



**KNOWLEDGE
ORGANISERS**

YR8

HONESTY | EXCELLENCE | ACCOUNTABILITY | RESPECT | TOLERANCE



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A Guide to Using your Knowledge Organisers

What is a knowledge organiser?

In this booklet you will find knowledge organisers for every subject you study at Maddani. Your teachers have thought about **the most important key vocabulary, diagrams, information, and ideas that you need to know to understand each topic and have summarised them on one A4 sheet of paper** for you. The information has been organised into clear tables, diagrams or key points to make the knowledge organiser easy to use and to understand.

How will Knowledge organisers help you?

People remember what they have learned by thinking about it often, and by linking key knowledge to other ideas within a topic. Your knowledge organisers include the key information and ideas for the topic you are studying, so that you can think about how these ideas are linked to what you are learning in each lesson. **This means that you are thinking about these key ideas many times as you study the topic.** This will make it easier to remember what you have learned and add new knowledge each lesson

Your knowledge organisers are also useful if you have been absent because the knowledge organiser will include the key ideas from the lesson you missed. This will make it much easier to understand and catch up with the activities you need to complete independently.

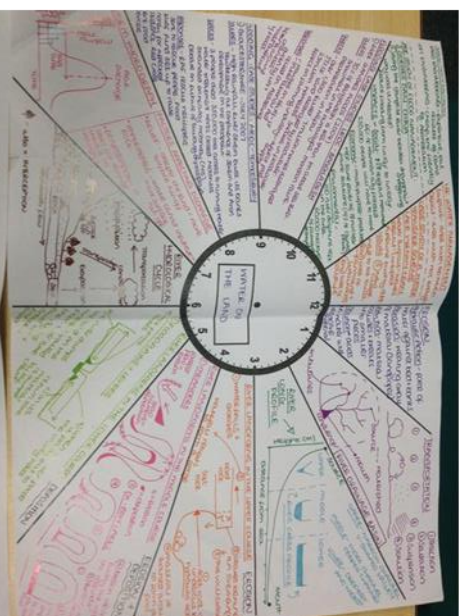
How can you use your knowledge organisers?

There are many activities that you can do using your knowledge organisers. Try some of the ones explained below:

Homework: Your teachers may assign homework linked to your knowledge organisers to help you understand key terms and ideas from the topic. This will help you prepare for your next lesson and understand the new information more clearly

Independent Research: You could do your own research to learn more about the key ideas included in your booklet

Creating more revision and learning tools: You can use the information on your knowledge organiser to create mind-maps or revision clocks. You can do this by taking the key ideas from the knowledge organiser and creating your mind-map or Round the Clock sheet (like the one shown below with 12 sections for information – just like a clock) by starting with the main ideas from your knowledge organiser and adding all the specific detail you remember from your lessons to the different sections of your mind-map or Round the Clock Diagram.



They are great for revision and testing your level of knowledge:

Test yourself: Because knowledge organisers include the key information and ideas for each topic, you can use them to help you revise for tests. You can self-quiz by covering sections of the knowledge organiser and testing yourself to see what you remember. Then uncover the information on your knowledge organiser and see if you were correct.

See how well you know the topic: Turn your knowledge organiser over and create a mind-map or write everything you know about the topic on a blank piece of paper. Then turn over the knowledge organiser and check to see if your information is correct or if there is anything that you missed. Revise it and make sure you will remember more the next time.

Create your own quizzes: Use the knowledge organiser to write your own set of questions based on the information included. Once you have a set of questions, turn the knowledge organiser over and see if you can remember the answers. Make sure you revise anything that you couldn't answer so that you will be able to next time. Try to answer the questions each week and see if you are able to remember more each time.

Create your own flashcards. For example, you could write the key terms from your knowledge organiser on one side of the card and the definition on the other. Then use the cards to quiz yourself.

Many of the key ideas you need to know for exams are on the mind-map. If it is included on the knowledge organiser your teacher thinks it is important for you to know it and you can expect it to be tested on an exam in some way.

It is important to remember that knowledge organisers don't include all the information that you need to know – only the main ideas. You can use them to help you remember the detail from your lessons.

How can your parents/carers use knowledge organisers to help you learn?

Read through the organiser with someone in your family and explain the information included in the knowledge organiser to them. Make sure you use examples and provide as much detail as you can, and then answer any questions your family member might have. Teaching someone else what you know helps you to understand the key ideas more clearly and helps you remember them more easily next time.

Ask your family to test or quiz you on the information included in the knowledge organiser. You should try to do this regularly and keep track of what you remember to see if you improve each time.

Ask your family to read out sections of the knowledge organiser to you, but to miss out key words or pieces of information and see if you can fill in the key terms or knowledge.

Ask your family to test you regularly on the spellings of key words until they are perfect. Make a note of the ones that you spell incorrectly to make sure that you know them next time.



Key Terms

Periodic Table	A tabular representation of all known elements in order based on atomic number.
Atomic Number	The number of protons in the nucleus of an atom. Also called the proton number.
Periods	A horizontal row in the periodic table.
Groups	A vertical column in the periodic table containing elements with similar chemical properties.
Element	A substance made of only one type of atom.
Compound	A substance where two or more elements have chemically joined together.
Mixture	Two or more substances that are not joined together. The substances can be elements, compounds or both.
Reactive	The tendency of a substance to undergo a chemical reaction.

Periodic Table

All the different elements are arranged in a chart called the **periodic table**. A Russian scientist called Dmitri Mendeleev produced one of the first practical periodic tables in the 19th century. The modern periodic table is based closely on the ideas he used:

- the elements are arranged in order of increasing **atomic number**
- the horizontal rows are called **periods**
- the vertical columns are called **groups**
- elements in the same group are similar to each other

The main groups are numbered from 1 to 7 going from left to right, and the last group on the right is group 0. The section in the middle of the table is called the Transition Metals. You may also see **all** the groups numbered (including the transition metals), this time from 1 to 18. If you know what one of the elements in a group is like, you can make predictions about the other elements in a group. For example, all the elements in group 1 are **reactive** metals, and all the elements in group 0 are unreactive non-metals.

Making predictions using the periodic table

Groups in the periodic table contain elements with similar chemical properties. But there are usually trends in properties that allow us to make predictions. For example, in group 1:

	Melting point	Density	Reactivity
Lithium	Decreases down the group	Increases down the group	Increases down the group
Sodium	Decreases down the group	Increases down the group	Increases down the group
Potassium	Decreases down the group	Increases down the group	Increases down the group
Rubidium	Decreases down the group	Increases down the group	Increases down the group

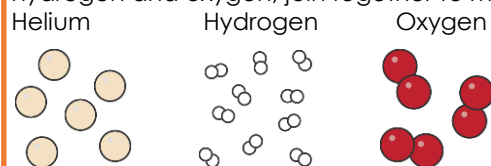
Caesium is the next element in group 1, and it can be found below rubidium. You can accurately predict that it will have the lowest melting point, the highest density and the highest reactivity of all the elements in group 1.

