



**BRISTOL
METROPOLITAN
ACADEMY**

28 th February 2022	Week A
7 th March 2022	Week B
14 th March 2022	Week A
21 st March 2022	Week B
28 th March 2022	Week A
4 th April 2022	Week B

Complete your homework on the night stated e.g. if it is a Monday week A you will complete DT and English homework.

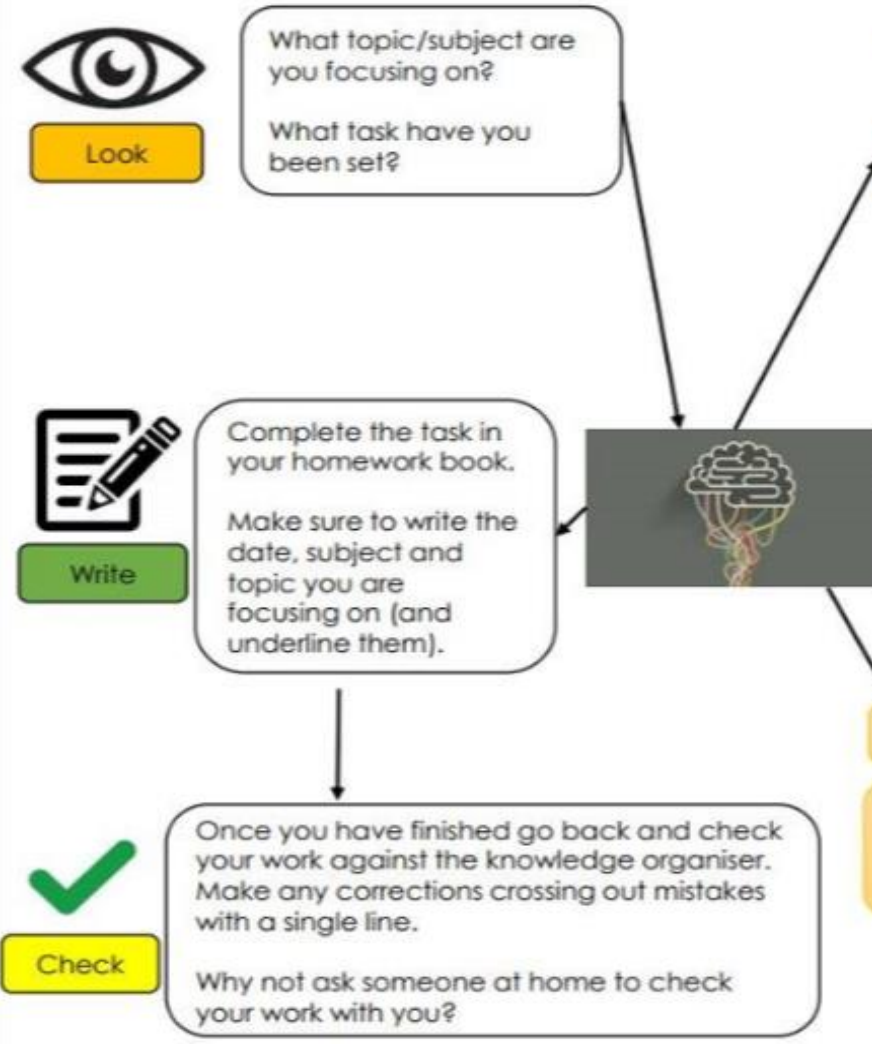
Knowledge Organisers 2021-22 Year 9 – Term 4

	Week A	Week B
Monday	English/DT	Science/MFL
Tuesday	Maths/Drama	ICT/PE
Wednesday	Science	English
Thursday	RS/Music	Geography/Art
Friday	History	Maths

How to use your knowledge organiser

Top tips:

1. Focus on the information you are most unsure of first
2. Follow the timetable in your homework book to make sure you are revisiting subjects equally
3. Don't panic if you don't remember all the information first time, keep revisiting it
4. You can ask your parents/carers to test you/check your work



Self quizzing

You need to create 5 questions (with their answers) about the content on the knowledge organisers.

Top tip! Use subject specific language e.g. function. If you aren't sure what they mean, look it up, ask an adult or ask your teacher.

What do we need carbohydrates for?

Functions

- Primary source of energy
- Store energy for later
- Build DNA
- Prevent the body from using proteins as an energy source

What happens if we have too much or too little?

Excess

- Tooth decay
- Type 2 diabetes
- Weight gain and obesity
- Hyperglycaemia

Deficiency

- Weight loss
- Lack of energy, tiredness
- Severe weakness
- Hypoglycaemia

Questions you might consider:

1. What is a key function of carbohydrates?

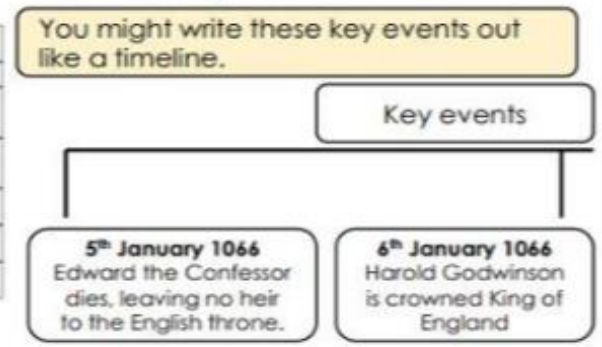
It is our primary source of energy.

Revision

Here you are recording key facts/concepts to help you remember them.

Key Events

1	5 th January 1066 - Edward the Confessor dies, leaving no heir to the English throne.
2	6 th January 1066 - Harold Godwinson is crowned King of England.
3	26 th September 1066 - Harold Godwinson, a Viking claiming the English throne, invades England with more than 10,000 men in 200 longboats.
4	23 rd September 1066 - The Battle of Stamford Bridge. Harold Godwinson, defeats and kills Harold Godwinson, but this takes Harold's army.
5	27 th September 1066 - William Duke of Normandy, invades the South of England.
6	14 th October 1066 - The Battle of Hastings. Harold marches south to meet William, where they battle at Hastings.
7	25 th December 1066 - William is crowned King of England at Westminster Abbey.



Keyword/theme development

Here you are focusing on keywords/ themes and practising memorising them.

Key Terms

Key Terms	Definitions
State of matter	Matter is divided into three states: solid, liquid, and gas
Melting	Change of state from solid to liquid
Freezing	Change of state from liquid to solid
Evaporation	Change of state from liquid to gas
Condensation	Change of state from gas to liquid

Copying these words into your book can help you to remember them.

Contents:

Drama – Pg 4	Food – Pg 7	German - Pg 11-12	Music – Pg 16	Science – Pg 19-20
Art Pg 2	DT – Pg 5	French – Pg 8-9	PE – Pg 17	Spanish – Pg 21-22
ICT Pg 3	English – Pg 6	Geog – Pg 10	RS – Pg 18	Textiles - Pg 23

Year 9 Present Project

Term 4

Signs Of The Times

In this SOW we will investigate:

- Architecture, and how it can be used to create artwork
- Famous architecture of the past, present and future, in our city, country and around the world
- A diverse range of artists, craftspeople & designers and explore these artists and the concepts within their work.
- Explore and experiment with a range of materials, techniques and processes to create a final outcome consisting of mixed media collage and drawing of a street scene

What GCSEs do I need to be an architect?

A lot of people ask the question "What GCSEs do I need to be an architect?" The truth is, entry requirements are different for each degree course.

You usually need a portfolio of your drawings and photographs.

Universities are not too prescriptive about what A-levels you need, but often look for a mixture of arts/humanities and maths/science subjects. A-levels in **maths** and subjects like **art** or **and design** will help.

WHAT DO ARCHITECTS DO?

Architects use their technical and creative skill to design structures that suit the requirements of their clients

As an architect, you'll design new buildings or extensions or alterations to existing structures and advise on the restoration and conservation of old properties. You may work on individual buildings or on large redevelopment schemes, and your responsibility can extend to the design of the surrounding landscape and spaces.

Working closely with clients and users, you'll make sure that projected designs match requirements and are functional, safe and economical, and in some cases highly innovative. You'll usually control a project from start to finish and work with a number of construction professionals, including surveyors and engineers.

Develop Ideas – Experiment – Record – Create Personal Response

Key word	Definition
Photomontage	Cutting, gluing, rearranging and overlapping two or more photographs into a new image.
Lino print	A form of block printing that involves carving a pattern or design into a linoleum, rubber or vinyl surface that can then be printed from.
Focal point	The centre of interest or activity.
Engineering	The branch of science and technology concerned with the design, building, and use of engines, machines, and structures.
Mixed media	A term used to describe artworks composed from a combination of different media or materials
Collage	A piece of art made by sticking various different materials such as photographs and pieces of paper or fabric on to a backing.
Architecture	The art or practice of designing and constructing buildings.



Year 789 - Data Representation

Number Bases

Denary

Base 10 Numbers - 23, 5

Binary

Base 2 Numbers -
01010101

128	64	32	16	8	4	2	1	
0	0	0	0	1	0	1	0	= 10
0	0	1	1	1	1	1	0	= 62
1	0	0	0	1	1	1	1	= 143
0	0	0	0	0	0	0	1	= 1
1	1	1	1	1	1	1	1	= 255

Binary Arithmetic

Rules of Addition

0 + 0 = 0

0 + 1 = 1

1 + 0 = 1

1 + 1 = 0 Carry 1

1 + 1 + 1 = 1 Carry 1

				1	1	1		
	0	0	0	0	1	1	1	0
+	1	0	1	0	0	0	1	0
	1	0	1	1	0	0	0	0

			1	1	1	1		
	1	1	0	1	0	0	1	1
+	0	0	0	0	1	1	1	0
	1	1	1	0	0	0	0	1

1			1	1	1			
	1	1	0	0	1	1	0	0
+	1	0	0	1	1	1	0	1
	1	0	1	1	0	1	0	1

OVERFLOW ERROR

When an extra bit is created to represent a number

Storage Units

The more bits of Binary you use, the higher the file size.

+8	↓	Bit		
+1000	↓	Byte	↑	x8
+1000	↓	Kilobyte	↑	x1000
+1000	↓	Megabyte	↑	x1000
+1000	↓	Gigabyte	↑	x1000
	↓	Terabyte	↑	x1000

2Mb to Bits								
2	x	1	0	0	0	=		
2	0	0	0					
2	0	0	0	x	1	0	0	0
2	0	0	0	0	0	0		
2	0	0	0	0	0	0	x	8
1	0	0	0	0	0	0	0	0
2Mb = 10000000 Bits								

ASCII TABLE

Decimal	Hex	Char	Decimal	Hex	Char	Decimal	Hex	Char
0	0	NULL	32	20	SPACE	64	40	@
1	1	START OF HEADING	33	21	!	65	41	A
2	2	START OF TEXT	34	22	"	66	42	B
3	3	END OF TEXT	35	23	#	67	43	C
4	4	END OF TRANSMISSION	36	24	\$	68	44	D
5	5	ENQUIRY	37	25	%	69	45	E
6	6	ACKNOWLEDGE	38	26	&	70	46	F
7	7	BELL	39	27	'	71	47	G

ASCII and Unicode

ASCII

7 bit ASCII used to represent 128 characters in binary. Only enough for English language.

Unicode

Created to extend binary values for other languages using 16 bit numbers. This allows for 65,536 characters to be encoded.

