













LIGHT HALL KNOWLEDGE MATS

Year 7 Summer 1



English	2
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Science	6 – 9
History	10
Geography	11 – 12
French	13
Spanish	14
Life & Morality	15 – 17
ICT	18
Technology	19 – 23
Music	24

The best from everyone, all of the time.

KEY WORD	DEFINITION	IMAGE	IN A SENTENCE	LOOK, COVER, WRITE, CHECK	LOOK, COVER, WRITE, CHECK
treachery	betrayal of trust.		There was treachery against me.		
abject	Something bad experienced.		Oliver Twist lives in abject poverty.		
unfortunate	having or marked by bad fortune; unlucky.		It was a series of unfortunate events.		
metropolis	A very large and busy city.		Birmingham city is a metropolis .		
eponymous	named after a particular person or group.		Oliver Twist is an eponymous novel.		
naive	showing a lack of experience, wisdom, or judgement.		Teenagers are naïve to the world.		
morality	the distinction between right and wrong behaviour.		A person's morality can be judged by their actions.		
vulnerable	exposed to the possibility of being attacked or harmed .		Old people are vulnerable to harm.		
chronological	The order in which they occurred.		I will write my life story in chronological order.		
juvenile	childish; immature.		A group of juveniles were running in the park.		
bildungsroman	a novel dealing with one person's life and their journey.		Oliver Twist is a bildungsroman novel.		
scandalous	causing general public outrage		His comments about her were scandalous .		

Oliver Twist- 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.

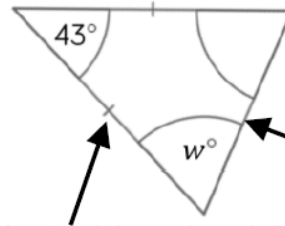
Clauses[06/05/24]: A **clause** is a group of words that contain a subject and a verb. You get the independent clause which can be a sentence by itself and does not need more information to clarify and a subordinate clause which depends on information from the independent clause to make sense.

Key Words

- **Protractor** – equipment used to measure angles
- **Isosceles triangle** – a triangle with two angles the same size and two sides the same size.

Sum of angles in triangles

Sum of interior angles in a triangle = 180°



Look at triangle notation
This indicates an isosceles triangle

$$\begin{aligned} \therefore 180 - 43 &= 137 \\ 137 \div 2 &= 68.5^\circ \end{aligned}$$

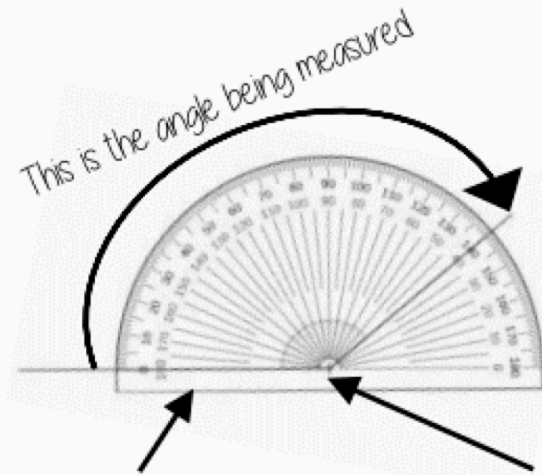
The two base angles will be the same size

A triangle can only have ONE right angle



Have a go!
Tearing the corners from triangles forms a straight line which is therefore 180°

Measure angles to 180°



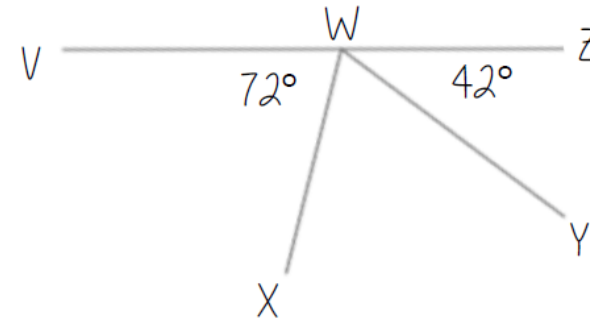
The base line follows the line segment

Make sure the cross is at the point the two lines meet

Read from 0° on the base line.
Remember to use estimation.
This is an obtuse angle so between 90° and 180°

Sum of angles on a straight line

Adjacent angles that share a common point on a line add up to 180°



Find angle XWY

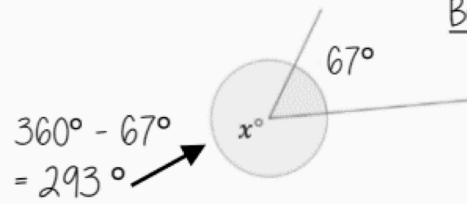
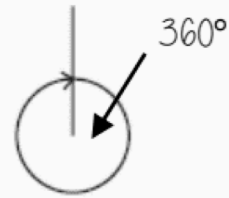
$$\begin{aligned} 72^\circ + 42^\circ &= 114^\circ \\ 180^\circ - 114^\circ &= \underline{66^\circ} \end{aligned}$$

Key Words

- **Quadrilateral** - A polygon with 4 sides and 4 angles.
- **Parallel** - Straight lines that never meet

Sum of angles at a point

The sum of angles around a point is 360°



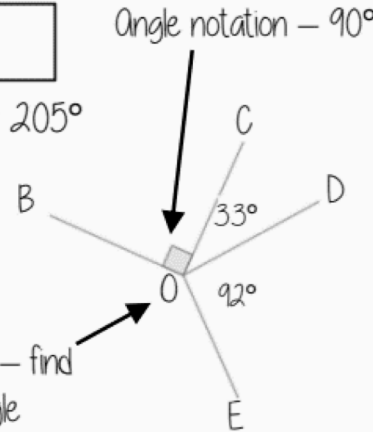
Find angle BOE

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

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

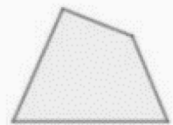
$$BOE = 155^\circ$$

Angle notation - find this missing angle



Sum of angles in quadrilaterals

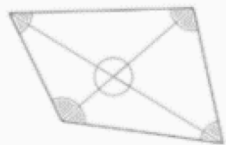
Sum of interior angles in a quadrilateral = 360°



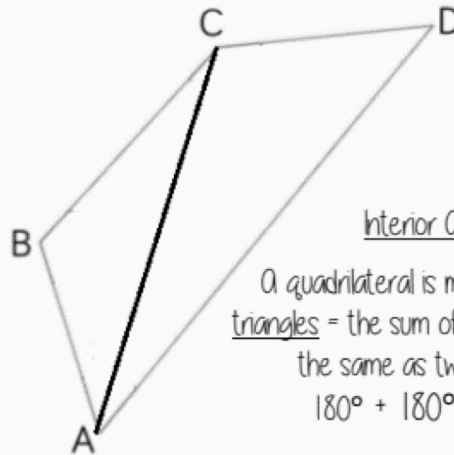
Convex Quadrilateral



Concave Quadrilateral



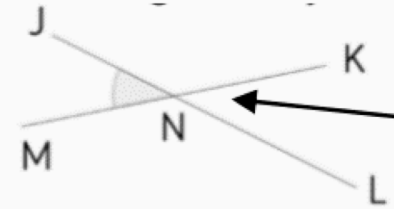
Interior angles are those that make up the perimeter (outline) of the shape



Interior Angles

A quadrilateral is made up of two triangles = the sum of interior angles is the same as two triangles:
 $180^\circ + 180^\circ = 360^\circ$

Vertically opposite angles

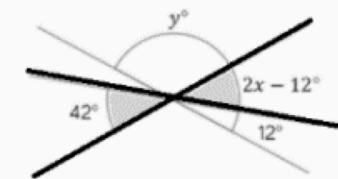
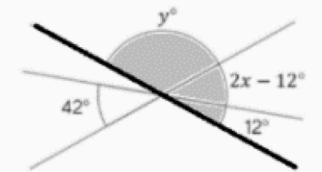


Angle JNM is vertically opposite to angle KNL

$$JNM = KNL$$

Vertically opposite angles are the same

Other angle rules still apply. Look for straight line sums and angles around a point.



