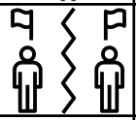
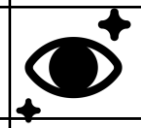
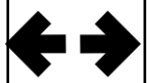
LIGHT HALL KNOWLEDGE MATS
Year 7 Spring 1

The best from everyone, all of the time.

KEY WORD	DEFINITION	IMAGE	IN A SENTENCE	LOOK, COVER, WRITE, CHECK	LOOK, COVER, WRITE, CHECK
Tempest	A violent storm.		The **tempest** at sea made the sailors worry.		
Patriarchal	A male-dominated society.		Women feel controlled in a **patriarchal** society.		
Antagonist	A character who is the enemy in the story.		An **antagonist** will always be evil.		
Grotesque	Repulsive, ugly and distorted.		The face in the painting was **grotesque**.		
Envious	A jealous desire.		I felt **envious** of her new coat.		
Ethereal	Extremely delicate, light and beautiful.		My Christmas fairy is **ethereal**.		
Betrayal	Breaking trust and loyalty.		All **betrayal** is evil.		
Manipulated	Controlled and influence a person cleverly.		I was **manipulated** into buying a biscuit.		
Colonised	Where another country takes political control over a place.		The UK is made up of **colonised** places.		
Bitter	Showing anger and hurt over a bad experience and treatment		She felt **bitter** towards her sister.		
Illusions	A false idea, image or belief which is thought to be real.		My phone filter gives an **illusion** I look like a cat.		
Antithesis	A person or thing that is the direct opposite of another.		Salty and sweet are the **antithesis** of each other.		

The Tempest- Spring 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:

Main clause [05/02/23]: a complete sentence with a subject and a verb. Subordinate clause: adds extra information to the main clause. Independent clause: a clause that is a complete thought and must have a subject and a verb that agree.

Adverbs [8/01/23]: these are words that modify the verb being used. Adverbs can be used to show manner (how something happens), degree (to what extent), place (where), and time (when).

Pronouns [22/01/23]:
Personal pronouns are short words used to replace yourself or a person's name (the noun being used), such as I, she, he, you, we, us and them.

Year 7 Knowledge Mats (#9) — Understanding Fractions — w.b. 08/01/2024

Key Words

- **Numerator –** the top number of a fraction
- **Denominator –** bottom number of a fraction

Challenge – Can you find out what the line in a fraction if called?

What is a Fraction?

The **number on top** shows how many **parts there are**

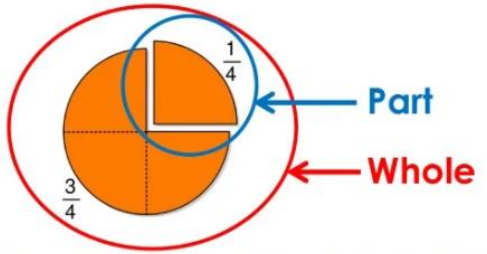
$\frac{2}{3}$ ← Numerator

$\frac{2}{3}$ ← Denominator

The **number on the bottom** shows how many **parts something has been divided into**

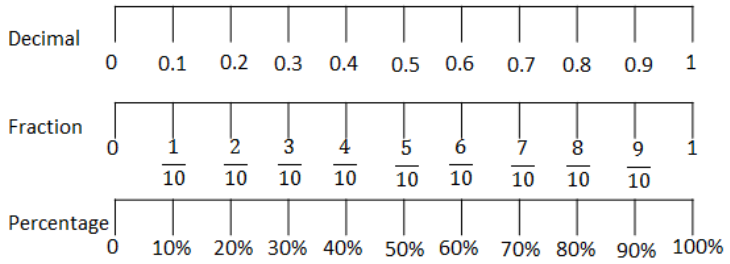
…As Part of the whole

Fractions are also parts of the whole, where the whole is the **denominator** and the part is the **numerator**.



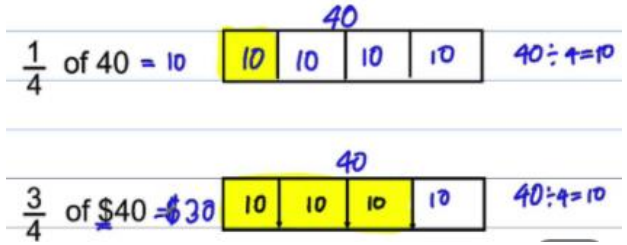
…As Numbers

Fractions are numbers which sit on a number line. Fractions, decimals and percentages are all different ways of expressing the same idea. You can think of them as showing how many sections the whole has been split up into and how many sections we are interested in.
e.g. 0.1 is equivalent to 1/10 and 10%.



…As Operators

Fractions can also be used to operate on other numbers. When we talk about 'half of 8' we are thinking of fractions as operators.



Simplifying Fractions

You can simplify fractions if the numerator and denominator have a shared factor. To fully simplify you must divide both by the highest common factor, or divide until the numerator and denominator have no shared factors.

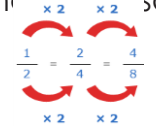
$$\frac{6}{12} \overset{\div 6}{=} \frac{1}{2}$$

Dr Frost Skills

K29a – Write a proportion as a fraction in its simplest form
K29b – Find Equivalent Fractions
K29c – Write a fraction in its simplest form
K29d – Compare two fractions.

Equivalent Fractions

Equivalent Fractions have the same value, even though they may look different.
These fractions have the same value:

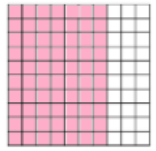


Year 7 Knowledge Mats (#10) Equivalence w.b. 24/01/2024

Key Words

- **Percentage –** a proportion of 100.
- **Recurring** – a decimal that repeats in a given pattern.

Convert FDP

$\frac{70}{100}$ → This also means 70 ÷ 100 → 70 out of 100 squares → 70 "hundredths" = 7 "tenths" 0.7 →  → 70 hundredths = 70%