Elements

Elements

There are over a hundred different **elements**. The atoms in a particular element are the same as each other, and they are different from the atoms of all other elements. For example, lead and gold are elements. A piece of pure gold contains only gold atoms. A piece of pure lead contains only lead atoms.

The atoms of some elements do not join together, but instead they stay as separate atoms. Helium is like this. The atoms of other elements, such as hydrogen and oxygen, join together to make **molecules**.



What are Atoms?

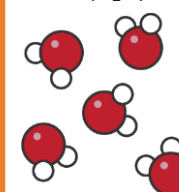
Everything is made from **atoms**, including you. Atoms are tiny particles that are far too small to see, even with a microscope. If people were the same size as atoms, the entire population of the world would fit into a box about a thousandth of a millimetre across.

Compounds

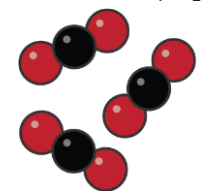
Compounds

A **compound** is a substance that contains atoms of two or more different elements, and these atoms are chemically joined together. For example, water is a compound of hydrogen and oxygen. Each of its molecules contains two hydrogen atoms and one oxygen atom. There are very many different compounds.

Water (H₂O)



Carbon Dioxide (CO₂)



Key Terms

Chlorophyll The green chemical inside the chloroplasts of plant cells. It enables photosynthesis to take place.

Chloroplast Contains the green pigment chlorophyll; the site of photosynthesis.

Photosynthesis A chemical process used by plants to make glucose and oxygen from carbon dioxide and water, using light energy. Oxygen is produced as a by-product of photosynthesis. Algae subsumed within plants and some bacteria are also photosynthetic.

Stomata Tiny holes in the epidermis (skin) of a leaf. They control gas exchange by opening and closing and are involved in loss of water from leaves. Singular is stoma.

Aerobic respiration Respiration that requires oxygen.

Alveoli Tiny air sacs in the lungs, where gas is exchanged during breathing.

Anaerobic respiration Respiration that occurs in the absence of oxygen.

Bronchi The plural of 'bronchus'. The bronchi are the two major air tubes in the lungs.

Bronchioles The many small, branching tubules into which the bronchi subdivide.

Diaphragm A large sheet of muscle that separates the lungs from the abdominal cavity.

Diffusion The movement of molecules from an area of higher concentration to an area of lower concentration.

gas exchange Oxygen passes through the capillary wall and into the tissues; carbon dioxide passes from the tissues into the blood.

Lactic acid A toxic chemical produced during anaerobic respiration.

Mitochondria Structures in the cytoplasm of all cells where aerobic respiration takes place (singular is mitochondrion).

Respiration The chemical change that takes place inside living cells, which uses glucose and oxygen to release the energy that organisms need to live. Carbon dioxide is a by-product of respiration.

respiratory system The organ system where air is taken into and out of the body, and gas exchange happens.

Trachea The windpipe, the tube that leads from the mouth towards the lungs.

Unicellular A single-celled organism.

Ventilation Breathing in and out.

Respiration

Energy is needed for life processes such as:

- growth and repair
- movement
- control of body temperature in mammals

Respiration is a chemical reaction that happens in all living cells, including plant cells and animal cells. It is the way that energy is released from glucose so that all the other chemical processes needed for life can happen. Do not confuse respiration with breathing (which is properly called ventilation).

Aerobic respiration

Glucose and oxygen react together in cells to produce carbon dioxide and water and releases energy. The reaction is called **aerobic respiration** because oxygen from the air is needed for it to work.

Here is the word equation for aerobic respiration:



Energy is released in the reaction. The **mitochondria**, found in the cell cytoplasm, are where most respiration happens.

Process of Photosynthesis

Plants need food to respire, grow and reproduce. Unlike animals, plants are able to make their own food by the process of photosynthesis.

Photosynthesis takes place in the part of the plant cell containing **chloroplasts**, these are small structures that contain **chlorophyll**.

For photosynthesis to take place, plants need to take in **carbon dioxide** (from the air), **water** (from the ground) and **light** (usually from the sun).

Here is the word equation for photosynthesis:



Here is the chemical equation for photosynthesis:



Photosynthesis takes place inside plant cells in small objects called **chloroplasts**. Chloroplasts contain a green substance called **chlorophyll**. This absorbs the light energy needed to make photosynthesis happen. Plants and algae can only carry out photosynthesis in the light.

Photosynthesis

Animals need to eat food to get their energy. But green plants and algae do not. Instead they make their own food in a process called **photosynthesis**.

Almost all life on Earth depends upon this process. Photosynthesis is also important in maintaining the levels of oxygen and carbon dioxide in the atmosphere.

These are the things that plants need for photosynthesis:

- carbon dioxide
- water
- light (a source of energy)

These are the things that plants make by photosynthesis:

- glucose
- Oxygen

•Respiration releases energy from glucose so that life processes can carry on. Aerobic respiration needs oxygen but anaerobic respiration does not. The respiratory system is adapted for gas exchange

Adaptation

They are **green** because they contain lots of chlorophyll to absorb sunlight.

They have a **large surface area** to maximise the amount of sunlight they can absorb.

They are **thin**, allowing easy diffusion of gases into and out of the leaf.

They have **veins** (xylem and phloem) to allow the transport of water, mineral ions and glucose (food).

Powers and Roots

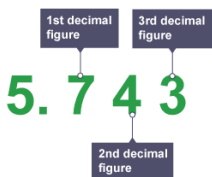
The notation 3^2 is known as **index form**. The small digit is called the index number or **power**. The index number tells you how many times the number should be multiplied.

When the index number is two, the number has been **squared**.
When the index number is three, the number has been **cubed**.

Significant Figures/ Rounding

Counting decimal places

Decimal places are counted from the decimal point:



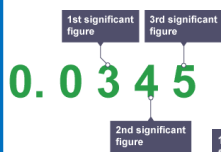
Example Round 9.6371 to 2 decimal places. This means we need to look at 2 digits after the decimal point.

9.6371

Because the next digit 7, is more than 5 we round 3 up. So 9.6371 to 2 decimal places is 9.64

Counting significant figures

Significant figures start at the first non-zero number, so ignore the zeros at the front, but not the ones in between. Look at the following examples: **Example 1.**



Round 0.0345 to 2 significant figures
The second significant figure is 4, look at the next digit, its 5 which means we round up 4. Answer: 0.035



Example 2.

Round 72800 to 1 significant figures
The first significant figure is 7, look at the next digit, its 2 which means we round down. Answer: 7000

Standard Form

A number is said to be written in standard form when it is written as $A \times 10^n$, where:

- A is a number greater than or equal to 1 , but strictly less than 10 , and
- n tells us how many places to move the decimal point.