Form equations with information from diagrams:
 $2x - 12 = 42$
 $2x = 54$
 $x = 27^\circ$

Year 7 Knowledge Mats (#17)

Key Words

- **Term** – a single number or variable
- **Arithmetic Sequence** – a sequence where the difference between terms is constant.

Sequences from algebraic rules

This is substitution!

$$3n + 7$$

This will be linear - note the single power of n. The values increase at a constant rate

$$2n - 5 \longrightarrow$$

eg

$$1^{\text{st}} \text{ term} = 2(1) - 5 = -3$$

$$2^{\text{nd}} \text{ term} = 2(2) - 5 = -1$$

$$100^{\text{th}} \text{ term} = 2(100) - 5 = 195$$

$$3n^2 + 7$$

This is not linear as there is a power for n

Substitute the number of the term you are looking for in place of 'n'

Checking for a term in a sequence

Form an equation

Is 201 in the sequence $3n - 4$?

Algebraic rule

$$3n - 4 = 201$$

Term to check

Solving this will find the position of the term in the sequence. ONLY an integer solution can be in the sequence.

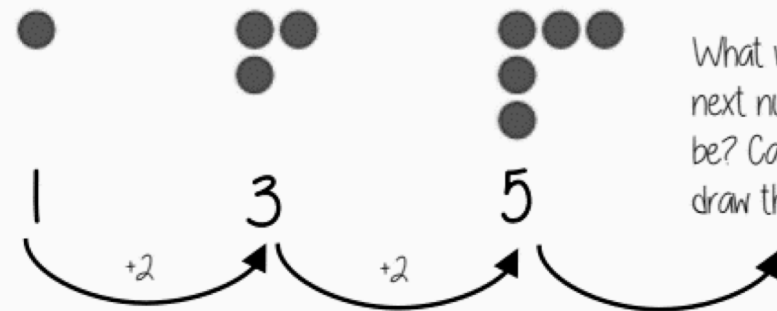
Sequences

w.b. 06/05/2024

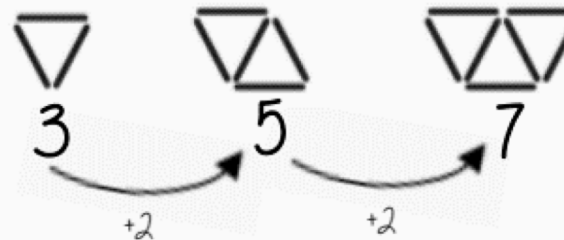
w.b. 20/05/2024

Describe and continue a sequence diagrammatically

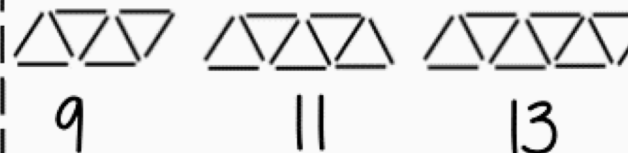
Count the number of circles or lines in each image



Predict and check terms



CHECK – draw the next terms



Predictions:

Look at your pattern and consider how it will increase.

eg. How many lines in pattern 6?

Prediction - 13

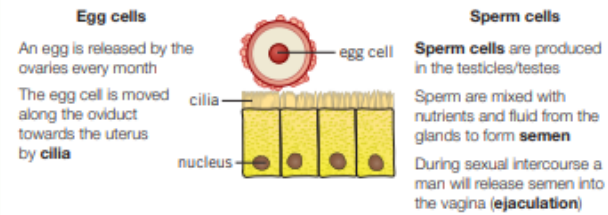
If it is increasing by 2 each time - in 3 more patterns there will be 6 more lines

Adaptations

- **Adaptations** are characteristics which organisms have developed to best survive in their surroundings
- Organisms with the best suited adaptations can breed and pass these on
- Those who are not best adapted will die out and not be able to pass on their genes

Fertilisation, implantation and gestation

- Egg cells and sperm cells are also called **gametes**, and each contains half the genetic information needed to form a complete organism.

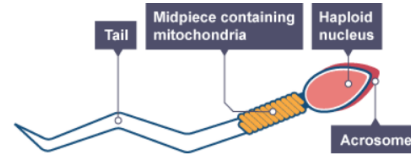


If a sperm meets the egg **fertilisation** may happen

The fertilised egg may then **implant** in the uterus lining and form an **embryo** (ball of cells)

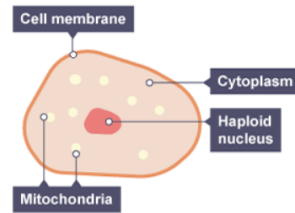
- During **gestation** the developing **fetus** needs nutrients from the mother, these are passed through the **placenta** which is connected to the fetus by the **umbilical cord**
 - Nutrients are passed from the mother to the baby and waste products are passed back from the baby to the mother
 - The baby is protected from bumps to the mother by the **amniotic sac** which acts as a shock absorber
- | | |
|------------|--|
| Just a dot | 1 week – cells beginning to specialise |
| 3 mm long | 4 weeks – spine and brain forming, heart beating |
| 3 cm long | 9 weeks – tiny movements, lips and cheeks sense touch, eyes and ears forming |
| 7 cm long | 12 weeks – fetus uses its muscles to kick, suck, swallow, and practise breathing |

Sperm cell adaptations



- A tail to move them towards an egg cell.
- Many mitochondria to release energy for movement.
- Part of the tip of the head of the sperm releases enzymes to digest the egg membrane to allow fertilisation to take place.
- The **haploid** nucleus contains the genetic material for fertilisation.
- Produced in large numbers to increase the chance of fertilisation.

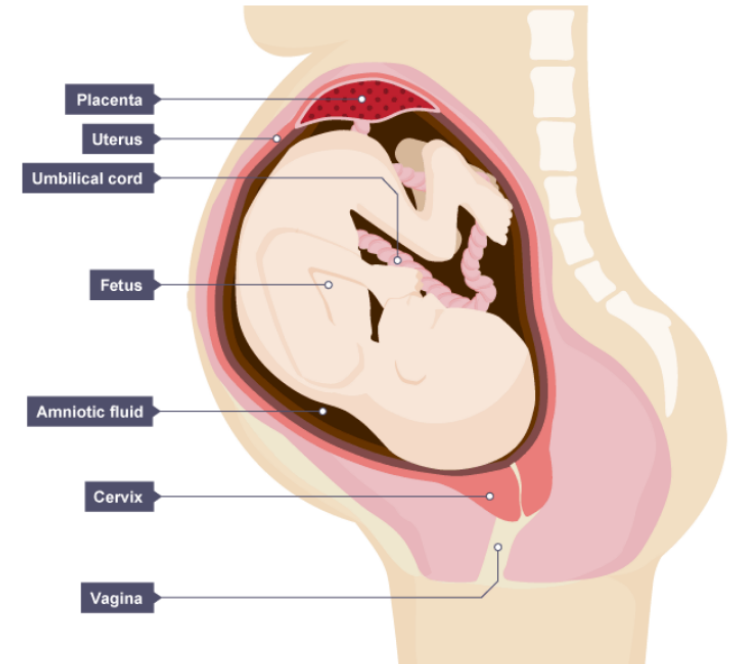
Egg cell adaptations



- The egg cell's cytoplasm contains nutrients for the growth of the early embryo.
- The haploid nucleus contains genetic material for fertilisation.
- The **cell membrane** changes after fertilisation by a single sperm so that no more sperm can enter.

