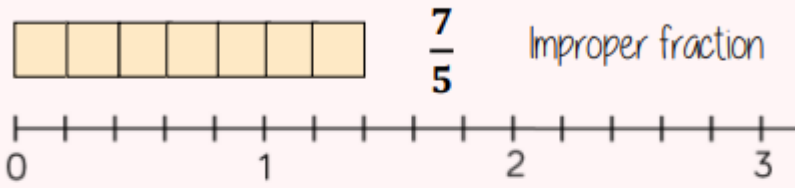
Add/Subtract from integers

$$1 - \frac{2}{6} = \frac{4}{6}$$


$$3 + \frac{1}{6} = 3\frac{1}{6}$$


The denominator indicates the number of parts a whole is made up of

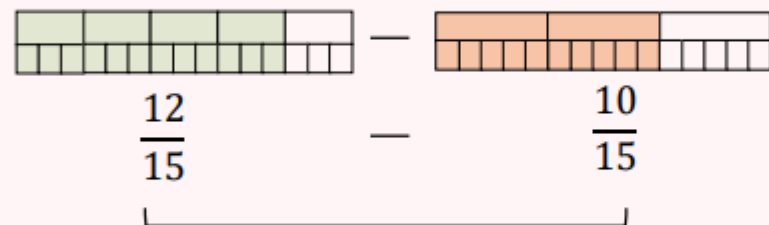
Mixed numbers and fractions



In this model 5 parts make up a whole

Fractions can be bigger than a whole

Add/Subtraction any fractions

$$\frac{4}{5} - \frac{2}{3} = \frac{2}{15}$$


Use equivalent fractions to find a common multiple for both denominators

Key Words

- **Non-unit fraction** - A fraction where the numerator is larger than 1
- **Reciprocal** - A pair of numbers that multiply together to give 1

Multiplying non-unit fractions

Shade in 3 parts

Repeat it on this many rows

This many columns

This many rows

$$\frac{3}{4} \times \frac{2}{3} = \frac{6}{12}$$

Modelled:

Parts shaded

Total number of parts in the diagram

Repeated addition = multiplication by an integer

$4 \times \frac{2}{5} \rightarrow \frac{2}{5} + \frac{2}{5} + \frac{2}{5} + \frac{2}{5}$

Integer (Whole number)

Each part represents  $\frac{1}{5}$

How many parts are shaded?  
What each part represents

$= \frac{8}{5}$

$= 1 \frac{3}{5}$

Each whole is split into the same number of parts as the denominator

**Revisit**  
When adding fractions with the same denominator - add the numerators

The reciprocal

When you multiply a number by its reciprocal the answer is always 1

$$3 \times \frac{1}{3} = 1$$

$$\frac{1}{3} + \frac{1}{3} + \frac{1}{3} = 1$$

The reciprocal of 3 is  $\frac{1}{3}$  and vice versa

Reciprocals for division

e.g.

$$5 \div \frac{1}{4} = 20$$

$$5 \times 4 = 20$$

Multiplying by a reciprocal gives the same outcome

Dividing any fractions

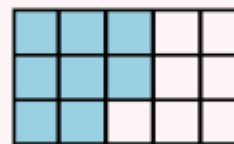
Remember to use reciprocals

$$\frac{2}{5} \div \frac{3}{4}$$

$$\frac{2}{5} \times \frac{4}{3}$$

Multiplying by a reciprocal gives the same outcome

Represented

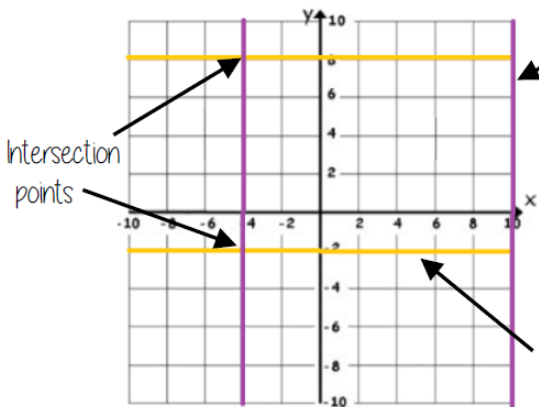


$$= \frac{8}{15}$$

Key Words

- **Gradient** – the steepness of a line    **Intercept** – where lines cross.

Lines parallel to the axes



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

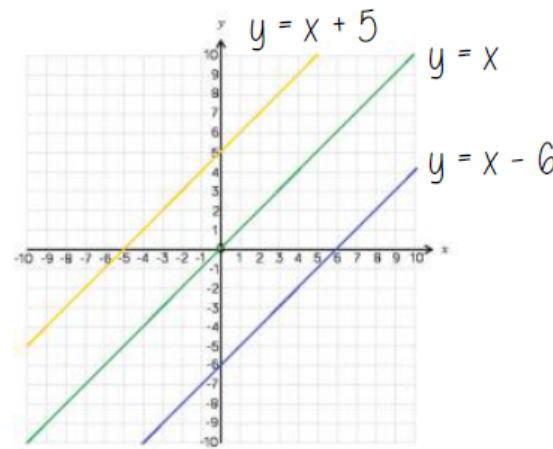
Lines parallel to the y axis take the form  $x = a$  and are vertical

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

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

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

Lines in the form  $y = x + a$



All the lines are parallel because the gradients are the same

$y = x + a$

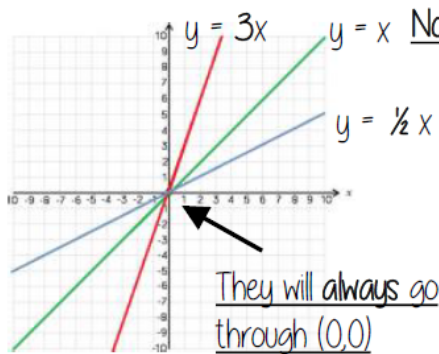
This is the line  $y=x$  when the y and x coordinate are the same

This shows the translation of that line  
 e.g  $y = x + 5$   
 Is the line  $y=x$  moved 5 places up the graph

5 has been added to each of the x coordinates

Recognise and use the lines  $y=kx$

The value of k changes the steepness of the line



Note:  $y = x$  is the same as  $y = 1x$

The bigger the value of k the steeper the line will be.

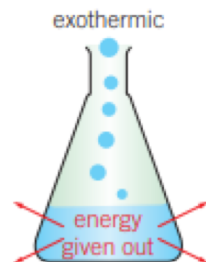
The closer to 0 the value of k the closer the line will be to the x axis.

