

The background of the cover features a photograph of the All Saints Academy Plymouth building, a modern structure with white and red facades. In the foreground, a person wearing a blue protective suit and gloves is welding, with bright sparks emanating from the point of contact. The scene is set outdoors on a paved area with greenery and a staircase in the background.

ALL SAINTS
ACADEMY PLYMOUTH

NEED TO KNOW BOOK

Year 9
Summer Term 2024

ALL SAINTS
ACADEMY PLYMOUTH

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Timetable

Week A

Period	Monday	Tuesday	Wednesday	Thursday	Friday
1					
Breaktime					
2					
3					
Tutor/Lunch					
4					
Extra Curricular					

Week B

Period	Monday	Tuesday	Wednesday	Thursday	Friday
1					
Breaktime					
2					
3					
Tutor/Lunch					
4					
Extra Curricular					

Homework Expectations

You are expected to complete up to 1 hour of Homework per night. This is split into 3 subjects at 20mins each.

	3 x 20 Minute Sessions		
	Subject 1 20 mins	Subject 2 20 mins	Subject 3 20 mins
Monday	Sparx Reader	Science	Science
Tuesday	Sparx Reader	Geography	French
Wednesday	Sparx Reader	Maths : Sparx	History
Thursday	Sparx Reader	Maths : Sparx	RE
Friday	Sparx Reader	Maths : Sparx	

Where is my homework?

Maths



Your maths homework is found at www.sparxmaths.uk.

You will complete your Compulsory Homework on a Monday.

If you have completed over 80% and are stuck on your last few questions, your teacher will help you on Tuesday.

Sparx Reader

Sparx Reader

Your Sparx reader homework is found at www.sparxreader.com

You will complete 20 minutes of reading every day Tuesday – Friday. You can, of course, complete more if you like!

Science



Educake

Your Science homework can be found at www.educake.co.uk. You will answer a series of questions once a week. When it comes to revising, you will have the option of picking a topic, reading an overview, and taking a quiz.

English, History, French and RE

Homework for these subjects will be found in your Google Classroom in the form of a quiz. These quizzes are to test that you have learned the knowledge in your Need to Know booklet. We have high expectations of you and expect students to try their best and achieve the best possible marks. We will give rewards for excellent attainment and we will help everyone achieve by using after school interventions to make sure no one falls behind.



At All Saints, we are organised and don't make excuses for ourselves. If we know we have evening plans, we complete our homework the night before to make sure we are free to go to our planned event. We always want the best for ourselves and my teachers want the same.

Reflection Sheet

Name:

Tutor:

Year:

Use this reflection sheet to track your progress and attitude to learning score after each progress check. This sheet will be used in your parent evening meetings with your teachers to discuss your areas of strengths, weaknesses and ways to improve. If your average attitude score is below a certain average your parents will be called in for a meeting with your Head of house and SLT member.

ATL SCORES	What will I get at GCSE?
0-1	Students who achieve an average of 1 or below usually leave school with no GCSEs.
1-2	Students who achieve an average of 1-2 usually leave with 1s or 2s (E or F) at GCSE
2-3	Students who achieve an average of 2-3 usually leave with 2s or 3s (D or E) at GCSE
3-4	Students who achieve an average of 3-4 usually leave with 3/4/5s (C or D) at GCSE
4-5	Students who achieve an average of 4-5 usually leave with 6/7/8s at GCSE

Average attitude to learning score	Term 1	Term 2	Term 3	Term 4

Subject rank	Subject <i>Maths</i>	Subject <i>English</i>	Subject <i>Science</i>	Subject	Subject	Subject	Subject	Subject	Subject	Subject
Term 1	/	/	/	/	/	/	/	/	/	/
Term 2										
Term 3										

Term 1 - Reflection (Answer the questions by filling in the boxes in blue or black pen)

Are you happy with your rank scores and ATL?	What subjects do you need to improve?	How will you get there?

Reflection Sheet

Term 2 - Reflection

Has your rank scores and ATL improved from term 1? If no, why not?	What subjects do you need to improve in?	How will you get there?

Term 3- Reflection

Has your rank scores and ATL improved from term 2? If no, why not?	What subjects do you need to improve in?	How will you get there?

Signed _____
signature _____

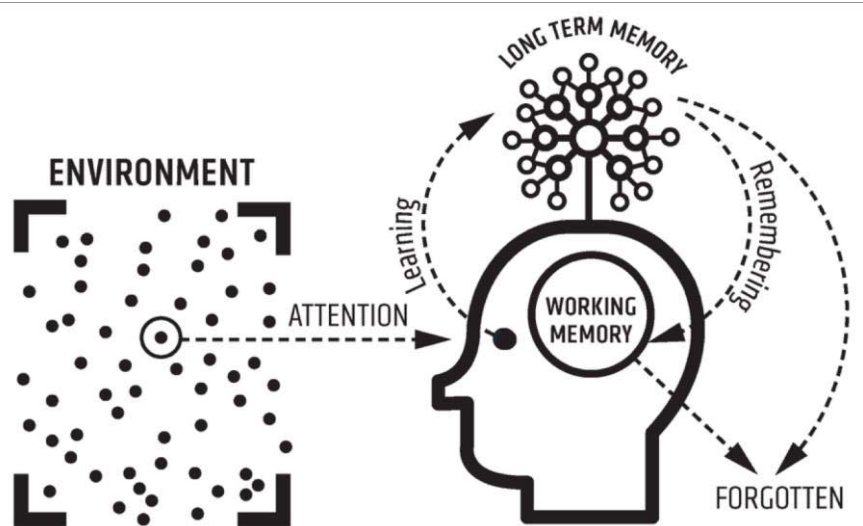
Tutor

Improving Your Long Term Memory

Memory

Your memory is split into two parts: the working-memory and the long-term memory. Everybody's working-memory is limited, and can therefore become easily overwhelmed. Your long-term memory, on the other hand, is effectively limitless.

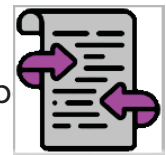
You can support your working memory by storing key facts and processes in long-term memory. These facts and processes can then be **retrieved** to stop your working memory becoming overloaded.



Need to know booklets are a key way to help you learn. Each booklet has the key information that needs to be memorised to help you master your subject and be successful in lessons.

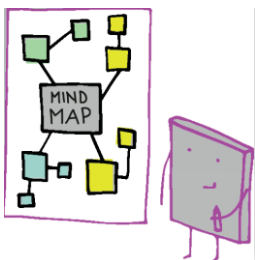
There is strong scientific evidence from cognitive psychology that shows the benefits of **self-quizzing** in promoting **retrieval strength**. This is your ability to quickly recall key facts related to your subject or topic

How should I self-quiz and how often?



There are lots of different ways to learn the material in your need to know booklet

You could:



Draw a mind map, jotting down everything that you can remember from the need to know booklet.



Cover up one section of the need to know booklet and try and write out as much as you can from memory.



Make flash cards based on the need to know booklet and ask someone to quiz you.

SENTENCES.
HAND
ARTICULATE.
PROJECT
Eye contact

Make up mnemonics to help you remember key facts, then write these out from memory.

Making revision notes and self-quizzing will help you be a more successful learner.

BOLD steps to your **BRIGHT** future



www.ASAPaspirations.co.uk

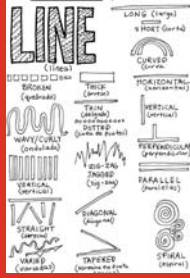
Post 16 pathways of Plymouth — Sixth forms — Apprenticeships — Employment — Resources

Support — Opportunities — Choosing a career — Parents guide — Writing a CV — Employability skills

The Formal Elements: The Formal Elements of Art are the parts used to make a piece of art work. It is impossible to create a piece of art, even if it is only a doodle, without using some or all of them. The art elements are Line, shape, form, tone, texture, pattern, colour and composition. They are often used together and how they are organised in a piece of art determines what the finished piece

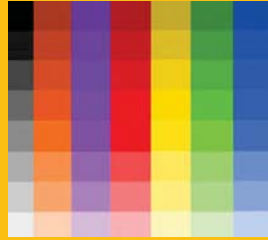
Line

A line is a path, left by a moving point. E.G. a pencil, or a paintbrush dipped in paint. A line can take on many forms. E.g. Horizontal, diagonal or curved. A line can be used



Tone

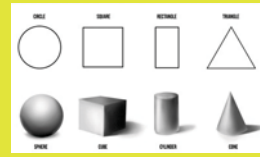
Tone means the lightness and darkness of something. This could be a shape and/or how dark or light a colour appears.



Shape & Form

A shape is an area enclosed by a line. It could be just an outline or it could be shaded in.

Form is a three dimensional shape such as a sphere, a cube or a cone.



Texture

Texture is the surface quality of something, the way something feels or looks like it feels. There are two types of texture, actual texture and visual texture.

Actual Texture: really exists so you can feel it or touch it.

Visual Texture: Created by using different marks to create the impression

Colour

There are three primary colours:

Red, Yellow, Blue

By mixing any two primary colours together, you get secondary colours.

Orange, Green and

Pattern

Pattern is a design that is create by repeating lines, shapes and tones or colours.

Patterns can be manmade such as a design on fabric or natural like the print on animal fur.



COLOR THEORY
Color is an element of art.

Everytime I use color, I am creating a color scheme.

This is a color wheel.

The most common color schemes are listed below.

Primary.... { I can make all the other colors by mixing different amounts of primary colors }

Secondary.... { I can mix two primary colors to make a secondary color. }

Warm.... { Yellow and all the colors with red and orange tones are warm. }

Cool.... { Violet and all the colors with blue and green tones are cool. }

Complementary.... { Opposites on the color wheel are complementary. }

Analogous... { Colors that are close neighbors on the color wheel are analogous. }

Rainbow... { Using primary and secondary colors placed in order from the color wheel, I can make a rainbow }

Intermediate... is a color term I need to know. It is the color in between the primary and secondary colors on the color wheel.

Art & Design

Georgia O'keefe

Georgia O'Keeffe is one of the most significant artists of the 20th century, renowned for her contribution to modern art. She is most famous for her paintings of nature. She painted nature in a way that showed how it made her feel. She is best known for her paintings of flowers and desert landscapes. She played an important part in the development of modern art in America, becoming the first female painter to gain respect in New York's art world in the 1920s.



Yellenda James

Preferring pens, inks, markers and acrylics, she combines complex abstract forms into dazzling images which take on lives of their own. Her colourful arrangements of organic shapes and tangled lines are at once floral and alien, organic and sci-fi. Each intimate world she creates seems to possess its own ethos and its own special ability to radiate emotion.



Key Words

Composition	The position and layout of shapes on the paper
Line	Defines shape, the outer edges of something.
Tone	How dark or light a shape is.
Shape	The outline of objects.
Form	Appearing three-dimensional.
Pattern	A repeated shape or line.
Mixed Media	Artworks composed from a combination of different media or materials.
Natural Form	An objects in nature in its original form. Examples: Leaves, flowers, pine cones, sea weed, shells, bones, insects, stones, fossils, crystals, feathers, birds, fish, animals
Modernism	The Key elements of modernism include break from tradition, Individualism, and disillusionment.
Refine	To develop and improve your artwork.
Organic	shapes, often curvilinear in appearance, that are similar to those found in nature, such as plants, animals, and rocks.
Texture	Texture is the surface quality of something, the way something feels or looks like it feels.
Collage	The technique and the resulting work of art in which pieces of paper, photographs, fabric and other ephemera are arranged and stuck down onto a supporting surface.

Art and Design Assessment Objectives:

DEVELOP

Artist Research.
Explore Ideas.
Be Inspired.
Personal comments and opinions.

EXPERIMENT

Explore different materials
Explore different techniques
Refine your work

RECORD

Observational drawings
Collecting image
Taking photos
Annotating your work

PRESENT

Produce a final piece
Link to prep work from project.