You can convert from standard form to ordinary numbers, and back again. Have a look at this example:

3×10^4 can be written as:

$$3 \times 10^4 = 3 \times 10 \times 10 \times 10 \times 10$$

$$= 3 \times 10,000$$

$$= 30,000$$

Fractions

If you were to add $\frac{1}{2}$ and $\frac{1}{3}$, It is hard to picture what the answer would be. Rewriting the fractions with a common bottom number, or denominator (in this case, 6), makes it easier.

1. Change the fractions so they have the same denominator.
2. Add or subtract the top numbers, or numerators.

e.g.

$$\frac{1}{2} + \frac{1}{3} = \frac{3}{6} + \frac{2}{6} = \frac{5}{6} \qquad \frac{7}{10} - \frac{2}{5} = \frac{7}{10} - \frac{4}{10} = \frac{3}{10}$$

Factors, Multiples, Index Law

Indices Rules

In general $2^m \times 2^n = 2^{(m+n)}$

In general $2^m \div 2^n = 2^{(m-n)}$

The **factors** of a number are the numbers that divide into it exactly.

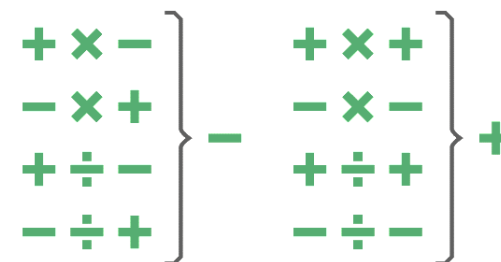
The **multiples** of a number are the numbers that belong to that number's times table.

Negative Numbers

Numbers below zero are called **negative** numbers. Numbers above zero are called **whole** numbers. There are rules you can use if adding, subtracting, multiplying or dividing positive and negative numbers.

The rule for multiplying and dividing these numbers is very similar to the rule for adding and subtracting.

- When the signs are different the answer is negative.
- When the signs are the same the answer is positive.



Surds

Surds are numbers left in square root form that are used when detailed accuracy is required in a calculation. They are numbers which, when written in decimal form, would go on forever.

Surds can be simplified if the number in the surd has a square number as a factor.

Remember these general rules:

$$\sqrt{a} \times \sqrt{a} = a$$

$$\sqrt{ab} = \sqrt{a} \times \sqrt{b}$$

$$\sqrt{\frac{a}{b}} = \frac{\sqrt{a}}{\sqrt{b}}$$

E-Safety Key Terms

Anti Virus Software Application designed to protect PCs from malicious computer code (virus)

Cookie A small piece of data sent from a website and stored in a user's web browser while a user is browsing a website.

Filtering Software or hardware product designed to prevent access to inappropriate websites on the internet. It does this by denying or allowing access based on lists of pre-classified addresses, or by examining the web data for keywords or unwanted content.

Firewall A system that prevents unauthorised access to a computer over a network, such as the internet. Firewalls can be either hardware or software businesses tend to use the former; home users the latter.

Password A word or series of letters, numbers and punctuation that only you know, which you use to log on to computers, networks or online services.

SMS Short message (or messaging) service, a system that enables mobile phone users to send and receive text messages

Social Network A social network service focuses on building online communities of people who share interests and/or activities, or who are interested in exploring the interests and activities of others. Most social network services are web based and provide a variety of ways for users to interact, such as e-mail and instant messaging services

The Internet

Be careful when sharing personal information online. Only use websites you trust. Personal information includes:

- full name
- date of birth
- address

This information can be used to steal your identity or to find you in the real world. Identity theft is where someone pretends to be you. They might shop online spending your money, or take out loans in your name.

Spam & Phishing

Spam emails offer all kinds of things like money, prizes and very low prices for products that are normally very expensive. They can contain malware too.

Phishing

Trying to trick someone into giving out information over email is called 'phishing'. You might receive an email claiming to be from your bank or from a social networking site. They usually include a link to a fake website that looks identical to the real one. When you log in it sends your username and password to someone who will use it to access your real accounts. They might steal your money or your identity.

Malware and Security

Malware is a general term that describes lots of different programs that try to do something unwanted to your computer. Anti-virus software prevents malware from attacking your computer or mobile device.

Types of Malware

A **virus** harms your computer in some way, usually by deleting or altering files and stopping programs from running.

A **trojan** starts by pretending to be a trusted file, but gives unauthorised access to your computer when you run it.

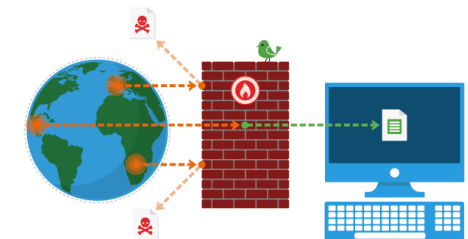
Worms are difficult to get rid of. They copy themselves over networks to external storage devices
Spyware collects information from your computer and sends it to someone.

Scareware tricks you into thinking it's software that you need to buy.

Firewall

A firewall monitors connections to and from your computer. If it spots something suspicious, it closes the connection or disconnects it. Most operating systems include a firewall and it should be turned on by default.

Hackers, people who try to gain access to your computer without your permission, will have a harder time if your firewall is enabled.



False Information

The internet is a great source of information but some of it is incorrect, out of date or biased. Always check multiple sources, ie other websites or written material, to confirm what you've read is correct.

No one is in charge of the internet so anyone can post or publish anything to it. Some content may be unsuitable. Websites that you can trust include those from:

- the Government – if the address has 'gov.uk' in it, it's a UK Government website
- the National Health Service (NHS) – if the address has 'nhs.uk' in it, it's an NHS website
- the Police – the official website is www.police.uk

Stay Safe

Email, instant messaging, social networking sites and video chat are great for keeping in touch with family and friends, but make sure you know who you're talking to. People may not be who they claim to be. They might try to get personal information from you or ask you to do something that makes you uncomfortable. Others may try to wind you up or be unnecessarily aggressive. This is called trolling and flaming. Ignore emails and friend requests from people you don't know. Always speak to an adult if you come across anything online that makes you feel uncomfortable and unsafe.

New Message

To compose an email, press the button in the top left hand corner 'New Message'.

Messages

When selecting an email in your inbox, you can choose what happens to it via these buttons.

Spam Emails

You may receive spam email which appears to be from a teacher, student or someone you know, prompting you to either click on a link or to open a message.

By clicking the link and entering your details you are giving access to your email account to hackers to sent automated emails.

Delete the email & do not click on the link to view the message.

Email Message

Once your Email is complete press 'Send'.

Insert the email address of the person who you would like to send the email to.

Over here you can add additional people who need to be included in the email but the email is not directed to them. The recipient will be able to see these names here.

Once your Email is complete press 'Send'.

Delete this draft email.

If you would like to add any documents from your computer/ One drive.

Delete this draft email.

Bcc is when you want to alert a person to the email but do not want the recipient to see who else has received this email.

Title your email here.

Write your message/ text/ information here.

Format your text, font size, layout etc, through this.

Add an image to the email.

If you would like to add any documents from your computer/ One drive.