They will always go through (0,0)

## Exothermic and endothermic reactions

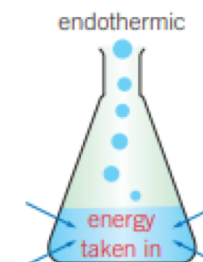
**Exothermic** reactions involve a transfer of energy from the reactants to the surroundings

- As energy is transferred to the surroundings this will show an increase in temperature
- Examples of exothermic reactions include combustion, freezing, and condensing



**Endothermic** reactions involve a transfer of energy from the surroundings to the reactants

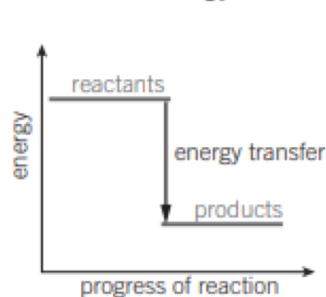
- As energy is taken into the reactants a decrease in temperature will be shown
- Examples of endothermic reactions include thermal decomposition, melting, and boiling



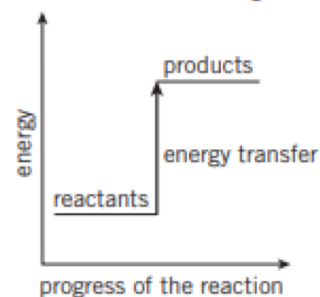
### Energy level diagrams

**Energy level diagrams** show the values of energy between the reactants and the products in a reaction

- If the energy is greater in the reactants than the products then the reaction is exothermic as energy has been given out to the surroundings
- If the energy is lower in the reactants than the products then the reaction is endothermic as energy has been taken in from the surroundings



**Exothermic**



**Endothermic**

### Bond energies

- Energy must be used to break **chemical bonds**, meaning that this reaction is endothermic
- Energy is given out when chemical bonds are made, meaning that this reaction is exothermic
- To see if a reaction is endothermic or exothermic, you must find the difference in the energy needed to break and to make the bonds in the reaction
- If the energy needed to break the bonds is less than the energy given out when making the bonds, the reaction is exothermic
- If the energy needed to break the bonds is more than the energy released when making the bonds, the reaction is endothermic



#### Key terms

Make sure you can write definitions for these key terms.

balanced symbol equation

chemical bond

chemical reaction

combustion

conserved

conservation of mass

decomposition

fuel

endothermic

energy level diagram

exothermic

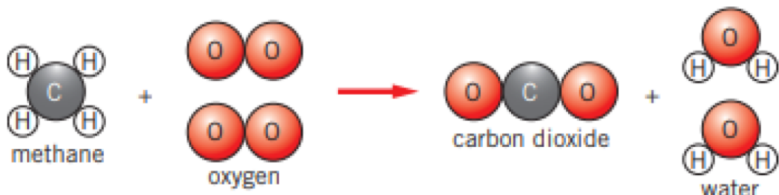
products

reactants

thermal decomposition

## Chemical reactions

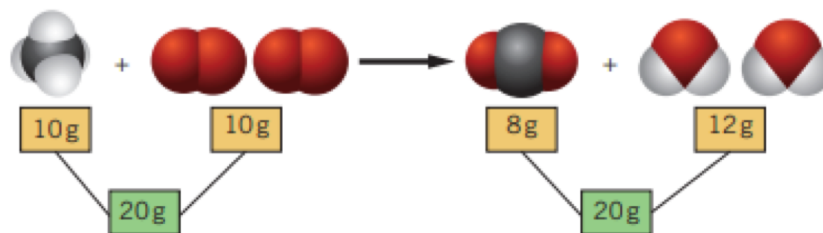
- Word equations can represent a **chemical reaction**:



- The **reactants** are on the left side of the arrow and the **products** are on the right side of the arrow
- We use an arrow instead of an equals sign as it represents that the reactants are changing into a new substance
- In a reaction, the amount of each type of atom stays the same, however they are rearranged to form a new product

## Conservation of mass

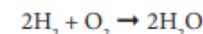
- In a reaction the mass will be **conserved**, this means that the total mass of the reactants will be equal to the total mass of the products
- If it appears that some of the mass has been lost, this means that a gas has been produced and escaped, accounting for the lost mass



W/c 22<sup>nd</sup> April 2024

**Balanced symbol equations** show the amounts of all of the individual atoms in a reaction

- The symbols used are from the Periodic Table
- They also show:
  - Formulae of reactants and products
  - How the atoms are rearranged
  - Relative amounts of reactants and products

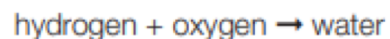


## Combustion

- Combustion** is the burning of a **fuel** in oxygen
- A fuel is a substance which stores energy in a chemical store
- Examples of fuels include petrol, diesel, coal and hydrogen
- When a carbon based fuel undergoes combustion, it will produce water and carbon dioxide

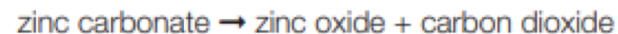


- Hydrogen can also be used as a fuel, this is much better than traditional fossil fuels as it does not produce carbon dioxide:

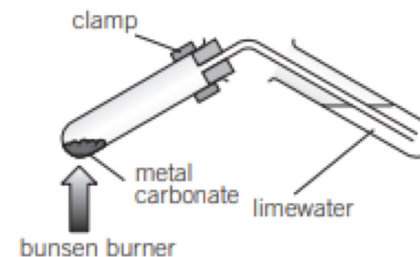


## Thermal decomposition

- A **thermal decomposition** reaction is one where the reactants are broken down (decomposition) using heat (thermal energy)
- An example of this is with metal carbonates:



- We can test for this carbon dioxide by bubbling the gas through limewater, if the limewater turns cloudy, the gas is carbon dioxide

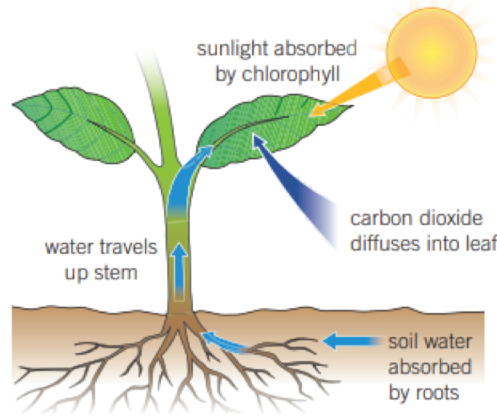


## Photosynthesis

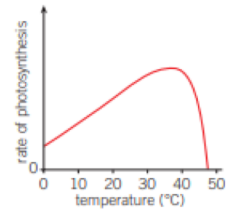
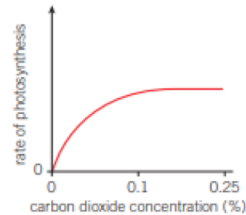
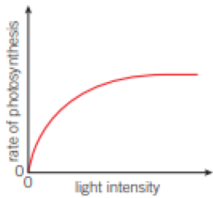
- **Photosynthesis** is the process which occurs in the chloroplasts to produce glucose using sunlight

water + carbon dioxide + sunlight → glucose + oxygen

- Any organism that can use photosynthesis to produce its own food is known as a **producer**, these are not just limited to plants but can include other organisms such as **algae**