Pregnancy and fetal development

After fertilisation, the zygote will divide by a process called **mitosis** into a ball of genetically identical cells called the embryo. This embryo will attach itself to the lining of the uterus where it will develop into a **fetus** and finally into a baby.



It takes about 40 weeks for a fetus to develop in the uterus. This time is called gestation

Key terms

Make sure you can write definitions for these key terms.

adaptation adolescence amniotic sac cervix cilia egg cell embryo environmental variation fertilisation fetus gamete gestation implantation inherited variation menstrual cycle ovary oviduct ovulation penis period placenta puberty reproductive system scrotum semen sex hormones species sperm cell sperm duct testicles umbilical cord urethra uterus vagina variation

Energy

- **Energy** is needed to make things happen
 - It is measured in **joules** or **kilojoules**
-
- The **law of conservation of energy** says that energy cannot be created or destroyed, only transferred
 - This means that the total energy before a change is always equal to the total energy after a change

Energy can be in different energy **stores**, including:

- **Chemical** – to do with food, fuels and batteries
- **Thermal** – to do with hot objects
- **Kinetic** – to do with moving objects
- **Gravitational potential** – to do with the position in a gravitational field
- **Elastic potential** – to do with changing shape, squashing and stretching

Food and energy

- Food has energy in a chemical energy store
- Different foods contain different amounts of energy
- Different activities require different amounts of energy
- Different people need different amounts of energy depending on what they do each day

Power and energy

- **Power** is a measure of how much energy is transferred per second
- Power is measured in **watts (W)**
- Each appliance has its own power rating to tell us how quickly it uses energy
- We can calculate power with the equation:

$$\text{power (W)} = \frac{\text{energy (J)}}{\text{time (s)}}$$

Common energy transfers in the home

In the home, energy can be transferred by:

- **mechanical work** – when a force is applied to move an object over a distance
- **electrical work** – when charge flows (electricity)
- **heating** – when there is difference in temperatures
- **radiation** – when energy is transferred as a wave, for example as light or sound.

Common energy stores and transfers in the home

Washing machine

Charges flow in the wires of the motor.

Energy is transferred by doing electrical work to the kinetic energy store of the motor. The motor turns.



Lamp

Charges flow through the filament bulb. Energy is transferred by electrical working to the thermal energy store of the filament bulb. The bulb gets hot.



Energy transfers from the thermal energy store of the bulb by heating and light.

Kettle

Charges flow through the heating element of the kettle. Energy is transferred by electrical working to the thermal energy store of the element. The element gets hot.



Energy transfers from the hot element to the water by heating. The water gets hot.



Key terms

Make sure you can write definitions for these key terms.

w.b. 22nd April 2024

chemical dissipated efficiency elastic potential energy energy resources fossil fuels gravitational potential joules kinetic kilojoules
law of conservation of energy non-renewable power renewable thermal watts

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Non-renewable energy

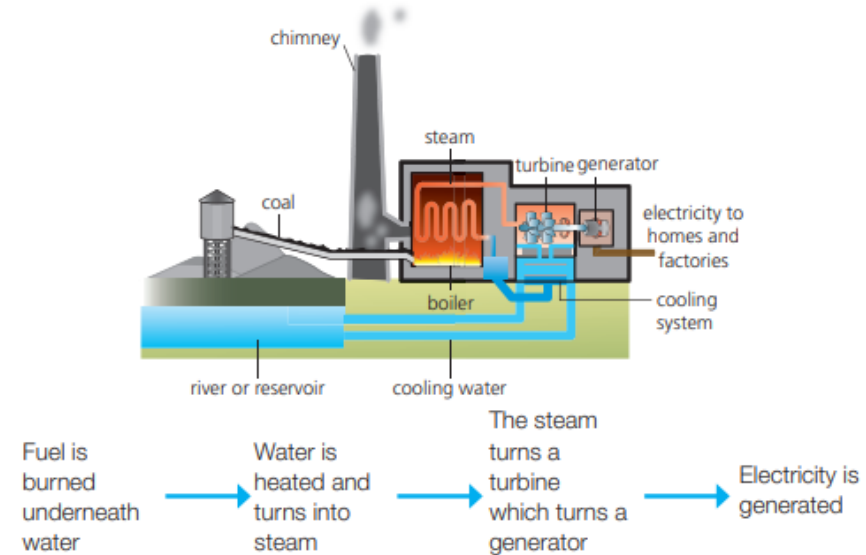
- **Non-renewable** energy cannot be replaced within your lifetime
- Non-renewable **energy resources** include coal, oil, natural gas and nuclear resources
- Coal, oil and natural gas are also known as **fossil fuels**, they release carbon dioxide when burned which contributes to global warming

Renewable energy

- **Renewable** energy can be replaced within your lifetime
- Renewable energy resources include wind, tidal, wave, biomass, solar, hydroelectric and geothermal
- Renewable energy resources do not produce much carbon dioxide, meaning that they have a smaller effect on global warming

Power stations

Thermal power stations burn coal, oil and natural gas, which are all non-renewable energy resources



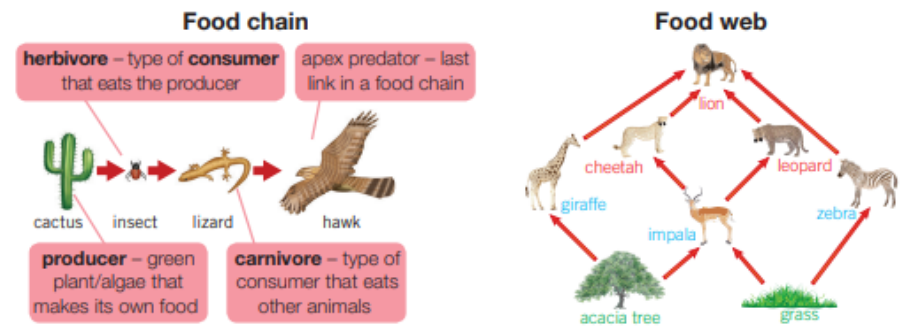
Dissipation of energy

- We say that energy is **dissipated** when it is transferred to a nonuseful store, it cannot be used for what it was intended for
- Energy can be wasted through friction, heating up components or heating the surroundings
- **Efficiency** is a measure of how much of the energy has been used in a useful way, we can calculate this with the equation:

$$\text{efficiency (\%)} = \frac{\text{useful energy output}}{\text{energy input}} \times 100$$

Food chains and webs

- **Food chains** show the direction in which energy flows when one organism eats another
- The direction of the arrows represent the direction in which the energy flows
- **Food webs** show how a number of different food chains are connected



- **Producers** are the organisms which start the food chain, they convert energy from the Sun, making their own food, these are often plants
- **Prey** are organisms which are eaten by other organisms
- **Predators** are the organisms which eat the prey

Disruption to food chains

- **Interdependence** is the way in which living organisms rely on each other to survive
- A food chain will be disrupted if one of the organisms die out
- If the producer dies out the rest of the food chain will also die out unless they have a different food source
- If the **consumer** population die out the number of organisms which they eat will increase unless they are eaten by another organism
- **Bioaccumulation** is the process by which chemicals such as pesticides and insecticides build up along a food chain

Food chains always start with a producer. This is usually a green plant or algae that completes photosynthesis to store energy from sunlight as glucose. Grass is the producer in the **grass → rabbit → fox** food chain. Photosynthesis provides the energy for most life on Earth.