Your Inbox

This is your inbox, you will have all the emails you receive displayed here. To view an email, click on the email you would like to open and it will appear on the right hand side.

Plot Summary

Which events were the most important for Richard to become king? (The top 3/4)

1. Richard is on the winning side of the battle for power between the houses of Lancaster and York. The previous king, Henry VI, has been murdered, together with his son.
2. Edward IV is now on the throne, but Richard, Edward IV's younger brother, longs to be king himself and will do anything to achieve this.
3. Richard arranges to have his brother, George, Duke of Clarence, executed for plotting against the king.
4. Richard persuades Lady Anne, the widow of Henry VI's son, to marry him. This strengthens his position.
5. Edward IV dies. The heir to the throne (Edward V) is a child, and Richard is made Lord Protector, which gives him great power.
6. Earl Rivers, Lord Grey and Lord Hastings, powerful men who might oppose Richard, are arrested and later executed.
7. The Duke of Buckingham, Richard's closest ally, persuades the citizens of London to ask Richard to be king. Richard is crowned.
8. Richard arranges for the princes (Edward V and his brother, Richard, the Duke of York), who are imprisoned in the Tower of London, to be killed.
9. Anne dies and Richard tries to marry Princess Elizabeth, his nieces and sister of the princes.
10. A rebellion, led by Henry Tudor, Earl of Richmond, begins. Many join the uprising.
11. Richard gathers his remaining allies and meets Richmond at Bosworth.
12. In the battle, Richmond kills Richard. He is then crowned king and becomes Henry VII, the first Tudor monarch.

Themes

- Lies and deception
- The position of women
- Fortune's ups and downs
- Conscience
- Power and ambition
- Narcissism
- Family and friends
- Betrayal of trust
- Evil
- Death
- Regret/Remorse
- Patriarchal power
- Nepotism

Context

- Richard III belongs to the genre of Shakespeare's plays known as the histories, which deal with events in England's historical past after the Norman Conquest, in 1066. Although it is often viewed as a sequel to three of Shakespeare's earlier history plays—1 Henry VI, 2 Henry VI, and 3 Henry VI—Richard III is usually read and performed on its own. The play chronicles the bloody deeds and atrocities perpetrated by its central figure—the murderous and tyrannical King Richard III.
- In reality, Richard was not as deformed, nor likely as sadistic and evil as Shakespeare made out. He was created this way, in the play, to support the Elizabethan audience, at the time. Queen Elizabeth I was the great grand-daughter of Henry VII, the king who killed Richard in the Battle of Bosworth field. She would, of course, have been very offended at seeing Richard presented with any redeeming features—and so many critics believe he was vastly exaggerated. This also made the play far more entertaining, too!
- Elizabethan England was a fiercely patriarchal society with laws that heavily restricted what women could and could not do. Women were not allowed to attend school or university, which meant they couldn't work in professions like law or medicine. Most of the guilds, which trained skilled workers like goldsmiths and carpenters, did not officially admit women. Even the disreputable profession of acting was off limits to women. The only trades legally available to women were those that could be mastered and practiced in the home, such as hat making and brewing. Women were also barred from voting, and though they could inherit property from their father or their husband, they could not themselves purchase property. In addition to these legal restrictions, women were also bound by strict social expectations that did not apply equally to men. Sermons and books written during the Elizabethan era encouraged women to be silent and obedient to male authority, whether that of their father or their husband.

Key Quotations

- "No beast so fierce but knows some touch of pity. But I know none, and therefore am no beast."
- "And therefore, — since I cannot prove a lover, To entertain these fair well-spoken days, — I am determined to prove a villain, And hate the idle pleasures of these days."
- "Out of my sight! Thou dost infect mine eyes."
- "Conscience is but a word that cowards use, devised at first to keep the strong in awe"
- "A horse! a horse! my kingdom for a horse!"
- "Wrong hath but wrong, and blame the due of blame."
- "Plain and not honest is too harsh a style."
- "foul devil," "a dreadful minister of Hell." - Lady Anne

Learning Objectives

By the end of the term and I will be able to

- Describe a past holiday
- Say where you went
- Say what you did
- Talk about festivals

Grammar Objectives

I will be able to understand and apply rules about

- Use of the past (perfect) tense with avoir
- Use of the past (perfect) tense with aller

Grammar

j'ai	jeu	I have	
tu as	joué	you have (singular)	played
il/elle a	visité	he/she has	visited
on a	trouvé	we have	found
nous avons	acheté	we have	bought
vous avez	mangé	you have (plural)	eaten
ils/elles ont	fait ...	they have	done ...

The imperfect tense is used to describe what something was like: c'était - it was

Activities in the Past

Qu'est-ce que tu as fait?	What did you do?
j'ai acheté	I bought
j'ai bu	I drank
j'ai fait	I did
j'ai joué	I played
j'ai mangé	I ate
j'ai trouvé	I found j'ai
visité	I visited
j'ai voyagé	I travelled
j'ai vu	I saw
je suis allé(e)	I went
je suis rentré(e)	I came back home
c'était	it was

Perfect Tense

Key grammar words

Perfect tense: Completed action in the past e.g. I ate/ I did etc.

Verb: action word

Past participle: Verb in the past tense e.g. to eat becomes ate, to do becomes did etc.

Imperfect tense: Continuous action in the past e.g. it was raining/ great etc.

Sequencing Words

d'habitude	usually
hier	yesterday
(tout) d'abord	first of all
puis	then
ensuite	then
après	after
pour finir	finally

Going on Holiday

Où vas-tu en vacances?	Where do you go on holiday?
à la campagne	in/to the countryside
à la mer/au bord de la mer	by/to the seaside
à la montagne	in/to the mountains
chez mes grands-parents	at my grandparents' house
en ville	in town
une auberge de jeunesse	a youth hostel
un bateau de croisière	a cruise ship
un camping	a campsite
un gîte	holiday cottage
un hôtel	a hotel
une villa	a villa
se baigner/nager	to swim
choisir	to choose
dormir	to stay overnight
faire des randonnées	to go hiking
faire du vélo	to go cycling
finir	to end, finish

Model Text

Salut je suis en vacances	Hello I am on holiday	Où es-tu en vacances ?
à New York	in New York	
aux États Unis	in America	
et c'est super !	and it's super!	C'est comment ?
Hier j'ai visité la Statue de la Liberté	Yesterday I visited the Statue of Liberty	Qu'est ce que tu as fait ?
et c'était incroyable.	and it was incredible .	
Tout d'abord, j'ai acheté des souvenirs	Firstly, I bought souvenirs	
et puis j'ai mangé un hamburger avec des frites.	and then I ate a hamburger with chips.	
Ensuite j'ai trouvé un ballon de foot à Central Park.	Next I found a football in Central Park.	
Puis, j'ai visité Times Square	then I visited Times Square	
et pour finir j'ai vu un Taxi jaune.	and to finish I saw a yellow taxi.	
C'était une journée géniale !	It was a great day!	C'était comment?