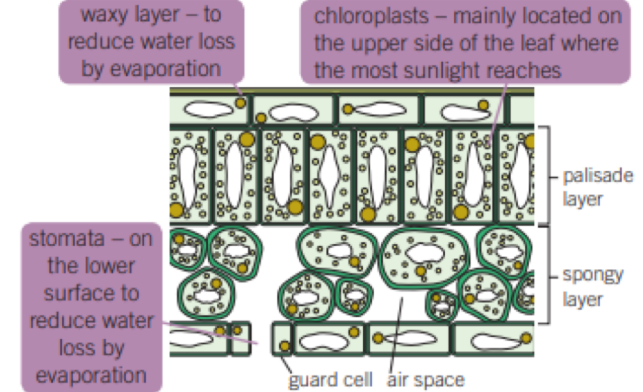


- The rate of photosynthesis can be affected by:
  - Light intensity – the higher the light intensity the higher the rate of photosynthesis up to a point
  - Carbon dioxide concentration – the higher the carbon dioxide concentration the higher the rate of photosynthesis up to a point
  - Temperature – the optimum temperature is the temperature at which photosynthesis occurs at the highest rate, before and after this the rate will be less



## Leaves

- To best adapt for photosynthesis leaves have a number of adaptations
- They are thin to allow the most light through
- There is a lot of **chlorophyll** to absorb light
- They have a large surface area to absorb as much light as possible



## Plant minerals

Plants need minerals for healthy growth, if they do not have enough of these minerals this is known as a **mineral deficiency**

Mineral	What is It used for?	What happens if there is not enough?
<b>nitrites</b> (contain nitrogen)	healthy growth	poor growth and older leaves yellow
<b>phosphates</b> (contain phosphorus)	healthy roots	poor growth, younger leaves look purple
<b>potassium</b>	healthy leaves and flowers	yellow leaves with deadpatches
<b>magnesium</b>	making chlorophyll	leaves will turn yellow

**Fertilisers** can be used to stop plants from suffering with mineral deficiencies

### Key terms

Make sure you can write definitions for these key terms.

aerobic respiration    algae    anaerobic respiration    chlorophyll    mineral deficiency    fermentation    fertiliser    haemoglobin    lactic acid    magnesium  
 nitrates    oxygen debt    phosphates    photosynthesis    plasma    potassium    producer    red blood cells



## Respiration

- Respiration is the process in which energy is released from the molecules of food which you eat
- Respiration happens in the mitochondria of the cell
- **Aerobic respiration** involves oxygen, it is more efficient as all of the food is broken down to release energy  
 $\text{glucose} + \text{oxygen} \rightarrow \text{carbon dioxide} + \text{water}$
- The glucose is transported to the cells in the blood **plasma**
- The oxygen is transported to the cells in **red blood cells**, by binding with **haemoglobin**
- Carbon dioxide is a waste product and is transported from the cells to the lungs to be exhaled

- **Anaerobic respiration** is a type of respiration which does not use oxygen, it is used when the body cannot supply the cells with enough oxygen for aerobic respiration
- Anaerobic respiration releases less energy than aerobic respiration  
 $\text{glucose} \rightarrow \text{lactic acid}$
- The **lactic acid** produced through anaerobic respiration can cause muscle cramps
- Lactic acid will build up if there is not enough oxygen present in the blood supply to break it down. This is known as an **oxygen debt**



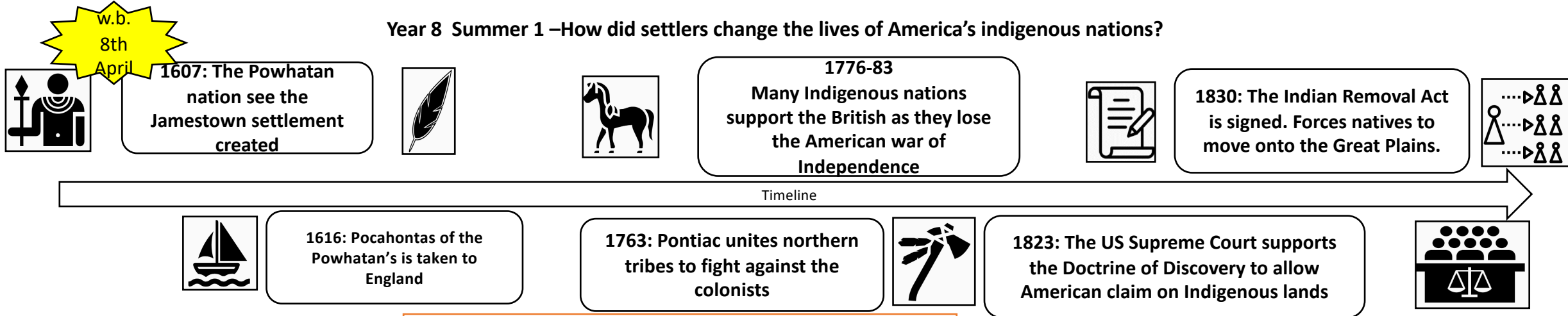
## Fermentation

- **Fermentation** is a type of anaerobic respiration which occurs in yeast
- Instead of producing lactic acid, yeast produces ethanol, which is a type of alcohol  
 $\text{glucose} \rightarrow \text{ethanol} + \text{carbon dioxide}$
- This process can be used to form alcohol to drink or to allow bread and cakes to rise

## Comparing aerobic and anaerobic respiration

	Reactant(s)	Products(s)	Rate of reaction	Energy released
<b>Aerobic respiration</b>	Glucose, oxygen	Carbon dioxide, water	Slow	More
<b>Anaerobic respiration</b>	Glucose	Lactic acid	Fast	Less

## Year 8 Summer 1 –How did settlers change the lives of America’s indigenous nations?



**Enquiry 1: How did the indigenous people live?**

**Key terms:**

**Indigenous**-People originating from a certain place or location.

**Nomadic**- people who don’t settle in one place

**What I need to know:**

- Indigenous people lived in different ways depending which area of America they lived.
- Tribes such as the Cherokee and Powhatan were settled. They farmed, fished and hunted for food.
- Tribe such as the Sioux were nomadic as they lived on the plains and followed the buffalo.
- The buffalo were extremely important to nomadic tribes as they used every part.
- Indigenous nations believed in spirits and that everything had a spirt. They believed these spirts helped guide them through life.

**Enquiry 2: How did life change for America’s Indigenous nations?**

**Key terms:**

**Powhatan** – The tribe that helped the settlers of Jamestown.

**The Sioux** – a powerful Native American tribe.

**Royal proclamation** – Law to stop the colonial expansion into America.

**What I need to know:**

- The Powhatan tribe were the first to come across the settlers at Jamestown. The British colonists may not have survived had they not learnt off the Powhatans.
- One of the most significant wars of the 1700s was Pontiac’s war against the British colonists. Pontiac’s war lasted 3 years.
- The British created the Royal Proclamation in 1763 to stop colonists expanding their land and to appease the natives.
- A peace treaty was signed in 1766, but many colonists were not happy and saw themselves as superior to the Indigenous tribes leading to colonists attacking the indigenous nations.
- In 1830, President Jackson signed the Indian Removal Act, which forced the natives to move west past the Mississippi river. Thousands died on this journey.