Week	I will need to know:	So that I can:
1 Design Process	The first stage of the design process is where the client will give the designer a design brief . This is an explanation of the type of product that the designer must design, their task if you like. The designer will then need to analyse this brief and explore opportunities for design and problem solving. They will carry out market research so that they can become an expert on the target market's needs and wants but also other competitor products that are already available. Designers often carry out a product analysis or product disassembly to help them learn more about the products they will be competing against.	Design quality products that meet the requirements of a client and target market.
2 Design process continued	After market research, designers will create a design specification , this is a list of specific criteria for the success of the product . Usually consisting of a range of 'it must' or 'it should' statements. Next the designer will generate a wide range of design ideas , select the best ones to develop further and gradually and with the help of the client, narrow this down to one idea which they will take to the next stage. Designers will now often create prototypes of the design, testing elements and continuously improving the design. This will usually lead to the detailed design phase, often referred to as DFMA (Design For Manufacture and Assembly) . This leads to the manufacture of the product and the evaluation of the final product, often leading to continued design activity.	Design quality products that meet the requirements of a client and target market.
3 Past and present designers	Philippe Starck is a French industrial designer who has designed a huge variety of products ranging from luxury yachts to hotels and kitchen equipment. He spent much of his career working for the Italian brand Alessi who specialise in quirky kitchen and home products. Alessi's products very often have aesthetics (visual appeal) as the priority, their goal is to design products that meet the consumer's needs and requirements while at the same time making the consumer happier. Many of their products have a character or cartoon like appearance. This styling has had a big influence on the work of many other designers. Many Alessi products are collectors items and are known as iconic products (well recognised/famous/influential).	Design products with the influence of successful past and present designers.
4 Prototype	Prototypes are models of a design, these are created so that a concept can be tested. Prototypes can be virtual or physical . Virtual prototypes are creating on a computer using CAD. These can be tested in simulations, for example a virtual aeroplane wing can be tested against stresses virtually before spending thousands making a physical model. Physical prototypes are made often from card, foam or even clay. Prototypes are carefully tested to see if they function as intended, look appealing to the target market, fit with other components, are strong enough and more.	Develop my ideas and ensure they are as developed as possible before manufacture.
5 Ethical consideration in designing	It is important for a designer to consider the impact of their product on society, people from different cultures and the planet . Designing a hand gun toy for a child may be fun to play with but the effect of children playing with toy guns should be considered. Designing a bike that is aimed at people who wish to cycle to work will have a positive effect of people's health and the environment. Consider the possible effects of these: A sweet designed to look like a cigarette, a T-shirt with a swear word on, a computer game where the baddies are from a particular country, an electric vehicle, smiley face car sticker.	Consider the wider impact of our products.
6 Inclusive design	A successful design should also ensure a variety of end users can use the product safely and effectively. They might make adaptations with accessibility in mind, for example: a braille keyboard for those with sight difficulties, a long shoe horn to allow an elderly person to put a shoe on without having to bend down or fastenings such as Velcro for small children to use on a shoe. As people get older it is important that products are designed in a way that help people not lose their independence. Tasks such as changing batteries in a TV remote may seem simple but someone suffering from arthritis may find this extremely hard. Designer will therefore aim to design products that are ergonomic and user friendly for all. This is inclusive design .	Ensure our designs do not exclude anybody where possible.
7 Sustainable design The 6 Rs	Considered when designing any product and will help the designer create a more sustainable product . Remember this means an environmentally friendly product. Recycle (can materials be recycled?), Re-use (can parts be used again?), Reduce (can less material or energy be used?), Re-think (can the design be changed? Can we step back to the original problem and find a radically new way to solve it with less environmental impact?), Refuse (refuse to use harmful materials or processes), Repair (make spare parts available and make it easy to repair and maintain so its life will be longer and not need replacing so quickly).	Be responsible and protect our planet through my design decisions.

Romeo and Juliet

Context – The play was written by William Shakespeare, and was first performed around 1594.

Shakespeare's Time – Shakespeare wrote his plays at the time of two monarchs: Queen Elizabeth I and James I. Romeo and Juliet was written relatively early in Shakespeare's career (the bulk of his tragedies were written in the 17th century) yet was extremely popular in his lifetime, as it is now. Shakespeare borrowed heavily from two texts: *The Tragical History of Romeo and Juliet* (1562) and *Palace of Pleasure* (1527).

Religion – The heavy religious presence is evident across several parts of *Romeo and Juliet*. This is reflective of a society across Europe that was deeply religious (predominantly catholic or protestant). Several characters demonstrate their commitment to the church, such as Romeo and Juliet who choose to marry rather than fornicate, and the Capulets, who are quick to contemplate that Juliet is in a better place (heaven) after she is found 'dead'.

Autoregulation – At the time of Shakespeare, the belief in both astronomy and the supernatural was far more prominent than in society today. The reference to 'star-cross'd lovers' demonstrates the large role of horoscopes and planet positions in being used to predict fate. Also, Romeo and Juliet make reference to the fact that they feel they are being guided by a supernatural force (e.g. 'fortune's fool').

Main Characters – Consider what Shakespeare intended through his characterization of each of the below...

Romeo – The son and heir of Lord and Lady Montague. Romeo is handsome and intelligent, yet he is also impulsive and extremely sensitive. Romeo is a peaceful character, and is not interested in the violence that goes on around him, choosing instead to focus his energies on love. Although Romeo's love seems fickle (he loves Rosaline at the outset) his commitment can't be debated in the end!

First Scene: Act I Scene II Final Scene: Act V Scene III
Prince Escalus – The most powerful character in the play, with the authority to govern the other characters and administer sentences. He is also a kinsman to Mercutio and Paris. At the seat of Verona, his main concern throughout most of his appearances are in relation to ensuring that the peace is kept. He is successful in banishing Romeo for the death of Tybalt, as opposed to sentencing him to death.

First Scene: Act I Scene I Final Scene: Act V Scene III
Montague and Capulet – The patriarchs of the Montague and Capulet families, who have held a long and violent feud with one another from some time before the play begins. Both seem to deeply love their respective child, yet do not always seem appropriately aware of their emotional wellbeing. For example, Romeo chooses to walk the streets in melancholy rather than share his feelings with his father, and Capulet feels the best thing for Juliet would be a marriage with Paris.

Themes – A theme is an idea or message that runs throughout a text.

Love – In Romeo and Juliet, love is an extremely overpowering force that supersedes all other values, emotions, and loyalties. Through their love, Romeo and Juliet conspire to go against the forces of their entire social world. Romeo returns to visit Juliet at pointings, even though he is well aware of the threat of death. At times, love is presented as fickle (Mercutio's speeches, Romeo + Rosaline).

Individual vs Society – Romeo and Juliet are forced to undermine the oppressive rules of society at the time. For example, rules of the patriarchal family force Juliet to be subservient to her parents, rules of religion mean that they must marry in haste, and rules of masculinity force Romeo into conflict with Tybalt.

Violence – Extreme violence takes place sporadically throughout the play. The feud between the two families is so bitter that the mere sight of each other can be the cause of a fight to the death. Unchecked violence is manifested through the character of Tybalt. The violence culminates in Act 3 Scene 1, in which both Mercutio and Tybalt are murdered.

Fate – In the first address to the audience, the Chorus states that Romeo and Juliet are 'star-cross'd' lovers, meaning that fate had intended for their paths to cross, and that fate controls their actions. A series of unfortunate accidents towards the end of the play thwart Friar Laurence's plan and eventually manifest in both Romeo and Juliet committing suicide, thus adding to the sense of fate.



Scene-by-Scene Summary – Take note of the key quotations from each scene.

Act	Scene	Summary	Key Quotations
Prologue		The Chorus speaks of an ancient grudge between two households, from which two 'star-crossed lovers' appear. A street brawl breaks out between the Montagues and Capulets. The Prince intervenes. He threatens the death sentence for anyone who breaks the peace again.	<i>From forth the fatal loins of these two foes A pair of star-crossed lovers take their life...</i> <i>To old Fire-town, our common judgment-place, Once more, on pain of death, all men depart.</i>
Act 1	Scene 1	Paris speaks of his desire to marry Juliet to Capulet. They arrange a masquerade ball so that he can begin to woo her. Mercutio accidentally invites Romeo and Benvolio.	<i>One fairer than my love? The all-seeing sun Ne'er saw her match since first the world began.</i>
Act 1	Scene 2	Lady Capulet discusses the prospect of Juliet getting married to Paris. She subtly says that she will look upon him.	<i>My love to thee is looking living matter! But no more sleep will I endure Mine eye than your content gives strength to make it fly.</i>
Act 1	Scene 3	Before the ball, Mercutio mocks Romeo. He gives his 'Queen Mab' speech. Romeo fears the night will set fate in motion.	<i>O, then I see Queen Mab has been with you... She is the fairies' mistress...</i>
Act 1	Scene 4	Romeo and Juliet meet at the ball. They immediately fall for each other. Romeo uses metaphors to compare her to a pilgrim. Tybalt spots Romeo and wants to kill him, but Capulet stops him. Romeo and Juliet learn that they are from warring families.	<i>If I profane with my unworsted hand This holy shrine, the gentle sin is this: My lips, two blushing pilgrims, ready stand To smooth that rough touch with a tender kiss.</i> <i>But passion lends them power, time means, to meet.</i>
Act 2	Prologue	The Chorus returns and delivers a sonnet about the new love.	<i>Go then, for 'tis in vain To seek him here that means not to be found. If that thy heart be false, to know it Thy purpose mairies, send me word tomorrow, By one that'll procure to come to thee.</i>
Act 2	Scene 1	Benvolio and Mercutio search for Romeo, who has escaped them in the hope of re-finding Juliet.	<i>The sovereignty will fall upon Macbeth.</i>
Act 2	Scene 2	The famous 'balcony scene'. Romeo decides that he cannot go home without seeing Juliet again. He trespasses into her garden, where she appears at a window. They decide that they will wed.	<i>Some means to come to come to shurr't this afternoon. Be shurr'd and married.</i>
Act 2	Scene 3	Romeo visits Friar Laurence to ask if he will wed him to Juliet. Whilst shocked at how fickle Romeo's love is, he agrees.	<i>But come what sorrow can, if cannot counterpoise The exchange of joy? That one short minute gives me in her sight.</i>
Act 2	Scene 4	Romeo arrives to meet Mercutio and Benvolio. The Nurse and Peter then arrive, and Mercutio makes fun of the Nurse. When Mercutio leaves, Romeo arranges with the Nurse for Juliet to meet him at Friar Laurence's chamber.	<i>'Ask for me tomorrow, and / you shall find me a grave man'</i> <i>O nurse, what wouldst thou to do in hell? When thou shalt bow the knee To a priest, and call me 'husband' to a man There is no world without Verona walls, Hence 'banished' is banished from the world!</i>
Act 2	Scenes 5-6	The Nurse sends Juliet to Friar Laurence's cell, where they are married. The Friar warns them to love moderately.	<i>There is no world without Verona walls, Hence 'banished' is banished from the world!</i>
Act 3	Scene 1	Tybalt duels Mercutio. Romeo tries to make peace, but Tybalt kills Mercutio. The Prince arrives and kills Romeo.	<i>Hang thee, young baggage! Disobedient wretch! I tell thee what: get thee to church on Thursday, Take thou this oath, being then in bed, And this defiled liquor drink thou off.</i>
Act 3	Scene 2	The Nurse tells Juliet of the fight. Juliet is traumatised by the idea of an exiled Romeo. The Nurse says she means where the it is hiding. Romeo despairs of hearing of being banished. The Friar makes a plan for him to visit Juliet before banishing. Elsewhere, Capulet contacts Paris and arranges for Juliet to marry him.	<i>Romeo, Romeo, Romeo! Here's drink. I drink to thee. O me, O me! My child, my only life, Revenge, look up, or I will die with thee!</i>
Act 3	Scenes 3-4	Romeo reluctantly leaves Juliet. Her mother then tells of the marriage to Paris. She rejects it. Capulet threatens to disown her.	<i>Let's see for means. O mischief, thou art swift!</i>
Act 3	Scene 5	Juliet meets Friar Laurence, saying that she would rather kill herself than marry Paris. Friar Laurence proposes the sleeping potion plan. She agrees, returns to her parents, and repents.	<i>Unhappy fortune! By my brotherhood, The letter was not nice but full of change, For never was a story of more woe Than this of Juliet and her Romeo.</i>
Act 4	Scenes 1-2	Juliet is scared, but drinks the contents of the vial.	
Act 4	Scene 3	The Nurse finds Juliet dead on her wedding morning. The family are distraught, but agree to make the funeral arrangements.	
Act 4	Scenes 4-5	Romeo is told of the death by Balthazar. Romeo decides that he will return to Verona to kill himself. Before doing so, he purchases poison from an apothecary.	
Act 5	Scene 1	Friar Laurence learns that Romeo has not received his letter informing him of the plan, and is worried. He doesn't know that Romeo now thinks that Juliet is dead.	
Act 5	Scene 2	Romeo finds Juliet's body and kills himself. She awakens and kills herself. Montague and Capulet commit to resolve.	
Act 5	Scene 3		