A S C I I																		
C = 67	=	0	1	0	0	0	0	1	1	=	8	bits	8	x	4			
A = 65	=	0	1	0	0	0	0	0	1	=	8	bits	=	32	bits			
T = 84	=	0	1	0	1	0	1	0	0	=	8	bits	32	/	8			
! = 33	=	0	0	1	0	0	0	0	1	=	8	bits	=	4	bytes			
U N I C O D E																		
✓	=	0	0	0	0	1	0	0	1	1	1	1	1	0	1	0		(2554)
籍	=	0	0	0	1	0	0	0	0	1	0	0	0	1	1	1		(4167)

Representing Images

Pixel - Small dot on of colour on an image

Resolution - Amount of pixels on an image

Colour/Bit Depth - Amount of bits in each pixel (amounts of colours available)

Factors that affect the quality and file size:

Increasing resolution and colour depth means the quality will improve. It also means the file size will increase.

Working out file size:

File size (bits) = Resolution x Bit Depth



Year 9 Drama Knowledge Organiser. Make sure when you rehearse and perform your devised piece, you include the following skills and techniques:

Physical Skills

Body language
Interaction
Posture
Gait
Gesture
Spatial awareness
Proxemics
Control
Mannerisms
Facial expressions
Eye focus / contact
Energy
Stage presence
Characterisation

Blocking: the precise movement and positioning of actors on a stage

Vocal Skills

Volume
Diction
Emphasis
Accent
Intonation
Inflection
Emotional tone
Pitch
Pace
Pause

You can include:

Levels, mime, slow motion, direct address, flash back, flash forward, improvisation, silence, pause

Teamwork

It is important to work together as a team and commit clearly to that group:

- turn up on time
- be positive
- accept ideas
- respect other opinions

At the very beginning of the devising, things will not be perfect. Remember the bigger picture and be positive, knowing that details can be fine-tuned later on. Groups that are always evolving and experimenting with their ideas can experience more success with their work.

The final stages of the process

Run through the piece for an audience that understand its importance.

- get rid of things that don't work
- run the piece with any technical aspects (projection and sound)
- test sound levels and **sightlines**

Then ask for honest feedback and act on it.

- Does it make sense if it needs to?
- Have the initial aims and objectives been met?
- Is the desired message being received clearly?
- Is the pace appropriate?
- Is it running smoothly?
- Has everyone learned what happens, when and where?

Be prepared to make mistakes and be resilient enough to carry on, but most importantly, enjoy performing.

Year 9 D&T – Term 1 – Pewter Project



Select one symbol from the selection above.

Create a logo for a product/company of your choice using your chosen symbol.

You can achieve this by modifying your chosen symbol by applying a range of composition techniques to develop its shape, form, and visual appeal. Be as creative as possible.

Logo design principles

1. Simple - needs to be easily identifiable at a glance.
2. Memorable – should be easily recalled after just one look.
3. Original – Create a unique design that cannot be confused with another.
4. Timeless - should be modern yet timeless and should avoid trends.
5. Versatile - can be used in a variety of sizes and colours.
6. Appropriate - should be appropriate for the intended audience.

Keywords

Malleable – able to be hammered or pressed into shape without breaking

Innovative - new and original

Analysis - detailed examination of the something

Annotation - analysis added to a text or diagram

Alloy - a metal made by combining two or more metallic elements

What is Pewter?

Pewter is a malleable metal alloy consisting of tin, antimony, copper, bismuth, and sometimes silver. Modern pewter consists of are 94% tin.

Pewter has a low melting point (around 170–230 °C) making it ideal for melting on a chip forge and brazing hearth and casting.

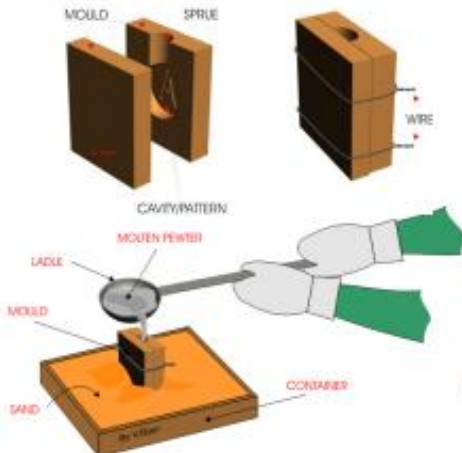
2D Design Basic Tools



- SELECT** – Use this tool to select different to highlight objects.
- LINE** – This tool creates straight lines. Click to start the line, extend out and click to finish.
- CIRCLE** – This tool creates circle shapes. Click to start the circle, extend to the size needed and click to finish.
- PATH** – This tool creates curved lines through continual clicks.
- RECTANGLE** – This tool can be used to create both rectangular and square shapes.
- TEXT** – Use this tool to insert text onto your designs. The font, size and direction of the text can be changed.
- DELETE PART** – Use this tool to delete separate lines and objects.
- DELETE ANY** – Use this tool to delete whole lines and objects.

CAD/CAM

CAD stands for Computer Aided Design. It involves *designing products* on a *computer*, rather than using a pencil and paper. CAD packages include *2D drawing software* (e.g. Adobe® Illustrator®, CorelDRAW®, TechSoft 2D Design® and ArtCAM®) and *3D modelling software* (e.g. SolidWorks®). CAD helps designers *model and change* their designs quickly. It's easy to experiment with *alternative colours and forms* and you can often spot problems *before making* anything. In 3D programs, you can view the product from *all angles*. **CAM** stands for Computer Aided Manufacture. It's the process of *manufacturing* products with the help of *computers*. CAD software works out the coordinates of each point on the drawing. These are called *x,y,z coordinates* – x is the left/right position, y is forwards/backwards and z is up/down. The point where x, y and z *meet* is (0,0,0) – the *datum*. CAM machines are computer numerically controlled (CNC) – they can *follow* the x,y,z coordinates and move the tools to cut out or build up your design. For example, some *routing machines* are CAM machines. They *remove* material from a larger piece of material to shape and create a product.



Safety Gear

VISOR

A SUITABLE VISOR

LEATHER APRON

APRON PROTECTS FROM UPPER BODY TO THE LEGS

LEATHER GLOVES

GLOVES EXTEND NEARLY TO THE ELBOW



Jewellers Clamp



Wire Wool



Needle Files



Metalworking Vice



Polishing Machine



Silicon Carbide Paper



Evaluation

Designers evaluate their finished products or prototypes in order to test whether they work well and if the design can be corrected or improved. Whatever you have designed it is important to evaluate your work constantly during the project. Evaluation can take a variety of forms:

- General discussion with other pupils, staff and others.
- Questionnaires / surveys carried out at any time during the project.
- Your personal views, what you think of existing designs.
- Most important of all - what do you think of your designs, prototypes and finished products ?
- Can you think of any other ways of evaluating your work ?

Crating Can Be Used to Draw 3D Shapes

Crating is where you start by drawing a box – the 'crate' – and gradually *add bits* on and *take bits off* till you get the right shape. For example, you can *remove sections* from a cuboid to make *any* other 3D shape.



- 1) When you're sketching a 3D object, it's easier if you imagine it as a *basic shape*.
- 2) First draw the *basic geometric shape* faintly.
- 3) Stick to a particular drawing technique – *isometric drawing*, for example.
- 4) The object can then be drawn *within the box*.
- 5) *Details* of the object can be added by drawing more *geometric shapes* on top.



Isometric Drawing Shows Objects at 30°

- 1) Isometric drawing can be used to show a *3D picture* of an object.
- 2) It *doesn't show perspective* (things don't get smaller in the distance), but it's *easy to get dimensions* right.
- 3) There are *three main rules* when drawing in isometric:

- Vertical edges are drawn as vertical lines.
- Horizontal edges are drawn at 30°.
- Parallel edges appear as parallel lines.

This drawing's been done on isometric dot paper. You could use plain paper and a 30°/60° set square instead.



Unit 3: Identity Poetry	Poems	Tier 3 vocabulary	Tier 2 vocabulary
<p>Benjamin Zephaniah: Born and raised in Birmingham. His poetry is influenced by music, poetry and street politics of Jamaica. Uses humour, rap and dub-rhythms to make poetry accessible. Zaffar Kunial was born in Birmingham to an English mother and a Kashmiri father. He now lives in Hebden Bridge. A.K.Blakemore - her poems explore a range of subjects: having a broken heart, exploitation, pop-culture, sunshine and covering more obscure topics. Spite inspired her to write. She was born in London; she still lives in London. She can be described as rebellious and confrontational. John Agard: Born in Guyana, South America in 1949, Agard moved to Britain in the late seventies. His poems explore cultural differences, class divisions and subverted racial stereotypes. Sujata Bhatt (1956) grew up in India but emigrated with her family to the United States in 1968. Honey Birch is a Slam Poet; she is Chinese and was adopted by white parents. Elizabeth Acevedo is a Dominican-American poet and author. She is also a National Slam Poetry Champion.</p> <p>Saeed Jones was born in Memphis and raised in Lewisville, Texas. His poems often examine race, desire, power, and grief, and incorporate mythology. Carol Ann Duffy was born in Glasgow in 1955 to a Scottish father and an Irish mother. Duffy was the first LGBT poet to be nominated as Poet Laurette. Vanessa Kisuule is a Bristol City Poet and performer, winner of many slam competitions. Maya Angelou was a poet and civil rights activist. Lucille Clifton: represents African-American experience and family life during the Civil Rights Movement. She was born in New York in 1936.</p>	<p>1. I Love Me Mudder. Explores a relationship with his mother. The speaker shows how he values his mother and that their love is true and pure</p> <p>2. 'Us' by Zaffar Kunial describes the ways that the word us means both separation and unity and how that gap could be bridged</p> <p>3. Peckham Rye Lane by Amy Blakemore is a portrait of a street in London and the chaos, absurdity, and peace.</p> <p>4. Oxford Don. The speaker shows his frustration with the superior attitude of the Mr Oxford Don – a university professor - with regards to immigrants like himself.</p> <p>5. Search For My Tongue. The poem's speaker is someone living in a foreign country who fears forgetting her native language. It explores how our language is linked to one's identity.</p> <p>6. A Chinese Kid In A White Family – Honey Birch's poem – is a one which shows the absurdity of stereotyping a person who has dual heritage. The speaker is Chinese adopted by white parents.</p> <p>7. Names: Xiomara is the novel's protagonist. She is a 15-year-old Dominican American teenager living in Harlem - a twin, trying to find her voice. Poetry is the way that allows her to do this; it allows her to question her upbringing and to defend herself, until she is able to find her true self.</p> <p>8. Boy In A Stolen Evening Gown. The speaker is someone who cross dresses and identifies as being gay. He wants to be accepted for who he is.</p> <p>9. 'In Mrs Tilscher's Class' paints a vivid picture of a young child's experience in primary school, under the tutelage of the -loved Mrs Tilscher. The poem also traces the end of the child's journey from innocence to the tumult of adolescence</p> <p>10. Hollow: A response to the destruction of the statue of Edward Colston, the slave owner.</p> <p>11. Still I Rise. The poem is an assertion of the dignity and resilience of marginalized people in the face of oppression. It is also a celebration of her identity as a powerful black woman.</p> <p>12. You Celebrate With Me. Throughout this poem, the speaker explores her journey and the obstacles that were in her way to becoming her true self</p>	<p>Meaning – the main message of the poem Speaker – the voice of the poem. Imagery – the words which paint images in the reader's mind. Simile – indirect comparison (like/as) Metaphor – direct comparison Personification – when a non-living object is described as looking like or behaving like a human. Tone – the feeling/atmosphere of the poem Structure – the organisation of the poem, its rhyme scheme, the rhythm. Stanza – grouped lines in a poem Form – the type of poem – i.e. sonnet, ode. Caesura – punctuation which occurs mid-line; slows the rhythm. Enjambment – lack of terminal punctuation, speeding up the poem. End-stopping – punctuation at the end of a line Metre – number of beats per line Plosive – sound made by stopping airflow – b,t,k, d, p; it creates a harsh sound. Onomatopoeia – a word which sounds like the thing it is describing – i.e. bang Alliteration – the repetition of the same sound Sibilance – the repetition of the 's' sound</p>	<ul style="list-style-type: none"> • Absurdity • Confrontational • Heritage • Native • Resilience • Identity • Adolescence • Innocence • Oppression • Stereotype • Myopic • Bigot • Sexuality • Repressed • Tolerance
Themes			
<p>Resilience: poets and their speakers show an unwillingness to be defeated; they present strong individuals who have managed to rise above their oppression.</p> <p>Sexuality: in these poems, some speakers show their sexuality as a means of self-expression and power; others are less bold, uncertain of how others may respond to their sexuality.</p> <p>Language and identity: some poets explore the importance of language and words which are a way that people think of their own identity; in a different way, some poets show how language is used as a means of power to make others feel unwelcome.</p>			

Year 9- Food

Food Fortification

During processing, many food products lose their nutritional value.