**Enquiry 3: What happened to the Indians after independence?**

**Key terms:**

**Treaty**- An agreement to end conflict.

**Indian Removal Act**- Law passed to move the Indigenous nations west.

**Little Big Horn** – the site of a key battle between the Indians and settlers

**Reservation** – land kept aside for Indian use – often of a poor quality

**What I need to know:**

- In the 1776 American war of Independence, many Indigenous nations decided to fight on the British side as the feared colonist expansion.
- When the Americans beat the British, the Indigenous tribes were left with a bleak future.
- American expansion increased straight away and more settlers moved across the land coming into conflict with more Indigenous nations.
- An Indian Frontier was created in 1834, to create a divide between Natives and the Americans.
- In 1861 little Crow and the Sioux tribe rebelled against the government who had broken a treaty to provide them with food.
- The battle of little big horn saw the Indians beat the American army.
- By the mid 1870’s nearly all plains Indians were confined to reservations. Their children were often taken from them and placed on reservations.

w/c 8<sup>th</sup> April

Beach nourishment	The addition of new material to a beach artificially. Cheap (£500,000 per 100 metres), easy to maintain, constant maintenance, sand from seabed destroys organisms
Beach reprofiling	Changing the profile or shape of the beach
Dune regeneration	Action taken to build up dunes and increase vegetation to strengthen the dunes and prevent excessive coastal retreat. Maintains natural environment, cheap, time consuming, areas off limit, limited area £200 – £2000 per 100 metres
Gabion	Steel wire mesh filled with boulders. £50,000 per 100 metres. Cheap, improves cliff management, unattractive, last 5 – 10 years
Groyne	Wooden barrier built out into the sea to stop longshore drift. £150,000 each, cheap, widen beach, unattractive, causes problems down the coast
Hard engineering	Use of concrete and large artificial structures to defend the coast
Managed retreat	Allowing cliff erosion to occur as nature takes its course. Cheap, natural process, loss of land, relocation of people
Rock armour	Large boulders dumped on the beach as part of the coastal defences. £20,000 per 100 metres, quick to build, expensive to transport rock, rocks might not blend in
Sea wall	A concrete wall to reflect the energy of the sea and prevent erosion. £5000 - £10,000 a metre, effective barrier, promenade on top, expensive, high maintenance
Soft engineering	Managing erosion by working with natural processes

## Homework 2: w/c 22<sup>nd</sup> April

- **Extreme Environment:** a habitat that is considered very hard to survive in due to its considerably extreme conditions
- **Antarctic Circle:** most southerly of the five major lines of latitude that mark maps of Earth
- **Climate:** the weather conditions prevailing in an area in general or over a long period.
- **Adaptation:** the process of change by which an organism or species becomes better suited to its environment
- **Glaciers:** a slowly moving mass or river of ice formed by the accumulation and compaction of snow on mountains
- **Exploration:** the action of exploring an unfamiliar area
- **Global Warming:** a gradual increase in the overall temperature of the earth's atmosphere
- **Oil Extraction:** drilling into the Earth to collect oil.
- **Importance:** the state or fact of being of great significance or value
- **Antarctic Treaty:** an agreement to preserve and protect the continent devoted to peace and science

## Homework 3: w/c 6<sup>th</sup> May

### Adaptations of a penguin



#### Physical Adaptations:

- Short, tightly packed feathers to make the penguin streamlined in water
- Heavy solid bones to help them stay underwater when swimming
- Paddle-like flippers to help them swim through water quickly
- Blubber to keep them warm in cold conditions
- Black and white skin allows them to camouflage in the dark ocean and absorb heat to keep warm.

#### Behavioural Adaptations:

- Form large huddles to stay warm
- Breed in the winter so offspring can reach independence and catch their own food in the summer

## Homework 4: w/c 20<sup>th</sup> May

### Antarctic Treaty

The Antarctic Treaty came into force on 23<sup>rd</sup> June 1961. The objectives are:

- to demilitarise Antarctica:
  - to establish it as a zone free of nuclear tests and the disposal of radioactive waste
  - to ensure that it is used for peaceful purposes only
- to promote international scientific cooperation in Antarctica
- to set aside disputes over territorial sovereignty.

The treaty remains in force indefinitely. The success of the treaty has been down to the growth in membership. Forty six countries have agreed to the treaty. Twenty eight nations, including the UK, have Consultative status. The Treaty parties meet each year at the Antarctic Treaty Consultative Meeting. They have adopted over 300 recommendations and negotiated separate international agreements, of which three are still in use

The three international agreements are:

- Convention for the Conservation of Antarctic Seals (1972)
- Convention on the Conservation of Antarctic Marine Living Resources (1980)
- Protocol on Environmental Protection to the Antarctic Treaty (1991)



# Light Hall Knowledge Mat

## Y8 Scheme of learning

# MFL - French HT5

## Mes loisirs et activités sportives – Dynamo 2

### On va au ciné?

Il y a une séance à 14h.  
Bonne idée! Je veux bien.  
Tu rigoles!  
Je n'ai pas envie.  
Désolé(e). Je ne peux pas ce soir.  
Rendez-vous où et à quelle heure?  
Chez moi. / Chez toi.  
À 19h.  
À plus.  
À demain.  
À samedi.  
Je peux vous aider?  
Je voudrais trois billets pour ...  
Deux adultes et un enfant.  
Ça fait combien?  
C'est quelle salle?

Are we going to the cinema?  
There's a screening at 2 pm.  
Good idea! I'd like to.  
You're kidding!  
I don't want to.  
Sorry. I can't this evening.  
Where and when shall we meet?  
At my house. / At your house.  
At 7 pm.  
See you later.  
See you tomorrow.  
See you on Saturday  
Can I help you?  
I'd like three tickets for ...  
Two adults and one child.  
How much is it?  
Which screen?

On peut jouer au / à la / à l' / aux ...  
On peut faire du / de la / de l' / des ...

le basket / le billard  
le cyclisme / le vélo  
le foot(ball) / le footing  
le handball / le hockey  
le judo / le patin à glace  
le rugby / le ski / le tennis  
le tennis de table  
le ping-pong  
le volleyball  
la danse / la gymnastique  
la musculation  
la pétanque / les boules  
la voile / la planche à voile  
l'athlétisme / l'équitation  
les arts martiaux

You can play ...  
You can do ...  
basketball / snooker  
cycling  
football / jogging  
handball / hockey  
judo / ice skating  
rugby / skiing / tennis  
table tennis  
tennis  
volleyball  
dance / gymnastics  
weight training  
boules  
sailing / windsurfing  
athletics / horse riding  
martial arts

### Pour être en bonne santé

Il faut ...  
travailler dur.  
manger équilibré.  
boire beaucoup d'eau.  
avoir de l'assurance.  
être motivé(e) et déterminé(e).  
aller à la salle de fitness.  
dormir huit heures par nuit.  
faire d'autres activités aussi.  
Il ne faut pas ...  
fumer de cigarettes.  
consommer de drogue.

To be in good health  
It is necessary ...  
to work hard.  
to eat healthily.  
to drink lots of water.  
to be confident.  
to be motivated and determined.  
to go to the gym.  
to sleep for 8 hours a night.  
to also do other activities.  
You must not ...  
smoke cigarettes.  
take drugs.