Football Rules

Rules	<ul style="list-style-type: none"> •Game is started by a kick off in the centre of the pitch. •In a full sided game each team consists of 11 players. •If the ball goes off the side of the pitch it is a throw in to the team that didn't touch the ball last. •If the ball goes off the end of the pitch it is a corner or a goal kick depending who the ball touched last. •Depending on where the incident takes place, a free kick or a penalty is awarded if the player in possession of the ball is illegally infringed. •The goalkeeper is the only player allowed to touch the ball with their hands and can only do this inside their 18 yard box. •To score a goal, the ball must cross the opposition's goal line. •If a player is past the opponent's last defender and in the opposition half when the ball is passed they are offside and a free kick is awarded to the opposition team. •The team with the most goals at the end of the game will win the game.
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Rugby Tactics

Handling	A vital skill involved in passing and running with the ball. Two hands in contact with the ball will help with passing the ball and making sure it is secure
Tackling	Trying to stop an opponent who has the ball by bringing them to the ground. A variety of tackles can be used, for example a side-on tackle, front on tackle, smother tackle or tap tackle.
Carrying	The act of carrying the ball around the pitch. Players can use a variety of techniques to avoid being tackled, for example a side step, swerve or spin.
Rucking	A ruck is a phase of play where one or more players from each team, who are on their feet, close around the ball on the ground to prevent the opposition from gaining possession after a tackle has been made.
Mauling	A maul forms when several players from the same team come together to help move the ball towards the try line. Several players from the opposing team may then come together to prevent this. A maul is different to a ruck, as the ball is not on the ground but in hand.

Skills & Tactics

Short Pass	Non kicking foot next to the ball/ use the side of the kicking foot to contact the ball following a short back swing/ keep head over the ball to improve accuracy and ensure ball stays on the ground/ follow foot through to generate more power.
Long Pass	Non kicking foot next to the ball/ use the front (laces) of the kicking foot to contact the ball following a bigger back swing (flexion of the knee)/ keep head over the ball to improve accuracy of the pass/ lean back slightly to help generate height if required on the pass/ follow foot/leg through to generate more power.
Heading	Keep eyes focused on the ball when preparing to header/ use the forehead to contact the ball/ move feet to ensure body is slightly behind the ball before heading/ use neck to generate more power on the header/ defensive headers are normally headed high with increased distance whereas attacking headers on goal are normally headed down to make it more difficult for the goal keeper to save/perform a jump before the header to increase power and give yourself more chance of beating the opponent to the header.
Shooting	Non kicking foot next to the ball/ keep body balanced/ head slightly over the top of the ball/ use side foot for placement or top of the foot for increased power/ flex leg back further when preparing to strike to the football for increased power/ aim for the area of the goal that the goalkeeper is least likely to save the ball.
Attacking	Attack defender with pace/ keep ball in close control away from the defender/ move the ball to make it more difficult for the defender to tackle you/ use tricks to outwit the opponent.
Defending	Man to man marking –sideways on/ close to player/ try to slow attacking player down/ on toes/ show attacker to their weaker foot/ time tackle effectively to increase chances of winning the ball back.
Crossing	Non kicking foot placed next to the ball/ contact ball with the instep of the foot/ lean body slightly back to add height on to the cross to avoid the first defender/ follow leg through to increase the power on the cross/ the body needs to remain balanced to increase accuracy and success of the cross.

Grammar Focus

(1) Present tense = an action taking place now. In Arabic, the present tense will begin with:

أ - ت - ي - ن - ا
أجْبُ - نَأْكُلُ - يَتَنَاوَلُ - نَطْلُبُ

(2) Numbers = 3-10 are opposite in gender

أَرْبَعُ دَجَاجَاتٍ ثَلَاثَةٌ

(3) Cases = Accusative case (like the object of the sentence) has a fathah
صُحُورٍ / أُمِّي نُحِبُّ السَّلْطَةَ (like the object of the sentence) has a fathah

Model Text

At breakfast I eat cereal with hot milk	فِي الْفَطُورِ أَنَا أَكُلُ السَّرِيالَ مَعَ الْحَلِيبِ الشَاخِنِ
At lunch I eat sandwich at school	فِي الْعَدَاءِ أَنَا أَكُلُ السَّانْدُوِيْشِ فِي الْمَدْرَسَةِ
At dinner lamb with rice or vegetables	فِي الْعَشَاءِ أَنَا أَكُلُ اللَّحْمَ مَعَ الْأُرْزِ أَوْ الْخَضِرَوَاتِ
My mother doesn't eat chicken	أُمِّي لَا تَأْكُلُ الدَّجَاجَ
My brother loves pizza	أَخِي يُحِبُّ الْبِيْزِرَا
My father has tea with three sugars	أَبِي يَتَنَاوَلُ الشَّايَ مَعَ ثَلَاثَةِ مَلَاعِقَ مِنَ السُّكَّرِ
At the restaurant, my mum always orders salad	فِي الْمَطْعَمِ، أُمِّي دَائِمًا تَطْلُبُ السَّلْطَةَ
Sometimes we order fish	أَحْيَانًا نَطْلُبُ السَّمَكَ
We rarely eat junk because it is unhealthy	قَلِيلًا نَأْكُلُ الْوَجَبَاتِ السَّرِيعَةَ لِأَنَّهَا غَيْرُ صَحِيَّةٍ

Time Phrases

Always دَائِمًا

never أَبَدًا

sometimes أَحْيَانًا

usually عَادَةً

rarely نَادِرًا

at breakfast I eat فِي الْفَطُورِ أَنَا أَكُلُ

at lunch I eat فِي الْعَدَاءِ أَنَا أَكُلُ

at dinner I eat فِي الْعَشَاءِ أَنَا أَكُلُ

Questions to Think about

At breakfast I eat cereal with hot milk	فِي الْفَطُورِ أَنَا أَكُلُ السَّرِيالَ مَعَ الْحَلِيبِ الشَاخِنِ
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My father has tea with three sugars	أَبِي يَتَنَاوَلُ الشَّايَ مَعَ ثَلَاثَةِ مَلَاعِقَ مِنَ السُّكَّرِ
At the restaurant, my mum always orders salad	فِي الْمَطْعَمِ، أُمِّي دَائِمًا تَطْلُبُ السَّلْطَةَ
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What's Your Answer?