The function of fortification is to:

- Restore nutritional value of foods.
- Improve nutritional value of foods.
- Make food more suitable for certain groups of consumers.
- Prevent diseases caused by malnutrition.

Some foods are fortified by law:

Wheat, flour and bread	Thiamine	To prevent beriberi disease, help release energy from food.
	Niacin	To prevent pellagra, help release energy from food.
	Calcium	To prevent rickets and osteoporosis.
	Iron	To prevent iron deficiency anaemia.
Vegetable fat spreads	Vitamin A	To prevent growth and eyesight issues, such as night blindness.
	Vitamin D	To prevent rickets and osteoporosis.
Semi-skimmed and skimmed milk	Vitamin A	To prevent growth and eyesight issues, such as night blindness.

Other foods, such as cereals and fruit juices, are fortified voluntarily.

Micronutrients

Vitamins and minerals are essential nutrients that your body needs in small amounts to work properly.

Fat-soluble vitamins

Fat-soluble vitamins (vitamin A, D, E and K) are mainly found in: animal fats, vegetable oils, dairy foods, liver and oily fish. While your body needs these vitamins to work properly, you don't need to eat foods containing them every day.

Water-soluble vitamins

Water-soluble vitamins (vitamin C, the B vitamins and folic acid) are mainly found in: fruit and vegetables, grains, milk and dairy foods. These vitamins aren't stored in the body, so you need to have them more frequently. If you have more than you need, your body gets rid of the extra vitamins when you urinate.

Minerals

Minerals include calcium and iron amongst many others and are found in: Meat, cereals, nuts, fish, milk and dairy foods, fruit and vegetables.

Minerals are necessary for 3 main reasons:
 Building strong bones and teeth
 Controlling body fluids inside and outside cells
 Turning the food you eat into energy

Macros



Protein

Build & Protects Muscle
 Found in meat, dairy & some plants



Fat

Provides Long Lasting Energy
 Found in meats, oils, dairy & meat



Carbs

Quickest Source of Energy
 Found in fruits, veggies & grains

MICROS



Vitamins

Made by Plants & Animals
 Found in meat, dairy & plants

Minerals

Consumed by Plants & Animals
 Found in meat, dairy & plants.

What do we need proteins for?

Functions

- Build enzymes and hormones
- Build cell membranes
- Repair and maintain tissues
- Defend the body (antibodies)
- Secondary source of energy

What happens if we have too much or too little?

Excess

- Kidney and liver diseases
- Weight gain

Deficiency

- Kwashiorkor
- Slowing growth rate
- Swelling

Protein alternatives

Vegetarians and vegans don't consume meat so instead they use protein alternative products which are manufactured in order to provide protein in a diet and protein rich foods.



Soy chunks



Tofu



Textured vegetable protein (TVP)



Tempeh



Beans, lentils, chickpeas

What do we need carbohydrates for?

Functions

- Primary source of energy
- Store energy for later
- Build DNA
- Prevent the body from using proteins as an energy source

What happens if we have too much or too little?

Excess

- Tooth decay
- Type 2 diabetes
- Weight gain and obesity
- Hyperglycaemia

Deficiency

- Weight loss
- Lack of energy, tiredness
- Severe weakness
- Hypoglycaemia

What do we need fats for?

Functions

- Source of energy
- Insulation
- Dissolve vitamins
- Build hormones
- Build cell membranes

What happens if we have too much or too little?

Excess

- Obesity
- Hypertension
- Coronary heart disease
- Fatty liver disease
- Type 2 diabetes

Deficiency

- Weight loss
- Vitamin deficiency
- Heart disease
- Feeling cold

Visible fats



Fats you can see, such as on meat are often saturated.

Invisible fats



Unsaturated fats you cannot see, such as in nuts and avocados. They are often good for the brain,

There are two different types of fats



Butter



Eggs



Cream



Olive oil



Avocado



9.11 My school – vocab. list

Quelle est ta matière préférée?

L'anglais
L'espagnol
Le français
Le théâtre
Le dessin
Le sport (L'EPS)
L'informatique
La musique
La technologie
La géographie
L'histoire
L'éducation religieuse
L'éducation civique
Les mathématiques
Les sciences
L'histoire/géo

Qu'est-ce que tu en penses?

C'est
Intéressant (e)
Pratique
Utile
Inutile
Facile
Difficile
Ennuyeux (se)
Passionnant (e)
Creatif (ve)
Important (e)
Trop
Très
Assez

What is your favourite subject?

English
Spanish
French
Drama
Art
PE
Computer Science
Music
Technology
Geography
History
RE
PSHE
Maths
Science
Humanities

What do you think?

It is
Interesting
Practical
Useful
Useless
Easy
Difficult
Boring
Exciting
Creative
Important
Too
Very
Quite



Comment est ton uniforme scolaire?

Je porte

Une veste/ un blazer
Un pull
Une chemise
Un t-shirt
Une cravate
Une jupe
Des chaussettes
Un pantalon
Des chaussures
Un collant

Moche
Beau/belle
(In)confortable
Cher
Pas cher
À la mode
Démodé

La journée scolaire

Je quitte la maison
Je vais au collège
Les cours commencent..
Les cours terminent.
Ça dure
La récréation
L'heure du déjeuner
Le matin
L'après-midi

What is your school uniform like?

I wear..

Blazer
Jumper
Shirt
T-shirt
Tie
Skirt
Socks
Trousers
Shoes
Tights



Ugly
Pretty
(un) comfortable
Expensive
Cheap
Fashionable
Unfashionable

The school day

I leave home
I go to school
Classes start...
Classes end...
It lasts...
Break
Lunch
In the morning
In the afternoon

Quelles sont les règles?

On ne doit pas
On ne peut pas
Il faut
Il est interdit de
Écouter en classe
Utiliser son portable en classe
Porter les bijoux
Porter le maquillage
Porter les baskets
Manquer les cours
Être à l'heure
Mâcher du chewing-gum
Faire ses devoirs

Qu'est-ce que tu voudrais faire dans le futur?

Réussir mes examens
Recevoir des bonnes notes
Faire un apprentissage
Chercher du travail
Faire du bénévolat
Voyager le monde
Avoir des enfants
me marier
Apprendre à conduire

Médecin
Professeur
Avocat (e)
Mécanicien (ne)
Plombier (ière)
Pompier (ière)
Vétérinaire
Coiffeur (euse)

What are the rules?

You must(n't)
You can('t)
You have to
It is forbidden
To listen in class
To use your phone in class
To wear jewellery
To wear make up
To wear trainers
To miss lessons
To be on time
To chew gum
To do homework

What do you want to do in the future?

To pass my exams
To get good grades
To do an apprenticeship
To look for a job
To work as a volunteer
To travel the world
To have children
To get married
To learn how to drive

Doctor
Teacher
Lawyer
Mechanic
Plumber
Firefighter
Vet
Hairdresser

<u>The present tense</u>	ER verb	IR verb	RE verb
Je (I)	-e	-is	-s
tu (you)	-es	-is	-s
Il/Elle/On (he/she/one)	e	-it	-
Nous (we)	-ons	-issons	-ons
Vous (you all)	-ez	-issez	-ez
Ils /Elles (they)	-ent	-issent	-ent

The future tense in French

You can talk about the future by using the **near future** tense.
Use part of the verb ALLER and the infinitive to say what you are **going** to do.

Ce soir, je vais jouer au tennis. This evening I am going to play tennis.
Demain, Paul va faire un gâteau. Tomorrow Paul is going to make a cake.

You can also use the following phrases with an infinitive to refer to the future.

Je veux = I want
Je voudrais = I would like
J'aimerais = I would like
J'espère = I hope

Adjectives describe nouns e.g., a **black** blazer.

In French, adjectives normally go after the words they are describing e.g., une chemise bleue (a blue shirt) and they must agree with the noun they are describing.

Adjectives must agree with the noun (or pronoun) they describe in gender and in number.

This means that if the noun an adjective describes is feminine, the adjective must be feminine e.g., une veste noire (a black blazer).

If that same noun is also plural, the adjective will be feminine **AND** plural as well e.g., les chaussettes noires (black socks).

Comparatives – to express more or less than

... **est plus + adjective + que** - is more...adjective...than

... **est moins + adjective + que** - is less...adjective... than

... **est aussi + adjective + que** – is as...adjective...as

For example:

L'anglais est plus intéressant que la géographie. (English is more interesting than Geography)

L'histoire est moins active que l'E.P.S. (History is less active than PE)

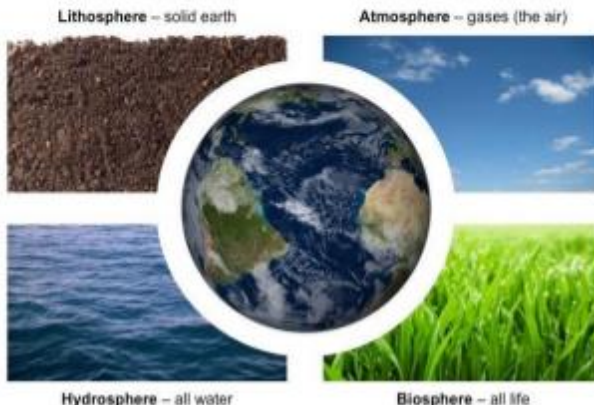
Le français est aussi difficile que les maths. (French is as difficult as maths).



The Earth's Spheres:

There are 4 main spheres on Earth. They are all connected and work with Each other. This is called 'Interdependence'.

We get all of our natural resources from these four spheres.

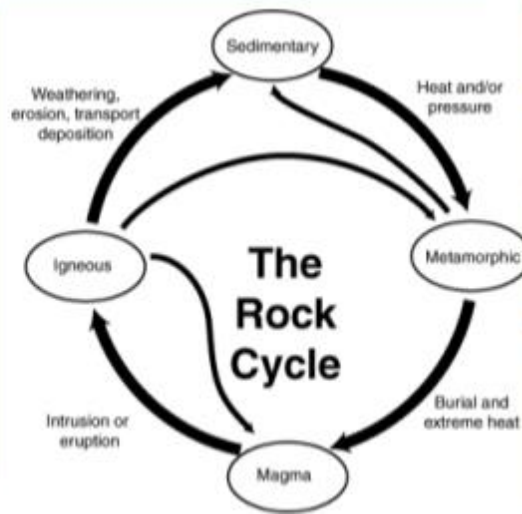


Ecological footprint:

- Today humanity uses 1.6 Earths to provide the resources we use and absorb our waste.
- We use more ecological resources and services than nature can regenerate in the same period of time.
- If everybody on Earth lived like we do in most HICs — we would reach the 'overshoot' day by May/June.
- If everybody on Earth lived like they do in Vietnam — we wouldn't reach 'overshoot' day until Dec 21st

Rocks, Oil and Soil

- Soil is formed due to the weathering of rocks and the wider nutrient cycle.
- It can take between 100-1000 years to form 1cm of soil.
- Importance of soil examples:
 - + growing crops
 - + reducing flood risk



Key Word	Definition
Interdependence	The idea that two or more things are connected and rely on each other
Lithosphere	The Earth's crust, including landforms, rocks and soils
Hydrosphere	The water on the surface of the Earth eg. Oceans and rivers
Biosphere	The living matter on Earth, including all plants and animals
Atmosphere	The thin, fragile layer of gases that surrounds the Earth
Renewable	A resource that can be recreated/replaced/reused eg sunlight
Non-renewable	A resource that cannot be replaced or recreated eg. Coal/oil
Raw Materials	A resource in its natural state, before production. Eg wood, cotton, oil
Finite Resources	Material that has a definite, fixed amount and can therefore eventually run out before it can be replaced
Paris Agreement	A legally binding international treaty on climate change, with a goal of limiting global warming to well below 2 degrees C.
Carbon emissions	The greenhouse gasses produced from human activities such as burning fossil fuels in factories and from car exhausts.