### Qu'est-ce que tu vas voir?

What are you going to see?  
Je vais regarder ...  
I'm going to see ...  
une comédie  
a comedy  
un film d'animation  
an animated film  
un film romantique  
a romantic film  
un film d'action  
an action film  
un film d'horreur  
a horror film  
un film de science-fiction  
a sci-fi film  
un film de super-héros  
a superhero film

15/04



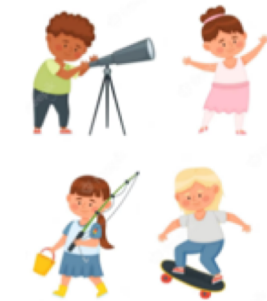
### Quels sont tes loisirs?

Je bavarde / Je parle avec mes copains.  
Je fais du cyclisme.  
Je fais du vélo.  
Je lis.  
Je fais de la lecture.  
Je nage.  
Je fais de la natation.  
Je ne lis pas beaucoup.  
Je ne joue jamais à des jeux vidéo.  
Je ne fais rien.

### What are your hobbies?

I chat/talk to my friends.  
I go cycling.  
I go cycling.  
I read.  
I do some reading.  
I swim.  
I go swimming.  
I don't read much.  
I never play videogames.  
I don't do anything.

29/04



### Tu as fait des achats?

Je suis allé(e) au centre commercial.  
J'ai fait les magasins.  
J'ai fait des achats.  
J'ai lu une annonce pour les soldes.  
J'ai fait une balade.  
J'ai fait une promenade.  
J'ai attendu une demi-heure.  
J'ai dépensé trop d'argent.  
J'ai découvert un café.  
J'ai essayé plein de vêtements.

Have you made purchases?  
I went to the shopping centre.  
I went shopping.  
I went shopping.  
I read an advert for the sales.  
I went for a walk.  
I went for a walk.  
I waited half an hour.  
I spent too much money.  
I discovered a café.  
I tried on lots of clothes.



13/05

### Je trouve le tennis/la gymnastique ...

amusant(e).  
compliqué(e).  
divertissant(e).  
fatigant(e).  
intéressant(e).  
passionnant(e).  
relaxant(e).  
violent(e).  
ennuyeux / ennuyeuse.  
difficile.  
facile.  
À mon avis / Pour moi ...  
le footing est plus facile que la natation.  
la voile est moins amusante que le ski.

I find tennis / gymnastics ...  
fun.  
complicated.  
entertaining.  
tiring.  
interesting.  
exciting.  
relaxing.  
violent.  
boring.  
difficult.  
easy.  
In my opinion / For me ...  
jogging is easier than swimming.  
sailing is less fun than skiing

### Les parties du corps

le bras / la jambe  
le cou  
le dos  
le genou  
le nez  
le pied / la main  
le ventre / l'estomac  
la bouche  
la gorge  
la tête

Body parts  
arm / leg  
neck  
back  
knee  
nose  
foot / hand  
stomach  
mouth  
throat  
head

l'épaule  
l'œil / les yeux  
l'oreille  
J'ai mal au bras.  
J'ai mal à la gorge.  
J'ai mal à l'œil.  
J'ai mal aux yeux.  
J'ai de la fièvre.  
Je me suis blessé au pied / à la tête / à l'épaule.  
Je me suis blessé(e) aux jambes

shoulder  
eye / eyes  
ear  
I have a sore arm.  
I have a sore throat.  
I have a sore eye.  
I have sore eyes.  
I have a temperature.  
I've hurt my foot / head / shoulder.  
I've hurt my legs.

### Chez le docteur

J'ai la grippe.  
J'ai un rhume.  
Il faut ...  
rester au lit.  
utiliser une crème.  
mettre un pansement.  
pratiquer des exercices modérés.

At the doctor's  
I have the 'flu.  
I have a cold.  
You must ...  
stay in bed.  
use a cream.  
put on a bandage.  
do some gentle exercises.

prendre des antidouleurs.  
Vous allez bien?  
Ça ne va pas.  
Depuis quand?  
depuis trois jours  
depuis hier

take painkillers.  
Are you well?  
I'm not well.  
Since when?  
for three days  
since yesterday



8<sup>th</sup> April

¿Qué te gusta comer y beber? What do you like to eat and drink?	
¿Qué no te gusta comer/ beber?	What don't you like to eat/drink?
Me gusta(n) mucho...	I really like...
Me encanta(n)...	I love...
No me gusta(n) nada...	I don't like... at all.
Odio...	I hate...
Prefiero...	I prefer...
el agua	water
el arroz	rice
los caramelos	sweets
la carne	meat
la fruta	fruit
las hamburguesas	hamburgers
los huevos	eggs
la leche	milk
el marisco	seafood/shellfish
el pescado	fish
el queso	cheese
las verduras	vegetables

20<sup>th</sup> May

Una fiesta mexicana	A Mexican party
¿Qué vas a traer/comprar?	What are you going to bring/buy?
Voy a traer...	I'm going to bring...
quesadillas	quesadillas (toasted cheese tortillas)
limonada	lemonade
Voy a comprar...	I am going to buy...
una lechuga	a lettuce

22<sup>nd</sup> April

¿Qué desayunas? What do you have for breakfast?	
Desayuno...	For breakfast I have...
cereales	cereal
churros	churros (sweet fritters)
tostadas	toast
yogur	yogurt
café	coffee
Cola Cao™	Cola Cao (chocolate drink)
té	tea
zumos de naranja	orange juice
No desayuno nada.	I don't have anything for breakfast.
¿Qué comes?	What do you have for lunch?
Como...	I eat ... /For lunch I have...
un bocadillo	a sandwich
¿Qué cenas?	What do you have for dinner?
Ceno...	For dinner I have...
patatas fritas	chips
pollo con ensalada	chicken with salad
¿A qué hora desayunas/comes/cenas?	At what time do you have breakfast/lunch/dinner?
Desayuno a las siete.	I have breakfast at 7:00.
Como a las dos.	I have lunch at 2:00.
Ceno a las nueve.	I have dinner at 9:00.

un pimiento verde/rojo	a green/red pepper
un aguacate	an avocado
un kilo de tomates	a kilo of tomatoes
medio kilo de queso	half a kilo of cheese
200 gramos de pollo	200 grammes of chicken
un paquete de tortillas	a packet of tortilla wraps
una botella de limonada	a bottle of lemonade

6<sup>th</sup> May

En el restaurante At the restaurant	
buenos días	good day, good morning
¿Qué va a tomar (usted)?	What are you (singular) going to have?
¿Qué van a tomar (ustedes)?	What are you (plural) going to have?
¿Y de segundo?	And for main course?
¿Para beber?	To drink?
¿Algo más?	Anything else?
Voy a tomar...	I'll have...
de primer plato	as a starter
de segundo plato	for main course
de postre	for dessert
Tengo hambre.	I am hungry.
Tengo sed.	I am thirsty.
nada más	nothing else
La cuenta, por favor.	The bill, please.
la ensalada mixta	mixed salad
los huevos fritos	fried eggs
la sopa	soup
el pan	bread
las chuletas de cerdo	pork chops
el filete	steak
el pollo con pimientos	chicken with peppers
la tortilla española	Spanish omelette
el helado de chocolate/fresa/vainilla	chocolate/strawberry/vanilla ice cream
la tarta de queso	cheesecake
la cola	coke