Dramatic Devices in Romeo and Juliet

Device	Description
Dramatic Irony	Mercutio and Benvolio think Romeo is still pining over Rosaline, but the audience knows he has moved on to Juliet. A2 S1
Soliloquy	Juliet's opening speech in A3 S2 in which she pours her heart out over her love for Romeo.
Aside	Juliet secretly hopes for the 'villain' Romeo: <i>Villain and he be many miles asunder God pardon him! A2 S5.</i>
Foreshadowing	Friar Laurence: <i>These violent delights have violent ends, And in their triumph die, like fire and powder.</i> A2 S6

Features of a Tragedy in Romeo and Juliet

Tragic Hero – A main character cursed by fate and possessed of a tragic flaw (Romeo), and to an extent Juliet).	
Hamartia – The tragic character flaw of the tragic hero (his passion and impulsiveness).	
Catharsis – The release of the audience's emotions through empathy with the characters.	
Internal Conflict – The struggle the hero engages in with his/her fatal flaw.	

Health, Safety and Hygiene

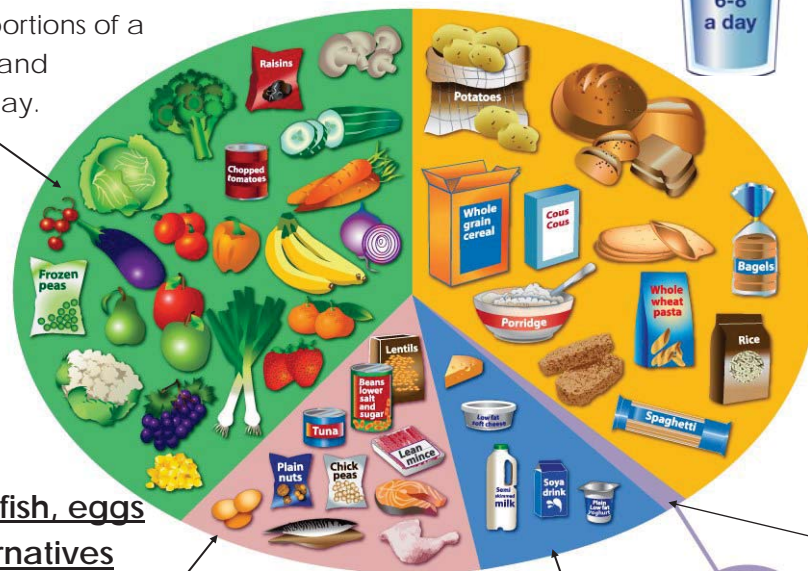
Health, safety and hygiene.

- ◆ Always listen to the teacher and follow instructions.
- ◆ Do not run in the food room.
- ◆ Do not leave bags and blazers where they can get in the way and cause a tripping hazard.
- ◆ Walk sensibly around the room when carrying equipment especially knives.
- ◆ Always return equipment once its finished with and cleaned especially knives. These will be counted in at the end of every lesson.
- ◆ Always listen carefully when the teacher is demonstrating how to use equipment. Make sure you ask questions if you do not understand.
- ◆ Take your blazers off and roll up your sleeves when doing a practical lesson.
- ◆ Tie your hair back.
- ◆ Always wash your hands thoroughly when preparing foods.
- ◆ Always use hot soapy water to wash your equipment.
- ◆ Make sure all spillages are cleaned up immediately.
- ◆ **Always** use an oven cloth when taking food from the oven.

The Eatwell Guide

Fruits and vegetables.

Eat at least 5 portions of a variety of fruits and vegetables a day.



Drinks.

6-8 glasses a day. Water, lower fat milk, sugar free drinks including tea and coffee count.

Potatoes, bread, rice, pasta and other starchy carbohydrates.

Choose wholegrain or higher fibre versions with less added salt, sugar and fat.

Beans, pulses, fish, eggs, meat and alternatives (protein).

Eat more beans and pulses, 2 portions of sustainably sourced fish per week, one of which is oily. Eat less red and processed meat.



Dairy and alternatives.

Choose lower fat and lower sugar options.

Oils and spreads (fats).

Choose unsaturated oils and use in small amounts.

Foods high in fats and sugars.

Eat less often and in small amounts.

Preparation Skills and Techniques

Chopping, Slicing, Dicing and Peeling Skills



A



B



C



Bridge Hold



Claw Hold



Peeling



What could happen?

Cake and Pastry Making Methods

Rubbing -in Method

Used for pastry and cakes that **do not have a large amount of fat** compared to flour

- ◇ Fat is **cut into chunks** (block margarine is best)
- ◇ Air is trapped when sieving the flour and by lightly **rubbing the fat in to the flour**
- ◇ Any optional ingredients (e.g. sultanas) are **added before the liquid or egg** that binds the crumb together



Creaming Method

Used for cakes containing **more fat and sugar** compared to flour

- ◇ The fat and sugar are **creamed together** using a **wooden or plastic spoon**. Air is **trapped** by **creaming** the sugar and fat together
- ◇ Soft margarine is better as it is **easier to cream**
- ◇ **Caster sugar** has **smaller crystals** than **granulated** so it **traps more air** and mixes better
- ◇ **Self raising flour** is used to make the cakes rise



Melting Method

- Fat is melted with the sugars and syrup
- Dry ingredients added
- Liquids bind all ingredients together



Year 9 French Key Vocabulary Cycle 3

encourager	to encourage, encouraging
obliger	to force, forcing
me/m'	me (obj)
te/t'	you (obj)
la difficulté	difficulty
l'objectif (m)	objective
la recherche	research
le résultat	result
clair	clear
presque	almost
supplémentaire	extra

livrer	to deliver, delivering
oublier	to forget, forgetting
payer	to pay, paying
le ² /l' ²	it (m), the (m)
la ² /l' ²	it (f), the (f)
le coût	cost
le client	customer
la marque	brand
la mode	fashion
cent	hundred
mille	thousand
quatre-vingt	eighty
quatre-vingt-dix	ninety
soixante-dix	seventy

annuler	to cancel, cancelling
arriver à	to manage to, managing to
continuer	to continue, continuing
continuer de	to continue to, continuing to

décider	to decide, deciding
décider de	to decide, deciding
essayer	to try, trying
essayer de	to try to, trying to
voler	to steal, to fly
la bise	kiss on the cheek
faire la bise	to kiss on the cheek, kissing on the cheek
l'isolement (m)	isolation
le masque	face mask
la pandémie	pandemic
le vol	theft, flight
impossible	impossible
interdit	not allowed
mondial	global
nécessaire	necessary

établir	to establish, establishing
fournir	to provide, providing
grandir	to enlarge, enlarging
réussir	to succeed, succeeding
sentir	to feel, feeling
l'armée	army
le début	beginning
l'état (m)	state
l'ouest	west
le sud	south
l'est	east
le nord	north
le soldat	soldier
la fin	end

French

laver	to wash, washing
se laver	to wash oneself, washing oneself
appeler	to call
s'appeler	to be called, being called
présenter	to present
se présenter	introduce oneself
réveiller	to wake, wake
se réveiller	to wake (oneself) up, waking (oneself) up
l'accord	agreement
la journée	day (duration)
le membre	member
la paix	peace
efficace	effective
fier	proud
officiel	official (adjective)

se sentir	to feel, feeling
se lever	to get up, to stand up
s'organiser	to get organised, to organise oneself
se trouver	to be located, to find oneself
se demander	to ask oneself, to wonder
se loger	to stay, staying
l'Afghanistan	Afghanistan
conflit	conflict (m)
crise	crisis (f)
association	association (f)
afghan/afghane	Afghan (m/f)
grave	serious
actuel	current

dîner	to have dinner, having dinner
voir	to see, seeing
je vois	I see, I am seeing
tu vois	you see, you are seeing
il voit	he sees, he is seeing
elle voit	she sees, she is seeing
la pièce	room
le téléphone	telephone
l'escalier	stairs
le salon	lounge
la salle à manger	dining room
la cave	cellar
quand	when
pendant que	while

couler	to flow, flowing
raconteur	to tell (a story), telling (a story)
surprendre	to surprise, surprising
la banlieue	suburbs
le cou	neck
l'écrivain (m.)	writer
l'immeuble (m.)	apartment block
la tour	tower
doux	soft (m.)
douce	soft (f.)
pauvre	poor
quelques	some

Year 9 - Geography- Cycle 3		Week 1 – Growth	Week 2 - Push & Pull
<p>Key Vocabulary</p> <p>Slum: A highly populated urban residential area consisting of densely packed housing units of weak build quality and often associated with poverty.</p> <p>World City: The most important cities in the world in terms of economic and cultural impacts.</p> <p>Deindustrialisation: A process in which the industrial activity in a country or region is removed or reduced because of a major economic or social change.</p> <p>Regeneration: Long term upgrading of existing places for urban, rural, industrial and commercial areas.</p>		<p>Urbanisation: the process of towns and villages developing and becoming bigger as their population increases. More than half of the world's population now lives in towns or cities.</p> <p>Megacity: a city with a population of over 10 million people. The largest megacity in the world is Tokyo in Japan with 37.4 million people!</p> <p>Rural-urban migration: the movement of people from the villages (rural areas) into the towns and cities (urban areas). It is most common in NEE and LICs. Caused by push and pull factors.</p> <p>Internal growth: growth within a city that results from births among the resident population rather than people moving into the city.</p>	<p>Rural- Urban Migration</p> <p>Out of villages Push Factors</p> <ul style="list-style-type: none"> few services lack of job opportunities unhappy life poor transport links natural disasters wars shortage of food <p>Into the cities Pull Factors</p> <ul style="list-style-type: none"> access to services better job opportunities more entertainment facilities better transport links improved living conditions hope for a better way of life family links
<p>Week 3 – Slums</p> <p>Informal sector: jobs where people do not pay tax and have no legal working rights, for example selling fruit at a street market.</p> <p>Informal housing: housing built on land that does not belong to those who are building it. Often land which may be unsuitable for the purpose: river beds, land close to industrial activity, land on steep or unstable slopes or next to transport networks.</p> <p>Infrastructure of often poor and there are problems with electricity and sanitation. This informal housing is often known as slums or squatter settlements.</p> <p>It is estimated that 1 in 7 people on the planet currently lives in a slum. In Some developing countries, it is as much as 90% of the urban population.</p>		<p>Week 4 – Dharavi</p> <p>Dharavi is located in Mumbai and is India's largest slum. It has nearly one million people crammed into one square mile.</p> <p>Water full of diseases – high levels of typhoid, diphtheria.</p> <p>Doctors deal with 4000 cases per day of sickness caused by poor sanitation.</p> <p>85% of people have a job in the slum.</p> <p>There are 15,000 one-room factories in the slum with a turnover of \$1 billion per year.</p> <p>In the UK, 23% of our waste is recycled; in Mumbai it is 80%. Most of that happens in Dharavi. Strong sense of community in the slum – small village squares, flower baskets. Plans to replace Dharavi slum with tower blocks of flats. The land is very valuable.</p>	<p>Week 5 – Jakarta</p> <p>Jakarta, the Indonesian capital, is home to 10 million people but it is one of the fastest-sinking cities in the world.</p> <p>It sits on swampy land with 13 rivers running through it. Flooding is frequent.</p> <p>By 2050, 95% of North Jakarta will be under water. Northern Jakarta has sunk 2.5 metres in 10 years, which is double the global average for coastal megacities. North Jakarta houses one of Indonesia's busiest sea ports.</p> <p>The dramatic rate of sinking is partly down to the excessive extraction of groundwater for use as drinking water, bathing and every day use. Piped water is not reliable to people pump water from aquifers underground.</p>