Using a calculator

$\frac{\blacksquare}{\square}$ → S⇌D Convert to a decimal

This will give you the answer in the simplest form

× 100 converts to a percentage

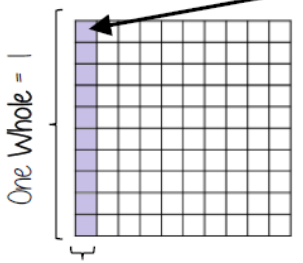
Be careful of recurring decimals

e.g $\frac{1}{3}$ = 0.3333333

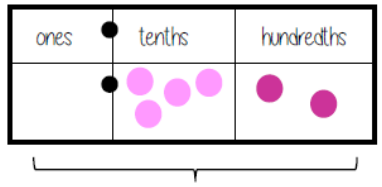
$= 0.\dot{3}$

The dot above the 3

Tenths and hundredths



One hundredth (one whole split into 100 equal parts) = $\frac{1}{100}$ = 0.01



0 ones, 5 tenth and 2 hundredths

0 + 0.1 + 0.1 + 0.1 + 0.1 + 0.1 + 0.01 + 0.01

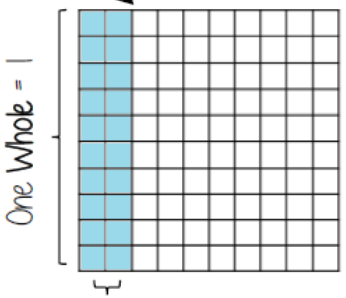
= 0 + 0.5 + 0.02

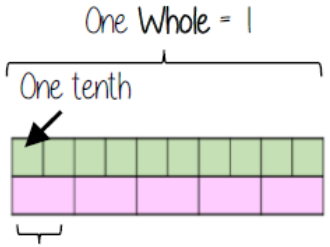
= 0.52

One tenth (one whole split into 10 equal parts) = $\frac{1}{10}$ = 0.1

Fifths

Twenty hundredths



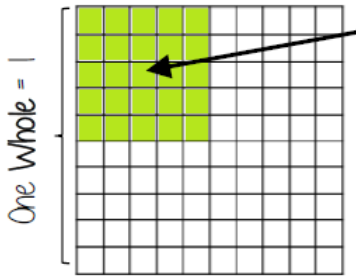


Two tenths = one fifth

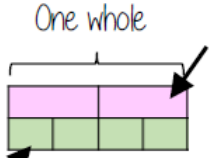
One fifth (one whole split into 5 equal parts) = $\frac{1}{5}$ = 0.2

Quarters

One quarter (one whole split into 4 equal parts) = $\frac{1}{4}$ = 0.25

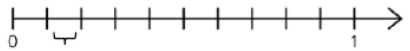


Twenty five hundredths



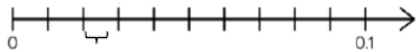
One quarter = 0.25

On a number line



One whole – split into 10 equal parts

One tenth = $\frac{1}{10}$ = 0.1



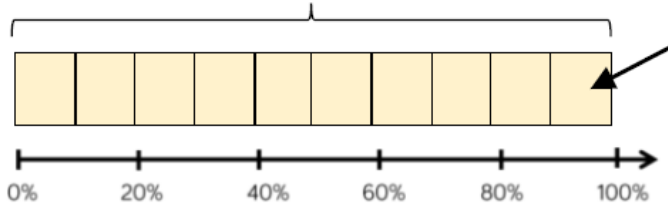
One tenth – split into 10 equal parts

One hundredth = $\frac{1}{100}$ = 0.01

Year 7 Knowledge Mats (#11) — Percentages — w.b. 05/02/2024

Find the percentage of an amount (Mental methods)

The whole represents 100%



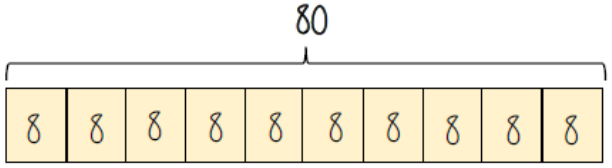
10% = $\frac{1}{10}$ of the whole

50% = $\frac{5}{10}$ = $\frac{1}{2}$ of the whole

20% = $\frac{2}{10}$ = $\frac{1}{5}$ of the whole

5% = $\frac{1}{20}$ of the whole

Find 65% of 80



For bigger percentages it is sometimes easier to take away from 100%

Method 1:
65% = 10% x 6 + 5%
= (8 x 6) + 4
= 52

Method 2:
65% = 50% + 10% + 5%
= 40 + 8 + 4
= 52

Find the percentage of an amount (Calculator methods)

Using a multiplier

Find 65% of 80

Fraction, decimal, percentage conversion

65% = $\frac{65}{100}$ = 0.65 ← The multiplier

0.65 x 80 = 52

Using the percent button

Find 65% of 80

This brings up the % button on screen
You will see 65%

Type 65

Press SHIFT ((%)

Press × 80 and then press =

You can also use the calculator to support non calculator methods and find 1% or 10% then add percentages together

"of" can represent 'x' in calculator methods

Key Words

- **Multiplier** – a decimal used to find a percentage of an amount.
- **Of** – in maths 'of' can represent 'x' in calculator methods.

Dr Frost Skills

K108b/c – Find percentages of an amount without a calculator

P1 Chapter 1: Forces
Knowledge organiser

W/c 8th January 2024

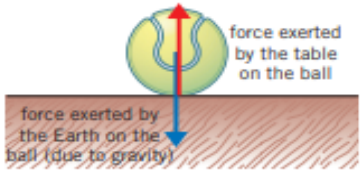
Activate
Question • Progress • Succe

What is a force?

- A **force** can be a **push** or a **pull**
- A force is measured in **Newtons** (N)
- We measure forces with a **newton meter**
- Forces explain why objects will move, change direction and change speed

- Forces always act in pairs, we call these **interaction pairs**

e.g. the tennis ball exerts a downward force of **weight** onto the table, the table exerts an equal and opposite reaction force onto the ball



Types of forces

- **Contact forces** act when two objects are physically touching
- **Air resistance** and **friction** are examples of contact forces

- **Non-contact forces** act when two objects are physically separated (not touching)
- Examples of non-contact forces include **gravitational force** and magnetic forces
- We call the region where an object experiences a non-contact force a **field**, examples of these include gravitational fields and magnetic fields

Gravity

- **Gravity** is a non-contact force that acts between two objects
- **Gravitational force** pulls you back to Earth when you jump
- The size of the gravitational force depends on the mass of the two objects and how far apart they are

- **Weight** is the downward force caused by gravity acting upon the mass of an object, it is measured in Newtons (N)
- **Mass** is the amount of matter within an object, whereas weight is the downward force of the object, we measure mass in **kilograms**
- We calculate weight with the equation:

$$\text{weight (N)} = \text{mass (kg)} \times \text{gravitational field strength (N/kg)}$$

- The value of the gravitational field strength can vary, so although a person's mass would be the same on different planets, their weight would not be

Balanced and unbalanced forces

- When forces acting on an object are the same size, but acting in different directions, we say that they are **balanced**
- When forces are balanced, the object is either not moving (stationary) or moving at a constant **speed**

- When the two forces acting on an object are not the same size, we say that the forces are **unbalanced**
- When forces are **unbalanced**, the object will either be in **acceleration** or **deceleration**
- The **resultant force** is the difference between the two unbalanced forces

Speed

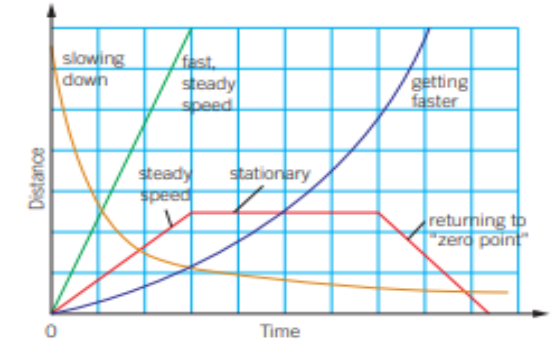
- **Speed** is a measure of how quickly or slowly that something is moving
- We measure speed in meters per second (m/s), this means that distance must be in meters and time must be in seconds
- We calculate speed with the following formula:

$$\text{speed (m/s)} = \frac{\text{distance travelled (m)}}{\text{time taken (s)}}$$