مَاذَا تَأْكُلُ/تَشْرَبُ فِي الْغَدَاءِ/فِي الْعَشَاءِ؟
هَلْ تُفَضِّلُ الدَّجَاجَ أَوْ اللَّحْمَ؟
لِمَاذَا؟

Food Descriptions

Tasty لَذِيذٌ
Healthy صَحِيحٌ
Hot سَاخِنٌ
Cold بَارِدٌ
Bitter مُرٌّ
Sour حَامِضٌ
Sweet حُلْوٌ
salty مَلِحٌ
spicy حَارٌّ

Questions to Think about

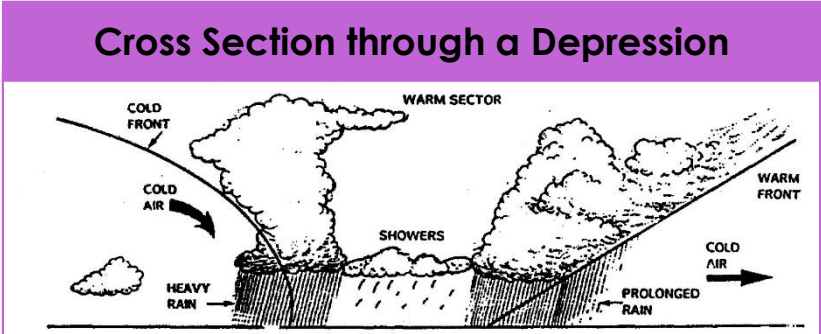
What time do you eat? With whom?
Where? Why? How often?

Key Words

Anticyclone	Microclimate
Aspect	Precipitation
Climate	Relief
Condensation	Temperature
Depression	Transpiration
Evaporation	Weather

Why Does it Rain?

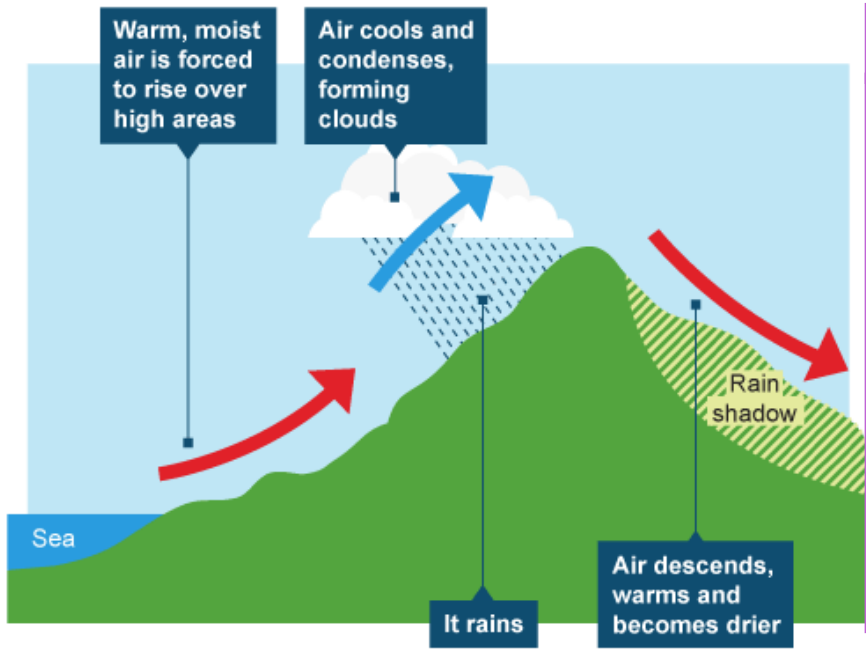
All rain is caused by air rising and the water vapour condensing but not all rain happens in the same way or for the same reasons. For example, air rises for different reasons. We give different names to the type of rain depending on why the air is rising.



Weather Symbols

How Is Convectional Rainfall Formed?

1. The sun has been warming the ground all morning.
2. The ground warms the air and the temperature rises
3. The air rises as currents of warm air. We call these convection currents
4. As the warm air rises, it cools and the water vapour (tiny droplets of water) in the air condenses to form clouds.
5. The water droplets join together with other water droplets and get heavy. They fall as rain.



Low Atmospheric Pressure

High Atmospheric Pressure

Protestants

Protestant ideas first became popular in Europe through Martin Luther and the 95 Theses before Henry VIII decided to make England a Protestant country. Luther's ideas became popular because

Many people heard and understood Luther's ideas

- Other preachers heard his ideas and repeated them in their own churches
- The printing press had recently been invented so for the first time books and pamphlets could be copied and shared quickly
- Luther used cartoons in his pamphlets so even though most people couldn't read, they understood the meaning of the pictures

People were interested in his ideas and wanted change

- Many thought the Pope and Italy were too powerful and liked that Luther wanted to challenge this
- Powerful princes were happy that Luther wanted the government to control taxes and not the church
- Luther used humour in his writing and made his ideas easy to understand

Henry VIII was strongly Catholic, but he liked Luther's Protestant ideas because

- He wanted to have a son and an heir, and his wife Catherine was getting older.
- He wanted a divorce so he could marry a younger wife who might have a son. The Catholic faith did not allow this but as a Protestant he could get a divorce
- If he started a new church he would be in charge of it and not the Pope
- The Catholic church was very wealthy. If Henry became head of the church in England he would control that wealth
- Some people in England believed in Protestant ideas and thought the Catholic church was corrupt

Key Terms

Protestant	Excommunicate
Catholic	Dissolution
Protestant Reformation	Monastery
95 Theses	Mass
Indulgences	Puritan
Heretic	Bishop
Martyr	Corruption

Differences in Beliefs

	Catholic view	Protestant view
Decoration of churches	People should glorify God by decorating churches with ornaments, statues and stained glass windows.	Churches should be simple and plain. Decoration distracts people from God's message so there should be no statues, stained glass windows or paintings.
Priest's role	Priests should be different than ordinary people and people need priests to find God and it is their role to explain the word of God to the people	Priests should be chosen by the community and should wear simple clothes. Church services should be in English and people don't need priests to explain the Bible to them.
The Bible	The Bible should be in Latin. This has been the language of the church for hundreds of years and it makes the service special.	The Bible should be in English so that everyone can read and understand it.

1517	Martin Luther's 95 Theses begins Protestantism
22 June 1527	Henry VIII wants a divorce from his wife Catherine but she refuses.
Autumn 1529	Some of Henry's advisors suggest that Henry be the Head of the Church in England.
11 February 1531	Henry makes England Protestant instead of Catholic and is declared Supreme Head of the Church in England.
8 June 1536	Henry VIII begins the closure of all monasteries.
1538	After Henry VIII broke with the Catholic Church, Pope Paul III excommunicates Henry
1545	Henry decides to go back on some of his changes to the religion. He is concerned that commoners should not be able to read the word of God as they could be disrespectful.
1547	Henry dies and Edward VI becomes king. Protestant reforms under Edward VI begin straight away. All images in churches are removed. Stained glass windows, shrines and statues are all to be dismantled. Church bells are taken down and vestments are prohibited.
1549	The Book of Common Prayer is published in English. (The Bible)
6 July 1553	Edward VI dies, naming his cousin, Lady Jane Grey, as his successor. He disinherited Mary as he did not want the country returning to Catholicism.
19 July 1553	Mary I becomes queen and puts plans in place to make England Catholic again. It takes Mary a while before England is accepted by the Catholic church.
February 1554	Protestant rebellion led by Sir Thomas Wyatt the Younger.
1555	Mary restores heresy laws and begins to punish Protestants more harshly
16 Oct. 1555	The Protestant churchmen Latimer and Ridley are burned at the stake.
17 Nov. 1558	Mary I dies childless leaving the throne to her sister Elizabeth.
13 Jan. 1559	Elizabeth is crowned Queen of England.
29 April 1559	The Elizabethan Religious Settlement is passed by Parliament.
1570	Elizabeth I is excommunicated from the Catholic Church.
24 March 1603	Queen Elizabeth I dies and the Tudor dynasty ends.