¿Y tú? ¿Qué opinas? And you? What do you think?			
Pues...	Well...	Eh...	Er...
Depende...	It depends...	A ver...	Let's see...
No sé...	I don't know...	Bueno/Vale...	OK...
Lo siento, pero no entiendo I'm sorry, but I don't understand			
¿Qué significa '...'?	What does '...' mean?	¿Puedes hablar más despacio, por favor?	Can you speak more slowly, please?
¿Puedes repetir?	Can you repeat that?		
Palabras muy frecuentes High-frequency words			
a las...	at... o'clock	lugar	place
bastante	quite	para	for
día	day	por ejemplo	for example
favorito/a	favourite	pasado/a	last
hora	time	que viene	next

## Keywords

1. Moral suffering
2. Natural suffering
3. Buddha
4. Four Noble Truths
5. Eightfold path
6. Enlightenment
7. Adam and Eve
8. Free will
9. Original
10. Holocaust
11. Reincarnation
12. Karma
13. Faith
14. Evil



15/04/2024

### Why do people suffer?:

- 1) Non-religious reasons
  - Result of bad choices made.
  - Part of life.
  - To teach people right from wrong
- 2) Religious responses to suffering.
  - Test of faith
  - Free will (Humans at fault)
  - Caused by wanting (Buddhist)
  - Linked to how we have lead our previous lives. (Hinduism)

13/05/2024

## Types of suffering-

**Moral suffering:**  
Suffering which is caused by humans: e.g murder/violence

**Natural suffering:**  
Suffering which is caused by nature : e.g volcanoes/earthquakes



29/04/2024

### The problem of evil and suffering -

How can an all loving God allow suffering in the world if he is:

- Omniscient:** All knowing
- Omnipotent:** All Powerful
- Benevolent:** All loving
- Religious response:** God has given everyone Free Will everyone has a choice to choose how to behave.



## Suffering-Year 8



## Religious views on suffering

### Religious views on suffering

**Buddhism**  
Siddhartha Gautama | Prince who didn't leave the palace until he was 29 | Witnessed four sights of suffering | left the palace in search of answers on how to end suffering | Enlightened under the Bodhi tree- came up with the four noble truths.



Buddhists believe suffering is caused by wanting things- when we don't get what we want we suffer.

**Four Noble Truths-** Buddha's teachings on how to overcome suffering:

1. All life involves suffering
2. The cause of suffering is wanting
3. To stop suffering we must stop wanting.
4. To live in the middle way and follow the eightfold path.

**Eightfold path -** To live in the middle way and follow the eight ways to live a life that limits suffering.

### Religious views on suffering

**Christianity**  
**Story of Adam and Eve**  
**Adam and Eve**



First humans created by God | Told by God not to eat from the T of Knowledge of Good and Evil | tempted by the serpent | disobeyed God and were banished from the garden of Eden | punished with death/ childbirth and working for a living.

### Christian responses to suffering

- Punishment of disobedience to God's orders.
- Misuse of Free Will
- Test of faith to see if you will continue to believe in God through suffering.
- Jesus suffered and therefore everyone will experience suffering.
- God has a plan for all suffering.
- It is a way to allow Christians to help those who are suffering.



**RE SKILLS: Concepts | Attitude | Knowledge | Exploration of experience | Skills.**



Religious views on suffering  
Hinduism



1. The law of karma says that every action has consequences.
2. Pain, suffering and any kind of misfortune is not caused by God but human actions.
3. Reward and punishment do not always come in this life. They might come in a future rebirth - eg, a good person might be reborn into a rich family as a reward for good deeds in a previous life.
4. Suffering in this life is because of behaviour in a previous life.
5. The soul (atman) is born into one physical body, and when that body dies it is reborn into another body.
6. This endless cycle of life, death and rebirth is called samsara.
7. It is possible to be released from samsara and to reach moksha, which is union with Brahman (God).

Islam and suffering

\*Suffering will be rewarded by those who were patient in their trials.



\*Suffering can be a punishment for the sins that have been committed.



\*Suffering is a test of faith in God.

\*Story of Moses and Al-Khidr - Moses appears to perform horrible actions but they are actions that lead to good coming afterwards. | Allah has a plan for suffering and is Just in His actions.



RE Skills	Success Criteria
1 mark (Knowledge)	Multiple choice – write down the correct letter and the word next to it.
2 marks (Knowledge – recall)	List 2 answers.
4 marks (Attitude)	Include 2 reasons, BOTH with examples or further explanation.
6 marks (Exploration of experience)	Include 3 different religious responses and an example or further explanation to back it up.
9 marks (Skills)	Include 2 agree and 2 disagree reasons, with an example or further explanation for each.  Add a conclusion



Knowledge



Attitudes



Exploration of experience



Skills



binary	A number system that contains two symbols, 0 and 1. Also known as base 2.
data	Units of information. In computing there can be different data types, including integers, characters and Boolean. Data is often acted on by instructions.
denary	The number system most commonly used by people. It contains 10 unique digits 0 to 9. Also known as decimal or base 10.
place value	The value of the place, or position, of a digit in a number.

W/c 15<sup>th</sup> April 24

W/c 29<sup>th</sup> April 24

128	64	32	16	8	4	2	1
-----	----	----	----	---	---	---	---

Working out the value of 1010 1000:

	128	64	32	16	8	4	2	1
1	0	1	0	1	0	0	0	0
1×128 +	0×64 +	1×32 +	0×16 +	1×8 +	0×4 +	0×2 +	0×1	
128 +	0 +	32 +	0 +	8 +	0 +	0 +	0	

So 1010 1000 in binary is equal to 168 in denary.

# B I N A R Y

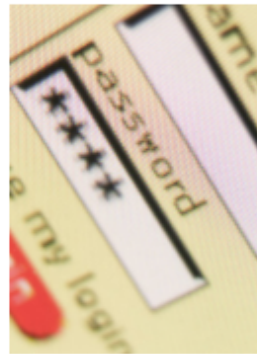
# A more complex IF / ELIF statement might look like this...

```

security = 0
username = ""
password = ""
while not username:
    username = input("Username:")
while not password:
    password = input("Password:")
if username == "Mr Plaice" and password == "cheese":
    print("Hello, Admin.")
elif username == "Mr Wood" and password == "chutney":
    print("Welcome, Mr Wood.")
elif username == "guest" and password == "visitor":
    print("Welcome, guest.")
else:
    print("Access Denied")

```

W/c 13<sup>th</sup> May 24



**W/C 15<sup>th</sup> April - The 8 Tips for Healthy Eating + Key Food Hygiene Terminology**

- |  |   |
|--|---|
|  | 1. Base your meals on starchy foods                           |
|  | 2. Eat lots of fruit and veg                                  |
|  | 3. Eat more fish – including a portion of oily fish each week |
|  | 4. Cut down on saturated fat and sugar                        |
|  | 5. Try to eat less salt – no more than 6g a day for adults    |
|  | 6. Get active and try to be a healthy weight                  |
|  | 7. Drink plenty of water                                      |
|  | 8. Don't skip breakfast                                       |

**Key terms**

**Allergens:** Substances that can cause an adverse reaction to food. Cross-contamination must be prevented to reduce the risk of harm.