- **Relative motion** compares how quickly one object is moving compared to another
- If both objects are moving at the same speed, they are not changing position in comparison to one another, meaning that their relative speed is zero

Distance-time graphs

- **Distance-time graphs** tell the story of a journey, they show how much distance has been covered in a certain period of time



- To find the average speed, the total distance must be divided by the total time

C1 Chapter 6: Reaction
Knowledge organiser

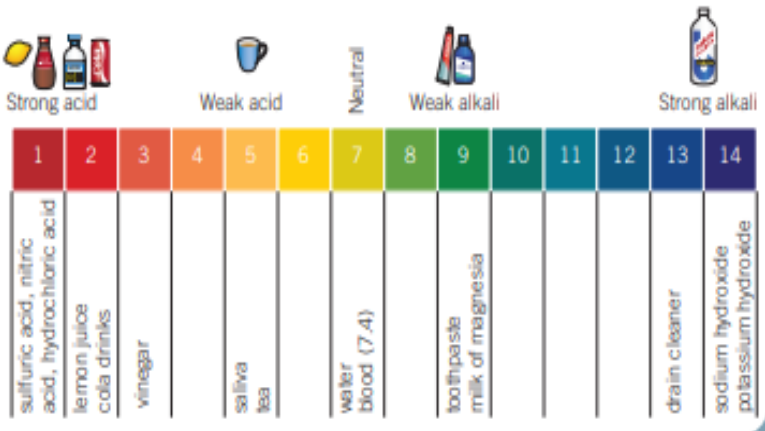
W/c 22nd January 2024

Chemical reactions

- A **chemical** reaction is a change in which atoms are rearranged to make new substances
- A **reversible** reaction is one where the products can react to get back the substances which you started with, most chemical reactions are not reversible
- You can look for signs that a chemical reaction has taken place such as flames, smells, heat change, a loud bang or gentle fizz

Acids and alkalis

- **Acids** and **alkalis** are the chemical opposites of one another
- Both acids and alkalis can be **corrosive** and **irritants**

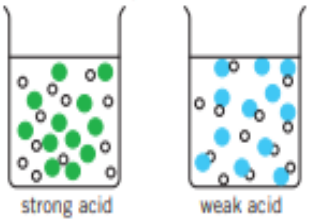


To see whether a substance is an acid or an alkali, we can use an **indicator**. Indicators show how acidic or how alkaline a solution is by showing its position on the **pH scale**, one example of this is **universal indicator**

- If the solution has a pH value of 1–6 it is **acidic**
- If the solution has a pH value of 8–14 it is **alkaline**
- If the solution has a pH value of 7 it is known as **neutral**

Acid strength

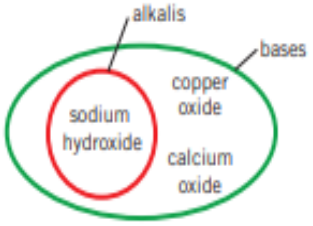
- The strength of an acid depends on how much of the acid has broken apart when it has dissolved in water
- Hydrogen chloride dissolves in water to form hydrochloric acid, this is a **strong acid** as all of the particles split up
- A **weak acid** will have particles that do not all split up



- The **concentration** of the acid is the amount of acid which has dissolved in 1 litre of water
- The more concentrated the acid, the lower the pH

Neutralisation

- **Neutralisation** reactions are any reaction in which acids react with a **base** to cancel out the effect of the acid
- These reactions form a neutral solution with a pH of seven
- A **base** is any substance which neutralises an acid
- An alkali is a base which has been dissolved in water



Salts

Salts are substances which are formed when an acid reacts with a metal or metal compound

Different acids form different types of salts:

- Hydrochloric acids form chloride
- Sulphuric acids form sulphates
- Nitric acids form nitrates

Key terms Familiarise yourself with the following keywords:

acid acidic alkali alkaline base chemical chemical reaction concentration concentrated neutralisation oxide oxidation pH scale reversible reactivity reactivity serie

corrosive displacement hydroxide indicator irritant neutral salt strong acid universal indicator weak acid

C1 Chapter 6: Reaction
Knowledge organiser

Activate

W/c 5th February 2024

Metal reactions

When a metal reacts with an acid it will produce a salt and hydrogen gas, the fizzing that you see is the hydrogen gas being given off

metal + acid → salt + hydrogen

magnesium + hydrochloric acid → magnesium chloride + hydrogen

When a metal reacts with oxygen a metal **oxide** is formed, this process is known as **oxidation**

metal + oxygen → metal oxide

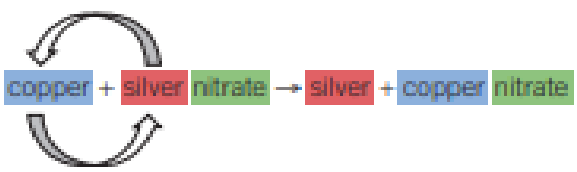
aluminum + oxygen → aluminum oxide

- When a metal reacts with water it forms a metal **hydroxide** and hydrogen gas.
- The alkali (group 1) metals react most vigorously, giving off a brightly coloured flame

metal + water → metal hydroxide + hydrogen

sodium + water → sodium hydroxide + hydrogen

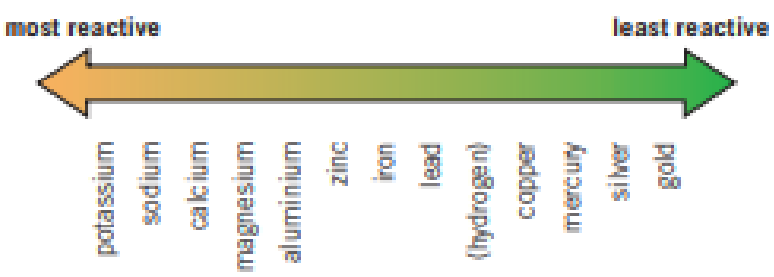
When a more reactive metal reacts with a compound containing a less reactive metal, it can take it's place, this is known as a **displacement** reaction



- If the metal on it's own is higher in the **reactivity series** than the metal in the compound a reaction will take place
- If the metal on it's own is lower in the reactivity series than the metal in the compound, a reaction will not take place

The reactivity series

- The **reactivity series** describes how reactive different metals are compared to one another
- The higher the metal is in the reactivity series the more reactive it will be this means that it will react much more vigorously



Familiarise yourself with the following keywords:

corrosive *displacement* *hydroxide* *indicator* *irritant* *neutral* *salt* *strong acid* *universal indicator* *weak acid*

Year 7 – Spring 1– What was the importance of the Silk Roads?

Enquiry 1: How did the Silk Roads develop trade and knowledge?