Key Terms

Equality	treating everyone the same.
Racism	Treating someone differently because of their race/nationality/religion.
Prejudice	an unfair and unreasonable opinion or feeling, especially when formed without enough thought or knowledge.
Discrimination	Acting on prejudice ideas, treating someone unfairly for a reason out of their control.
Stereotype	Assuming everybody with a certain characteristic are the same.
Diversity	Showing differences from person to person.
Identity	What makes you, you
British Values	Ideas, characteristics or mindset which makes you feel British.
Dignity	A feeling of worth.
Values	personal judgement of what is important in life.
Rights	What every human is entitled to.
Anti-Social Behaviour	actions that harm or lack consideration for the well being of others.
Human Rights	the basic rights and freedoms that belong to every person in the world from birth until death.

What Skills will I Develop in Life Skills?

Each lesson will have opportunities to develop your skills through a variety of learning activities, ranging from:

- Thinking skills
- Enquiry and evaluation skills
- Research skills
- Debate and communication skills
- Active learning.
- Reflective learning skills.
- Personalised learning skills.
- Revision and recall.



Overview

This unit of work is about learning how people can be treated unfairly, and recognising how that is wrong. We will explore several key types of discrimination and what we as a community can do to overcome it. We will celebrate diversity and the good it can bring to our society. You will consider the impacts of prejudices and the strategies for overcoming discrimination by looking at Human Rights, British Law and diversity in modern day Britain.

Key Concepts

British Values, Citizenship, Health and Well Being, Living in the Wider World, Human Rights.

Essential attributes developed through Life Skills.

Self -Improvement
 Resilience
 Self-organisation
 Clarifying own values
 Developing and maintaining a healthy self concept
 Empathy and compassion
 Respect for others
 Skills for employability
 enterprise skills

Key Words

- **Media/Medium** - The materials and tools used by an artist to create a piece of art.
- **Technique** - The skill in which an artist uses tools and materials to create a piece of art.
- **Abstract** - A piece of art which is not realistic. It uses shapes colours and textures.
- **Style** - The technique an artist uses to expressive their individual character of there work.
- **Composition** - The arrangement and layout of artwork/ objects.
- **Highlight** - The bright or reflective area within a drawing/ painting where direct light meets the surface of the object or person.
- **Shadow, shade, shading** - The tonal and darker areas within a drawing/painting where there is less light on the object or person.
- **Texture** - The feel, appearance or the tactile quality of the work of art
- **Mark making** - Mark making is used to create texture within a piece of art by drawing lines and patterns.
- **Collage** - A piece of art made by using a variety of materials such as paper/ newspaper/photographs which are cut out, rearranged and glued on a surface.

The Colour Wheel



There are different categories of colours based on the **colour wheel**: primary, secondary, tertiary, warm, cool and complimentary

Primary Colours: Red, yellow and blue

In traditional colour theory (used in paint and pigments), primary colours are the 3 pigment colours that cannot be mixed or formed by any combination of other colours. All other colours are derived from these 3 hues.

Secondary Colours: Green, orange and purple
These are the colours formed by mixing the primary colours.

Tertiary Colours: Yellow-orange, red-orange, red-purple, blue-purple, blue-green & yellow-green
These are the colours formed by mixing a primary and a secondary colour. That's why the hue is a two word name, such as blue-green, red-violet, and yellow-orange.

Colour & Value

Colour is light reflected from a surface. There are 3 qualities hue, value and intensity.

Value is one of the seven elements of art. Value deals with the lightness or darkness of a colour. Since we see objects and understand objects because of how dark or light they are, value is incredible important to art.

Elements of Art

SHAPE: Shape encloses a two-dimensional area. Geometric or organic.



FORM: Form encloses a three-dimensional area. It's the three-dimensional analogue of shape.



LINE: The edge of a shape or form or the direction followed by anything in motion.



COLOR: Light reflected from a surface. Three distinct qualities Hue, Value, Intensity.



VALUE: Shadows/shades from lightness to darkness.



SPACE: The area between and around objects. Positive, negative, or three-dimensional.



TEXTURE: The surface quality of an object that we sense through touch.



Tints and Shades

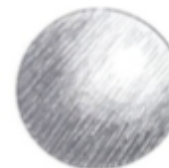
When dealing with pure colour (hue), value can be affected by adding white or black to a colour. Adding white to a colour produces a tint...



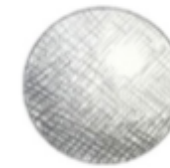
Adding black to a colour produces a shade...



Shading Techniques



Hatching with parallel lines is the same as cross hatching, except you are making all the lines go in the same direction.



Hatching with parallel lines is the same as cross hatching, except you are making all the lines go in the same direction.



Creating shades by "smudging" the applied shade. This is done by pressing and smearing the applied graphite with your finger, a soft cloth or a "stump".



Creating shades through a series of dots. Building up more dots closer together results in dark-shading.

Primary & Secondary Research

Sources of data and information fall into two categories – Primary and Secondary

Primary data is new data, gathered by the researcher. Sources include: interviews, focus groups, questionnaires and case studies

Secondary data is gathered as part of research or reporting on primary data. Sources include articles, books and magazines

Ergonomics & Anthropometric

Ergonomics

- The science of how humans interact with objects
- Design for efficiency and comfort in the working environment

Anthropometrics

- Measurement of the physical properties of the human body
- It derives from the Greek words 'Anthropos' (human), and 'metron' (measure)
- Should this form primary or secondary research?

Anthropometrics

Designers gather the measurements of the average individual human, looking at:

- Height, weight and length
- Angle of reach
- Viewing distance and viewing angles
- A typical example of anthropometrics looks at the correct way to sit at a desk to maintain a comfortable position
- Name two other items that have been improved by the use of anthropometrics

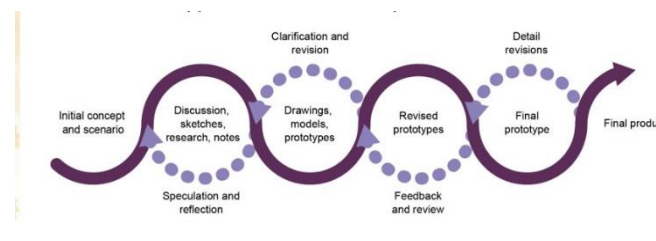
Design Brief

This is the conclusion of all your research and data
A statement of intent will summarise your design plan:

- What are you going to design?
- Who is the target audience?
- Where are they going to use the product?
- What is the budget?
- When does it need to be completed?
- What size does it need to be?