Key Vocabulary	Week 6 – World City	Week 7 – Exeter
<p>Sustainable: To meet the needs of the present without compromising future generations to meet their own needs.</p> <p>Urban Greening: creating a mutually beneficial relationship between people who reside in the city and the environment, through public landscaping and urban forestry.</p>	<p>A world city is one considered to be an important hub in the global economic system.</p> <p>Characteristics of world cities:</p> <ul style="list-style-type: none"> o Headquarters of transnational corporations. o Centre for business innovation o Major centre for manufacturing o Home of an important stock exchange or major banks. o Highly rated universities, often specialising in research, which links to a high quality healthcare provision. o Cultural opportunities including opera and ballet o E.g. Sydney, Australia. 	<p>Exeter has a population of 128,900. Princesshay shopping centre and the high street was redeveloped between 2005 and 2007 costing £225 million.</p> <p>There were concerns about the visual impact of a major city centre redevelopment on the historic buildings e.g. the cathedral. The redevelopment included the conservation of the historic City Wall dating from Roman times. Princesshay consists of 50 shops, restaurants and café and over 100 flats and apartments.</p> <p>Future plans to regenerate Sidwell Street with a four star hotel opposite John Lewis and 250 build-to-rent homes. Around 35,000 people commute into Exeter on a daily basis.</p>
Week 8 – Sustainable City	Week 9 – Masdar City	Week 10 – Longyearbyen
<p>A sustainable city offers a good quality of life to current residents but doesn't reduce the opportunities for future residents to enjoy.</p> <p>Key features of a sustainable city:</p> <ul style="list-style-type: none"> o Public transport as an alternative to cars. o Walking and cycling is safe. o Renewable resources are used instead of non-renewable. o Water is seen as a resource and recycled wherever possible. o New homes are energy efficient. o Access to affordable housing. o Community links are strong and communities work together to deal with issues such as crime. o Areas of open space. o Cultural and social amenities are accessible for everyone. 	<p>Masdar City, in the UAE, relies on solar energy and other renewable sources.</p> <p>Started in 2006, the city was envisioned to cover 6km² and estimated to cost \$18-22 billion. Final completion is now estimated to be 2030. The city will be home to 45,000-50,000 people and 1,500 businesses.</p> <p>As of 2016, fewer than 2,000 people are employed there. The city has terracotta. The temperature in the streets is 15-20°C cooler than surrounding desert. A wind tower sucks in air from above and pushes a cool breeze through the streets.</p> <p>Buildings are clustered together to shield people from the sun. Masdar is powered by a 22-hectare field of solar panels.</p>	<p>The world's northernmost town in Longyearbyen which is located in the Norwegian archipelago of Svalbard. It has 2,400 citizens.</p> <p>It was established a mining town. Longyearbyen is around 650 miles from the North Pole. There are more polar bears than there are people. The sun does not rise at all for four months of the year.</p> <p>The town has all the amenities of a modern town, including a school, church and restaurants.</p> <p>Longyearbyen is home to the famous Doomsday Seed Vault which stores every known crop on the planet.</p> <p>No burials of people have happened in Longyearbyen for over 80 years due to the icy conditions and permafrost preventing bodies from decomposing!</p>

HISTORY

What questions do historians ask and how do they answer them?

1. Why did the Second World War begin?

- The British people and the government didn't want another war, the First World War had cost 1 million lives and injured 1 million more men.
- However, Germany had been so badly ruined that they had voted for a new, angry, powerful leader called Adolf Hitler and he wanted more land.
- The British Prime Minister gave into Hitler's requests for land and gave him parts of the modern day Czech Republic. This policy was called "appeasement" but it didn't work, Hitler wanted more land in Poland.

2. Why did the British people suffer so much during the Second World War?

- Britain declared war in 1939 against Germany and their ally Japan. The Second World War had begun.
- The new and most scary weapons were aeroplanes and the bombs they could drop.
- Soon British cities were being bombed from the air and civilians were being killed.
- The British Navy and Royal Air Force were very important during the Second World War. They had to protect Britain's skies from bombers and try to keep supplies coming in by sea.
- Britain was alone against Germany after France was defeated in 1940 but the people held on. The British public had to eat less, sleep in bomb shelters, help their communities and even separate their families during the war.

3. Write down three questions that you can answer using the paragraph below.

- Eventually, with the help of Russia (USSR) and the USA, Britain was able to fight back the enemy in Africa, Burma and mainland Europe.
- As the British Army pushed back the Germans, they found terrible camps where innocent civilians had been locked up and forced to work, some were even designed as death camps.
- Both Japan and Germany did not respect human rights for everyone.
- By April 1945, the German Army was in full retreat and the Russians reached Berlin—Adolf Hitler killed himself in his underground bunker.
- Japan surrendered after the USA dropped two atomic bombs on two cities.
- Both Germany and Japan surrendered in 1945.

4. How do historians find out the "truth" about what happened in the war?

- Historians have worked out what happened during the Second World War from researching contemporary Sources (evidence from the time) and writing interpretations.
- Later historians (like us) can then compare these interpretations, look at the original sources, and try to work out what actually happened.
- This cross-referencing of evidence is vital to finding the "truth" of what happened.

HISTORIAN SKILLS

Knowledge
Explanation
Using Sources
Interpretation

KEYWORDS

Interpretations = a version of events based on research
Cross-reference = comparing different evidence on the same event
Contemporary = from the time of the event
Source = a piece of evidence
Research = finding information on an event
Biased = one sided

IMPORTANT DATES

1938 = Munich conference to appease Hitler
1939 = Second World War begins
1940 = Germany defeats France using blitzkrieg tactics
1940 = Battle of Britain. Children evacuated to the countryside
1941 = Germany invades Russia (USSR)
1941 = Japan attacks the USA at Pearl Harbour
1942 = Battle of Midway
1943 = Battle of Kursk
1944 = D-Day
1945 = Germany surrenders. VE Day 8th May 1945
1945 = Atomic bombs dropped on Hiroshima and Nagasaki, Japan surrenders. VJ Day 15th August 1945

FAMOUS SOURCE

Nature = a poster

Origin = designed in 1939 by the government

Purpose = to make people feel better after air raids

The Source shows us what the government wanted people to think during the war, but it does not tell us how the public actually felt. The poster is an example of propaganda. Although 2.5 million were made, only around 20 were ever put up during the war! One was found in the year 2000 and it became very popular again.



KEEP
CALM
AND
CARRY
ON

Why was the world on the brink of destruction in the second half of the 20th Century?

Why did the USA and USSR become enemies?

- After the Second World War ended, the USA and Britain wanted to make the world free, democratic, able to trade, and capitalist.
- However the USSR (Russia) wanted to make the world equal and communist. They didn't care about democracy or freedom.
- In 1949, the USSR tested its first nuclear weapon and, as a result, the USA started to see the USSR as an enemy and the Cold War began.

Why was it called the "Cold War"?

- The USA and USSR began an arms race with each other: each of the countries trying to build more nuclear weapons than the other to prove they were best.
- Eventually they developed rocket technology and ICBMs so the USSR and USA could attack each other from the other side of the world with the push of a button.
- If one side fired their missiles, then the other side would detect them and fire theirs—both sides would be destroyed from the system known as M.A.D.
- Because of MAD, the two superpowers never went to war directly and it became a "Cold War". Instead they had to compete through other countries, sporting events, space technology, and through cultural achievements.

How did the Cuban Missile Crisis affect the Cold War?

- In 1962, the world came close to nuclear war during the Cuban Missile Crisis.
- The USSR had placed missiles in Cuba which was very close to the USA.
- The USA blockaded Cuba and the USSR threatened to launch their missiles.
- In the end the USSR backed down and the two superpowers set up a phone hotline because they realised they had to communicate to avoid a nuclear war.
- A nuclear war could end human civilisation because the nuclear explosions would kill millions of people and the fallout would stop plants growing for years.

What problems did the USA have at home during the Cold War?

- The USA fought a long war in Vietnam to try and stop it becoming communist but with the USSR and China's help, the Vietnamese won.
- The American people became tired of the war and began to protest against it.
- The Vietnam War was seen as wrong because most of the Americans that fought in the war were young, poor, and black. Also the US military injured and killed many civilians while trying to fight the enemy soldiers.
- Although the USA were the first nation to put a man on the moon, the President that promised the moon landing was assassinated in Texas in 1963.
- The Cold War highlighted many social problems such as sexism and racism, and the younger generation protested for change.

HISTORIAN SKILLS

Knowledge
Explanation
Using Sources
Interpretation

KEYWORDS

Capitalism = money controls everything

Communism = society free of money

Fallout = radioactive dust and ash in the sky that blocks sunlight

ICBM = Intercontinental ballistic missile

MAD = Mutually assured destruction

Nuclear weapons = warheads that use the power of splitting or joining atoms

Superpowers = countries that are so powerful they can control world events

USSR = Union of Soviet Socialist Republics

IMPORTANT DATES

1945 = Second World War ends

1949 = USSR tests a nuclear bomb

1949 = The communist revolution in China

1957 = USSR develops long range missile technology for ICBMs

1957 = USSR launches its Sputnik satellite

1960 = Birth control pill available

1962 = Cuban Missile Crisis

1963 = American President JFK assassinated

1964 = Civil Rights Act passed in the USA

1969 = Moon landing

1975 = Vietnam War ends

1976 = Race Relations Act passed in Britain

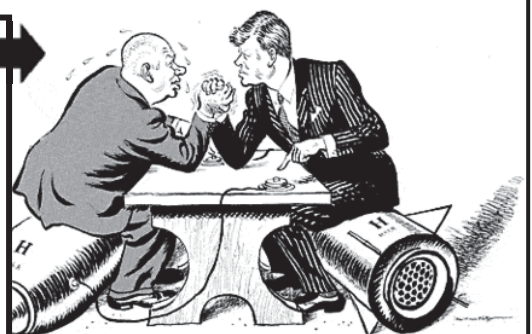
FAMOUS SOURCE

Nature = a cartoon

Origin = published in a British newspaper 29th October 1962

Purpose = to show how close the world had got to nuclear war

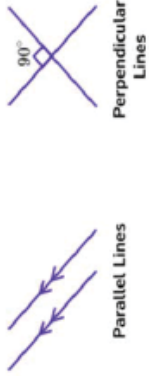
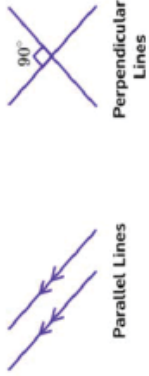
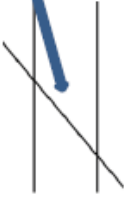
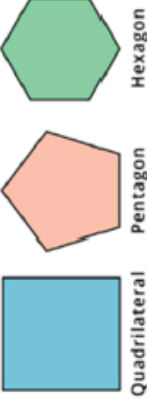


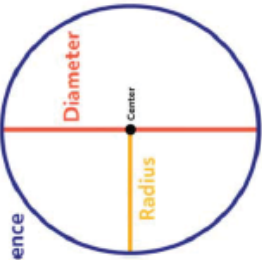
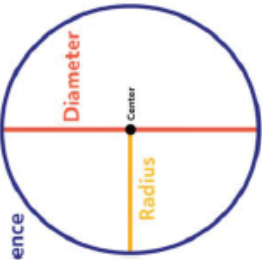

The Source shows the leaders of the USSR and USA (Khrushchev on the left and Kennedy on the right). Both men are sitting on nuclear missiles and are arm wrestling. President Kennedy appears more composed and the USSR leader Khrushchev is sweating. Both men have their fingers over the detonation button.