Importance of Oil:

- Oil starts off as 'crude oil' before being refined
- For fuel for cars/chips/plans
 - Production of plastics/clothing/fertiliser
 - To generate electricity

<u>infinitives</u>	machen	können	RE verb
ich(I)	mache	kann	lerne
du (you)	machst	kannst	lernst
er/sie/man (he/she/one)	macht	kann	lernt
Wir (we)	machen	können	lernen
ihr (you all)	macht	könnt	lernt
Sie (you) /sie (they)	machen	können	lernen

The future tense in German

You can talk about the future by using the present tense + a future time phrase or use the future tense which is:-

Use part of the verb werden and the infinitive to say what you are going to do/will do

*Heute abend spiele ich Tennis. This evening I am going to play tennis.
Morgen wird Paul Kuchen essen. Tomorrow Paul will eat cake.*

You can also use the following phrases with an infinitive to refer to the future.

Ich will= I want

Ich möchte = I would like

Adjectives describe nouns e.g., a **black** blazer.

In German, adjectives go before the words they are describing e.g., eine **blaue** Krawatte (a blue tie) and they must agree with the noun they are describing.

Adjectives must agree with the noun (or pronoun) they describe in gender and in number.

This means that if the noun an adjective describes masculine, the adjective must be masculine e.g., einen **schwarzen** Blazer (a black blazer).

If the noun is plural, the adjective will be plural as well e.g., **schwarze** Socken (black socks).

Comparatives – to express more or less than

Add 'er' to the adjective, but in words of more than 1 syllable an umlaut is sometimes added too. You must also add **als = than**

klein = kleiner(smaller) lang = länger



wichtig = wichtiger (more important)

Mathe ist **interessanter als** Deutsch

mehr = more/weniger = fewer/besser = better



9.11 My school – vocab. list

<p><u>Was ist dein Lieblingsfach?</u> Englisch Spanisch Französisch Theater Kunst Sport Informatik Musik Technologie Erdkunde Geschichte Religion Mathe/Mathematik Naturwissenschaften Deutsch</p> <p><u>Wie findest du?</u> Es ist interessant praktisch nützlich nutzlos einfach <i>schwierig</i> langweilig spannend kreativ wichtig zu sehr ziemlich</p>	<p><u>Favourite Subject.</u> English Spanish French Drama Art PE Computer Science Music Technology Geography History RE Maths Science German</p> <p><u>What do think about?</u> It is Interesting Practical Useful Useless Easy Difficult Boring Exciting Creative Important Too Very Quite</p>	 <p><u>Beschreib deine Schuluniform</u> Ich trage eine Jacke/einen Blazer einen Pullover ein Hemd ein T-Shirt eine Krawatte/einen Schlips einen Rock Socken eine Hose Schuhe Strumpfhose</p> <p>hässlich schön (un)bequem teuer billig modisch altmodisch</p>	<p><u>Describe your school uniform</u> I wear.. Blazer Jumper Shirt T-shirt Tie Skirt Socks Trousers Shoes Tights</p>  <p>Ugly Pretty (un) comfortable Expensive Cheap Fashionable Unfashionable</p>	<p><u>Was sind die Schulregeln?</u> Man darf(nicht) Man kann (nicht) Man muss Es ist verboten Im Unterricht zuhören Ein Handy im Klassenzimmer haben Schmuck tragen Make –up tragen Sportschuhe tragen Unterricht verpassen pünktlich sein Kaugummi kauen Hausaufgaben machen</p> <p><u>Was möchtest du in der Zukunft machen?</u> Prüfungen bestehen gute Noten haben eine Lehre machen einen Job suchen freiwillig arbeiten reisen Kinder haben heiraten fahren lernen</p> <p>Arzt(-in) Lehrer (in) Rechtsanwalt (in) Mechaniker (in) Klempner Feuerwehrmann/frau Tierarzt(in) Friseur/Friseuse</p>	<p><u>What are the rules?</u> You are allowed You can('t) You have to It is forbidden To listen in class To have a phone in class To wear jewellery To wear make up To wear trainers To miss lessons To be on time To chew gum To do homework</p> <p><u>What do you want to do in the future?</u> To pass my exams To get good grades To do an apprenticeship To look for a job To work as a volunteer To travel To have children To get married To learn how to drive</p> <p>Doctor Teacher Lawyer Mechanic Plumber Firefighter Vet Hairdresser</p>
<p><u>Der Schultag</u> Ich verlasse die Schule Ich gehe zur Schule Die Stunden beginnen Die Schule ist...zu Ende Es dauert Die Pause Die Mittagspause Morgens Nachmittags</p>		<p><u>The school day</u> I leave home I go to school Lessons start... School ends... It lasts... Break Lunch break In the morning In the afternoon</p>			

Context

Between 1933 and 1939, after Adolf Hitler and the Nazi's came to power in 1933, Jewish people in Germany faced terrible **discrimination** and **prejudice** and some were killed. **During WW2 (1939-45)** the mass killing of approximately **six million Jewish people** across Europe occurred.

Key Events

1	30th January 1933 – Hitler became Chancellor of Germany.
2	22nd March 1933 – The first concentration camp opened in Germany – Dachau.
3	1st April 1933 – The Nazi's organised a boycott of Jewish businesses.
4	16th September 1935 – The Nuremburg Laws were passed.
5	5th October 1938 – Jewish people have to hand in their passports and they are stamped with the letter J.
6	9th and 10th November 1938 – Kristallnacht – A night of violence when Jewish shops and synagogues were attacked.
7	15th November 1938 – All Jewish children are expelled from schools.
8	December 1938 – The first Kindertransport arrived in Britain.
9	1st September 1939 – Germany invaded Poland. WW2 began.
10	22nd June 1941 – Germany invaded the USSR.
11	8th December 1941 – The first death camp, Chelmno, begins operation.
12	20th January 1942 - The Wannsee Conference - meeting where leading Nazi's decided to deport all European Jews to death camps.
13	April-May 1943 – The Warsaw ghetto uprising.
14	7th May 1945 – Germany surrendered to Britain and France.
15	9th May 1945 – Germany surrendered to the USSR.



History – Year 9
Knowledge
Organiser
Term 4
How and why was the Holocaust possible?

Topic

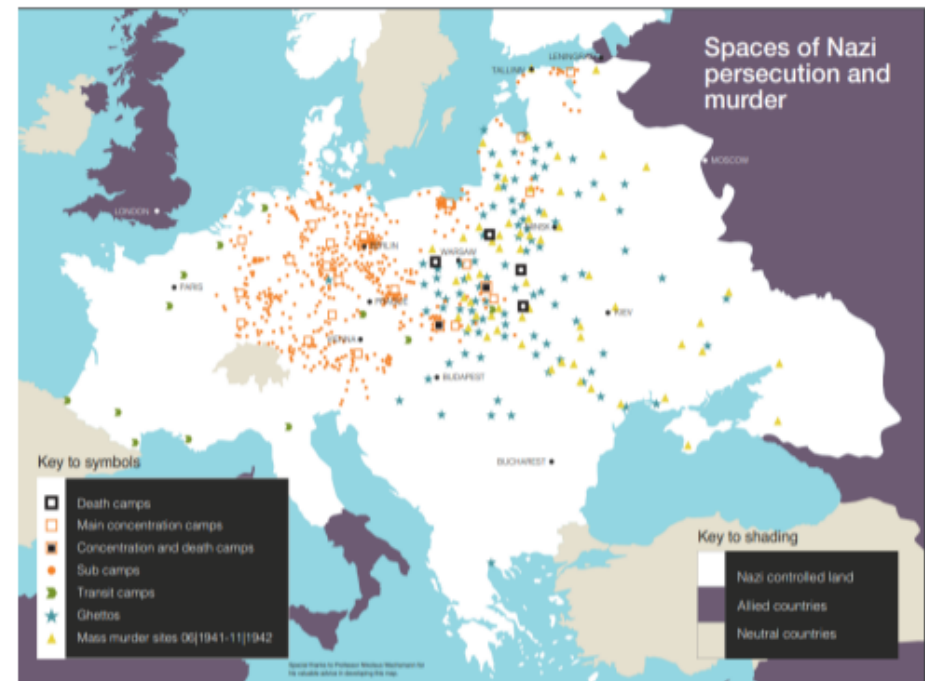
16	Holocaust	The planned attempt by the Nazi regime and its collaborators in Nazi-occupied Europe to annihilate the "entire" Jewish people, following the Nazi invasion of Russia in 1941.
----	-----------	---

Historical Skills

Use of sources	<p>Content: What does the source tell us?</p> <p>Nature: What type of source is it?</p> <p>Origin: Who made the source? When? Where?</p> <p>Purpose: Why was the source created?</p>
Interpretations	To understand different opinions from Historians and consider the reasons for their opinions.

Key Terms

17	Antisemitism	Prejudice, discrimination or persecution against Jews.
19	Concentration Camp	Prison camp to which the Nazis sent Jews, their opponents and other people they considered undesirable.
20	Death Camp	Killing centres established by the Nazis in Central Europe during WW2.
21	Einsatzgruppen	The killing squads who followed the army into Poland and Russia following the invasions of these countries.
22	Genocide	The deliberate and systematic attempt to exterminate a whole race of people.
23	Ghetto	An area of a city into which the local Jewish population was forcibly packed and forced to stay in increasingly appalling conditions.

Spaces of Nazi persecution and murder

Substitution

Evaluate (find the value of) the expressions, given that:

$$a = 2, \quad b = 3, \quad c = -5$$

1. $4b = 4 \times 2 = 8$

Note – Always use the correct order of operations

2. $7b - 3c = (7 \times 3) - (3 \times -5) = 21 - -15 = 21 + 15 = 36$

3. $5b^2 + 1 = 5 \times (3)^2 + 1 = 5 \times 9 + 1 = 45 + 1 = 46$

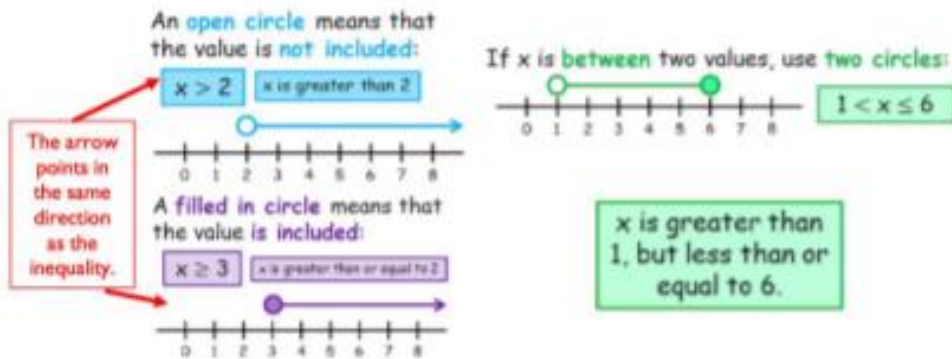
4. $2c^3 = 2 \times (-5)^3 = 2 \times -125 = -250$

5. $\frac{3ac}{2b} = \frac{3 \times 2 \times -5}{2 \times 3} = \frac{-30}{6} = -5$

For fractions work out the numerator and denominator separately first

Inequalities show the **range** of numbers that satisfy a rule. $x < 2$ means x is less than 2 $x \leq 2$ means x is less than or equal to 2 $x > 2$ means x is greater than 2 $x \geq 2$ means x is greater than or equal to 2The list of integers for $-2 < x \leq 1$ is -1, 0, 1.