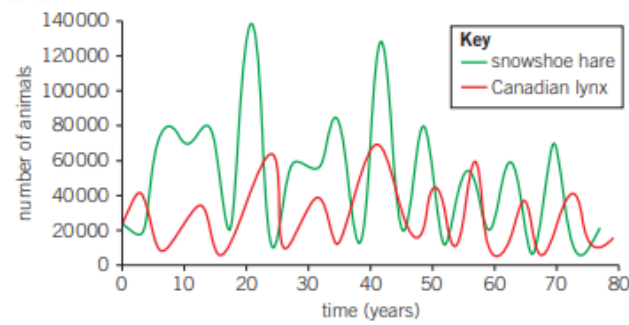
A primary consumer eats a producer. The rabbit is the primary consumer in the example food chain. This is in turn eaten by a secondary consumer, which is the fox.

Ecosystems

- All of the organisms which live in one area are known as a **population**
- An **ecosystem** is all of the organisms which are found in a particular location and the area in which they live in, both the living and non-living features
- A **community** are all of the areas in an ecosystem, the area in which the organisms live in is known as the **habitat**
- A **niche** is the specific role in which an organism has within an ecosystem, for example a panda's diet consists of 99 % bamboo

Competition

- **Competition** is the process in which organisms compete with one another for resources
- Animals compete for food, water, space and mates
- Plants compete for light, water, space and minerals
- The best competitors are those who have adapted in order to best gain these resources
- As the number of a predator in a population increases the number of the prey will decrease as more are being eaten
- As the number of the predator decreases the number of the prey will increase as less are being eaten
- The relationship between the predator and the prey is known as a **predator-prey relationship**



After this might be a tertiary consumer (which eats a secondary consumer) and possibly a quaternary consumer (which eats a tertiary consumer), but not in this example.

Animals that are hunted and eaten are prey, and these are consumed by predators. The final consumer at the top of the food chain is called a top (or apex) predator and is not eaten by anything else.

Make sure you can write definitions for these key terms.

interdependence
habitat
sigma
germination
stamen
food web
sepal
seed
population
pollination
ecosystem
pollen
producer
consumer
predator
competition
petal
community
carpel
ovule
ovary
niche
bioaccumulation
anther

To what extent was life in Tudor England a religious rollercoaster?

w.b.
8th
April

1485: Henry Tudor defeated Richard III at the Battle of Bosworth and is crowned king of England.

1533: Henry divorces Catherine of Aragon and marries Anne Boleyn.

1536: Henry closes the monasteries

1553: Edward died and his ministers named his protestant cousin queen. She rules for 9 days before Mary becomes queen

1509: Henry is crowned Henry VIII and marries Catherine of Aragon.

Timeline

w.b. 6th
May

1547: Henry VIII dies and his 9 year old son Edward is crowned king

1558: Mary I dies and Elizabeth becomes queen

Enquiry 1: How did the Tudors come to power?

Key words:

Heir: The successor to a position

War of the roses: The name given to the war between the houses of York and Lancaster for the throne of England.

What I need to know:

- The War of the Roses was a series of battles between the houses of York and Lancaster for the English throne.
- The Battle of Bosworth took place on the 22nd August 1485. This was fought between Richard III (York) and Henry Tudor (Lancaster)
- Henry emerged from the Battle as the winner and was crowned King Henry VII.
- Henry VII married Elizabeth of York to unite the houses of Lancaster and York and they created the Tudor rose as a symbol of their union.
- Henry and Elizabeth produced two male heirs Arthur and Henry. This secured the Tudor dynasty.

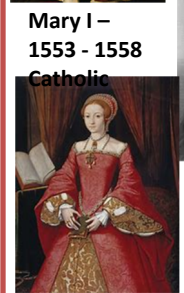
w.b. 22nd
April



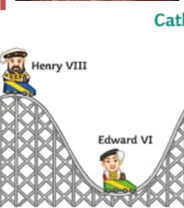
Henry VII – 1486 - 1509
Catholic



Henry VIII – 1509 – 1547
Catholic/Protestant

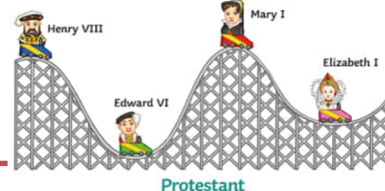


Mary I – 1553 - 1558
Catholic



Elizabeth I – 1558 – 1603
Protestant

Edward VI – 1547 - 1553
Protestant



Enquiry 2: Why was there a religious rollercoaster in Tudor England?

Key words:

Heir: The successor to a position

Reformation: The movement to change the corrupt practices within the church that led to the formation of the protestant religion.

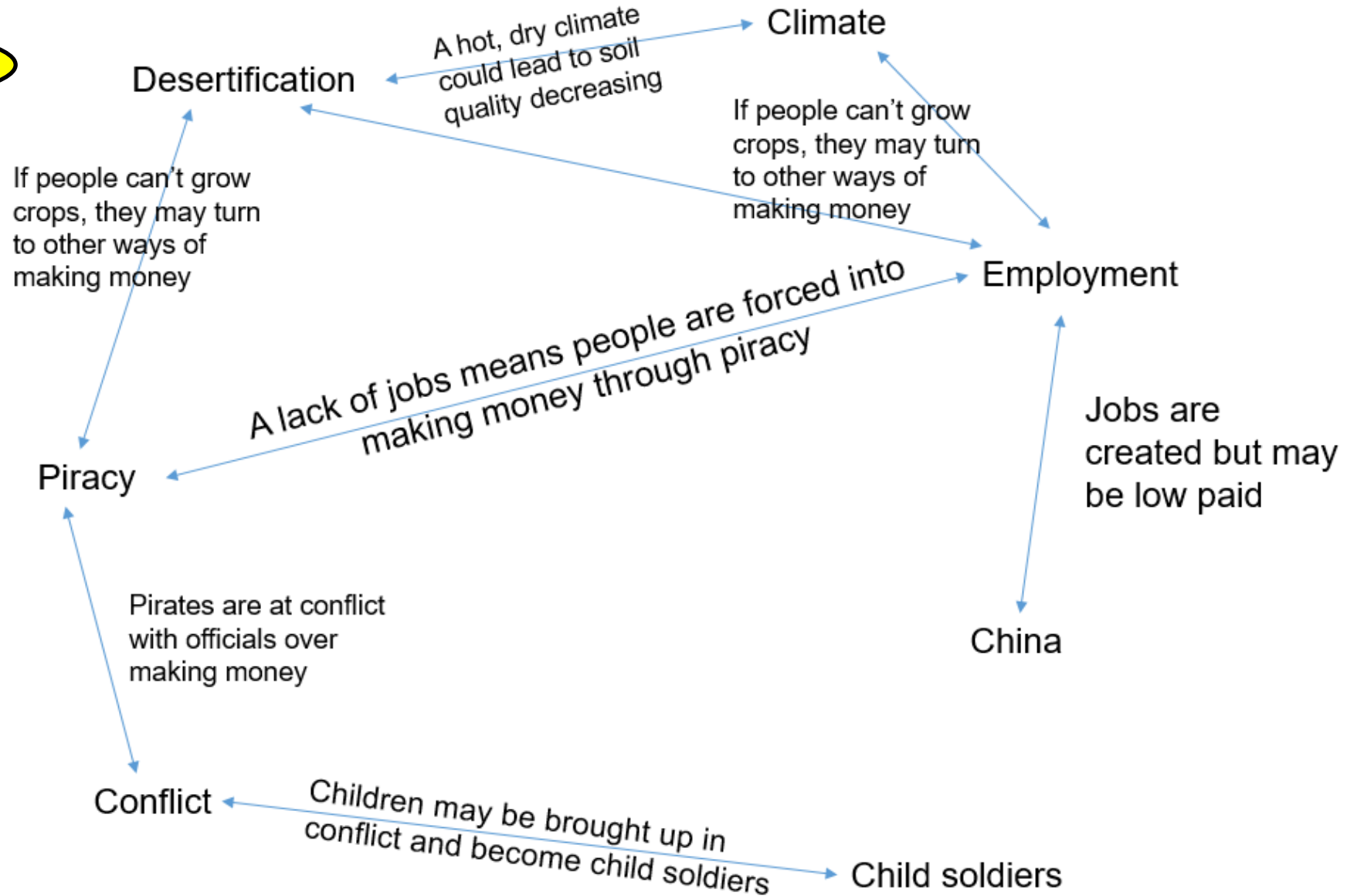
What I need to know:

