Knowledge Organisers for Year 8

Autumn First Half-Term

Catholic MIBIL



A Knowledge Organiser is a place to keep some key information for the topics we are learning about. This may include an important formula, vocabulary, dates or explanations. It is not a complete list of everything we are studying but it is a place where we can find the basic information. It is likely that when you first see the Knowledge Organiser you won't understand most of what it on it. Gradually, as you work on the content in lessons it will become more familiar and, over time, you should find that, not only do you understand everything on it, but that you can *remember* everything that is on it and, even better, know how this information relates to what you are studying.

How do we use our Knowledge Organisers?

We can use our Knowledge Organisers in many ways. The main aim is that we are able to memorise, understand and eventually *apply* all of the information in the Knowledge Organisers. We will do this by:

- using them to refer to in class to support our learning.
- discussing them at home with parents or carers to reinforce our learning and so that others may be involved in what we are learning too.
- using them as learning homeworks that we will have quizzes on in class.
- using them to refer to when completing homework.

Where will I find the Knowledge Organisers?

Knowledge Organisers will be made available to you via the school website https://stjosephsbolton.org.uk (Follow the link under school information to Learning & Teaching – Progression Scales) and your teachers will often send you links to them with your homework on epraise or in your class TEAMS. (You will find out more about these teams over your first year at St Joseph's).

Art

THE COLOUR WHEEL

WARM

The Formal Element	Definition
Line	The path left by a moving point, e.g. a pencil or a brush dipped in paint, that can take many forms. e.g. horizontal, diagonal or curved.
Tone	The lightness or darkness of something. This could be shade or how dark or light a colour appears
Texture	The surface quality of something, the way something feels or looks like it feels. There are two types: Actual and Visual.
Shape	An area enclosed by a line. It could be just an outline, or it could be shaded in.
Pattern	A design that is created by repeated lines/ shapes/ tones or colours. It can be manmade, like a design on a fabric or natural, such as markings on animal fur.
Colour	There are 2 types including Primary and Secondary. By mixing any two primary together we get a secondary.

COMPLEMENTARY

HARMONIOUS

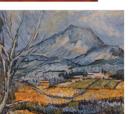
OPPOSITE EACH OTHER / CONTRASTING

NEXT TO EACH OTHER / BLEND WELL TOGETHER

SECONDARY









Vincent Van Gogh

Andre Derain

Paul Cezanne

Alice Sheridan

LANDSCAPES WORD BANK

Horizon Line - Where the land and the sky meet.

Perspective - a 2D surface showing an image that appears as 3D. It gives the correct impression of their height, width, depth, and position in relation to each other.

Arial Perspective - Colour and detail is less the further away an object

Background - Objects that are furthest away from the viewer.

Mid-ground - Objects that are in the between the foreground and background.

Foreground - Objects that are closest to the viewer.























Making objects look 3D

To prevent your drawings from looking flat, you should use a range of tones and marks. Pressing harder and lighter and layering with your pencil creates different tones. Use the direction of your pencil to help enhance the 2D surface, and you can also include shadows which will also help objects appear 3D.

Art Technique Key Words

and recommended they more		
Media/Medium	The materials and tools used by an artist to create a piece of art	
Technique	The way an artist uses tools and materials to create a piece of art	
Composition	Where you place objects on the page	
Highlight	The bright or reflective area on an object or piece of art	
Shadow/shade	The darker areas within a piece of art or object	
Proportion	The size relationship between different parts - eg height compared to wid	

Colour Theory

Primary Colours are the 3 main colours. They cannot be made, but are used to make all other colours.

Secondary colours are made mixing 2 primary colours.

Tertiary colours are made by mixing a primary and secondary colour together. Complimentary colours are opposite on the colour wheel.

Harmonious colours are next to each other on the wheel.

Tint – When you add white to a colour to make it lighter.

Shade- When you add black to a colour to make it darker





B-ICT Knowledge Organiser

Year 8 A1—E-Safety



E-safety websites:

www.thinkuknow.co.uk https://www.bbc.co.uk/bitesize/ www.thinkuknow.co.uk http://www.safetynetkids.org.uk/ https://www.childline.org.uk/ https://www.bbc.co.uk/bitesize/



Copyright, Creative Commons licenses and Plagiarism



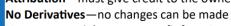
Copyright applies automatically to anything uploaded to the internet. It remains for the life of the creator plus an additional 70 years.