Check the symbols carefully, if they have the line underneath they include the end value.

○ Greater than $>$ Greater than or equal to \geq ○ Less than $<$ Less than or equal to \leq Not equal to \neq Solving one step equations/inequalities

To solve any equation or inequality we need to do the inverse of the operation that we see.

$$\begin{array}{l} t + 4 = 10 \\ -4 \quad -4 \\ t = 6 \end{array} \quad \begin{array}{l} \leftarrow \text{The inverse of} \\ \text{add is subtract} \\ \text{and vice versa.} \rightarrow \end{array} \quad \begin{array}{l} c - 3 > 6 \\ +3 \quad +3 \\ c > 9 \end{array}$$

$$\begin{array}{l} 6y < 30 \\ +6 \quad +6 \\ y < 5 \end{array} \quad \begin{array}{l} \leftarrow \text{The inverse of} \\ \text{multiply is divide} \\ \text{and vice versa.} \rightarrow \end{array} \quad \begin{array}{l} \frac{m}{7} = 4 \\ \times 7 \quad \times 7 \\ m = 28 \end{array}$$

Solving two step equations/inequalities

To solve a two step equation or inequality we need to complete 2 inverse calculations in a specific order.

$$\begin{array}{l} 6y + 2 = 32 \\ -2 \quad -2 \end{array} \quad \begin{array}{l} \leftarrow \text{Subtract first because the} \\ \text{2 is separate from the y.} \rightarrow \end{array}$$

$$\begin{array}{l} 6y = 30 \\ +6 \quad +6 \\ y = 5 \end{array} \quad \begin{array}{l} \leftarrow \text{Divide because it is the} \\ \text{inverse of multiplying.} \rightarrow \end{array}$$

$$\begin{array}{l} \frac{w-5}{3} \geq 4 \\ \times 3 \quad \times 3 \end{array} \quad \begin{array}{l} \leftarrow \text{Multiply first because the entire} \\ \text{expression is divided by 3.} \rightarrow \end{array}$$

$$\begin{array}{l} w - 5 \geq 12 \\ +5 \quad +5 \\ w \geq 17 \end{array} \quad \begin{array}{l} \leftarrow \text{Add because it is the} \\ \text{inverse of subtracting.} \rightarrow \end{array}$$

Solving equations with brackets

We must expand the bracket first and then solve by doing the inverse of the operations. We use the same method for inequalities.

$$3(2x + 5) = 39 \quad \begin{array}{l} \leftarrow \text{Expand brackets first.} \rightarrow \end{array}$$

$$\begin{array}{l} 6x + 15 = 39 \\ -15 \quad -15 \end{array} \quad \begin{array}{l} \leftarrow \text{The inverse of } +15 \text{ is } -15. \rightarrow \end{array}$$

$$\begin{array}{l} 6x = 24 \\ +6 \quad +6 \\ x = 4 \end{array} \quad \begin{array}{l} \leftarrow \text{The inverse of } \times 6 \text{ is } +6. \rightarrow \end{array}$$

Solving with unknowns on both sides

To solve an equation or inequality with unknowns on both sides we need to collect all of the same terms together, still by looking at the inverse.

$$5x - 20 \leq 3x + 4$$

$$\begin{array}{r} -3x \quad -3x \\ 5x - 20 \leq 3x + 4 \end{array}$$

$$2x - 20 \leq 4$$

$$\begin{array}{r} +20 \quad +20 \\ 2x - 20 \leq 4 \end{array}$$

$$2x \leq 24$$

$$\begin{array}{r} +2 \quad +2 \\ 2x \leq 24 \end{array}$$

$$x \leq 12$$

We subtract $3x$ from both sides because it is the smaller term of x .

Then solve like a normal two step equation.

$$2x - 10 = 5x + 2$$

$$\begin{array}{r} -2x \quad -2x \\ 2x - 10 = 5x + 2 \end{array}$$

$$-10 = 3x + 2$$

$$\begin{array}{r} -2 \quad -2 \\ -10 = 3x + 2 \end{array}$$

$$-12 = 3x$$

$$\begin{array}{r} +3 \quad +3 \\ -12 = 3x \end{array}$$

$$-4 = x$$

We subtract $2x$ from both sides because it is the smaller term of x .

Then solve like a normal two step equation.

Top tip: Always subtract/add the smaller number of terms to avoid getting a negative term at the end.

Solve this inequality and represent your answer on a number line:

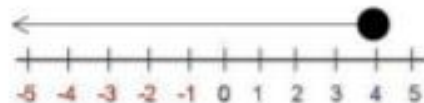
$$5x - 6 \leq 14$$

$$\begin{array}{r} +6 \quad +6 \\ 5x - 6 \leq 14 \end{array}$$

$$5x \leq 20$$

$$\begin{array}{r} \div 5 \quad \div 5 \\ 5x \leq 20 \end{array}$$

$$x \leq 4$$



Solve this inequality and represent your answer on a number line:

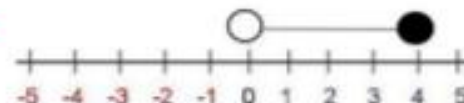
$$4 < 3x + 1 \leq 13$$

$$\begin{array}{r} -1 \quad -1 \\ 4 < 3x + 1 \leq 13 \end{array}$$

$$3 < 3x \leq 12$$

$$\begin{array}{r} \div 3 \quad \div 3 \\ 3 < 3x \leq 12 \end{array}$$

$$1 < x \leq 4$$



Simultaneous equations are when **more than one equation** are given, which involve **more than one variable**. The variables have the **same value** in each equation.

Solve by subtraction

$$\begin{array}{r} 18 \\ \color{blue}{x} \color{blue}{x} \color{blue}{x} \color{yellow}{y} \color{yellow}{y} \\ \hline 10 \\ \color{blue}{x} \color{yellow}{y} \color{yellow}{y} \\ \hline 8 \\ \color{blue}{x} \color{blue}{x} \end{array}$$

$$3x + 2y = 18$$

$$- \quad x + 2y = 10$$

$$\hline 2x = 8$$

$$\begin{array}{r} +2 \quad +2 \\ 2x = 8 \end{array}$$

$$x = 4$$

$$x + 2y = 10$$

$$(4) + 2y = 10$$

$$\begin{array}{r} -4 \quad -4 \\ (4) + 2y = 10 \end{array}$$

$$2y = 6$$

$$\begin{array}{r} +2 \quad +2 \\ 2y = 6 \end{array}$$

$$y = 3$$

$$x = 4$$

$$y = 3$$

Solve by addition

$$3x + 2y = 16$$

$$+ \quad 6x - 2y = 2$$

$$\hline 9x = 18$$

$$\begin{array}{r} +9 \quad +9 \\ 9x = 18 \end{array}$$

$$x = 2$$

$$3x + 2y = 16$$

$$3(2) + 2(y) = 16$$

$$6 + 2y = 16$$

$$\begin{array}{r} -6 \quad -6 \\ 6 + 2y = 16 \end{array}$$

$$2y = 10$$

$$y = 5$$

Solve by adjusting one

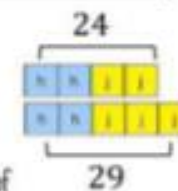
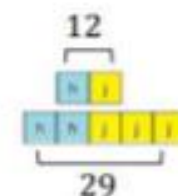
$$h + j = 12 \quad \text{No equivalent values}$$

$$2h + 2j = 29$$

$$2h + 2j = 24$$

$$2h + 2j = 29$$





By proportionally adjusting one of the equations – now solve the simultaneous equations choosing an addition or subtraction method



Year 9— Film Music— Knowledge Organiser



Key Terms 1—Film Music	
Specially Composed Music	Some music is composed specially for a film. Much of this is broadly classical in style.
Borrowed Music	Some music used in film soundtracks was composed for other purposes but is adopted for use in a film because it fits the film-maker's intentions.
Cue Sheet	A detailed listing of musical cues matching the visual action of a film so that composers can time their music accurately to match the visual images.
Diagetic	Music that is part of the action: the characters in the film can hear it.
Non-Diagetic	Music that is not part of the action: the characters in the film cannot hear it. It is just for the audience.
Leitmotif	A short melody that is associated with a character or idea in a film. E.g., James Bond has his own leitmotif.
Sound-track	The word "soundtrack" can often mean a commercial recording of a collection of music and songs from a film sold individually as an audio CD.
Theme Song	Sometimes a song, usually a pop song, is used as a theme song for a film. This helps with marketing and publicity
Under Score	Where music is played at the same time as the action or dialogue.

Key Terms 2—Music Theory	
Bass Clef 	A musical symbol indicating to performers to perform the notes and a certain (low) pitch
Chord	A series of notes played together at the same time e.g. the James Bond Leitmotif
Concord	A chord where the notes sound 'comfortable' or 'happy' with each other e.g. chord of C major
Discord 	A chord where the notes sound like they 'clash' together – often producing a 'tense' feel
Crescendo	Gradually getting louder 
Pitch	Horror movie composers often use extremes of high and low pitch when creating musical soundtracks to create a feeling of 'tension' and 'suspense'
Repeat Marks 	A musical symbol made up of two dots and two bar lines, telling the performer to go back to the beginning (or to the previous repeat marks) and repeat the music



John Williams Rachel Portman Kathryn Bostic

Key Terms 3—Music Technology	
Syncing/ Sync Point	A precise moment where the timing of the music needs to fit with the action.
Timecode	A time synchronisation tool that every film maker must use to make sure that the visuals, dialogue and music are all in time.
MIDI (Musical Instrument Digital Interface)	MIDI connects devices that make and control sound — such as synthesizers, samplers, and computers — so that they can communicate with each other.
DAW (Digital Audio Workstation)	A comprehensive piece of software that allows your computer to record, edit, mix and produce music. Ableton live is a popular DAW.

You could listen to some music written by the three composers above whilst doing your homework

POWER**Vertical jump**

Equipment: Wall, tape measure, chalk
Usually measured in: cm

**MUSCULAR STRENGTH****Grip dynamometer**

Equipment: Grip dynamometer
Usually measured in: KgW

**FLEXIBILITY****Sit and reach**

Equipment: Sit and reach box
Usually measured in: cm

**SPEED****35-metre sprint**

Equipment: tape measure and stopwatch
Usually measured in: seconds (s)

**PE Knowledge Organiser****FITNESS TESTING**

Component of fitness	Fitness test
Flexibility	Sit and reach
Strength	Grip Dynamometer
Aerobic endurance	Multi-stage fitness test Forestry step test
Speed	35-metre sprint
Speed and agility	Illinois agility run
Power	Vertical jump test
Muscular endurance	1-minute press-up test 1-minute sit-up test
Body composition	Body mass index (BMI) Bioelectrical impedance analysis (BIA) Skinfold testing – Jackson-Pollock nomogram method

BODY COMPOSITION**Body Mass Index (BMI)**

Equipment: Scales and tape measure
Usually measured in: kg/m²

Bioelectrical Impedance Analysis (BIA)

Equipment: BIA analyser and a mat
Usually measured in: % body fat

Skinfold test

Equipment: Skinfold callipers
Usually measured in: % body fat

**AEROBIC ENDURANCE****Multistage fitness test**

Equipment: Bleep test CD, tape measure, cones

Usually measured in: ml/kg/min

Forestry step test

Equipment: Step (Males = 40cm high / Females = 33cm high), metronome, stopwatch.