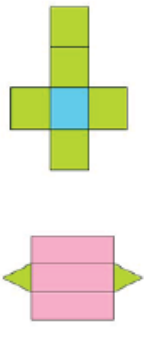

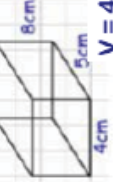
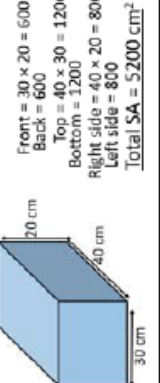
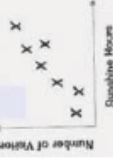
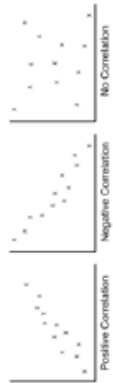


Creating Interactive Digital Media

Interactive digital media products are found across the media industry in games, websites and apps, learning platforms, simulations and in commerce. The content of these products have been designed to create an immersive and engaging environment which can promote, educate, entertain, inform or influence. Digital design skills will enable students to design and create interactive digital media products that meet a given client brief and appeal to an identified target audience whilst developing industry standard IT skills.

Topic of Learning	I will need to know:	So that I can:
Types of interactive digital media, content and hardware	There are many different types of interactive digital media products, websites, information points, mobile apps, e-learning products, digital maps and games. The format of the media product is determined by the purpose of the product and the target audience. The content of media products include images, audio, video, animation text, tables, lists, forms, navigational buttons, maps and layers. Different hardware is used to access media products. Examples include computers, games consoles, kiosks, mobile phones, smart TV and tablets.	Identify the purposes of different interactive media products and their target audience.
Features and conventions of interactive digital media	The features of media design includes a graphical user interface (GUI) consistent layout, colour scheme, house style, typography selection and white space. Interface and interaction styles include click, touch, voice control, motion, drag, drop and feedback. Conventions of digital media include non-linear navigation, user friendly intuitive interfaces and accessibility for target audiences.	Understand what makes an effective GUI in order to create different types of interface when creating digital media products.
Resources required to create interactive digital media	The hardware used to create digital media, includes computer, mouse, stylus, monitor, graphics tablet, touch screen, microphone and digital camera. Software used to create digital media, includes web authoring software, app creation, video editing, image editing and animation software.	Identify the most appropriate hardware/software to use when creating digital media products.
Planning documentation and techniques	Before creating a digital product, the product needs to be planned. Pre-production documents created are wire frames, storyboards, navigation diagrams, mind maps, mood boards, master page templates and interactivity designs.	Understand the importance of planning a digital media product before it is created.
Technical skills needed to create digital media products	There are many technical skills required to create digital media products. Skills include, advanced searching, selecting appropriate image types eg bitmap or vector, adjusting image size, canvas size, applying filters, retouching and layering. When repurposing video, tools used include cut, split, trim, extend, optimise file size, volume editing, enhancing sounds. When creating animations, tools used will include frames, onion skinning and motion tween.	Use a range of technical skills to create effective digital media products.

<u>Word</u>	<u>Used in context</u>	<u>Definition</u>	<u>Example</u>
Parallel	A square is made up of two sets of parallel lines	Lines that do not meet or cross and are always the same distance apart	
Perpendicular	Two sides of a square meet at a right angle. Therefore, they are perpendicular	Two lines intersecting to form a right angle	
Transversal	Which of the lines below is the transversal ?	A line that crosses at least two other lines	
Polygon	Square, rectangle, triangle and pentagon are all examples of polygons	A closed shape with straight sides	
Regular Polygon	A pentagon with all sides the same length is a regular polygon	A polygon with all angles equal and all sides the same length	
Circumference	Calculate the circumference of this circle	The perimeter of a circle	
Diameter	Use the diameter to work out the circumference of the circle.	A straight line passing from side to side of a circle, through the centre	
Radius	Use the radius to calculate the area of the circle	A straight line from the centre to the circumference of a circle. Half of the diameter	
Compound Shape	Calculate the area of the compound shape shown in the diagram	A shape made up of two or more geometric shapes	

<u>Word</u>	<u>Used in context</u>	<u>Definition</u>	<u>Example</u>
Net	Show the net of a cube with edges 3cm long	Describes what a 3D shape looks like when opened and laid flat	
Prism	How many faces does this prism have?	A solid object with a constant cross section	
Volume	Calculate the volume of the cuboid	The amount of 3D space an object takes up Volume = length x width x height	 $V = 4 \times 5 \times 8 = 160\text{cm}^3$
Surface Area	Work out the surface area of this prism	The amount of space covering the outside of a 3D shape	
Scatter graph	The scatter graph shows the heights and weights of ten children	A graph displaying values for two variables for a set of data	
Bivariate data	What type of graph shows bivariate data?	Data that has two (usually related) variables	Weight and height
Correlation	What type of correlation is shown by this scatter graph?	The relationship between two variables	
Probability	What is the probability of flipping a coin and it landing on heads	The likelihood of an event happening	$P(\text{Heads}) = 0.5$
Relative Frequency	Calculate the relative frequency of getting a 6 after the dice was rolled thirty times	The number of times an event happens divided by the number of trials in an experiment	Emma has won ten tennis matches and lost seven. The relative frequency of Emma winning a match is $\frac{10}{17}$

Training Methods– Memory Tip– WIFCC

Can you describe training methods and the component of fitness they target. What type of training would different athletes use? Why would it improve their performance? Can you attempt the example sessions.

Training Method	Description	Example Session
Weight Training	Lifting a resistance to cause adaptation to the muscles. Involves repetitions (the amount of times the movement is performed) and sets (a group of repetitions).	3 sets of 10 repetitions @60% of One Rep Max (the greatest amount you can lift once). Exercises– Bench Press, Leg Press, Shoulder Press, Bicep Curl. Can improve muscular strength, muscular endurance and muscular power.
Interval Training	Training which involves alternating work and rest periods. Can be structured to improve either speed or cardiovascular endurance.	Short Interval Training– 10-15 seconds sprinting with 90 seconds slow jog x 10 sets Long Interval Training– 2 minutes steady running with 1 jogging x 5 sets
Fartlek Training	Speed play. Working at a range of intensities, varying the speeds with no rest periods. Improves cardiovascular endurance.	5 minutes jog to warm up, then 15 seconds sprint, 45 seconds walk, 30 seconds steady, 15 seconds sprint and so on. Work for 15 minutes.
Continuous Training	Working at a low to moderate intensity for a long period of time with NO rest.	20-30 minutes steady jogging @60-80 % of Maximum Heart Rate.
Circuit Training	Performing a series of exercises at different stations often with a brief rest in between to complete a set Improves muscular and cardiovascular endurance.	30 seconds work– 30 seconds rest Order of exercises– Press Up, Squats, Sit Ups, Shuttle Runs, Tricep Dips, Step Ups, Plank, Skipping

Training Zones

Make sure that you can recall the guidelines for each zone. Can you link to sporting activities that would require training in each zone.

	Aerobic Training Zone	Anaerobic Training Zone
% of Maximum Heart Rate	60-80% of MHR	80-90% of MHR
Intensity of Exercise	Low to moderate intensity	High intensity
Length of Time in Zone	At least 15-20 minutes to have a training effect	15 seconds to 1 minute intervals
Related Training Methods	Continuous, Fartlek, Interval, Circuit	Weight, Interval, Circuit
Fitness Components that can be worked	Cardiovascular and muscular endurance	Speed, Power, Strength Tolerance to lactic acid

Calculating Intensity of Exercise through Heart Rate Zones– Example

A 20 year old joins a local gym and has been set a training programme where they will need to monitor their heart rate, to make sure that they are working hard enough but not overtraining.

Step 1– Calculate maximum heart rate. $220 - 20 = 200$ bpm

Step 2– Aerobic Training Zone (lower threshold) $220 \times 0.6 = 120$ bpm

Step 3– Anaerobic Threshold

(upper end of Aerobic Zone/lower end of Anaerobic Zone) $220 \times 0.8 = 160$ bpm

Step 4– Upper End of Anaerobic Zone $220 \times 0.9 = 180$ bpm

Can you calculate training zones for yourself and a member of your family?

WK 1 Human Rights

We are all born with human rights, but several important documents explain what they are and how they should be protected.

The Universal Declaration of Human Rights (UDHR)

The Universal Declaration of Human Rights is the most important document outlining human rights. It was agreed upon by the United Nations in 1948, as a response to the terrible events of the Second World War.

The Universal Declaration of Human Rights is not a law itself.

It is a statement of the world's commitment to human rights. Many of its articles have been included in the laws of countries around the world.

WK 1

The Universal Declaration of Human Rights outlines the rights enjoyed by every human being regardless of gender, race, language, religion, politics, or wealth.

It recognises and protects the right to:

- life, freedom and security;
- justice;
- own property;
- have your own opinion about religion and politics;
- say what you want;
- associate with who you want;
- marry who you want;
- work where you want;
- rest and relaxation;
- education.



WK 2 Prejudice and discrimination (part 1)

Prejudice and discrimination are **attitudes** and resulting **actions** that cause people to be treated differently. Many Christians today actively fight prejudice and discrimination in all their forms.

Prejudice comes from the words '**to judge before**'. It means to form an unfavourable opinion or feeling about a person or a group of people without a full examination. In theory, it is possible for somebody to be prejudiced without anybody else knowing about it. Discrimination is making a distinction against a person or thing based on the group, class or category they belong to, rather than basing any action on individual merit.

A simple distinction between prejudice and discrimination is that **prejudice is to do with attitude, discrimination is to do with action.**



Christians believe that all humans are made in the image of God. Therefore any action that devalues a person is an insult to God who created and loves that person.

At the centre of the Christian faith is the belief that Jesus Christ shed his blood on the cross to atone for the sins of all people everywhere.

"So God created human beings, making them to be like himself"

"There is neither Jew nor Greek, slave nor free, male nor female, for you are all one in Christ Jesus".

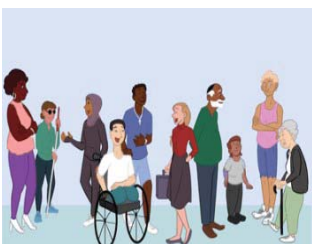
"Love your neighbour as yourself"



WK 3 Prejudice and discrimination (part 2)

Prejudice based on **gender** is called **sexism**. Both women and men can be victims of this, but it is more common for women to be the victims. Prejudice based on the **national grouping or race** of a person is known as **racism**. Colour prejudice is the most common form of racism, as skin colour is a sign of the race a person belongs to.

There are forms of prejudice that combine religion and race and it can be difficult to distinguish between the two elements. Prejudice towards **Jews** is called **anti-Semitism**. Prejudice towards **Muslims** is called **Islamophobia**.



WK 4 Prejudice and discrimination (part 3)

Prejudice towards **homosexual people** is called **homophobia**. When people, young or old, suffer from prejudice because of their age it is called **ageism**. Other main categories of prejudice are concerned with social class, disability, life-style choices and appearance.

WK 5 Religious freedom

Article 18 of the UN Universal Declaration of Human Rights, adopted in 1948, states that 'everyone has the right to freedom of thought, conscience and religion'.

Throughout history, Christians have faced **persecution**.

Jesus told Christians to spread the word of Christianity. He acknowledged that this may put them in danger, but that those who do so will receive salvation.

There are still some circumstances in the 21st century, where Christians are persecuted because of their beliefs. This could mean that they are not able to practice their religion freely and safely.