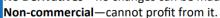
Copyright covers images, text, music, programs, song lyrics, scripts artwork etc. If you want to use anything that you find online, you must seek written permission from the creator.

Creative commons licenses can be applied by creators if they are happy for the work to be used by other in certain situations.

Creative commons licenses are:

Attribution—must give credit to the owner





Copying someone else's work and passing this off as your own is known as plagiarism.

Sexting

Sexting is when you send a sexual message, photo or video to someone else. It could be a picture of you, but sometimes people send pictures and videos of other people.

Digital Footprint



A digital footprint is the trail of information you leave behind when you use the internet.

Your digital footprint is made by things that are visible such as social media posts from you and other people. This includes photos, status updates, check-ins at locations, online groups and sites that you've liked or joined, and posts from other people that you've shared.

Online Sexual Harrassment

"Online sexual harassment is defined as unwanted sexual conduct on any digital platform. It can include a wide range of behaviours using digital content such as images, videos, posts, messages, and pages."

Cookies

A cookie is a small text file created when you access a website. These can be used to store your personal preferences or log in details so you don't need to re-enter these details.

Phishing, spam and viruses

Phishing is the act of stealing personal information by sending emails that **appear** to be from legitimate websites, ie, your bank, Paypal, Facebook, Twitter etc. Phishing websites often have spelling mistakes and are not addressed to you personally. Emails from legitimate sources usually will not includes links to log on to accounts.

Spam is electronic junk mail. It is sent to large amounts of people and is not personalized. Purposes include advertising, phishing, spreading malware.

A virus is malicious software that, after running, copies itself into other programs and files on the computer.

Some common types:

Trojan HorseSpywareAdwareWorms

YOUR AD HERE

Billboard Test

if you wouldn't be happy to see it up there, don't post it online!

Key Terms

Cyberbullying—using any form of technology to bully.

Flaming— posting or sending offensive messages online.

Impersonating—
pretend to be another
person (to appear to be
that person when
online).

Masquerading—
pretend to be someone
you are not (for example posting anonymously or with a fake
account).

Browser—software to access the internet i.e. Chrome, Edge

Bias—only giving one side of the story.



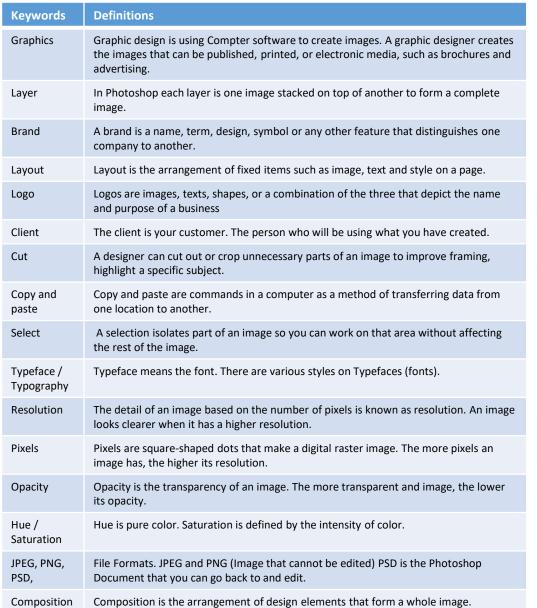
WISDOM HAS BUILT HERSELF A HOUSE.

Department of Design and Technology.

Design and Technology – Digital Graphics One of



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f	four ca	arousel	mod	ules		
	Remove specific	c areas with the r	nagic wand	Remove a bac	kground on I	Photoshop
				Adjust the size Ctrl + T	Salact the Subject	Salact the hackground





Click on the image you

want to edit with the







Ctrl + D = Deselect







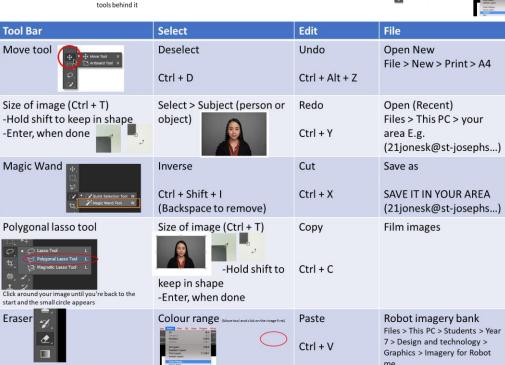


Ctrl + Shift + I (this will select the

It might be behind the quick selection tool so to find it click

and hold to see the

With the magic wand, click what you want to



To practice at home you can use photopea which is a free web based programme.