- Henry VIII came to power in 1509, he was married 6 times during his reign.
- England was predominantly Catholic until Henry VIII broke from Rome so he could gain a divorce from his first wife.
- England struggled under a 'Religious Rollercoaster' where Edward VI made England more Protestant, his sister Mary I made England Catholic and persecuted Protestant and then Elizabeth I made England Protestant again.
- The Spanish attempted to invade England in 1588, Elizabeth defeated the Spanish.

w.b.
20th
May

Homework 1:
Africa Synoptic Links

w/c 8th April



Homework 2: Key Terms

w/c 22nd April

- Development: countries working their way up the ladder of economic performance, living standards, sustainability and equality.
- Migration: moving from one place to another
- Rural-urban migration: moving from the countryside to towns/cities
- Urbanisation: the increase in the proportion of people moving to towns and cities
- Deforestation: the large scale clearing of an area of rainforest
- Globalisation: the process by which the world is becoming increasingly interconnected as a result of massively increased trade and cultural exchange.

Homework 3: The Amazon Rainforest

Location

The Amazon Rainforest is located across the north of South America, primarily in Brazil.

Causes of deforestation

- Farming (cattle ranching and crops)
- Mining
- Logging
- Road building
- Urbanisation

w/c 6th May

Impacts of deforestation

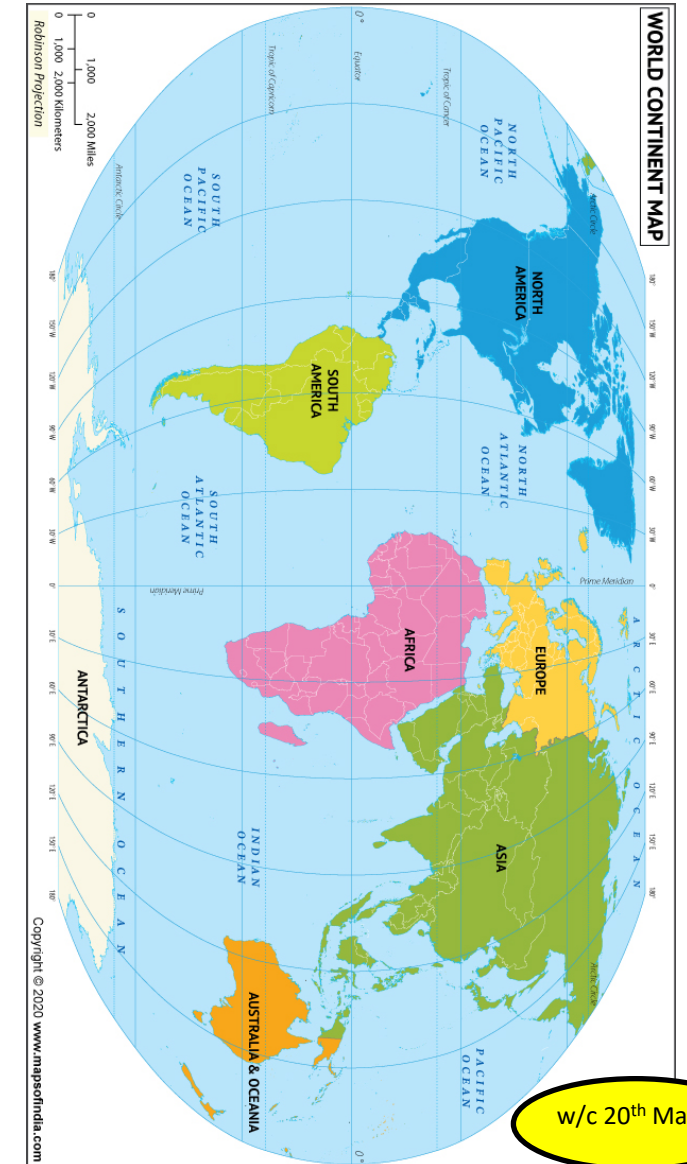
Global:

Increase in carbon dioxide in the atmosphere, loss of medicinal plants, change to climate.

Local:

Soil erosion, loss of animal habitats, loss of home for tribes.

Homework 3: The World



w/c 20th May



15/04

As-tu un animal? Have you got a pet?	un lapin	a rabbit
J'ai ... I have ...	un lézard	a lizard
un chat	a cat	un oiseau
un chien	a dog	un poisson
un cochon d'Inde	a Guinea pig	un serpent
un hamster	a hamster	Je n'ai pas d'animal.
		I don't have a pet

Les pays Countries			
le pays de Galles	Wales	l'Allemagne	Germany
le Portugal	Portugal	l'Angleterre	England
la Belgique	Belgium	l'Écosse	Scotland
la France	France	l'Espagne	Spain
la Grèce	Greece	l'Irlande	Ireland
la Pologne	Poland	l'Irlande du Nord	Northern Ireland
la Suisse	Switzerland	l'Italie	Italy

la famille	family	le fils / la fille	son / daughter
la famille d'accueil	foster family	la (belle-)mère	step-mother
le (beau-)père	(step-)father	la grand-mère	grandmother
le grand-père	grandfather	la (demi-)sœur	(half/step-)sister
le (demi-)frère	(half/step-)brother	les parents	parents

il/elle est ...	he/she is ...
petit(e)	small
grand(e)	tall
de taille moyenne	medium-sized
il/elle a les yeux ...	he/she has ... eyes
bleus / verts / marron	blue / green / brown
il/elle a les cheveux ...	he/she has ... hair
noirs / blonds	black / blond
roux / gris / bruns	red / grey / brown
courts / longs / mi-longs	short / long / medium-length
bouclés / raides	curly / straight
une barbe	a beard
des taches de rousseur	freckles
des tatouages	tattoos
il/elle porte des lunettes	he/she wears glasses

29/04

vingt	20
trente	30
quarante	40
cinquante	50
soixante	60
soixante-dix	70
quatre-vingts	80
quatre-vingt-dix	90
cent	100



La famille de Cédric

13/05

Où habites-tu?	Where do you live?
J'habite ...	I live ...
en Angleterre	in England
au pays de Galles	in Wales
dans un appartement	in a flat
dans une maison	in a house
J'aime habiter ici.	I like living here.
Je n'aime pas habiter ici.	I don't like living here.
C'est ...	It's ...
tranquille	peaceful
grand	big
confortable	comfortable
trop petit	too small
Il n'y a pas de place.	There's no space / room.
le salon	the living room
la cuisine	the kitchen
la chambre	the bedroom
la salle de bains	the bathroom
la salle à manger	the dining room
le jardin	the garden



Qu'est-ce que tu manges au petit déjeuner?	What do you have for breakfast?
Je mange ...	I eat ...
un croissant	a croissant
un fruit	a piece of fruit
du pain (grillé)	(toasted) bread
du beurre	butter
du bacon	bacon
du yaourt	yoghurt
une tartine	a slice of bread with jam or spread

de la confiture	jam
des céréales	cereal
des œufs	eggs
Je bois ...	I drink ...
du jus de fruits	fruit juice
du chocolat chaud	hot chocolate
du lait	milk
de l'eau	water
Je ne mange rien.	I don't eat anything.