WB. 8th January

Key words:

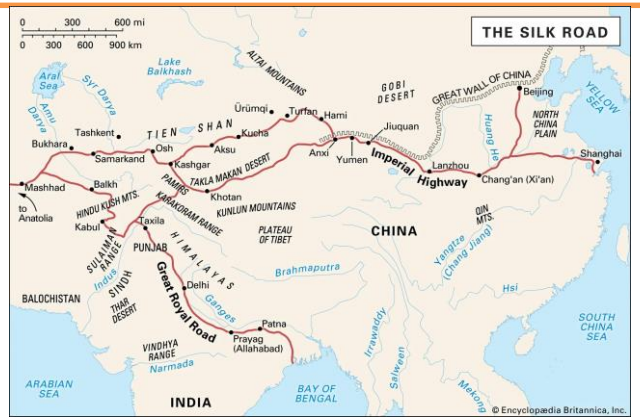
Silk road: The Silk Road was a network of trade routes which connected
the East and West of the ancient world.

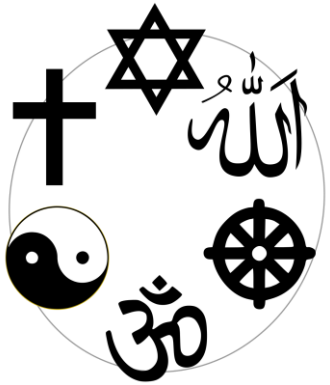
Trade: The action of exchanging resources and services with other people.

Society: Human beings living together in a group

What I need to know:

- The Silk Road was a network of trade routes that linked Asia with Europe.
- The Silk Road stretched from east to west for about 4,000 miles. It began at Xi'an, in eastern China.
- Caravans transported goods between many cultures along the Silk Road. Few people travelled the entire route. Goods were carried in stages by different groups
- Silk and other Chinese goods went west, all the way to ancient Rome. Wool, gold, and glass were some of the goods that went east.





Enquiry 2: How did religion spread?

WB. 22nd January

Key words:

Caravan – traders or travellers who travelled in large groups

Caravanserai - roadside inn where travellers could rest and trade along the Silk Roads

Crusade - a Christian military expedition made with the aim of recovering Jerusalem from the Muslims

What I need to know:

- Religion was primarily spread along the Silk Roads through traders. Buddhism, Judaism, Christianity and Islam spread as a result.
- The Crusades were a series of religious wars between Christians and Muslims started primarily to secure control of holy sites considered sacred by both groups
- Baghdad became the beating heart of the Islamic empire. During the Islamic Golden age, it was a time that saw major breakthroughs in science, mathematics, medicine and astronomy, literature and philosophy

Enquiry 3: Who was the master of the Silk Roads?

Key words:

An empire: a state where one person or country rules other people or countries by force

The steppe: a region of grassland with extreme temperatures making farming impossible

Ruthless: willingness to use violence and other methods to achieve your goals

What I need to know:

- Genghis Khan grew up on the harsh cold plains of Mongolia. His name as a boy was Temujin, which meant "finest steel".
- He was a fierce and brutal fighter and became admired by many of the Mongols for his courage.
- He then began to conquer his enemy Mongol tribes. He knew the Mongols needed to unite. After conquering his enemies, the other Mongol tribes agreed to ally and follow Temujin. They named him Genghis Khan or "ruler of all".
- Genghis was a brilliant general. He organized his soldiers into groups of 1000 called "gurans. He also used innovative tactics on the battlefield.
- Genghis Khan was a strong leader. He was cruel and murderous to his enemies, but loyal to those who followed him.

WB. 5th February

W/c 8th January

Homework 1 - Key Words:

- **Climate:** the weather conditions prevailing in an area in general or over a long period.
- **Drought:** A drought is a period when an area lacks water, which can last months or even years.
- **Scarcity:** the state of being scarce or in short supply; shortage.
- **Famine:** extreme scarcity of food.
- **Malnutrition:** lack of proper nutrition, caused by not having enough to eat, not eating enough of the right things, or being unable to use the food that one does eat.
- **Economy:** the state of a country or region in terms of the production and consumption of goods and services and the supply of money.
- **Transnational Corporation:** A large corporation that has a home base with a headquarters, but operates in various other countries.
- **Piracy:** the practice of attacking and robbing ships at sea.
- **Displacement:** the action of moving something from its place or position
- **Civil War:** a war between citizens of the same country.

Homework 2: Nigeria

· Nigeria is located within the west of Africa.
· It is north of the equator.
· The latitude is 10°N and the longitude is 10°E.
· It is near to Benin, Niger, Chad and Cameroon.
· 62% of the population live in extreme poverty.
· 70% of people are employed in farming and food production.

W/c 22nd January

Homework 3: Piracy

Advantages of Piracy

- Creation of jobs
- Local shop owners and residents have been able to purchase generators for electricity
- Pirates scare aware illegal fishing trawlers
- Increase in fish stock

W/c 5th February

Disadvantages of Piracy

- Local residents feel unsafe due to the increased presence of guns
- Local exchange rate changes regularly
- Increased alcoholism
- Reduction in trade for neighbouring countries
- Increased cost to ship owners (e.g. through insurance pay outs)

Light Hall Knowledge Mat — Faculty MFL French HT3 — 2023-2024
Y7 Scheme of learning

Les couleurs	*Colours*
gris(e)	Grey
rouge	Red
blanc(he)	White
marron	Brown
noir(e)	Black
vert(e)	Green
Bleu(e)	Blue
Orange	Orange
Rose	Pink
Violet(te)	Purple

Tu aimes … ?	*Do you like …?*
j'adore …	I love …
j'aime …	I like …
j'aime assez …	I quite like …
je n'aime pas …	I don't like …
je déteste …	I hate …
aimer	to like
détester	to hate
adorer	to love

Quelle heure est-il?	*What time is it?*
Il est …	It is …
cinq heures	five o'clock
cinq heures dix/vingt	ten/twenty past five
cinq heures et quart	quarter past five
cinq heures et demie	half past five
cinq heures moins dix/vingt	ten/twenty to five
cinq heures moins le quart	quarter to five
midi/minuit	midday/midnight

Qu'est-ce que tu penses de tes matières? *What do you think of your subjects?*			
le français	French	l'anglais	English
le théâtre	drama	l'EPS	P.E.
la géographie	geography	l'histoire	history
la musique	music	l'informatique	I.C.T.
la technologie	technology	les arts plastiques	art
		les maths	maths
		les sciences	science

15/01

Les raisons	*Reasons*
C'est …	It's …
facile.	easy.
difficile.	difficult/hard.
intéressant.	interesting.
ennuyeux.	boring.
amusant.	fun/funny.
créatif.	creative.
nul.	rubbish/awful.
le/la prof est sympa	the teacher is kind
le/la prof est trop sévère	the teacher is too strict
j'ai trop de devoirs	I have too much homework