Usually measured in: ml/kg/min

SPEED AND AGILITY**Illinois agility test**

Equipment: cones, tape measure, stopwatch

Usually measured in: seconds (s)

MUSCULAR ENDURANCE**One-minute sit-up test**

Equipment: A mat and a stopwatch
Usually measured in: sit-ups per minute

One-minute press-up test

Equipment: A mat and a stopwatch
Usually measured in: press-ups per minute



RE:VISION

What is Islam?

Islam	Peace, through submission to God
Prophet	Messenger of Allah, for example, Mohamed was the final prophet.
Tawhid	Oneness of God, everything is connected to God, nobody can fully understand Allah
Shirk	Believing anything is equal to Allah, Making decisions that should be made by God, or putting your own will before God's
Ummah	Worldwide family of Muslims
Allah	One God, who has no equal.

Islam - is the religion - means submission
Muslim - followers of Islam - one who submits to the will of Allah
Allah - Arabic name for God
Salam - Peace (peace within comes when people submit to the will of Allah)

Key belief Shahadah - "I bear witness that there is no God but Allah, and that Mohamed (PBUH) is the prophet of God."

Muslims have 99 names for Allah, but their crucial belief is in the unity or oneness of Allah - this is known as **TAWHID**

Some examples of the 99 names of Allah:

The Knower
 Most Gracious
 Most Merciful.
 The King
 The Holy One
 The Source of Peace
 The Keeper of Faith, The Guardian
 The Almighty,
 The Sustainer,

The Qu'ran

Muslims believe it is the final word of Allah (God) and is perfect. The Qu'ran is the holiest text in Islam. It was given to Mohamad by the Angel Gabriel over 23 years. Muslims believe that Allah has given them a complete guide for how to live their life.

The Hadith

A collection of the sayings of the Prophet Mohamed (pbuh)

Eid-ul-Fitr

This festival comes at the end of **Ramadan**. Muslims give thanks to God for helping them to fast and giving them the Qur'an. It is a time of forgiveness. Muslims gather at the mosque to pray in the morning. They give presents to one another and enjoy festival food. They give to the poor so they can celebrate too.

Eid-ul-Adha

This festival comes at the end of the time of **Hajj**. It is the festival of sacrifice and recalls the story of Abraham. Muslims kill animals at this festival to show they are ready to give their lives to God. Meat is shared with friends, family and the poor.

5 Pillars of Islam

1. Shahadah	Belief Saying: "There is no God but Allah, and Mohamed is his messenger" To become a Muslim, you must recite this statement three times in front of witnesses. You must believe and understand what you are saying.
2. Salat	Prayer Muslims should pray five times a day. In Islamic countries a person will call people to pray from the Mosque. Muslims bow in prayer to show respect and submission to Allah.
3. Zakat	Charity Muslims purify their money by giving 2.5% away (after essential bills. After essential bills) Muslims believe that everything we have has been loaned to us by Allah. It is one way to submit to Allah and support the Ummah.
4. Sawm	Fasting Muslims fast during the holy month of Ramadan. During daylight hours Muslims do not eat, drink, smoke, have sex or fight. Fasting from food and drink teaches self discipline and empathy for the poor.
5. Hajj	Pilgrimage If they can, Muslims try to go to Mecca once in their lifetime. Everyone wears white to show that they are equal

The life of Prophet Mohamed (pbuh)

Mohamed (pbuh) was born in Mecca in 570CE. His father died before he was born. His mother died when he was 6. When he grew up he became a trader. People said he was honest in business.

He married his employer, a rich and independent woman called Khadijah. Mohamed's family believed in one God, but this was unusual at the time.

One night, Mohamed was in a cave praying when he heard the words of Allah, spoken by the angel Jibril (Gabriel). Mohamed (pbuh) had never been taught to read or write, but he told others the exact words that Allah had said. These words were written down. This became the Quran.

Mohammed began to preach to the people. He said "stop worshipping all these statues. There is only one God." But the people of Mecca would not listen to him. They tried to kill him, so when he was invited to, he journeyed to a city called Medina, this is called the hijra.

In Medina, Mohammed (pbuh) was welcomed and he had the first mosque built so that people could go there to worship Allah. He became the leader of the new community: The Ummah.

Mohammed (pbuh) died when he was 63. He was buried in Medina and a mosque was later built around his tomb.

6 Articles of Faith (pillars of Iman)

1. Belief in Allah as the one and only God (Tahwid) Tahwid means there is only one God, and he is the creator of all things, pure monotheism. Believing in Tahwid means that everything is connected to Allah, nothing is secular. Allah is not born, and He has no son or daughter, Allah has no equal, because of this He should be worshipped and obeyed.	2. Belief in Angels (Al-Malaa'ika) Angels were created from light, before humans were even created, for the purpose of worshipping Allah. Angels are workers of Allah. They do whatever Allah tells them to do. They pray and worship and Glorify Allah, some carry the throne of Allah, some help Muslims in times of need, others sit on our shoulders and write down all the good and bad deeds that we may do.	3. Belief in the holy books (Al Kitub) This is the belief in the Holy books of Islam that have been sent by Allah to guide us. 3 of them have been translated or added to, so they are not completely Allah's Message anymore. They are the Torah, The Gospels and the Psalms. The only book left perfectly is the Qur'an, because it is the last message Allah will send to us. In it Allah tells us that the Quran is the 'completion of our faith.'
4. Belief in the Prophets (Risalah) Risalah means prophethood . Allah has always been guiding people through His prophets. All the prophets and messengers came with the same message; to submit to Allah by obeying and worshipping Him. Prophets include Adam, included Noah, Abraham, Ishmael, Isaac, Lot, Jacob, Joseph, Moses, David and Jesus, and ended with Muhammad, the final prophet (peace be upon them all). There are 25 prophets mentioned in the Quran, but there could be many more that were not mentioned.	5. Belief in the Day of Judgement (Akiraah) Muslims believe we will all have to answer to Allah on the Day of Judgement, when we will be judged according to how we lived our lives. A person who obeys and worships Allah will be rewarded with a place of happiness in Paradise (Jannah); the person who does not will be sent to Hell, (Jahannam) a place of punishment and suffering. Allah is the 'most merciful' so he will forgive many sins on Judgement day	6. Belief in Predestination (Al Qadr) Allah knows our destiny. Yet we have Free Will Allah already knows everything that will happen in the end, including who will go to Heaven and Hell. However we are also free to choose right and wrong. Muslims believe this is because Allah is outside of time, so he can see all things at once.

What the Prophet taught:

People who live good lives will go to paradise. Those who get rich by making others suffer will go hell.

There is only one God. Idols should be destroyed.

Stop having wars and feuds, and to settle our quarrels through the law.

Muhammad said all people are "equal like teeth on a comb", whatever their colour or background.

People with money should help the poor. "He is not a Muslim who eats his fill while his brother goes hungry"

Mohamed taught that people must not -
 1. Act out of anger.
 2. Hate, envy or provoke each other.
 3. Spy on each other or betray each other's trust.
 4. Drink alcohol or gamble.
 5. Cheat each other.
 6. Charge interest on money loaned to those in need.
 7. Pay bribes to get what is lawfully not yours.
 8. Kill unwanted babies either before or after birth.
 9. Be cruel to animals.

The Growth of Islam

Second largest religion
 Fastest growing religion
 It spread along the trade routes
 Many Muslim countries became rich from selling oil.

**Sunni and Shia**

The split occurred 1400 years ago, following the death of Mohamed in Medina. Muslims who wanted to select his successor, or Caliph, by following the traditional Arab custom (Sunna) formed into a group known as Sunnis. Others insisted the Prophet had selected his cousin and son-in-law Ali as the next leader. This group was called Shia Ali, or 'Party of Ali'.

Conflict in Islam

Islam would be a more powerful force if countries worked together. Iran is a Shi'ite country and Iraq is Sunni.
 Iran wanted Shi'ites everywhere to fight for power but Iraq didn't want this. Hundreds and thousands died in the war about this.
 Some Muslim countries want an Islamic Government others don't.

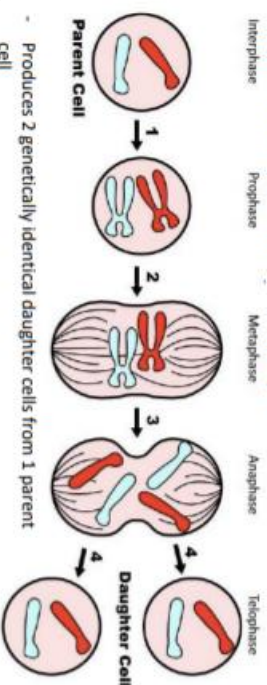
Islam's Contributions
 The Qur'an encourages Muslims to seek knowledge. Muslims need to be smart to work out when to pray and how much tax to pay.

- Public libraries
- Algebra
- Discovery of many stars
- Surgical tools
- Coffee
- Modern Chess
- Windmills
- Fountain pens
- Technique of inoculation



Mitosis (p24)

- Type of cell division used for growth and repair



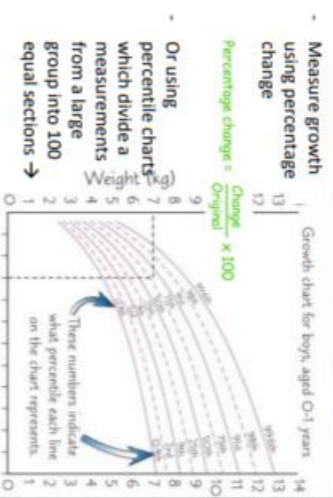
Interphase – cell makes extra sub-cellular parts. DNA replication occurs, chromosome copies stay attached.
Prophase – nucleus breaks down and spindle fibres appear. Chromosomes become visible
Metaphase – chromosomes use spindle fibres to line up along the middle of the cell.
Anaphase – chromosome copies are separated and move apart to each end of the cell using spindle fibres.
Telophase – a new nuclear membrane forms around each set of chromosomes.
Cytokinesis – new cell membrane forms to separate the 2 daughter cells.