Les mots essentiels High-frequency words

Pronoun	
nous	we
Prepositions	
de	of
dans	in
à	in/at
Other useful words	
du/de la/de l'/des	some
(ne) ... rien	nothing

Stratégie 4

Cognates and near-cognates

- Cognates may have the same spelling in French and English, but don't forget to learn them! You need to learn them with the correct article, e.g. **le** Portugal, **des** céréales.
- Watch for small differences in spelling between English and French e.g. **appartement**, **chocolat**. Try to spot patterns: -ic is -ique in words like **piquante**; -y is -ie in words like **Italie**.
- Remember that the pronunciation might sound quite different to the spoken English form. How do you pronounce these cognates?
France Portugal hamster parents fruits



¿Qué hay en tu ciudad? What is there in your town?

Hay...	There is...	una universidad	a university
un castillo	a castle	En...	In...
un centro comercial	a shopping centre	mi barrio	my neighbourhood
un estadio	a stadium	mi ciudad	my town, my city
un mercado	a market	mi pueblo	my village, my small town
un museo	a museum	No hay museo.	There isn't a museum.
un parque	a park	No hay nada.	There's nothing.
una piscina	a swimming pool	unos museos	some museums
una plaza	a square	unas tiendas	some shops
un polideportivo	a sports centre	muchos museos	a lot of museums
un restaurante	a restaurant	muchas tiendas	a lot of shops
una tienda	a shop		

8th April

6th May

22nd April

¿Qué haces en la ciudad? What do you do in town?

Salgo con mis amigos.	I go out with my friends.	a la cafetería	to the cafeteria
Voy...	I go...	a la playa	to the beach
al cine	to the cinema	de compras	shopping
al parque	to the park	de paseo	for a walk
a la bolera	to the bowling alley	No hago nada.	I do nothing.

¿Qué vas a hacer? What are you going to do?

Voy a salir con mis amigos.	I am going to go out with my friends.	Vamos a jugar al voleibol.	We are going to play volleyball.
Vas a ver la televisión.	You are going to watch TV.	Vais a chatear.	You (plural) are going to chat online.
Va a ir de paseo.	He/She is going to go for a walk.	Van a hacer los deberes.	They are going to do their homework.

¿Cuándo? When?

este fin de semana	this weekend	luego	then
el sábado por la mañana	on Saturday morning	finalmente	finally
el domingo por la tarde	on Sunday afternoon/evening	a las tres de la tarde	at three o'clock in the afternoon
primero	first	(un poco) más tarde	(a little) later

20th May

En la cafetería In the café

Yo quiero...	I want...	croquetas	croquettes
bebidas	drinks	gambas	prawns
un batido de chocolate/de fresa	a chocolate/strawberry milkshake	jamón	ham
un café	a coffee	pan con tomate	tomato bread
una Coca-Cola	a Coca-Cola	patatas bravas	spicy potatoes
una Fanta limón	a lemon Fanta	tortilla	Spanish omelette
un granizado de limón	an iced lemon drink	¿Algo más?	Anything else?
un té	a tea	No, nada más.	No, nothing else.
raciones	snacks	¿Y de beber?	And to drink?
una ración de calamares	a portion of squid	¿Cuánto es, por favor?	How much is it, please?
		Son cinco euros setenta y cinco.	That's 5,75 €.

Common instructions phrases

Lee- read	escucha – listen
Explica – explain	pon- put
Escribe – write	apunta – fil in
Empareja – pair up	traduce – translate

Keywords-

1. Baptism
2. Marriage
3. Upanayana
4. Amrit
5. Jerusalem
6. Amrit
7. Aqiqah
8. Brit- Milah
9. Confirmation
10. Funeral
11. Birth
12. Font
13. Bar Mitzvah
14. Mecca
15. Death
16. Heaven
17. Hell



15/04/2024

What are the Rites of Passage?



The rites of passage include the journey of life and what everyone experiences at some point in their life.

- Birth
- Coming of age
- Initiation
- Marriage
- Death
- Life after death

Rites of Passage - Year 7

Birth in Christianity and Islam.

Baptism in Christianity

Baptism welcomes a baby into Christianity | Jesus was baptised, so Christians follow his example | Some Christians believe that baptism cleanses the original sin | Makes Christians part of God's family | God parents are chosen to spiritually guide the baby as they go through life | sign of the cross is made on the baby's forehead | Special candle is lit as a sign of the light of Christ entering the baby's life



Birth in Christianity and Islam.

The Aqiqah- Birth ceremony in Islam

The father whispers the call to prayer (in the right ear) when the baby is first born | Baby's first taste should be something sweet | A little bit of juice date is rubbed on the baby's tongue | They do this so the baby is brought up to be sweet and obedient | The baby's hair is shaved off on the seventh day | Hair is weighed and equivalent of silver is given to charity | some baby's are circumcised- this is done as symbolism of belongingness and cleanliness | Aqiqah celebration is done on the 7th day | it is a big celebration - a large amount of meat is given to the poor/friends and family | prayers are also said to thank Allah for the baby

29/04/2024

Coming of age- Judaism, Hinduism and Sikhism



Coming of age- Bar Mitzvah (Judaism)

Boys have a Bar Mitzvah when they reach 13 years old | Bat Mitzvah is held for girls at the age of 12 | The ceremony of Bar Mitzvah marks a person's passage from a child to an adult | the young person studies the Torah and prepares for the ceremony | The Shabbat service happens at the Synagogue, prayers are read and a speech is given | Bar- Mitzvah promises to keep God's commandments | marks a long-life education and participation in the Jewish community | A party is thrown after the Bar- Mitzvah to celebrate | A tallit is worn during prayer (this is a long shawl with strings tied in a particular pattern to remind Jews of their duty to God | The tefillin consists of two leather boxes- attached to the upper arm and one to the forehead | the boxes include verses from the Bible | Wearing the tefillin reminds Jews to serve God with both head and heart

13/05/024



Coming of age- Upanayana Hinduism

Upanayana is a coming of age ceremony, that includes rituals involving the family, the child and the teacher | A boy receives during this ceremony a sacred thread called Yajñopaveetam that he wears | the boy's head is shaved for the ceremony, symbolising a cleansing from their old ways of living. | New clothes are put on after bathing | Gifts and blessings from family and friends are often received. | The Janoi (thread) is made up of three strands, representing purity of thought, words and actions | The cotton strands go over the left shoulder and under the right arm | Vows are made to obey all aspects of the first ashrama (life stages)

Coming of age- Judaism, Hinduism and Sikhism

Coming of age-Amrit ceremony (Sikhism)