Qu'est-ce que tu portes?	*What do you wear?*
je porte …	I wear …
on porte …	we wear …
l'uniforme scolaire	school uniform
un pantalon	trousers
un polo	polo shirt
un pull	jumper
un sweat	sweatshirt
un tee-shirt	tee-shirt
une chemise	shirt
une cravate	tie
une jupe	skirt
une veste	jacket/blazer
des chaussettes (f)	socks
des chaussures (f)	shoes
des baskets (f)	trainers
Je pense que c'est…	I think that it is…
chic	smart/stylish
confortable	comfy/comfortable
démodé(e)	old-fashioned
pratique	practical

29/01

Ta journée scolaire est comment?	*What is your school day?*
je quitte la maison	I leave the house
j'arrive au collège	I arrive at school
je retrouve mes copains	I meet (up with) my friends
on commence les cours	we start lessons
je mange à la cantine	I eat in the canteen
je chante dans la chorale	I sing in the choir
je joue dehors	I play outside
on recommence les cours	we start lessons again
je rentre à la maison	I go home
à (quatre) heures	at (four) o'clock
Quel est ton jour préféré?	What's your favourite day?
Mon jour préféré, c'est le …	My favourite day is …
J'ai deux heures d'anglais.	I have two hours of English.
C'est ma matière préférée.	It's my favourite subject.
Je suis fort(e) en maths.	I am good at maths.
l'emploi du temps	timetable
la rentrée	start of new school year
les vacances	holidays

Light Hall Knowledge Mat
Y7 Scheme of learning

Faculty MFL Spanish HT3
Mi instituto – module 3

29th January

15th January

¿Qué estudias? What do you study?

Estudio...	I study...	informática	ICT
ciencias	science	inglés	English
dibujo	art	matemáticas	maths
educación física	PE	música	music
español	Spanish	religión	RE
francés	French	teatro	drama
geografía	geography	tecnología	technology
historia	history		

Los profesores Teachers

El profesor/La profesora es...	The teacher is...	raro/a	odd
paciente	patient	severo/a	strict

¿Cómo es tu insti? What's your school like?

Es...	It's...	grande	big
antiguo/a	old	horrible	horrible
bonito/a	nice	moderno/a	modern
bueno/a	good	pequeño/a	small
feo/a	ugly		

¿Cuál es tu día favorito? What is your favourite day?

Mi día favorito es el lunes/el martes.	My favourite day is Monday/Tuesday.	Porque...	Because...
Los lunes/martes estudio...	On Mondays/Tuesdays I study...	por la mañana	in the morning
¿Por qué?	Why?	por la tarde	in the afternoon
		estudiamos	we study
		no estudio	I don't study

¿Qué hay en tu insti? What is there in your school?

En mi insti hay...	In my school, there is...
un campo de fútbol	a football field
un comedor	a dining hall
un gimnasio	a gymnasium
un patio	a playground
una biblioteca	a library

una clase de informática	an ICT room
una piscina	a swimming pool
unos laboratorios	some laboratories
unas clases	some classrooms
No hay piscina.	There isn't a swimming pool.

Opiniones Opinions

¿Te gusta el dibujo?	Do you like art?
Sí, me gusta (mucho) el dibujo.	Yes, I like art (a lot).
No, no me gusta (nada) el dibujo.	No, I don't like art (at all).
¿Te gustan las ciencias?	Do you like science?
Sí, me encantan las ciencias.	Yes, I love science.

aburrido/a	boring
difícil	difficult
divertido/a	amusing, funny, fun
fácil	easy
importante	important
interesante	interesting
práctico/a	practical
útil	useful

¿Qué haces durante el recreo? What do you do during break time?

Como...	I eat...
un bocadillo	a sandwich
unos caramelos	some sweets
chicle	chewing gum
una chocolatina	a chocolate bar
fruta	fruit
unas patatas fritas	some crisps

Bebo...	I drink...
agua	water
un refresco	a fizzy drink
un zumo	a juice
Leo mis SMS.	I read my text messages.
Escribo SMS.	I write text messages.
Nunca hago los deberes.	I never do my homework.

Festivals-Year 7

Keywords

1.Resurrection
2. Khalsa
3. Hagadah
4. Anandpur
5. Crucifixion
6. Celebrate
7. Matzot
8. Leaven
9. Pesach
10. Baisaki
11. Festival
12. Ritual
13. Holy week
14. Messiah
15. Guru
16. Passover
17. Seder meal

15th Jan

How do we Celebrate?

- Sharing gifts
- Eating special foods
- Music
- Lights
- Fireworks
- Helping others
- Dancing
- Praying

29th Jan

Why do we celebrate?

- Remember important events.
- To show respect.
- To praise God.
- To remember our culture.
- To spread a message.
- Reminds us to be thankful.

Religious Festivals

Christianity – Holy Week

Remembers the death and sacrifice of Jesus| Died for the sins of everyone | Rode into Jerusalem on a donkey| Arrested by the Roman soldiers and sentenced to death by Pontius Pilate | Rose from the dead

Christians believe Jesus rose from the dead on Easter Sunday

The Four days of Holy week are:

1. Palm Sunday
2. Maundy Thursday
3. Good Friday
4. Easter Sunday

Christians remember celebrate this by;

Palm Sunday – crosses are made out of palm leaves, waving palm leaves singing songs of praise.

Maundy Thursday - Christians often meet together to share a special meal of bread and wine.

Good Friday – Day of mourning, Priest wears black, removing church decorations, making hot cross buns.

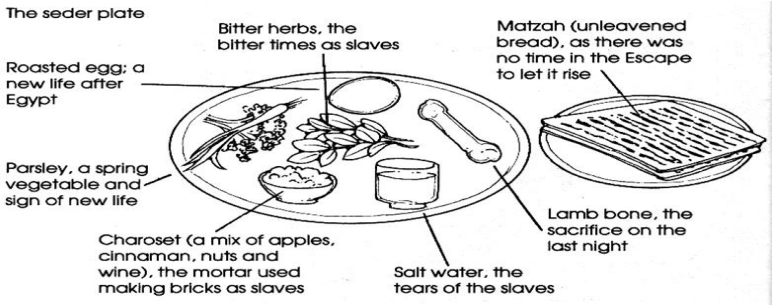
Easter Sunday – Lighting a special candle called a Pascal candle, giving out small chocolate eggs, services full of light and joyful songs.

Judaism - Passover

The Israelites were slaves in Egypt and the Pharoah would not allow them to leave| | God sent Ten Plagues to Egypt | The tenth was the death of every first born Egyptian | The Israelites marked their doors with the blood of a lamb so that the spirit of God would *Passover* these homes | When they were freed, the Israelites had to leave quickly.

During the meal the youngest person asks these 4 questions at the start of the Seder Meal;

1) Why is this night different from all other nights., for on other nights we eat leavened or unleavened bread but on this night only unleavened?
2) On all other nights we may eat any kind of herbs but on this night only bitter herbs?
3) On all other nights we do not dip our herbs even once but on this night we dip them twice?
4) On all other nights, we eat either sitting upright or reclining. Why on this night do we all recline?