WK 5 There are organisations in the UK who help persecuted Christians by:

There are organisations in the UK who help persecuted Christians by:

- translating and distributing Bibles and other Christian literature in places where this is not permitted
- training Christians and church leaders to support them through the trauma they may have suffered
- providing advice and support to Christians who have been victims of disaster



WK 6 Wealth and poverty

Christianity teaches that there is nothing wrong with wealth in itself. What is wrong is desiring or craving wealth.

In Timothy, it states:

... for the love of money is the root of all kinds of evil.

Many Christians believe people should use their wealth to help those who have less than they have. Humans have a duty to help each other as all are members of a global family.

In the **parable of the sheep and the goats** (Matthew 25:31-46), Jesus taught that people should help those in need - whether they are hungry, thirsty, sick or alienated from society. To help those in need is the same as helping Jesus:

I tell you, whenever you did this for one of the least important of these followers of mine, you did it for me!



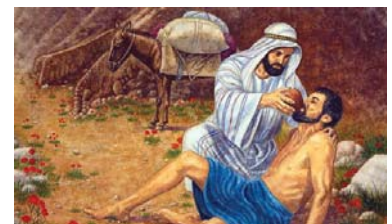
WK 7 Where you live makes a difference

In the **parable of the good Samaritan** (Luke 10:25-37), Jesus addressed issues of racial prejudice and discrimination. A Jewish man who was attacked and left for dead was ignored by two of his own people, yet it was a hated Samaritan who cared for him. Jesus concluded with the words:

'Which of these three men acted like a neighbour toward the man attacked by the robbers?' The teacher of the Law answered, 'The one who was kind to him.' Jesus replied, 'You go, then, and do the same.'

Most poverty is found in **less economically developed countries (LEDCs)**. These countries are non-industrialised, eg Afghanistan and Sudan. People living in these countries are more likely to have high rates of child mortality, poor life expectancy, inadequate housing and poor educational standards.

Contrast this with those who live in **more economically developed countries (MEDCs)**. Examples of MEDCs include the UK, USA and Canada. People living in MEDCs often have a much better chance of living in relative wealth. These countries have a more developed economy and have a greater income due to their technological and industrial abilities.



WK 8 Exploitation

Exploitation: misuse of power or money to get others to do things for little or unfair reward.

Before exploring different types of slavery, it is important to talk about what freedom is. It is a very difficult subject to define and a lot of people have different views on what exactly it is.

The Universal Declaration of Human Rights (UDHR) is a document that attempts to define the rights and freedoms of all human beings.

There are many forms of modern slavery and according to Anti-Slavery UK, slavery can exist in the following ways:

- **Forced labour** - any work or services which people are forced to do against their will under the threat of some form punishment.
- **Debt bondage** - the world's most widespread form of slavery, when people borrow some money and are required to work to pay off the debt, then losing control over the conditions of both their employment and the debt.

WK 9

- **Human trafficking** - involves people being transported into a situation of exploitation through the use of violence, deception or coercion.
- **Child slavery** – defined as the delivery of a child by its parents or a guardian to someone else for the purpose of exploitation. Child slavery can include child trafficking, child soldiers, child marriage and child domestic slavery.
- **Forced marriage** – when someone is married against their will and cannot leave the marriage. Most child marriages can be considered slavery.

Many Christians believe it is part of their religious duty to help the poor. They follow the example of Jesus, who reached out to the poor in society. Some Christians believe that faith and the fight for justice go hand in hand.

“Do not exploit the poor because they are poor and do not crush the needy in court, for the Lord will take up their case and will exact life for life.”

WK 10 Giving Aid

Christian Aid began work in 1945. The organisation was founded by British and Irish churches to help refugees following **World War Two**. Working together with supporters and partners, Christian Aid aims to:

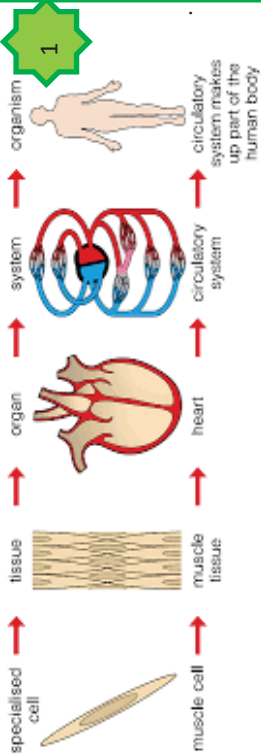
- expose poverty throughout the world
 - help in practical ways to end poverty
 - highlight, challenge and change the structures and systems that favour the rich and powerful over the poor and marginalised
- One of Christian Aid's campaign slogans is **“We believe in life before death”**. Christian Aid works to help vulnerable people have a decent life by taking action in the following ways:
- seeking to follow the teaching of Jesus, who commanded his followers to love their neighbour and work for a better world
 - giving people survival essentials when they are without shelter or refuge, and helping them find the strength and resources they need to flourish and protect themselves from shocks and disasters
 - supporting people to stand up for their rights and to build stable, secure lives they can enjoy living

WK 11 Giving Aid

Islamic Relief has been responding to emergencies over 30 years, providing a lifeline for vulnerable communities affected by conflict and natural disasters. Our work continues long after an emergency is over: with a presence in over 40 countries worldwide, we promote sustainable economic and social development by working with local communities to rebuild after disaster and eradicate poverty, illiteracy and disease. We often work in dangerous and hard-to-reach places, where the need is usually greatest. We believe passionately in empowering the communities we serve, to lift them out of poverty. Through our advocacy and campaigning efforts we also aim to give vulnerable and marginalised communities a strong voice in pressing for policy changes that can help boost resilience and poverty alleviation



Moving & Changing Materials



Required Practical— Food Tests

Test for:	Indicator:	Observations
Sugar	Benedict's Reagent	Once heated the solution will change from blue-green to yellow-red in the presence of sugar
Starch	Iodine	Iodine will change from orange-brown to blue-black in the presence of starch
Protein	Biuret	The solution will change from blue to pink-purple
Lipid	Ethanol	A white layer will form on the top of the solution if lipids are present.



Required Practical—Effect of pH on the Rate of Reaction of Amylase

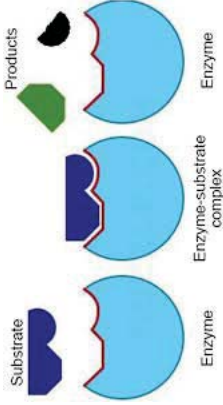
Independent Variable: pH of buffer solution
Dependent Variable: Time taken for the reaction to complete (how long it takes for all the starch to be digested by the amylase)

Method:

- use the marker pen to label a test tube with the first value of pH buffer solution (pH4) and stand it in the test tube rack.
- Into each well of the spotting tile, place a drop of iodine.
- Using a measuring cylinder, measure 2cm³ of amylase and pour into the test tube.
- Using a syringe, measure 1cm³ of the buffer solution and pour into the test tube.
- Leave this to stand for 5 minutes and then use the thermometer to measure the temperature.
- Add 2cm³ of starch solution into the test tube, using a different measuring cylinder to measure, start the timer.
- After 10 seconds, use a pipette to extract some of the amylase/starch solution and place one drop into the first well of the spotting tile. Squirt the remaining solution back into the test tube.
- Continue to place one drop into the well of the spotting tile every 10 seconds until the iodine remains orange.
- Record the time taken for the starch to be completely digested by the amylase by counting the wells that were tested positive for starch. Each well represents 10 minutes of time.
- Repeat steps 1 to 8 for pH values 7 and 10.

Digestive Enzymes

An enzyme is a biological catalyst. Enzymes speed up reactions without being changed or used up. This happens because enzymes lower the activation energy required for the reaction to happen. Enzymes are made up of chains of amino acids .



Enzymes have an active site which the substrate or reactant fits into. Enzymes are very specific and will only catalyse one specific reaction. If the reactants are not the right shape, the enzyme will not work for this reaction.

Enzyme	Substrate /	Product
Amylase	Starch	Sugars
Protease	Protein	Amino Acids
Lipase	Lipids (fats)	Glycerol &

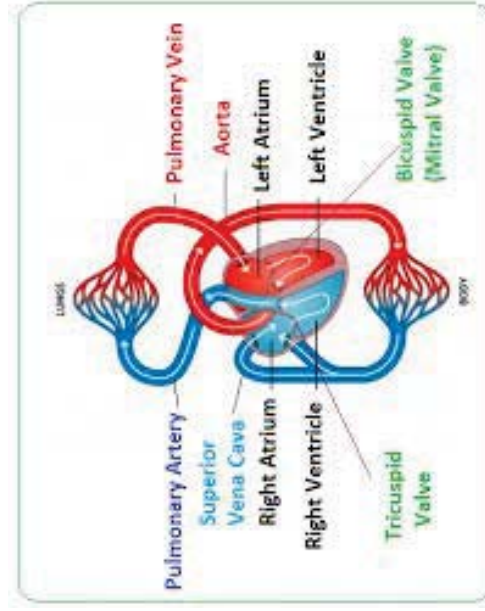
Enzymes also work optimally at specific conditions of pH and temperature. If the enzyme is exposed to the wrong pH or it gets too hot it could denature. A denatured enzyme has changed shape so will not longer work as the substrate will not be able to fit into the active site. The products of digestion are used to build new carbohydrates and proteins and some of the glucose is used for respiration.

Blood

Blood is composed of red blood cells, white blood cells and platelets, all suspended within a plasma. The plasma transports the different blood cells around the body as well as carbon dioxide, nutrients, urea and hormones. Red blood cells transport oxygen attached to haemoglobin. White blood cells fight disease.

The Heart and Blood Vessels

The heart is a large muscular organ which pumps blood carrying oxygen or waste products around the body. The lungs are the site of gas exchange where oxygen from the air is exchanged for waste carbon dioxide in the blood. Oxygen is used in the respiration reaction to release energy for the cells and carbon dioxide is made as a waste product during the reaction. $\text{glucose} + \text{oxygen} \rightarrow \text{carbon dioxide} + \text{water} + [\text{energy}]$



The Heart

The heart works as a double pump for two circulatory systems, the pulmonary circulation and the systemic circulation.

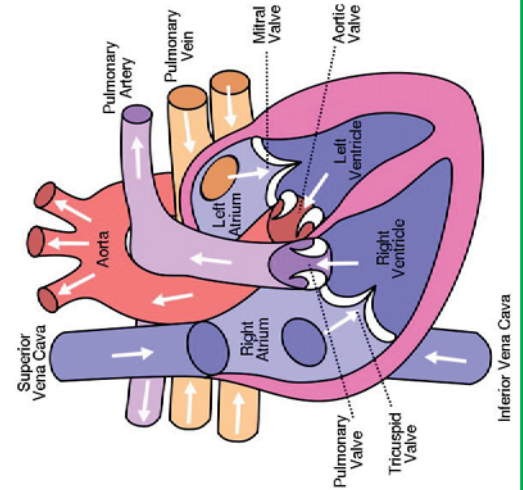
The pulmonary circulation serves the lungs and brings deoxygenated blood to exchange waste carbon dioxide gas for oxygen at the alveoli.

The systemic circulation serves the rest of the body and transports oxygen and nutrients from digestion to the cells of the body, whilst carrying carbon dioxide and other waste away from the cells.

The systemic circulation flows through the whole body. This means blood is flowing at a much higher pressure than in the pulmonary circuit.

The Heart as a Pacemaker

The rate of the heart beating is very carefully and automatically controlled within the heart itself. Located in the muscular walls of the heart are a small groups of cells which act as pacemakers. They produce electrical impulses which stimulate the surrounding muscle to contract, squeezing the chambers of the heart and pumping the blood.