Project brief: Through learning how to use some basic skills in Photoshop, you will create the design for a Popcorn Tub from your choice of film including relevant packaging symbols and components. When your design has been completed, you will be able to assemble it and apply a foil finishing effect.



Design and Technology – Food One of four carousel modules



Language for Learning

Diet related illness Diabetes type 2 Obesity Coronary heart disease Tooth decay Sugary carbohydrates Starchy carbohydrates Saturated fat Insulin Plaque acid Energy balance











Food Practical Tasks

Bolognese ragu Spaghetti carbonara Vegetable tart Oaty biscuits Sweet and sour chicken Chicken curry Pizza

Key Practical Skills

Knife Skills Vegetable preparation Boiling **Reduction Sauces** High risk foods Shaping Baking Boiling Simmering Dough making

Assembling









Claw Grip























WISDOM HAS BUILT HERSELF A HOUSE.

Department of Design and Technology.

Design and Technology – Resistant Materials One of four carousel modules



In this module pupils will be designing and making a wooden trinket box, they will combine traditional and modern techniques and be expected to work in a safe manner at all times.

Language for Learning

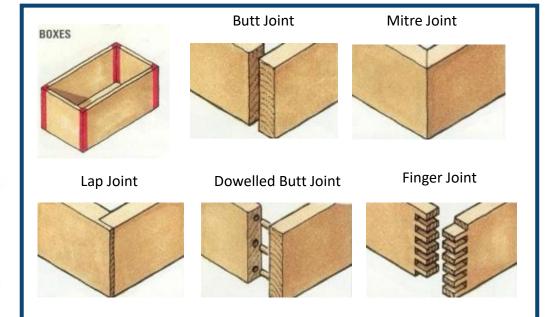
Physical Properties Working Properties Hardwoods Softwoods Manufactured Boards Strength Hardness





















Questions.

Can you name the machinery shown?

Why is there lots of signage around the workshop?

What does deciduous mean?

What does coniferous mean?

What is the difference between natural and manufactured timber?

What might the benefit be of using a finger joint?

Explain the difference between hardwoods and softwoods.

What do we mean by the term fixtures and fittings?



WISDOM HAS BUILT HERSELF A HOUSE.

Department of Design and Technology.

In this project you will consolidate your learning from Year 7- using hand and machine sewing skills. You will complete samples of fabric paint, applique and buttons/beads.

Using a design brief you will complete a task analysis and choose a client to design a product for.

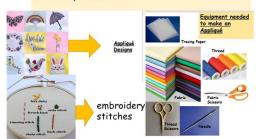
Using different design techniques such as repeat pattern, 3d and isometric drawing to design your product.

Using the knowledge and practical skills you will design and make a weighted door stop.



How to make an Appliqué

- 1. Choose an Image/Pattern to appliqué
- 2. Trace Your Image/Pattern onto a piece of tracing paper.
- 3. Cut Out your Image/Pattern.
- 4. Secure your Image/Pattern to the fabric using pins.
- 5. Cut Out your Image/Pattern from the fabric.
- 6. Secure your cut out fabric to your product.
- 7. Secure Your Appliqué (Image/Pattern) using pins
- 8. Stitch your Appliqué
- 9. Add Any Embellishments



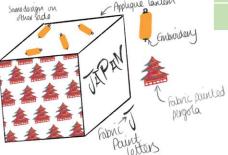
What is the history of embroidery?

While embroidery is practiced across the world, its origin stems from China and the Near East. Early embroidery can be traced back to Cro-Magnon days or 30,000 B.C. Archaeological finds from this time period reveals fossilized remains of heavily hand-stitched and decorated clathing.