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

Hinduism - Holi

In India there was a King called Hiranyakashup who had a son called Prahlad | The King wanted everyone to worship him as a God, but Prahlad refused | The King tried many ways to kill his son like putting him in a pit full of snakes and having him trampled by elephants | Prahlad prayed to the Hindu god Vishnu and was saved | Holika, the King's sister who was said to be fireproof, offered to help the King | Holika took Prahlad to the top of a bonfire, which was then set on alight | However, Holika died but Prahlad was saved when he prayed to the god Vishnu | Days later the king died and Prahlad became king.

Hindus also celebrate another story about a boy called Krishna. He used to play tricks on maids like throwing paint at them. This is also remembered and done by Hindus celebrating Holi.

How is the festival celebrated today?

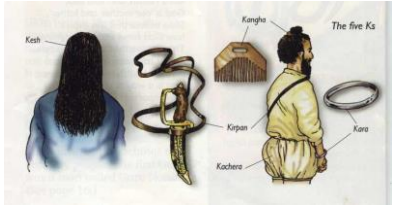
Effigy of Holika is burnt- protection by God; victory of Good over evil
Dry colour/water balloons- playing pranks as Krishna did on some maids.
Dancing - happy, joyful occasion, fun
Sweets exchanged- opportunity to see family and friends, brings people close together
Use of Colour- shows equality; no caste or creed

Sikhism – Baisakhi

In India at the time the Moghul Empire ruled and they wanted everyone to be a Muslim | They were threatening the Sikhs to become Muslim or die | Guru Teg Bahudur is beheaded for being a Sikh | A huge crowd goes to meet Guru Gobind Singh| Guru Gobind Singh asks if anyone is prepared to die for their faith | One man says he is prepared to die and so Guru Gobind Singh takes him into the tent holding a sword | Guru Gobind Singh comes out of the tent with blood on his sword | The Guru asks again and 4 more men stand up and say they are prepared to die for their faith| The 5 men come out of the tent alive and well| They are now known as the `beloved five` and the Khalsa is formed.

How is Baisakhi celebrated?

- Gurdwaras (Sikh places of worship) are decorated and visited. Parades, dancing and singing happen throughout the day.
- The festival is marked with special marches (processions) through the streets.
- Celebrations always include music, singing and chanting scriptures from the Guru Granth Sahib (the Sikh holy book) and hymns.
- The Guru Granth Sahib will be carried in the procession in a place of honour
- Many Sikhs choose to be baptised into the Khalsa brotherhood on this day.



Assessment Success Criteria

1 mark - Knowledge	Multiple-choice question – write down the correct letter of the answer and the word next to it.
3 marks - Attitudes	Include 2 reasons and 2 examples
5 marks -Concepts	Include 3 technical terms and what each term means.
6 marks – Exploration of Experience	Include the 3 different beliefs, their meanings AND a reason why someone may have that belief.
9 Marks - Skills	Include 2 reasons to AGREE and 2 reasons to DISAGREE with an example/further explanation for each. Add a conclusion.

Knowledge

Concepts

Attitudes

Exploration of experience

Skills

W/c 26th January 2024

algorithm	A sequence of logical instructions for carrying out a task. In computing, algorithms are needed to design computer programs.
condition	In computing, this is a statement or sum that is either true or false. A computation depends on whether a condition equates to true or false.
flowchart	A diagram that shows a process, made up of boxes representing steps, decision, inputs and outputs.
input	Data which is inserted into a system for processing and/or storage.
instruction	A single action that can be performed by a computer processor.
iteration	In computer programming, this is a single pass through a set of instructions.
loop	A method used in programming to repeat a set of instructions.
notation	A system of written symbols or graphics used to represent something in order to aid communication and understanding.
output	Data which is sent out of a system.
program	Sequences of instructions for a computer.

Algorithms

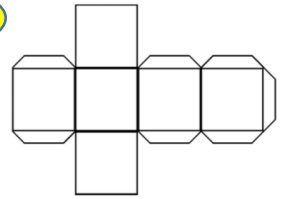
An algorithm is a way to show a set of instructions
There are two main types:
Flowchart
Pseudocode

W/c 16th January 2024

Name	Symbol	Usage
Start or Stop	Start/Stop	The beginning and end points in the sequence.
Process	Process	An instruction or a command.
Decision	Decision	A decision, either yes or no.
Input or Output	Input/Output	An input is data received by a computer. An output is a signal or data sent from a computer.

Wb 29th January

Wb 15TH January



ICT in Graphic Design and Production

There are two main ways ICT is used in graphics:
Computer-aided design (CAD) is used to design products.
Computer-aided manufacturing (CAM) is used to standardise the manufacture of products.
CAD and **CAM** is made up of **Input** devices and **Output** devices:

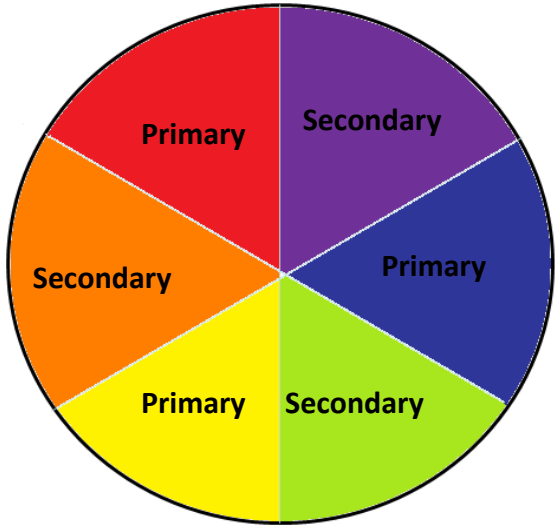
Inputs	Outputs
- keyboard - computer mouse - scanner - digital camera - graphics tablet - tracker ball	- monitor - printer - plotter - cutter - milling machine - stereo lithography machine

	Cutting and Shaping Tools	
	**Scissors**	Easy to use, suitable for straight lines and curves, dependent on skill of user, can struggle with thicker boards
	**Craft Knife**	Very sharp, precise cuts, excellent for geometric shapes and straight lines with safety rule, can be difficult to cut curves
	**Hand Perforator**	For creating perforated lines used in packaging for folds or tear-off strips
	**Compass Cutter**	Uses a blade and pin to cut circles and arcs of a fixed radius in papers and boards
	**Die Cutter**	Uses a template (die) to stamp out shapes and patterns in materials. Identical products made, can be used for high volume manufacture

w/b 15th January

Colours

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 standout.

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.

w/b 29th JANUARY

Importance about Lettering

Lettering, or typography, is the art of word design.

There are hundreds of different typefaces available on computers. You can even create your own.

When you are choosing lettering you must think about the following things:

- Appearance – How does it look? You should pick a font or typeface that you think looks good.
- Suitability – Is it suitable for the product? You don't want to use a jolly font for something sad.
- Readability – Can you read it? The word has got to be legible.

- Size – Is the size correct for the piece of work?

You can choose the size of the font to fit in with the surrounding piece of work or to make it stand out more.