IPMAT

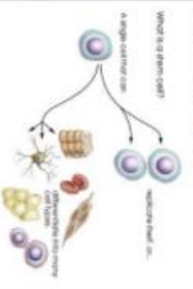
Growth (p25)



Differentiation = specialised cells

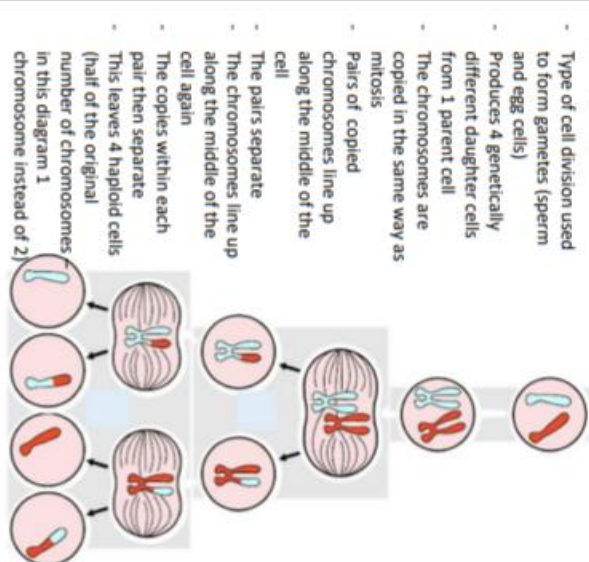


Stem Cells (p26)



- Embryonic stem cells found in embryos can differentiate into any specialised cell
- Adult stem cells are limited in the type of cell they can differentiate into
- Lots of potential uses
- Ethical issues
- Plant stem cells called meristem cells are found in shoots and roots and can differentiate into any cell type

Meiosis (p32)

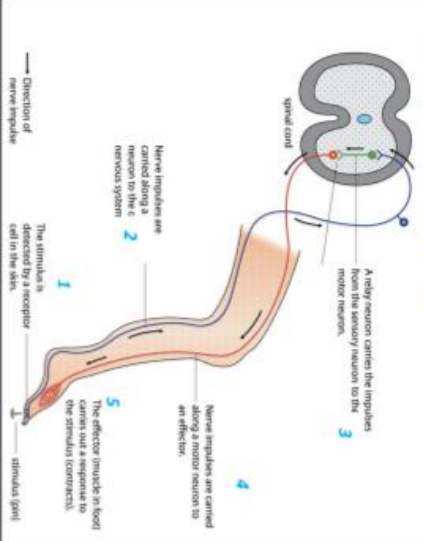


EDEXCEL 9-1 Biology | Topic 2 – Cells and Control | Required Knowledge

CPG Biology: pages 27-30.

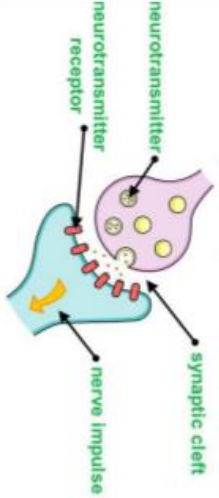
Reflexes (p29)

- An automatic response to a stimulus



Synapses (p29)

A **synapse** is a junction between two neurones across which electrical signals must pass.

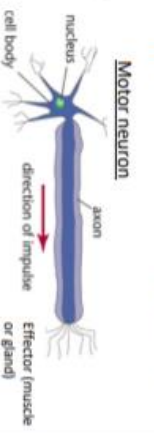
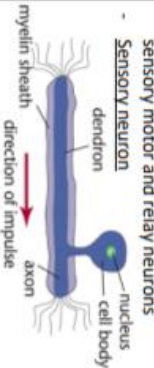


Neurotransmitter molecules diffuse from vesicles towards the neurotransmitter receptors, moving from an area of high concentration to low concentration.

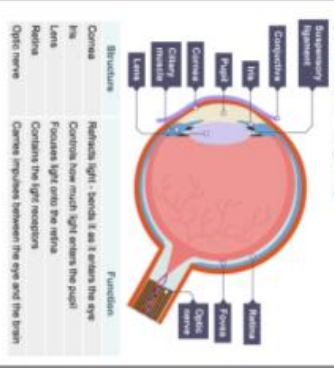
Don't forget to try the revision questions for topics 1 & 2 on page 311

Nervous System (p27)

- Central nervous system = brain and spinal cord
- Peripheral nervous system = all other neurones (nerve cells) around the body, including sensory motor and relay neurones



Eye Structure (p30)

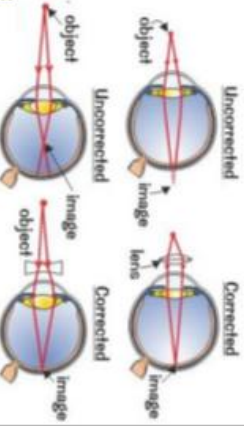


Brain (p29)

- Cerebral hemispheres: largest part, centre of intelligence, memory, speech and consciousness. Left = right
- Cerebellum: controls muscle function, speech, thought, emotions, reading writing and learning
- Medulla oblongata: centre for controlling respiration, circulation and digestion
- Studied using CAT or PET scans.

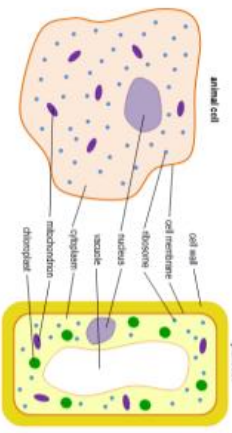
Eye Problems (p30)

- Long sighted: Image forms behind retina. Corrected using convex lens to bring rays together and move image forwards
- Short sighted: Image forms in front of retina. Corrected using concave lens to spread out rays and move image back
- Colour blindness: genetic condition with fault cones cells in the retina leading to difficultly differentiating colours. Not able to be corrected.
- Cataracts: a clouding of the lens. Corrected by replacing the lens.

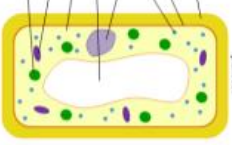


Cell Structure

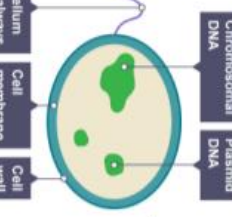
- Animal cell



- Plant cell

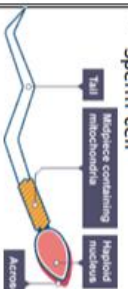


- Bacterial cell

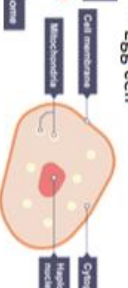


Specialised cells

- Sperm cell

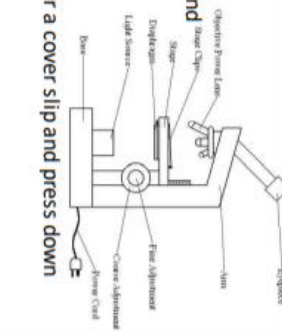


- Egg cell



Making Microscope Slides

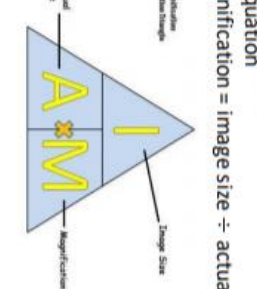
1. Take a thin slice of specimen *(to let light through)*
2. Put a drop of water on a slide and use tweezers to add the specimen *(water holds it in place)*
3. Add a drop of stain *(makes it easier to see)*
4. Use a mounted needle to lower a cover slip and press down firmly *(so there are no bubbles)*
5. Put the slide on the stage and secure using the clips
6. Choose the lowest powered objective lens
7. Use the coarse focusing knob to move the stage up and down while looking through the eyepiece *(to focus the image)*
8. Adjust the focus using the fine adjustment knob
9. Put a clear ruler on the stage to measure the diameter of your field of view
10. Repeat focusing with higher-powered objective lens if needed *(this will allow you to estimate the size of the specimen)*



Magnification

Equation

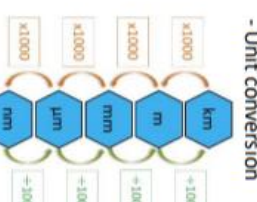
Magnification = image size ÷ actual size




Light vs. Electron Microscopes

Light microscope	Electron microscope
Inexpensive to purchase and operate	Expensive to purchase and operate
Simple and easy specimen preparation	Complex and lengthy specimen preparation
Magnifies up to 2000x	Magnifies over 500,000x
Specimens may be living or dead	Specimens are dead, and must be fixed in a plastic material


Unit conversion



Enzyme Structure



Enzymes speed up chemical reactions where things are split apart or joined together. Enzymes only work with one substrate; they have a high specificity due to the shape of the active site. The substrate's shape has to match the active site's shape exactly. This is called the 'lock and key' model.



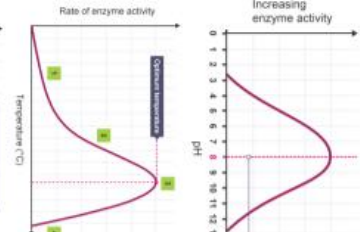
Investigating Enzymes

The enzyme amylase catalyses the break down of the starch into maltose (sugar). The enzyme is added to buffer solutions of different pHs. The time it takes for the enzyme to work is calculated by continuously sampling the mixture and adding it to iodine. Only when all of the starch has been broken down will the iodine stop changing colour. Calculation needed: Rate = $1 \div \text{time taken}$.



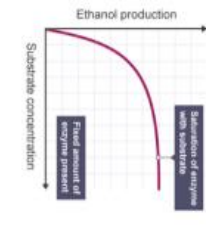
Factors affecting enzymes

As the enzyme experiences conditions away from the optimum the shape of the active site begins to change meaning the substrate can't fit as well and less reactions will occur.



As the enzyme experiences warmer conditions it (and the substrate) will move more quickly, there will be more collisions and more reactions. After the optimum the heat causes the shape of the active site to change in the same way as pH.

As more substrates are added the more collisions there will be with available enzymes and more reactions, up until a certain (saturation point), where all of the enzymes are already working at their maximum rate.



Specific digestive enzymes

- Carbohydrase**: Starch → Glucose
- Protease**: Protein → Amino acids
- Lipase**: Lipids → Fatty acids + glycerol

All of these digestive processes can happen in reverse = synthesis.

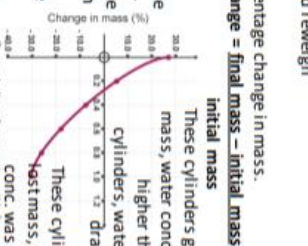
Investigating Osmosis

1. Prepare sucrose solutions of 5 concentrations
2. Measure the mass of potato cylinders
3. Put one cylinder into a test tube of each solution
4. Leave for 40 mins
5. Pat dry and reweigh

Results

Calculate percentage change in mass.

Percentage change = final mass - initial mass x 100 / initial mass



Transport



Diffusion

Movement of particles from high concentration to low concentration e.g. carbon dioxide into plant leaves

Osmosis

Movement of water particles across a partially permeable membrane from high water concentration to low water concentration e.g. into plant roots

9.11 My school – vocab. list

<p><u>¿Cuál es tu asignatura favorita?</u></p> <p>El inglés El español El francés El teatro El dibujo El deporte La informática La música La tecnología La geografía La historia La religion La educación personal y social Las matemáticas Las ciencias Las humanidades</p> <p><u>¿Qué Piensas?</u></p> <p>Es Interesante Práctico Útil Ínutil Fácil Difícil Aburrido Emocionante Creativo Importante Demasiado Muy bastante</p>	<p><u>What is your favourite subject?</u></p> <p>English Spanish French Drama Art PE Computer Science Music Technology Geography History RE PSHE Maths Science Humanities</p> <p><u>What do you think?</u></p> <p>It is Interesting Practical Useful Useless Easy Difficult Boring Exciting Creative Important Too Very Quite</p>		<p><u>¿Cómo es tu uniforme escolar?</u></p> <p>Llevo...</p> <p>Una chaqueta Un jersey Una camisa Una camiseta Una corbata Una falda Unos calcetines Unos pantalones Unos zapatos Unas medias</p> <p>Feo Bonito (in)cómodo Caro Barato De moda Pasado de moda</p>	<p><u>What is your school uniforme like?</u></p> <p>I wear..</p> <p>Blazer Jumper Shirt T-shirt Tie Skirt Socks Trousers Shoes Tights</p> <p>Ugly Pretty (un) comfortable Expensive Cheap Fashionable Unfashionable</p>		<p><u>¿Cuáles son las reglas?</u></p> <p>(no) se debe (no) se puede Hay que Está prohibido Escuchar en clase Usar el móvil en clase Llevar joyas Llevar maquillaje Llevar zapatillas de deporte Dañar las instalaciones Respetar el turno de palabra Comer chicle Hacer los deberes</p>	<p><u>What are the rules?</u></p> <p>You must(n't) You can('t) You have to It is forbidden To listen in class To use your phone in class To wear jewellery To wear make up To wear trainers To damage the facilities To wait your turn to speak To chew gum To do homework</p>
<p><u>La jornada escolar</u></p> <p>Salgo de casa Voy al insti Las clases empiezan... Las clases terminan... Dura... El recreo La hora de comer Por la mañana Por la tarde</p>	<p><u>The school day</u></p> <p>I leave home I go to school Classes start... Classes end... It lasts... Break Lunch In the morning In the afternoon</p>	<p><u>¿Qué quieres hacer en el futuro?</u></p> <p>Aprobar mis exámenes Sacar buenas notas Hacer un aprendizaje Buscar trabajo Trabajar como voluntario Viajar por el mundo Tener hijos Casarme Aprender a conducir</p> <p>Médico/a Profesor(a) Abogado/a Mecánico Fontanero Bombero Veterinario Peluquero</p>	<p><u>What do you want to do in the future?</u></p> <p>To pass my exams To get good grades To do an apprenticeship To look for a job To work as a volunteer To travel the world To have children To get married To learn how to drive</p> <p>Doctor Teacher Lawyer Mechanic Plumber Firefighter Vet Hairdresser</p>				