Sikhs who have been through the Amrit Ceremony of initiation, become baptised Sikhs, take new names, and wear the **5 Ks**. | A Sikh can go through this initiation as soon as they are old enough to understand the full commitment that they are making. | The ceremony takes place in a **Gurdwara**, before the Guru Granth Sahib, and in the presence of 5 initiated Sikhs | During the ceremony, hymns are recited from the Sikh scripture, prayers are said, | Then *amrit* is prepared. *Amrit* is a mixture of sugar and water that has been stirred with a double-edged sword. | The candidates for initiation drink some of the *amrit* from the same bowl, and have it sprinkled on their eyes and hair | Each then recites the *Mool Mantra* | The ceremony ends with the eating of the ceremonial *karah parshad* | *Parshad* is a sweet tasting food which has been blessed. It is made from semolina, sugar and ghee. |



Marriage-Hinduism and Christianity



Pilgrimage to Jerusalem- Jerusalem remains an important place of **pilgrimage** for Jewish people | According to Jewish tradition, all of creation began in Jerusalem. | Many Jewish people still visit Jerusalem today as the focal point of their religion and face towards it when they pray as a sign of its importance | Visiting the Western Wall is a reminder to Jewish people of their history, but also gives them a link with the holiest site, the Temple | It is the closest Jewish people can get to the presence of God | There are many **rituals** that take place at the Western Wall. People write prayers on small pieces of paper and push them in between the cracks of the wall | As Jews believe that the wall is a symbol of God's presence, many believe that God can actually see what has been written | The prayers are collected twice every year and then buried on the **Mount of Olives**.

Pilgrimage- Islam and Judaism

Pilgrimage to Makkah- Once a year, Muslims of every ethnic group, colour, social status, and culture gather together in Mecca and stand before the Kaaba praising Allah together. | It is a ritual that shows that everyone is equal in the eyes of Allah | The Hajj makes Muslims feel real importance of life here on earth, and the afterlife | The Hajjis or pilgrims wear simple white clothes called Ihram and perform acts of worship | Mecca is a place that is holy to all Muslims. It is so holy that no non-Muslim is allowed to enter | For Muslims, the Hajj is the fifth and final **pillar of Islam** | It occurs in the month of Dhul Hijjah which is the twelfth month of the Islamic lunar calendar | It is the journey that every sane adult Muslim must undertake at least once in their lives if they can afford it and are physically able.

The Hindu marriage ceremony is considered **sacred**, binding a man and woman together for life | Traditionally, the day before the marriage, the bride has her hands and feet decorated with beautiful designs made with **henna**. | On the morning of the marriage, the bride and groom take baths and put on perfumed oils to symbolise being pure and ready to commit themselves to each other | Most weddings take place in a **mandap** which contains a sacred fire at its centre. | Prayers and offerings are made to **Lord Ganesh**. | The bride and groom place flower **garlands** around each other's necks, symbolising an unbroken circle to show eternal union | The priest then ties the bride's **sari** to a scarf worn by the groom, symbolising the couple's physical and spiritual union | They walk several times around the sacred fire with each circuit representing different aspects of marriage | The bride and groom take **seven steps** and make **seven promises** to each other. The groom puts red powder into the bride's hair to show that she is now a married woman



Marriage-Hinduism and Christianity

Christians believe that marriage is a gift from God, one that should not be taken for granted | A marriage is a public declaration of love and commitment | This declaration is made in front of friends and family in a church ceremony | Beginning the service: the priest welcomes the congregation and then reads out what Christians believe in marriage | Declarations: the couple make their promises in front of God that they will love, comfort, honour and protect their partner as long as they both shall live | Vows: The couple then make their vows to one another | Rings: The couple exchange rings | Proclamation: the priest tells the couple that they are now husband and wife | Prayers: prayers are said for the couple. They may include a prayer for the gift of children, but this is optional | Readings and sermon: there will be some readings from the Bible and the minister gives a sermon | Signing of the register: the bride and groom, along with two witnesses, sign the register, which is a legal requirement. They receive a legally binding marriage certificate.

Death in Christianity

Christians believe that when someone dies, they are judged by God | The righteous go to Heaven and the sinners go to Hell | Christians believe that Hell is the separation from the love of God | When a Christian dies, it is seen as the end of his/her life on earth | A funeral is held for friends and family to grieve for the person who has died and give thanks for their life | If someone is on their deathbed, a minister will prepare them for death | Often, the deceased will have left information in his/her will concerning what they want to be included in the funeral service (hymns, prayers) and will also say whether they wanted to be buried or cremated | The funeral is held about a week after death. It can either take place in a church or at a crematorium | Readings and sermon: a psalm from the Bible is read out | Personal readings: The priest will talk about the person who has died | Prayers: prayers of thanksgiving, penitence and readiness for death are said | Reflection: Silent time for reflection. The congregation is given a minute to reflect on the deceased | Commendation and farewell: The priest speaks these words: "Let us commend (the person's name) to the mercy of God, our maker and redeemer." The priest then reads a prayer of entrusting and commending | The committal: this is probably the most solemn moment of the service. | At a burial, this is when the coffin is lowered into the grave. At a cremation, the curtains are closed around the coffin.

Assessment Success Criteria

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 things done on pilgrimage AND then explain how it would influence a religious believer today.
9 marks (Skills)	Include 2 agree and 2 disagree reasons, with an example or further explanation for each. Add a conclusion



Exploration of experience



Knowledge



Attitudes



Skills



Basic Tags

<html> </html>

Creates an HTML document

<head> </head>

Sets off the title & other info that isn't displayed

<body> </body>

Sets off the visible portion of the document

<title> </title>

Puts name of the document in the title bar; when bookmarking pages, this is what is bookmarked

W/c 15th April 24

HTML Tags are used to create websites – this is something we will be doing in lessons

Text Tags

<pre> </pre>

Creates preformatted text

<h1> </h1> --> <h6> </h6>

Creates headlines -- H1=largest, H6=smallest

Creates bold text (should use instead)

<i> </i>

Creates italicized text (should use instead)

<tt> </tt>

Creates typewriter-style text

<code> </code>

Used to define source code, usually monospace

<cite> </cite>

Creates a citation, usually processed in italics

<address> </address>

Creates address section, usually processed in italics

Emphasizes a word (usually processed in italics)

Emphasizes a word (usually processed in bold)

Sets size of font - 1 to 7 (should use CSS instead)

Sets font color (should use CSS instead)

Defines the font used (should use CSS instead)

W/c 29th April 24

H
T
M
L

W/c 13th May 24

http: // **www.example.com**

Scheme Authority

Hostname

// **www.example.com**

Subdomain Subdomain Top-Level Domain

This shows the structure of a URL – a computer uses an IP address



The Eat Well Guide. Watch the video and learn the names of all the sections and the advice within each section.

<https://www.youtube.com/watch?v=1tJYcNt6Bpk>

<https://www.nhs.uk/live-well/eat-well/the-eatwell-guide/>



W/C 29th April Technical Skills Terminology

Be able to explain the following technical skills and ingredients prepared or cooked in this way.

- Weigh**– weighing scales – we weigh solid foods so we have the exact amount.
- Measure** – measuring jug or tablespoons or teaspoons – we measure liquids.
- Chop** – vegetable knife – to cut into smaller pieces before cooking.
- Boil** – reach a very hot temperature to cause bubbling and steam.
- Simmer** – stay just below boiling point while bubbling gently.
- Thickening** – starch is used in cooking to thicken liquids.

Food Safety Hazards

1. Physical hazards
2. Chemical Hazards
3. Microbiological Hazards

W/C 29th April Technical Skills Terminology

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.foodfactoflife.org.uk/VideoActivity.aspx?siteId=15§ionId=65&contentId=73>

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:

w/b 15th April.