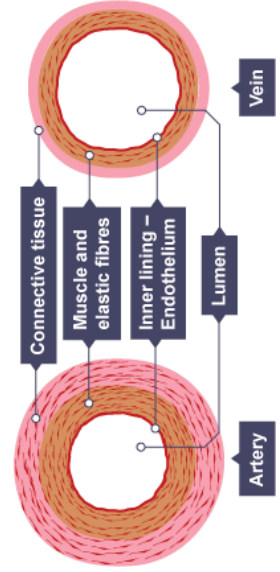


Blood Vessels

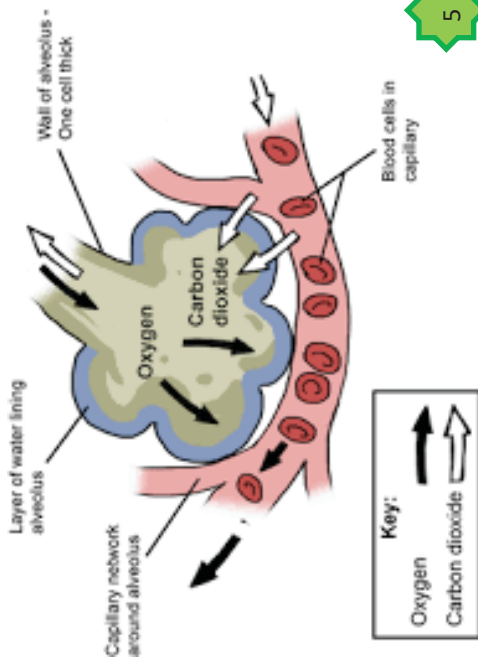
The three types of blood vessels are adapted to carry out their particular function.



	Artery	Vein
Direction of blood flow	Away from the heart	Towards the heart
Oxygenated or deoxygenated blood?	Oxygenated (except the pulmonary artery)	Deoxygenated (apart from the pulmonary vein)
Pressure	High	Low
Wall structure	Thick, elastic, muscular, connective tissue for strength	This, less muscular, less connective tissue
Lumen (the channel inside the vessel)	Narrow	Wide (with valves)

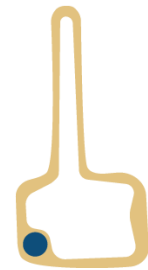


Alveoli & Gas Exchange



5

Root Hair Cells



Plants absorb water by osmosis through the root hair cells of the roots. Dissolved in the water are important minerals for the plants growth and development, which are absorbed by active transport.

The root hair cells are adapted to their function with the following features:

- Finger-like projection in the membrane increases the surface area available for water and minerals to be absorbed.
- The narrow shape of the projection can squeeze into small spaces between soil particles, bringing it closer and reducing the diffusion pathway.
- The cell has many mitochondria, which release energy required for the active transport of some substances.

6

Plant Tissues, Organs & Systems

Leaves are plant organs and their main function is to absorb sunlight energy for use in photosynthesis.

Within the cells are small organelles called chloroplasts which contain a green pigment called chlorophyll. This is the part of the plant which absorbs the energy from sunlight and where photosynthesis happens.

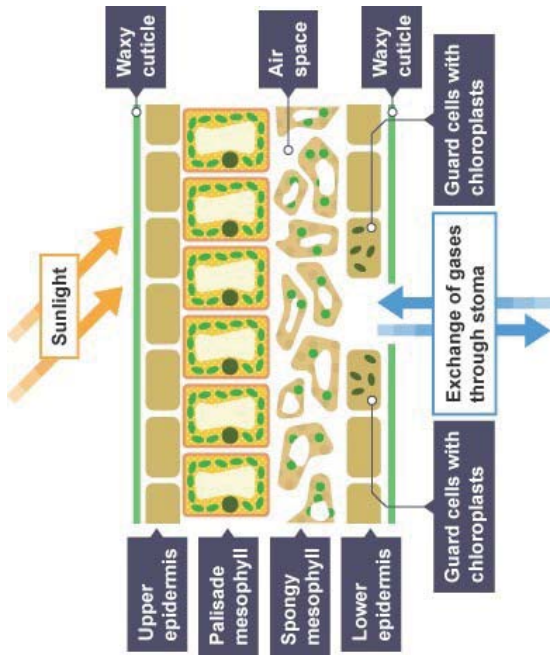
Leaves are adapted to carry out their function, they are typically flat and thin with a large surface area. This means they have a maximum area to absorb sunlight and carbon dioxide. This thin shape reduces the distance for diffusion of water and gases.

Leaves contain vessels called xylem and phloem.

The xylem transports water and dissolved minerals towards the leaves and the phloem transports glucose and other products from photosynthesis around the plant.

The large air spaces between the cells of the spongy mesophyll layer allow for the diffusion of gases. Carbon dioxide enters the leaves and oxygen exits the leaves.

The guard cells are specially adapted cells located on the underside of the leaf. They are positioned in pairs, surrounding the stomata (a small opening in the epidermis layer). The guard cells change shape to open and close the stomata controlling the rate of gas exchange in the leaf.



8

Transpiration

Transpiration is the loss of water by evaporation and diffusion from the leaves of the plant. Water is a cohesive molecule and as it evaporates there is less water in the leaf, so water from further back moves up to take its place. This is turn draws more water with it. This is the transpiration stream.

Transpiration occurs naturally as there is a tendency for water to diffuse from the leaves (where the concentration is relatively high) to the air around the plants (where the concentration is relatively low), via the stomata.

Environmental factors can change the rate of transpiration occurs; Increased light intensity, increased temperature, increased humidity, increased wind speed, decreased water content in the soil,

7

Moving & Changing Materials

Complete the table:

	Artery	Vein
Direction of blood flow		
Oxygenated or deoxygenated blood?		
Pressure		
Wall structure		
Lumen (the channel inside the vessel)		

3

Why are enzymes referred to a biological catalysts?

Why are enzymes so important to industry?

Describe how to carry out the test to see if sugars are present

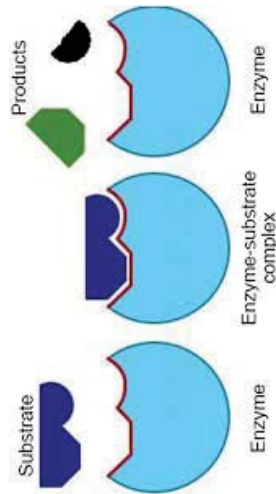
Complete the table:

Test for:	Indicator:	Observations
Sugar		
Starch		
Protein		
Lipid		

1

The diagram below shows the lock & key model of enzyme function. Label the diagram using the following words:

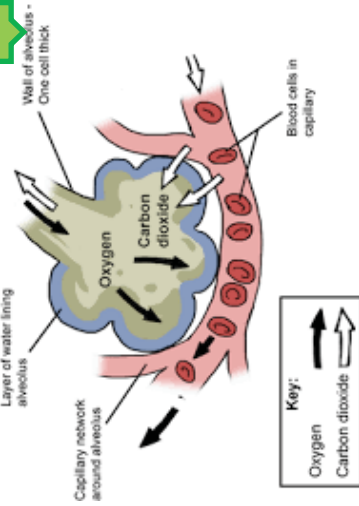
Enzyme, active site, substrate, products, enzyme-substrate complex



Now use the labelled diagram to help you to describe how lock and key theory works.

Use the diagram opposite to describe how alveoli are adapted for efficient gas exchange:

5



Describe transpiration and identify factors that affect the rate of transpiration:

7

Transpiration is

Factors that affect the rate of transpiration:

The xylem tissue is composed of hollow tubes strengthened by lignin. What is the function of xylem tissue?

7

What is the function of the phloem tissue?

Describe how the root hair cell is adapted to carry out its function:

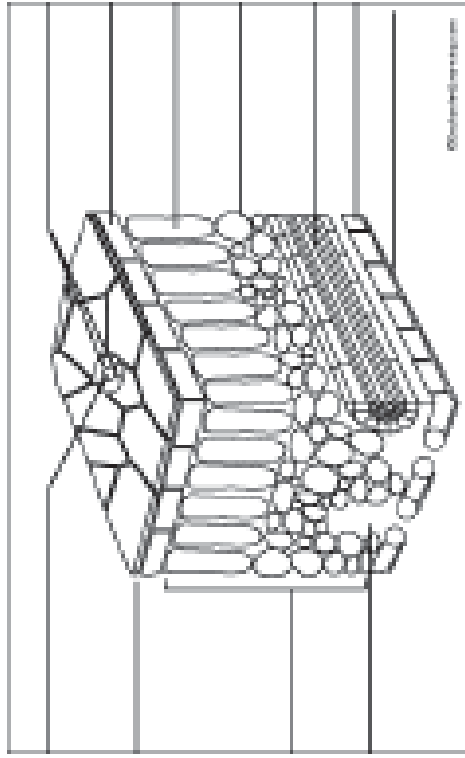
6

What process is used in the uptake of water in root hair cells?

What process is used in the uptake of ions in root hair cells?

Label the diagram of the leaf:

8





Need to Know Dictionary: English

Word	Definition
Stanza	A group of lines in a poem. Like a 'paragraph' in a poem.
Rhyme	The repetition of similar sounds.
Enjambment	When the lines of a poem run on without a pause.
Caesura	A pause within the line of a poem.
Metaphor	A metaphor is a word or a phrase used to describe something as if it were something else.
Extended metaphor	A metaphor that is repeated throughout a text.
Alliteration	The repetition of the same letter at the beginning of two or more words.
Tone	The feelings and atmosphere created by language.
Identity	Identity is the qualities, beliefs, personality traits, appearance, and/or expressions that characterise a person or group.
Imagery	Where the writer uses words to paint a picture to help the reader visualise what is being described.

Need to Know Dictionary: Maths

Word	Definition
quadratic equation	contains terms with powers no higher than two
construct	to draw a shape, line or angle accurately using a compass and straightedge (ruler)
perpendicular	at right angles to the horizon or another object
loci	a set of points that satisfy a particular condition or rule
data	data is a collection of information gathered by observation, questioning or measurement
index (indices)	an index (exponent, power or order) is a small number placed to the upper-right of a base number which shows how many copies of the base number are multiplied together
standard form	standard form is another name for scientific notation, i.e. $876 = 8.76 \times 10^2$
surds	<ul style="list-style-type: none"> • another name for an irrational number. • a surd is a real number that can be written as a nonrepeating or nonterminating decimal but not as a fraction because the decimal goes on forever without repeating
rational expressions	rational expressions are polynomial fractions
prime factorisation	is finding which prime numbers multiply together to make the original number



Need to Know Dictionary: Science

Word	Definition
Ionic	the electrostatic force of attraction between positively and negatively charged ions
Covalent bond	the bond between two nonmetal atoms that share one or more pairs of electrons
Intermolecular Forces	the attraction between the individual molecules in a covalently bonded substance
Photosynthesis	the process by which plants make food using carbon dioxide, water, and light
Endothermic reaction	a reaction that requires a transfer of energy from the environment
Aerobic Respiration	an exothermic reaction in which glucose is broken down using oxygen to produce carbon dioxide and water and release energy for the cells
Anaerobic respiration	an exothermic reaction in which glucose is broken down in the absence of oxygen to produce lactic acid in animals
Potential Difference	a measure of the work done or energy transferred to the lamp by each coulomb of charge that passes through it. The unit of potential difference is the volt (V)
Resistance	resistance (in ohms, Ω) = potential difference (in volts, V) \div current (in amperes, A)
Electrons	tiny negatively charged particles that move around the nucleus of an atom

Need to Know Dictionary: Geography

Word	Definition
Extreme Environment	A habitat that is considered very hard to survive in due to its considerably extreme conditions such as temperature
Distribution	The way in which something is spread over an area.
Desertification	The process whereby land which once was fertile is gradually turned into a desert.
Inhospitable	An environment that is harsh and difficult to live in.
Greenhouse effect	The build up of certain gases which become trapped in the atmosphere, and are slowing heating up the earth's surface.
Atmospheric Circulation	These are the circular air movements in cells in the atmosphere (air). The cells join together to form global atmospheric circulation.
Primary effects	are caused directly by the natural hazard (a primary effect of an earthquake would be the ground shaking)
Secondary effects	are caused by the primary effects (a secondary effect of an earthquake could be a landslide caused by the shaking ground)
Immediate responses	people reacting straight away. Could include search and rescue, food, water or shelter.
Long term responses	people acting to help people's lives return to normal. This could include rebuilding houses and buildings.
Climate change	changes in the climate which are thought to be caused by human impact
International agreement	when a range of different countries from around the world make an agreement