**Bacteria:** Small living organisms that can reproduce to form colonies. Some bacteria can be harmful (pathogenic) and others are necessary for food production, e.g. to make cheese and yogurt.

**Cross-contamination:** The transfer of bacteria from one source to another. Usually raw food to ready to eat food but can also be the transfer of bacteria from unclean hands, equipment, cloths or pests. Can also relate to allergens.

**Food poisoning:** Illness resulting from eating food which contains food poisoning micro-organisms or toxins produced by micro-organisms.

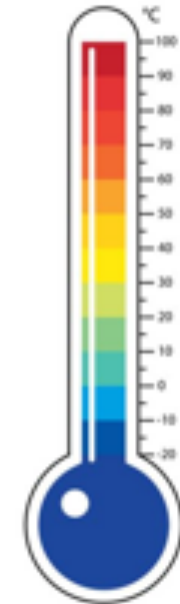
**High risk ingredients:** Food which is ready to eat, e.g. cooked meat and fish, cooked eggs, dairy products, sandwiches and ready meals.

**W/C 29<sup>th</sup> May – Key Temperatures**

**Temperatures to remember**

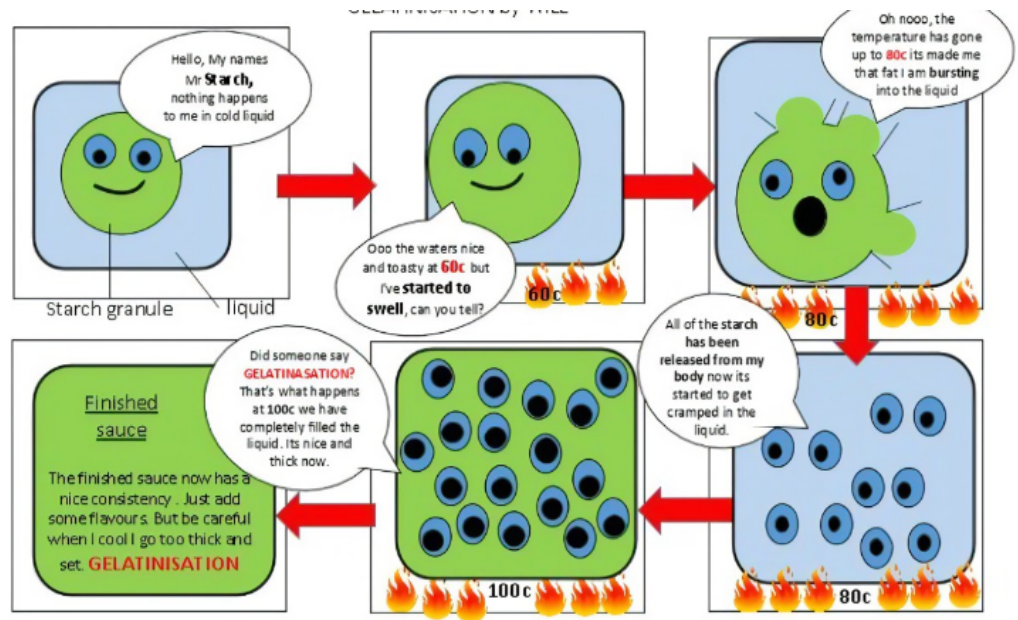
To reduce the risk of food poisoning, good temperature control is vital:

- 5-63°C – the danger zone where bacteria grow most readily.
- 37°C – body temperature, optimum temperature for bacterial growth.
- 8°C – maximum legal temperature for cold food, i.e. your fridge.
- 5°C (or below) – the ideal temperature your fridge should be.
- 75°C – if cooking food, the core temperature, middle or thickest part should reach at least this temperature.
- 75°C – if reheating food, it should reach at least this temperature. In Scotland food should reach at least 82°C.



W/C 13<sup>th</sup> –Food Science Gelatinisation

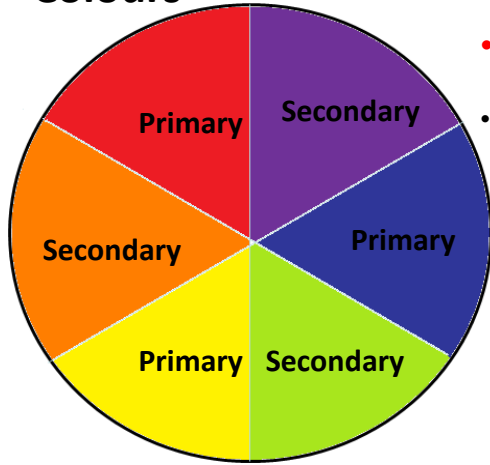
W/C 21<sup>st</sup> November – Food Science Gelatinisation - the swelling of starch granules when they are cooked within a liquid until they burst and release starch molecules to thicken a sauce e.g. white sauce for a Lasagne, Pasta Bake or Macaroni Cheese.



<https://www.youtube.com/watch?v=zjyhMzjDaVI>  
Watch the first 5mins.

Colours

w/b 15<sup>th</sup> April



**The colour wheel** is a way of showing primary and secondary colours.

- **Primary colours**- Red, Blue and yellow.
- Secondary colours- Purple, Green and orange.

**Complimentary colours** are two colours found directly opposite on the colour wheel (for example Red and Green), they are used by graphic designers to make logos and images stand out.

**Harmonious colours** are colours found next to one another on the colour wheel, designers use these to make design ideas which are balanced and easy on the eye. For example Red and orange.

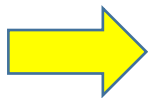
Key terms

w/b 29<sup>th</sup> April

Graphic techniques

Graphic techniques are the methods a designer uses in drawings, such as crating, shading, colouring, and photography

Logo



A logo is a small drawing or emblem representing a club, society or company.

Pictorial projection

A pictorial projection is an accurate three-dimensional drawing of an object.

Render

To render a drawing is to add colouring or shading to it and give it texture to look like the material

Tonal shading

The **lightness or darkness of an object**. It is done by applying various strengths of shading to demonstrate where an object is affected by the light and shadows.

Wb. 13<sup>th</sup> May

**Product Maintenance**

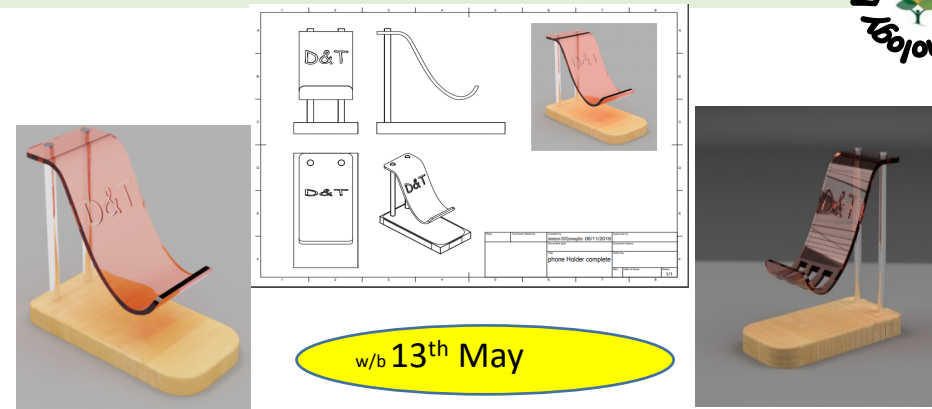
Choose the correct words from the options given to complete the following sentences.

maintenance expectancy warranty  
style batteries Deliberately raw materials  
environmentally

Many products have a life **expectancy** based on some degree of maintenance e.g. simple products like personal electrical devices need to have their **batteries** changed regularly. Complex products, e.g. cars have very detailed **warranty** Schedules.