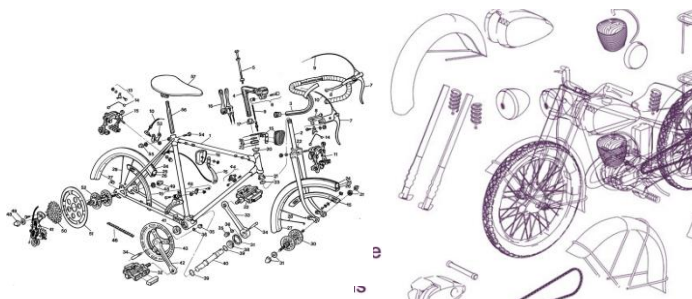
Iterative Design

- The iterative cycle enables the designer to refine their work in progress
- By actually making the item, designers begin to fully understand it and how successfully it works
- Many versions will fail to work as well as intended
- The outcomes, good or bad, dictate the next step
- With every iteration, the results improve
- Using drawings, notes and models enables designers to work through a series of ideas
- These ideas are constantly revisited and reviewed at each stage of the design process to culminate in a finished product



Exploded Drawings

- An exploded drawing shows how component parts of a product are assembled
- Parts are aligned so you can clearly communicate where each part is from
- Exploded diagrams are often supplied with kit models or flat packed furniture
- Discuss how these diagrams can be useful



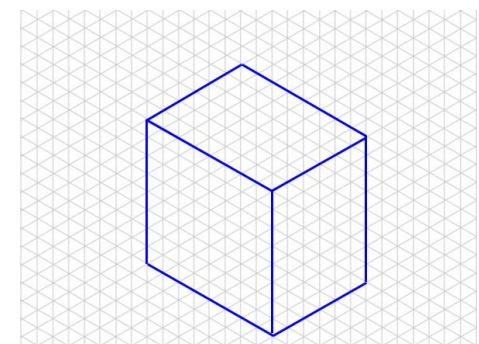
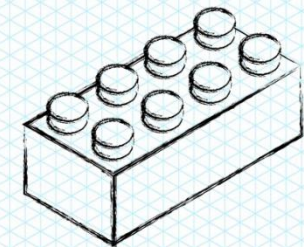
Design Fixation

- Design fixation can negatively impact design
- It can limit creativity and result in similar or 'safe' design ideas
- Designers can fall into common pitfalls of:
 - not properly understanding a client's needs
 - failing to consider alternative solutions
 - lack of research into new materials or technology
- What strategies would you suggest designers utilise to keep their ideas fresh?

Isometric Projection

Isometric drawings shows three faces of an object

- Lines leading away are all parallel instead of narrowing, towards a vanishing point which can create slight distortion
- Isometric grid paper can be a helpful guide when drawing in isometric projection

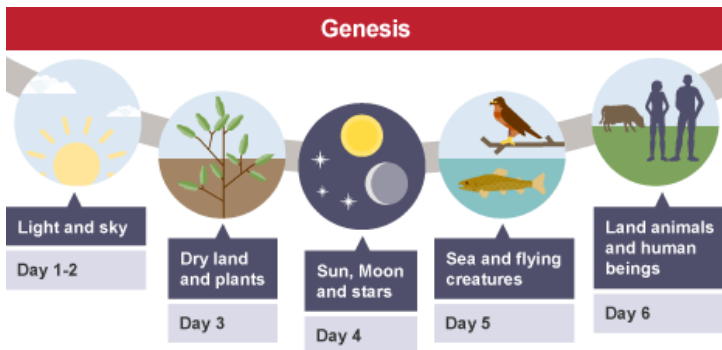


Key Words

- 1. Assisi** Town in Italy, where a meeting of the world's major religions took place in 1986 and produced a declaration on the environment.
- 2. Atmosphere** The layers of gases that surround the Earth. The important gases in the atmosphere are nitrogen, oxygen and carbon dioxide.
- 3. Creation** The act of bringing something into existence. In religion, this refers to the creation of the world by God.
- 4. Cultivate** To work the land so that it produces crops.
- 5. Endangered species** Animals that are close to extinction because of their low numbers.
- 6. Environment** The immediate surroundings in which people live, or the natural world such as the land, air or water.
- 7. Exploitation** Unfair advantage taken of something or somebody just for your own benefit, not for the good of the other person or thing.
- 8. Dominion** The idea that God put human beings in charge of the world, to bring it under their control and be responsible for its maintenance.

Creation & Christianity

God is the only creator.
 God existed before he created the world.
 The world was well planned and is sustained by God.
 God blessed creation, which means that all creation is **holy**.
 God created everything in Heaven and on Earth in six days.
 On the seventh day, God rested.



Environment & Christianity

Most Christians believe that God gave human beings a special responsibility within creation to cultivate it, guard it and use it wisely. This is called stewardship.

These passages from the Bible show the dominant message is that God is the one who provides for humans and humans should show they are thankful by taking care of what God has given them.

Islam & Creation

Islam is very clear about the belief that **Allah** was responsible for the creation of the universe. There is no single story of creation, but there are references to it in many places in the **Qur'an**. From these it is possible to build a picture:

- Allah is eternal, and so not bound by the constraints of time.
- Allah decided to create the universe and because of his unlimited power and authority he commanded things to come into being.
- Allah then made all living creatures, the **angels**, the planets and the rain to allow vegetation to grow.
- Allah sent angels to Earth to collect seven handfuls of soil, all different colours, and that with soil Allah made the first man, Adam, breathing life and power into him.
- Eve (Hawa), the first woman, was created from the side of Adam and lived with him in **Paradise**.
- Adam and Eve disobeyed Allah, though they were forgiven, and were sent from Paradise to the Earth which Allah had created.
- The Earth had been created to allow Adam and Eve and their descendants (the human race) to live and thrive.
- Creation took Allah six days to complete.

Environment & Islam

The **Qur'an** says that Allah (God) is the **creator** of the world. Human beings are on the world as trustees or viceregents - they are told to look after the world for Allah and for the future. Muslims believe that all people are khalifahs, or guardians, of the planet and have a duty and responsibility for its care.

A number of the Hadith refer to the Prophet Muhammad's concern about the environment and treatment of animals, and he encourages those around him to value the Earth and all of nature.

In the Qur'an, Muslims are instructed to look after the environment and not to damage it.

Assisi 1986

In 1986 HRH Prince Philip, then International President of the WWF, invited five leaders of five of the major religions of the world - Buddhism, Christianity, Hinduism, Islam and Judaism - to meet to discuss how their faiths could help save the natural world.

The meeting took place in Assisi in Italy, because it was the birth place of St Francis, the Catholic saint of ecology. From this meeting arose key statements by the five faiths outlining their own distinctive traditions and approach to the care for nature.



MADANI SCHOOLS FEDERATION