Inputs	Outputs
<ul style="list-style-type: none"> - keyboard - computer mouse - scanner - digital camera - graphics tablet - tracker ball 	<ul style="list-style-type: none"> - monitor - printer - plotter - cutter - milling machine - stereo lithography machine

w/b 29th April

Cutting and Shaping Tools

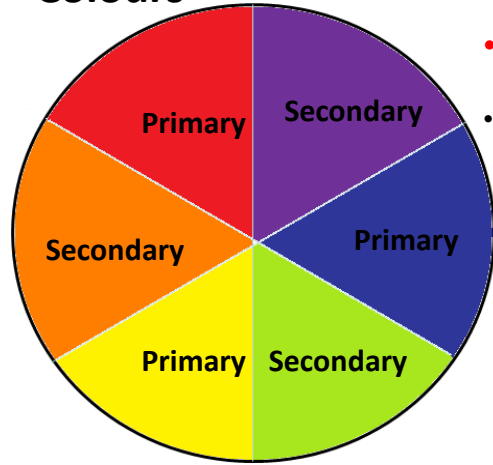
	Scissors	Easy to use, suitable for straight lines and curves, dependent on skill of user, can struggle with thicker boards
	Craft Knife	Very sharp, precise cuts, excellent for geometric shapes and straight lines with safety rule, can be difficult to cut curves
	Hand Perforator	For creating perforated 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

Wb 13th May

Papers and boards	
Bleed Proof	Smooth, prevents pen seeping through, presentation drawings
Cartridge paper	Good quality, often textured, painting, markers, drawing
Grid Paper	e.g. isometric, square grid, working drawings, model making
Layout Paper	Thin, lightweight, takes markers well, tracing, sketching
Tracing Paper	Transparent, thin, tracing copies of drawings
Corrugated Card	Strong, lightweight, different thicknesses, packaging, boxes
Duplex Board	Thin, often one side for printing, food packaging
Foam Board	Foam sandwiched by two pieces of board, model making
Foil-lined Board	One side covered with aluminium, insulates heat, ready meal/takeaway packaging
Solid White Board	Top quality board, smooth, suitable for printing, book covers

Colours

w/b 15th 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.

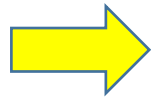
Key terms w/b 29th April



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. 13th 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 .

w/b 15th April

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



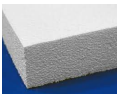






w/b 29th April

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 13th May

Polymers (Plastics)	
Thermoplastics	Thermosetting Plastics
(can heat and shape repeatedly) Many can be recycled	(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 resistance 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 easily	



W/b 15th April

Factors to consider when designing a product

1. Cost of the material
2. Client – target group
3. The Type of material to use

4. Method of Manufacture
5. Aesthetics, colour, style. Size and appearance of the product

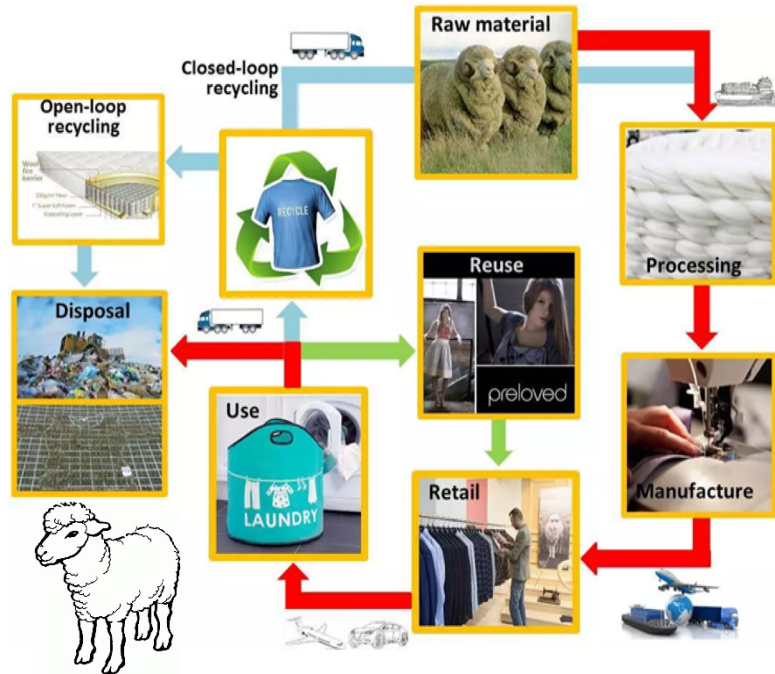
Wb 13th May

INSTRUCTIONS	
Finger wrap	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 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
Machin e	<ol style="list-style-type: none"> 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

Life cycle Assessment of wool

L.C.A.

Wb 29th April



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.

Folk Music

(Exploring Harmony and Accompaniments)



Sections A and B – w.c. 15th April

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. During the 1950's a great **FOLK MUSIC REVIVAL** began and bands in the 1970's 'mixed together' Folk and Rock (**FOLK ROCK**) as a type of musical **FUSION** e.g., *Lindisfarne, Steeleye Span*. Other musicians created more modern and commercial **ARRANGEMENTS** of Folk Songs such as *Ralph McTell's "Streets of London"* in 1975.



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 **EVERYDAY LIFE, THE SEASONS, BATTLES AND WARS, SHEPHERD'S SONGS** and **LULLABIES** (cradle songs). People also sang Folk Songs to help them forget their aches and pains e.g., *shepherds sang about their sheep and lambs and the bitter weather to help keep their spirits high*. Folk Music can also be **INSTRUMENTAL**, often used for dancing, entertainment, celebration, and religious ceremonies. Dancing to Folk Music still happens such as **MORRIS DANCERS** or **MAYPOLE DANCING**.



Sections C and D – w.c. 29th April

C. Folk Song Accompaniments

TONIC PEDAL - A (BASS) PEDAL (POINT/NOTE) is a note of long duration, often held in the bass part (lower down the keyboard) which uses the **TONIC** note, over which the melody line and chords will "fit" e.g.



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.

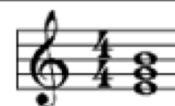


OSTINATO – A repeated musical pattern as an accompaniment, often using notes of the **CHORD** and rhythm patterns from the song e.g.



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

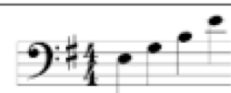
As a **TRIAD** (all three notes (**ROOT, THIRD, FIFTH**) performed together, the **ROOT** sometimes in the **BASS** part acting as **BASS LINE**).



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).



As an **ARPEGGIO** - playing the notes of a chord ascending or descending (**ROOT, THIRD, FIFTH**) in order, but separately.



As an **ALBERTI BASS** - a way of playing the notes of a chord in the order: lowest (**ROOT**), highest (**FIFTH**), middle (**THIRD**), highest (**FIFTH**), repeated several times as a bass line **ACCOMPANIMENT**

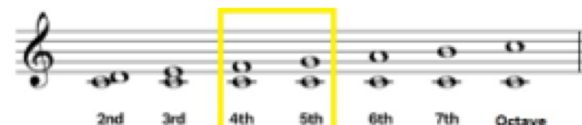


D. Harmony in Folk Music: Intervals

ACCOMPANIMENT – Music that accompanies either a lead singer or melody line. This can be instrumental performed by members of a Folk Band but also vocal often known as the "backing" provided by backing singers. (see C for different forms of accompaniments).

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 CAPPELLA**. However, the following instruments are often used in Folk Music:

Section E – w.c. 13th May

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