**Planned Obselescence** is when a product has been **deliberately** designed to be **thrown away** after a certain period of time, e.g. **Pens, razors, glue sticks**. These products are often convenient to use but can use up the same amount of **raw materials** and energy as more long lasting products and aren't **environmentally** friendly .

Hardwood	Softwood	Manufactured Wood (man-made)
<p><b>Deciduous trees</b> that shed the leaves in winter. Trees grow slowly and can have twisted trunks. They are often not replaced once cut down. More expensive</p>	<p><b>Coniferous trees</b> that keep the foliage (leaves/needles) all year round. Grow quickly, replaced once cut down, relatively low cost.</p>	<p>w/b 15<sup>th</sup> April</p> <p><b>Manufactured wood</b> from the waste of cutting down timber – mixed with other materials and formed in boards</p>
<p>w/b 29<sup>th</sup> April</p> <p><b>Types of wood / Timber in each category</b></p>		
<p>Oak, Beech, teak, Ash</p>	<p>Scots pine, Parana Pine, Spruce, Cedar</p>	<p>Plywood, MDF, Chipboard, hardboard, Blockboard</p>
<p><b>Stock Form – How it is sold and purchased</b></p>		
<p>Planks, boards, strips, squares, dowel, half round and quarter round</p>	<p>Planks, boards, strips, squares, dowel, half round and quarter round</p>	<p>Large flat sheets – don't warp or twist easily</p>



w/b 13<sup>th</sup> May

Tools and Equipment	
<p><b>Laser Cutter:</b> C.N.C. (Computer Numerical Control ) Machine used to cut and engrave on Acrylic, Plywood, Leather</p>	
<p><b>Tenon Saw</b> – Used to cut straight cuts in timber. Limited thickness that can be cut due to the brass back section at the top of the saw.</p>	
<p><b>Junior hacksaw :</b> Used to cut small sections and thicknesses in metal</p>	
<p><b>Scroll saw</b> - Used to cut intricate detail and curved shapes in thin sections of wood</p>	
<p><b>Battery drill</b> – A portable drill with a battery attachment. Used to drill holes and can be used to inserting and removing screws.</p>	

# VARIATIONS

Exploring ways to develop musical ideas

Sections A & B w.b. 15<sup>th</sup> April

## A. Theme and Variations Key Words

**MELODY** – A tune or succession of notes, varying in pitch, that have an organised and recognizable shape. Often called the main **TUNE** or **THEME** of a piece of music or song and easily remembered.

**VARIATION** – Where a **THEME** is altered or changed musically, while retaining some of the primary elements, notes and structure of the original. **VARIATION FORM:**



A (Theme) A1 (Variation) A2 (Variation) A3 (Variation) A4 (Variation)

w.c. 29<sup>th</sup> April

## B. Augmentation and Diminution – Note Values and Duration

**AUGMENTATION** – the process of **DOUBLING** the note values (**DURATION**) of a theme as a means of variation.



**DIMINUTION** – the process of **HALVING** the note values (**DURATION**) of a theme as a means of variation.

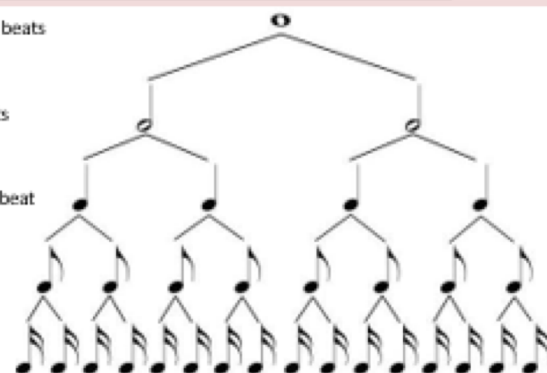
SEMIBREVE = 4 beats

MINIM = 2 beats

CROTCHET = 1 beat

QUAVER = 1/2 beat

SEMIQUAVER = 1/4 beat



## C. Variation Techniques

**PITCH** – Change the highness or lowness of the theme – play the same notes, but at different pitches e.g. in different **OCTAVES**.

**TEMPO** – Change the speed of the theme – play it faster or slower.

**DYNAMICS** – Change the volume of the theme – play it louder or softer.



**TEXTURE** – Change the amount of sound we hear – play as a **SOLO**, add an **ACCOMPANIMENT** or **CHORDS**, add a **COUNTER-MELODY** (an ‘extra’ melody that is played or sung at the same time as the main melody, often higher in pitch and sometimes called a **DESCANT**).



**TIMBRE AND SONORITY** – Change the **SOUND** of the theme – play it on a different instrument.



**ARTICULATION** – Change the way the theme is played – smoothly (**LEGATO** – shown by a **SLUR**) or short, detached and spiky (**STACCATO** – shown by a dot).

**PEDAL** – A long (often very long!) note in the bass line of the music over which other parts, including the theme or a variation of the theme can be played. Also called a **PEDAL NOTE** or **PEDAL POINT** and often the **TONIC** note (but can be the **DOMINANT** or other notes).

**DRONE** – A long or series of repeated (often long) notes using the **TONIC** and **DOMINANT** notes together (a **FIFTH**).

**MELODIC DECORATION** – Adding extra notes or embellishments to the theme such as trills, turns, mordents (**ORNAMENTS**) or **PASSING NOTES** (extra notes between the main melody notes).

**OSTINATO** – Adding a repeated musical pattern (rhythmic or melodic) to the main theme as a form of variation.

**CANON/ROUND** – A song or piece of music in which different performers sing or perform the same **THEME** starting one after the other.



**GROUND BASS** – A repeated musical pattern in the bass part upon which chords, and melodies can be performed and varied “over the top” of.



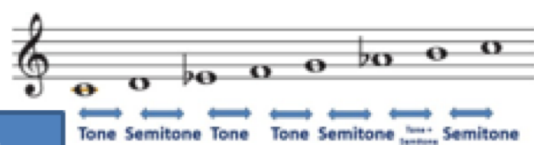
## D. Tonality – Major and Minor



**TONALITY** refers to whether a **THEME** or **MELODY** is in a **MAJOR** or **MINOR** key. Changing the tonality from major to minor or minor to major is one way of providing a variation on the theme of melody. Major and minor scales follow a certain pattern of tones and semitones:



MAJOR SCALE



MINOR SCALE

Sections D & E – w.b. 13<sup>th</sup> May

## E. Inversion and Retrograde

**INVERSION** – Changing the **INTERVALS** between the notes of a theme so that they are upside down from the original.

**RETROGRADE** – A variation technique created by arranging the main theme backwards.

**RETROGRADE INVERSION** – Arranging the “inverted” variation of the theme backwards!