Need to Know Dictionary: French

- 1 **Infinitive (noun)** - The verb in its unchanged state. In French, infinitives end in either -er, -ir or -re. The Latin root word 'fin' means 'end'.
- 2 **Preposition (noun)** - A word that tells you where or when something is in relation to something else. In French, some prepositions are followed by de (pronounced 'duh'). From the Latin for 'putting before.'
- 3 **Irregular (adjective)** - Not following the usual pattern. It's really important you learn irregular verbs because they don't follow the usual pattern. The prefix 'in' can mean 'opposite of' the Latin root word 'regularis' means 'having rules'.
- 4 **Reflexive pronoun (noun)** - Reflexive pronouns are used with reflexive verbs which describe an action that someone does to themselves. Some French verbs have a reflexive pronoun in front of the verb. The French reflexive pronouns are me, te, se, nous, vous, and se
- 5 **Cognate (noun)** - Cognates are words that share similar meaning, spelling and pronunciation. When trying to work out meaning, you should look for cognates. From the Latin word meaning 'of common descent'.
- 6 **Auxiliary verb (noun)** - An auxiliary verb (aka a helping verb) is a verb that helps another verb express its tense, mood, or voice. To form the perfect tense, you need an auxiliary and a past participle. The two auxiliary verbs in French are être, which means 'to be,' and avoir, which means 'to have.'
- 7 **Imperfect tense (noun)** - Used to describe things in the past We used the imperfect tense to talk about what used to happen. The prefix 'im' is used to form words with the opposite meaning.
- 8 **Abstract noun (noun)** - A noun that refers to a thing that does not exist as a material object. Honesty and loyalty are examples of abstract nouns. Other types of nouns include concrete, proper, and collective.
- 9 **Conjugate (verb)** - To change the verb depending on who is performing the action or when the action is taking place. We are now able to conjugate verbs in the present and the perfect tense. The prefix 'con' means to 'join'.
- 10 **Tense (noun)** - A set of forms taken by a verb to indicate time. You should use a variety of tenses in your speaking and writing, in order to achieve a higher grade. From the Latin word 'tens' meaning 'time'.

Need to Know Dictionary: History

Word	Definition
1900s	The correct way to write "the nineteen hundreds" as a number.
Century	100 years
Contemporary	At the same time of the event or person
Decade	10 years
Democracy	Leaders selected by a voting system by those that are led.
Election	To vote for something
Morale	A feeling about how well or badly something is going.
Persecution	To treat a person badly over a long period of time.
Propaganda	Information that is designed to alter the way people think.
Racism	Hatred based on race or background of a person



Need to Know Dictionary: Engineering Design

Word	Definition
Design Cycle	A series of four phases that designers will use in order to design effective and successful products. Using this four phased system reduces the likelihood of errors being made and opportunities being missed.
Identify	The first phase of the design cycle, where designers research the design brief, conduct analysis, primary and secondary research and summarise their findings.
Design	The second phase of the design cycle, where designers create a design specification, create a variety of designs and evaluate these to select the best solutions.
Optimise	The third phase of the design cycle, where designers develop the chosen design or designs. This includes prototyping, error proofing and Design for Manufacture and Assembly (DFMA).
Validate	The fourth and final phase of the design cycle, where designers evaluate their final prototypes and consider ways the product could be further developed.
Prototype	A prototype is a model of a product used to explore design alternatives, test theories, confirm performance and ensure the product is safe and user-friendly. Engineers use prototypes to figure out specific unknowns still present in the design.
Error proofing	Part of the optimise phase, this is where designers develop the design to make it harder for the end user or an assembly line worker to use or assemble the product wrongly.
Casting	The process of melting a metal and pouring or injecting it into a mould in order to form a particular shape. We will do this with pewter.
Disassembly	When a designer takes apart a product in order to learn from its design and construction. Companies do this with rival products. Disassembly may also happen at the end of a product's life so that it can be repaired or recycled.
Product analysis	When a product is analysed in detail, so that lessons can be learnt from its design and construction. This may lead to improved designs in the future.

Need to Know Dictionary: Art

Word	Definition
Satire	the use of humour, irony, exaggeration, or ridicule to expose and criticise people's stupidity or vices, particularly in the context of contemporary politics and other topical issues.
Street Art	Street art is a form of artwork that is displayed in public on surrounding buildings, on streets, trains and other publicly viewed surfaces.
Controversial social activist political	Giving rise or likely to give rise to controversy or public disagreement. a person who works to achieve political or social change, especially as a member of an organisation with particular aims. relating to the government or public affairs of a country.
abstract expressionism	Abstract expressionism is the term applied to new forms of abstract art developed by American painters in the 1950s & 1960s. It is often characterised by gestural brush-strokes or mark-making, and the impression of spontaneity
subversive	refers to a process by which the values and principles of a system in place are contradicted or reversed in an attempt to transform the established social order and its structures of power, authority, hierarchy, and social norms.
Epigrams	An epigram is a brief, interesting, memorable, and sometimes surprising or satirical statement.
expressionistic	Something that's expressionistic uses emotions rather than realism to express an artistic idea.
visual language	The visual language is a system of communication using visual elements.



Need to Know Dictionary: Sports Studies

Word	Definition
Risk assessment	The process of identifying hazards (things which can cause harm) which currently exist or may appear in the activity area.
Emergency procedures	What to do in the event of an accident or other emergency. Often follows procedures (an order) to minimise further risk and chaos, whilst maximising safety.
Safe practice	organising the group and the activities appropriately depending on the space, number of participants and equipment being used.
Timing	considering the length of activities.
Adaptability	making changes to the session if people find it too easy or too hard.
Reliability	turning up when you say you will and running to time.
Leadership style	The leader's main behaviours when directing, motivating, guiding and managing groups of people. These can be autocratic, democratic or laissez-faire.
Communication	The process of sending or receiving information. Can be verbal (spoken) or non-verbal. Should use appropriate language and consider age of participants when providing technical terms.
Positioning	Considering where to be stood in relation to the group when giving demonstrations and explanations.
Creativity	Design of activities to ensure they are relevant for the group and activity, to promote engagement and interest.

Need to Know Dictionary: Religious Studies

Word	Definition
Bioethics	the study of what is right and wrong in biological and medical research.
Euthanasia	painless killing of a patient suffering from an incurable and painful disease or irreversible coma.
Adultery	voluntary sexual intercourse between a married person who is not their spouse.
Cohabitation	a couple living together and having a sexual relationship without being married to one another.
Polygamy	the practice or custom of having more than one wife at the same time.
Procreation	bringing a baby into the world; producing offspring.
Fundamentalist Christians	believe the statements in the Bible are literally true and believe there are certain basic beliefs that are essential to the Christian faith.
Liberal Christians	believe that the Bible's authors were guided by God, but that not everything they wrote is a literal account of what actually happened.
Agape	a selfless and unconditional type of love.
Enslavement	The moment at which a human being receives a soul.



Need to Know Dictionary: Hospitality and Catering

Word	Definition
Climate change	Changes in the earth's temperature that can lead to unusual and extreme weather
Carbon footprint	A measure of how much food production contributes towards the production of greenhouse gases
Food provenance	Where food and the ingredients in them originally come from before they reach the Hospitality and Catering industry
Appetising	Where food is prepared, cooked and served so well that people want to eat it
Organoleptic	The quality of food that people experience with their senses
Senses	The ability of the body to react to things through sight, taste, sound, smell and touch
Mise-en-place	A catering term meaning preparation time before you start to cook. May include preparing self and area, collecting equipment, chopping vegetables etc
Contingencies	What to do if things go wrong. This will be included when creating a production plan for a dish. For example- Do not over rub fat in with the flour. If I do, start again as the pastry will be tough.
Special Points	Things to consider when doing each step of your production plan. For example reference should be made to adjustments in oven temperatures or to check length of cooking time for vegetables to serve hot.
Dovetailing definition	To cook several things at the same time in the most logical order. For example if you are cooking a main and dessert you may need to start part of the dessert off first and then do part of a main course. Whilst the main is cooking you can then go back to finish the dessert. The dishes need to be served together.

Need to Know Dictionary: Creative iMedia

Word	Definition
Target Audience	A specific group of people which a media product is aimed at.
Audience segmentation	A marketing strategy based on identifying subgroups within the target audience in order to deliver more tailored messaging for stronger connections.
Media purposes	The purpose of a media product eg to entertain, educate, advertise, promote, inform.
Client requirements	A document which sets out what the client requires in a media product which would make it suitable for the target audience and the purpose.
Audience consumption	The way in which audiences engage with media products eg viewing a programme, playing an online game, reading a blog.
Brand identity	The association the audience makes with the brand which has been built up over time and reinforced by the advertising campaigns and their placement.
Mind map	Used by media production planning teams to help structure initial ideas for a product.
Mood board	Used by designers to generate design ideas and help create a 'feel' for a media product.
Work Plan	A plan or overview showing the tasks/activities that need to be completed in order to create a media product.
Visual representations	These can include colour, shape, texture, movement, symbols and signs.
Visualisation diagram	A sketch with annotations to show what a final media product will look like.



Need to Know Dictionary: Child Development

Word	Definition
Antibodies	Proteins made by the body that can latch on to foreign viruses and bacteria, making them ineffective.
Immunity	If you have a high enough antibody level to protect you against a particular infection, you are immune.
Colostrum	A yellowish breast milk, rich in antibodies and high in protein, produced from the end of pregnancy through the early days of breastfeeding
Combination feeding	A method which combines two or more feeding types (e.g. breastfed and formula fed, breast fed and bottle fed with expressed milk)
Engorged breasts	An uncomfortable fullness of the breasts, experienced at any time during breastfeeding; most often within the 36 hours after delivery or when mothers first wake up in the morning if their babies don't feed at night.
Expressed breast milk	Squeezed from the breast by hand or pump, which is stored or fed to the baby via a bottle.
Foremilk and Hindmilk	Terms for the milk produced at the beginning (foremilk) and end (hindmilk) of a particular feed. Foremilk is mostly water combined with other nutrients, hindmilk is richer in fat helping a baby to gain weight.
Mastitis	An inflammation of the breast tissue, where the breast becomes swollen, hot and painful. Can result in an infection.
Rooting	An active sign of hunger evident as a baby moves their head around looking for a nipple to latch on to
Tongue Tie	A condition where the tissue connecting the tongue to the floor or the mouth is short and tight, restricting tongue movement and breastfeeding ability.

Need to Know Dictionary: Health and Social Care

Word	Definition
Self-concept	A child begins to develop a sense of self.
Self esteem	It relates to how much you value yourself and feel capable of doing things
Socialisation	This is the process of becoming social by learning social rules and norms with regard to what is appropriate behaviour
Primary socialisation	Attitudes and beliefs are learnt by observing and imitating family members.
Secondary socialisation	Peers are a main source of information about how to act.
Physical Development	Development of the BODY
Intellectual Development	Development of the MIND/BRAIN
Emotional Development	All about our FEELINGS
Social Development	All about RELATIONSHIPS with other people
Motor skills	Movements and actions of the muscles.



Need to Know Dictionary: Business Studies

Word	Definition
Entrepreneur	A person who takes a risk by starting and running a business enterprise.
Capital	Money used to start or develop a business.
Growth	When a business becomes larger, for example by making more products or operating more places where goods and services are sold.
Competitor pricing	When a price is set based on the prices charged by competitor businesses for similar products.
Focus groups	Selected small groups of customers who give their opinion on products.
Innovation	The improvement of an original idea, which will often involve using new processes.
Customer service	The name given to an area of the business that deals with customer enquiries.
Cash flow forecast	A statement showing the expected flow of money in and out of the business over a period of time.
Fixed costs	Costs that stay the same as output changes.
Expenditure	Money that the business pays out.