- Format – Does it need to be bolder, underlined or italic?

You can **change** the *format* of the word but keep the font and size the same.

- Colour – you can also emphasize words by making them a particular colour. Why do you think some of the words on this slide are orange?

w/b 15th January

Steps for setting up a laser cutter

1.	Place material onto the laser cutter platform/bed
2.	Send the design to the laser cutter program and adjust the power and speed settings for the material being cut or engraved on
3.	Set the "Home Position" for the laser and check there is sufficient material on the bed to use for the design.
4.	Make sure the fume air extraction is switched on, the lid is closed THEN Press the "Go" Button to start the laser cutter
5.	Remove material when the laser has finished cutting/ engraving the material

Common additives added to the plastic raw material by scientists to improve the properties of different types of plastics available.

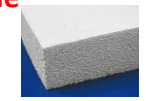
1	**Plasticisers**: – Makes plastics become less brittle
2	**Pigments:** – Colour the plastic to allow a range of colours to be possible
3	**Fillers:** – Powdered additives e.g. Mica reduces electrical conductivity, asbestos allows high temperature use.
4	**Stabilisers:** Protects the plastics from ultra-Violet light that makes the plastic to become brittle
5	**Flame Retardants:-** Makes the plastic less likely to catch fire

Polymers (Plastics)

w/b 29th January

Thermoplastics
(can heat and shape repeatedly)
Many can be recycled

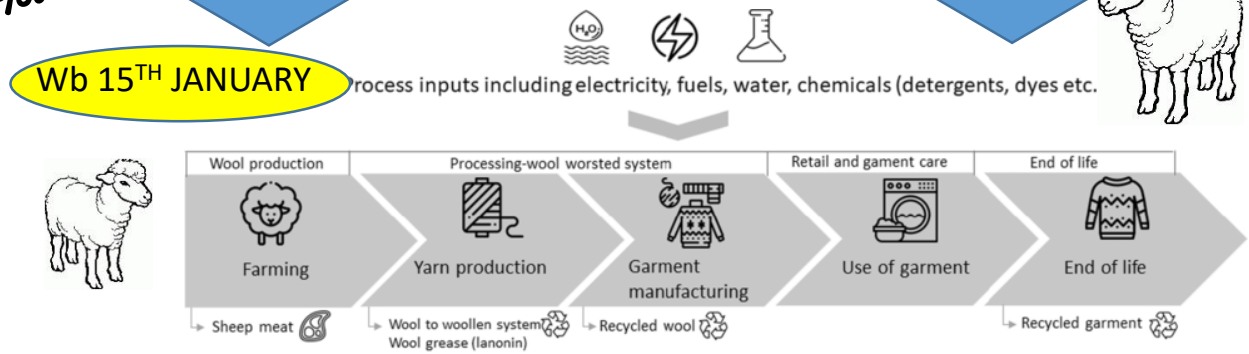
Thermosetting Plastics
(can only heat and shape once)
Very difficult to recycle if not at all

Thermoplastic	Thermosett
Polyethylene **Bucket Tough, mouldable** **Wide range of colours** 	**(Melamine Formaldehyde)**  **Kitchen Counters** **Good heat resistance** **Available in a range of colours**
Expanded Polystyrene **Packaging for fragile items (Lightweight,** **Good impact resistance** 	**(Epoxy resin)**  **Adhesive Gorilla glue** **Very strong glue to bond/join materials together**
ABS **(Lego Bricks)** **Tough, good impact re and scratch resistance** 	**(Urea Formaldehyde)**  **Electrical good/ Wall sockets** **Good Electrical resistance**
PC - Polycarbonate **Bicycle Helmets** 	**(Phenol Formaldehyde)**  **Pan Handle Good Heat resistance**
PETE - Plastic bottle containers for water and drinks **Can be recycled easil** 	

Year 7 Textiles

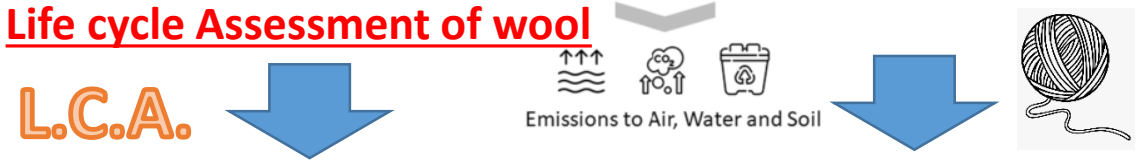
Life cycle Assessment of wool

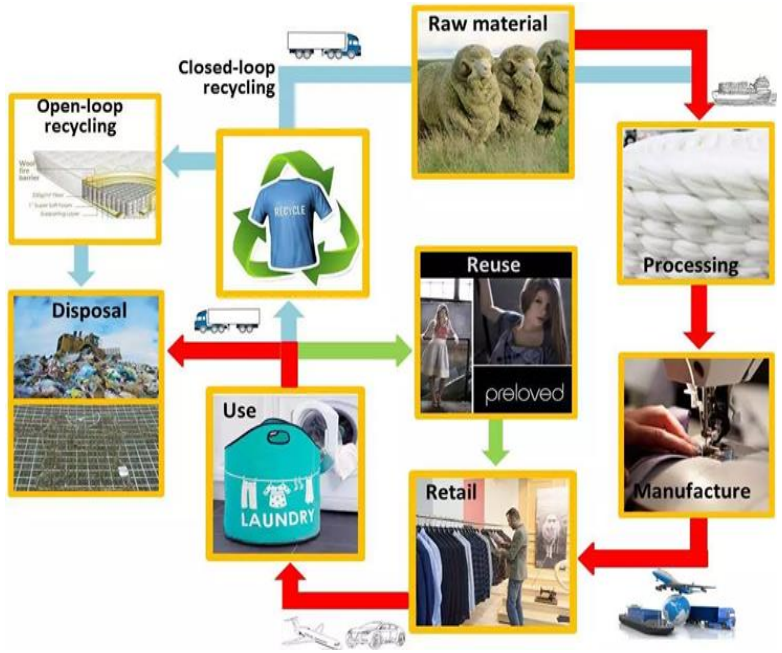
Wb 15TH JANUARY



Life cycle Assessment of wool

L.C.A.





Life cycle Assessment of wool

1. **Farming** – sheep shearing to collect the raw material of the wool.
2. **Processing** the wool into fibres and yarn production
3. Manufacturing the Woollen clothing
4. **Transportation and distribution** to the retail outlets
5. **The user buys the product** and wears the it.
6. **Disposal** - Reuse – clothing sent for resale and recycled, taken apart and recycled into new garments.