9.11 My school Knowledge Organiser

School – Subjects, uniform and time
Future plans & jobs



<u>The present tense</u>	AR verb	ER verb	IR verb
yo (I)	-o	-o	-o
tu (you)	-as	-es	-es
él/ella (he/she)	-a	-e	-e
nosotros/as (we)	-amos	-emos	-imos
vosotros/as (you all)	-áis	-éis	-ís
ellos/ellas (they)	-an	-en	-en

The future tense in Spanish

You can talk about the future by using the **near future** tense.

Use part of the verb IR + a + the infinitive to say what you are **going** to do.

Este tarde **voy a jugar** al tenis. *This evening I am going to play tennis.*

Mañana Paul **va a hacer** un pastel. *Tomorrow Paul is going to make a cake.*

You can also use the following phrases with an infinitive to refer to the future.

Quiero = I want

Me gustaría = I would like

Quisiera = I would like

Espero = I hope

Adjectives describe nouns e.g. a **black** blazer.

In Spanish, adjectives normally go after the words they are describing e.g. una camisa azul (a blue shirt) and they have to agree with the noun they are describing.

Adjectives must agree with the noun (or pronoun) they describe in gender and in number.

This means that if the noun an adjective describes is feminine, the adjective must be feminine e.g. una chaqueta negra (a black blazer).

If that same noun is also plural, the adjective will be feminine AND plural as well e.g. las medias negras (black tights).

Comparatives – to express more or less than

... **es más...adjective...que** - is more...adjective...than

... **es menos ...adjectiveque** - is less...adjective... than

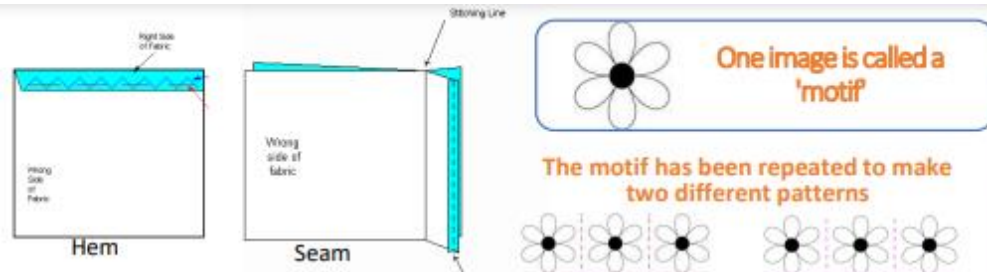
... **es tan...adjective....como** – is as...adjective...as

For example:

*El inglés es **más** interesante **que** la geografía. (English is more interesting than Geography)*

*La historia es **menos** activa **que** la educación física. (History is less active than PE)*

*El francés es **tan** difícil **como** las matemáticas. (French is as difficult as maths).*

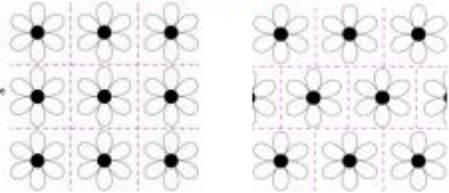


What is the difference between a hem and a seam?

A hem is a neat non fraying edge made by folding fabric over and stitching it down. A seam is a line along which pieces of cloth are joined by sewing.



The motif has been repeated to make two different patterns



plain repeat pattern brick repeat pattern/offset repeat pattern

Year 9 Textiles Knowledge Organiser

About Designers

Orla Kiely

Orla Kiely is known for her print designs inspired by her early childhood – the colours of the countryside and her home.

Kiely's design work lends itself to CAD for its repetitive style. Her original work was hand painted using gouache paint. 'Stem' is her most iconic print which consists of simple graphic strength – clean, measured and bold.

Kiely believes her work is never finished and can be re-worked several times until she is satisfied with the end result.



Laura Ashley

Print has been at the forefront of the Laura Ashley brand since it was first established when Laura Ashley started printing her own designs for head scarves.

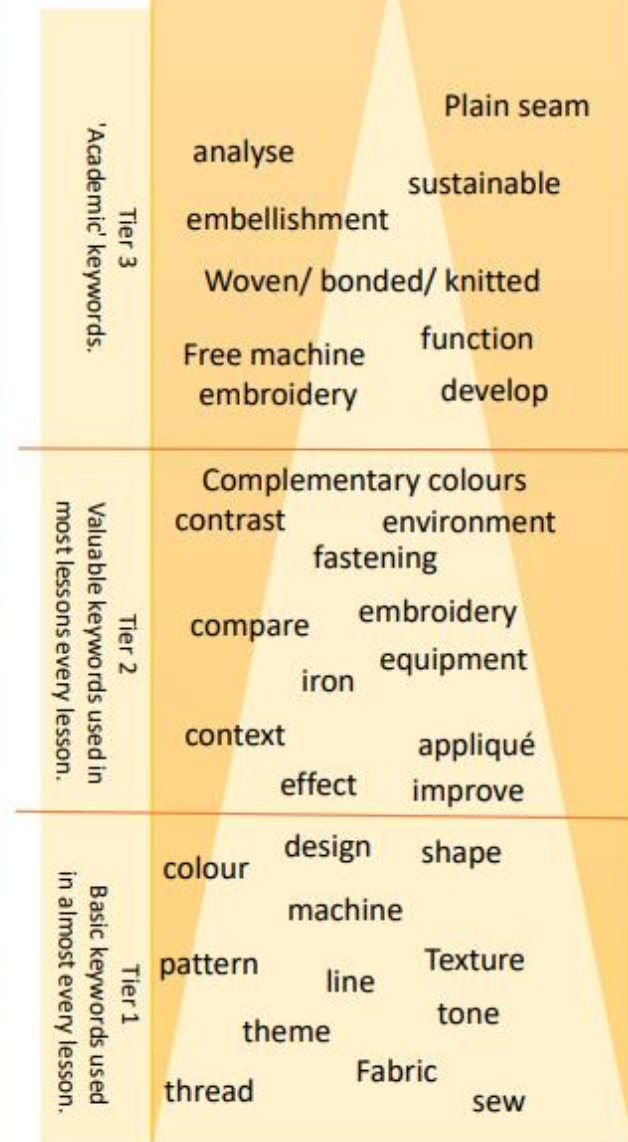
She went on to design dresses for social wear at the end of the 1960s. Her popular long Victorian-inspired dresses became known as the 'Laura Ashley look'.

The business expanded into coordinated ranges of furnishing fabrics using natural materials such as cotton and recycled paper for wallpaper.



Equipment	Use
Bobbin 	A bobbin is a cylinder, to which cotton thread is wrapped around. It is found in the bottom part of a sewing machine.
Overlocker machine 	An overlocker does not replace a sewing machine. Its primary function is to clean finish a raw edge, giving the project a professional appearance
Quick unpick 	It is used to quickly remove stitches and seams.
Tailor's chalk 	Used to mark on to fabric. It is easily washed off.
Measuring Tape 	It is a flexible ruler that can be used for body measurements, tailoring and dressmaking. It is flexible to measure fabric and curves of the body.

Textiles Hierarchy of Key words



Questions and activities – hints and tips

Summarising a lesson:

Answer the following questions to help you summarise your learning in a lesson. This will help you recap and think again about your learning, and will be useful to look back on in the future.

- What key words did you use in the lesson?
- Can you define those key words and use them in a sentence?
- What new content did you cover?
- How does this link to your previous learning?
- Can you summarise your learning into one sentence?

Revision:

If you have an assessment approaching, you could create some revision material based on your knowledge organiser.

Can you get down the key information in a spider diagram?

Can you use diagrams, pictures, symbols etc to recall your knowledge?

Knowledge quizzes:

Create a set of questions using the information from your knowledge organiser, or from your lesson.

You could make them about key words, and maybe even give multiple choice answers.

Go over the questions you keep getting wrong.

Try the questions out with those at home, or maybe your teacher could use them for their starter quiz in class.

Keyword Development:

Practise the spellings of key words. Use the look-cover-write-check method to help you.

Can you explain what the key words mean?

Can you link the key words together?

Copy out the key words with their definitions.

What might it look like?

Geography Thursday 1st October
Topic: Our Place in the World

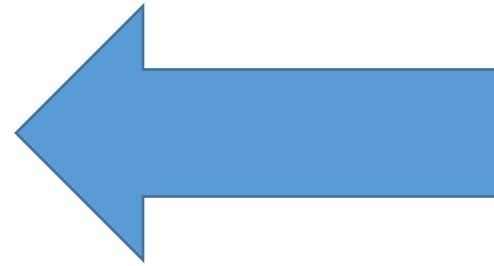
Lesson Summary:

Longitude - the distance, in degrees, E or W of the Prime Meridian.

Latitude - the distance, in degrees, N or S of the Equator.

Today we learnt about how the world is divided up using lines of latitude + longitude. The Equator is an 0° latitude, and the poles are 90° N + S.

This links to our previous learning because now I can say where the continents are using longitude + latitude to find them on a map.



Lesson summary:

Science

Topic: Cells

Monday 28th September

Knowledge Quiz:

- 1.) What is the name of the part of the microscope where the specimen is placed?
A = Stage
- 2.) How many cells are there in a 'unicellular' organism?
A = one
- 3.) What does the 'cell membrane' do?
A = controls movement of substances in + out of the cell
- 4.) Where does photosynthesis take place in a cell?
A = Chloroplast
- 5.) What is the function of the red blood cells?
A = to carry oxygen

Knowledge Quiz:



How to present your homework:

Subject written on the left-hand side of the page and underlined.
For example: Food

Topic written on the centre of the page and underlined.
For example: Sugars

One single straight line between both pieces of homework.

Subject: Food Tuesday 25th June 2019

Topic: Sugars

Keyword	Definition
Monosaccharides	
Disaccharides	
Intinsic sugars	
Polysaccharides	

Subject: English Topic: Macbeth

1. Who are the four most important characters in Macbeth?
Macbeth, Lady Macbeth, Banquo and Macduff.
2. What are three character traits of Banquo?
Gullible, superstitious and ambitious.
3. How would you describe Lady Macbeth?
She is manipulative, cold-blooded and cruel.
4. How is Lady Macbeth two-faced?
She is warm and welcoming to Duncan, and then manipulates her husband to kill him.
5. What is the name of Banquo's son?
Fleance

Date written fully on the right hand side of the page and underlined – this should be the day you complete the homework.