Wb 29th JANUARY

	INSTRUCTIONS
Finger wrap	1 – cut a strand of wool and place between the four fingers 2 – gently wrap wool around all four fingers, ensuring it is not too tight 3 – use the first strand between your fingers to tie a tight knot twice 4 – slide off fingers and cut loops 5 – fluff and trim to shape
Card wrap	1 – cut a strand of wool and put to one side 2 – Place the two halves of the template together ensuring there is a gap between them, start to tightly wrap wool around 3 – Use scissors to cut around the edges to cut the loop, the scissors should be placed in the groove 4- use the first strand of wool to tie tightly around the edge, carefully pulling the wool to the centre by tying a tight knot twice 5 - fluff and trim to shape
Machine	1 – cut a strand of wool roughly shoulder width and place to one side 2 – open out the one half of the pom pom maker (two smile shapes) and start to wrap the wool round tightly. When happy cut the wool and close that half and repeat on the other side 3 – when both halves are full use scissors to cut around the edge of the wrapped wool 4 – use the first strand you cut to tie a tight know three times, you will need to pull it as tightly as possible to ensure it does not fall apart. 5 – Open out both halves of the maker and pull them apart, fluff and trim to shape

Light Hall Knowledge Mat – FOOD

W/C 15th January - Hygiene + Safety Key Terms

KEY WORDS TO LEARN

Food allergy – immune-mediated adverse reaction to a particular food.

Food intolerance – when a person has difficulty digesting a certain food.

Personal Hygiene – what a person does to prepare for cooking hygienically and safely.

Food safety + hygiene – is about protecting people and reducing the risk of food poisoning.

Hazard – anything that can contaminate food or cause injury or illness.

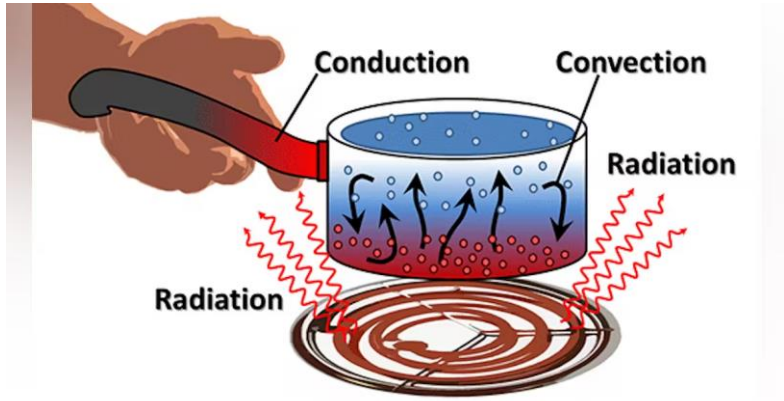
Bridge hold + Claw grip – watch the videos -

http://archive.foodafactoflife.org.uk/VideoActivity.aspx?siteId=15&sectionId=65&contentId=73

W/C 29th January Heat Transfer Methods

Be able to give examples of cooking methods linked to each one.

Conduction (via direct contact)	Convection (via fluid)	Radiation (via electromagnetic Radiation)
• Conduction is the direct flow of heat through a material resulting from physical contact.	• heat transfer between a surface and adjacent fluid (gas, air or liquid) and by the flow of fluid from one place to another, induced by temperature	• No transfer medium required • It's the transfer of thermal energy through matter of space by electro-magnetic waves.



https://www.youtube.com/watch?v=e9H2DDKgnr4

FOLK Music

YEAR 7 – SPRING 1

WC 8th Jan
Section A&B

A: History of Folk Music

Folk Music is **Traditional music of the people** performed by the people themselves and played within their own communities. Folk Music was passed on **ORALLY** (through speech or song) from one generation to the next – the **ORAL TRADITION** (passed down by word of mouth), and many Folk songs were not originally written down. The Industrial Revolution of the 18th and 19th Centuries destroyed communities so many of the traditional Folk songs were lost. Attempts were made to collect these songs and Cecil Sharp published a 'written down' collection of English Folk Music in 1907 which had taken a lifetime to collect.

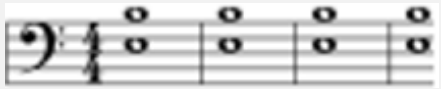
B: Types of Folk Music

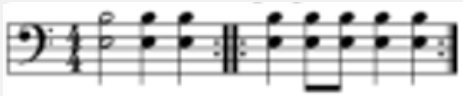
People from different countries and cultures have their own **FOLK MUSIC.** However, although it may sound different, **FOLK SONGS** are often include **WORK SONGS**, including **SEA SHANTIES**: songs sung at sea by sailors, the rhythm of these helped the sailors haul the ropes that hoisted the sails, and songs about **EVERDAY LIFE, THE SEASONS, BATTLES AND WARS, SHEPHERD's SONGS** and **LULLABIES** (cradle songs).

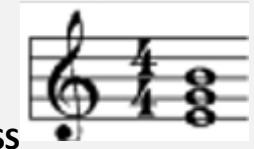
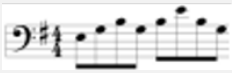
WC 22nd Jan
Section C&D

C: Folk Song Accompaniments

DRONE – A form of musical accompaniment consisting of continuous sounding pitched notes, usually a **FIFTH** apart (5 notes), again, often in the bass part e.g.



OSTINATO – A repeated musical pattern as an accompaniment, often using notes of the **CHORD** and rhythm patterns from the song e.g.

CHORDS – Many Folk Songs use **PRIMARY CHORDS** (**CHORD I,** **CHORD IV** and **CHORD V**) and sometimes the **SECONDARY CHORDS** of **CHORD III** and **CHORD V** as a musical accompaniment. The notes of a **CHORD** can be performed in different ways to create different accompaniments.

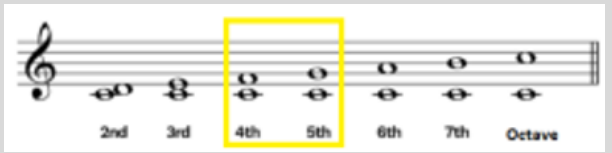
As a **TRIAD** (all three notes) **(ROOT, THIRD, FIFTH)** performed together, the **ROOT** sometimes in the **BASS** part acting as **BASS LINE**)

As a **BROKEN CHORD** – a way of playing the notes (**ROOT, THIRD, FIFTH**) of a chord separately ('broken' up) in a different order, ascending (going up) or descending (going down.)

WC 5th Feb
Section F

D: Harmony in Folk Music

ACOMPANIMENT – Music that accompanies either a lead singer or melody line. This can be instrumental performed by members of a Folk Band.

HARMONY – The effect produced by two or more pitched notes sounding together at the same time. e.g. a chord or triad creates harmony or a lead singer and backing singers singing different melodies or parts 'in harmony' (**COUNTER MELODY**)

INTERVAL – The distance between two musical notes. The intervals of a **FOURTH** and **FIFTH** are common in Folk Music.



F: Instruments, Timbres and Sonorities of Folk Music

Many **FOLK SONGS** are often performed **UNACCOMPANIED** (with no instrumental accompaniment) = **A CAPELLA.** However, the following instruments are often used in Folk Music.

						
Penny/Tin Whistle	Harmonica or Mouth Organ	Acoustic Guitar	Accordion	"Fiddle" (Violin)	Mandolin	Banjo