Design and Technology – Textiles One of four carousel modules

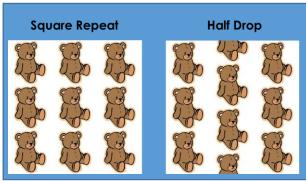


Key Words	Explanation
Needle	Used with thread to sew fabric together.
Fabric Paint	Applied to the surface of the fabric to add decoration.
Thread	Used with a needle to sew fabric together.
Applique	Layers of fabric applied on top of each other and sewn down.
Fabric Scissors	Used to cut fabric only.
Embroidery	A range of decorative stitches.
Fabric	Used as the main material in textile items.
Pins	Used to hold fabrics together temporarily.
Net	A paper template to produce your 3d object.
Isometric drawing	A method for visually representing three-dimensional objects in two dimensions

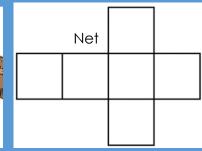














Year 8 Drama Autumn Term One





Character and Improvisation

Areas for Assessment		
Creating	The ability to work within a group to create and develop performance work.	
Performing	The ability to present a character using physical and vocal skills.	
Evaluating	The ability to discuss the qualities of a performance using dramatic language.	

Hot seating, Emotion Memory, Magic If, Given Circumstances, Subtext

Elements of Drama

Script: the text of the play

Cast of Characters: all of the characters, usually portrayed by actors

Narrator: the person who tells what happens during the play

Setting: the time and place in the play

Act: a chapter in a play that contains more than one scene

Scene: the action that take place in a single setting

Dialogue: the words said by the characters

Stage Directions: written instructions telling the actors what to do

Upstage	Upstage	Upstage
Right	Center	Left
Stage	Stage	Stage
Right	Center	Left
Downstage	Downstage	Downstage
Right	Center	Left
L	APRON	Prosceniu

DO'S of mime√	DON'TS of mime
DO Exaggerate characteristics	DON'T Turn your back on the audience
DO Face the audience	DON'T Laugh on stage
DO Be confident!	DON'T Look at the floor
DO Carry on if things go wrong	DON'T Rush through your lines
DO Make eye contact with the character you're	DON'T Be nervous, just try your best!

Dramatic Mediums to consider when Performing		
Facial	Consider the direction of your eyes and what they say to an	
Expression	audience. What position is your mouth in. Do you need to	
	demonstrate control if this is in slow motion?	
Body	Open or closed? Are you portraying a strong character who is	
Language	outwardly focused or a nervous inwardly character?	
Gesture	What are they doing with their hands? Can it help the audience	
	understand what is going on?	
Use of	Have you considered the words you are going to say? The	
Voice	volume, tone, pitch and use of pause to convey meaning.	
Proxemics	Where do the performers stand in the space? Does the distance	
(space)	between characters tell us anything about their relationships?	
Audience	Are the performers positioned in places where the audience can	
Awareness	see them fully?	

You will develop your ability to create various styles of performances through improvisation, using given circumstances to direct your performances.

English

Freedom and Iniustice — Year 8

WINDRUSH CHILD: What will I study?

A young boy is waving goodbye to all he's ever known — his grandmother, palm trees and the shores of his Caribbean home. He and his parents are stepping into an adventure across the ocean in search of something new. Ahead of him are rough waters, the journey is long, but a new beginning is on the horizon. Endorsed by Amnesty, Windrush Child is an essential read for young people. The book teaches about inclusivity and diversity and gives voice to a generation of Children whose stories had often been overlooked. In Windrush Child, Benjamin Zephaniah brings to life an important moment in modern British history, giving voice to the Windrush generation, contextualising the Windrush Scandal, and tracing the terrible impact of the scandal right up to the present day.



Key Skill: Evaluate

Point (P)	Focus on the statement - reason	I agree that
Method (M)	Refer to a method and quotation	The writer uses
Explain (E)	Explain how the method supports your point	This suggests
Zoom in (z)	Make specific reference to a detail from the method	The use of
Link / Evaluate (E)	Explain/evaluate how the method further clarifies your point	This further creates a sense of through

o Tips		
) πρs		
valuate	Use the key words in the statement to	Be Clear
efinitely/	begin your paragraphs.	Especially/
urely/certainly/	The writer	particularly/notably
eliberately/	successfully makes	Prominently/marke
leverly/	me feel	dly/predominantly
requently/	I agree that	

Core Knowledge: Writing to argue Speaking and Listening. The concept of racial injustice and realworld examples from past and present.

DAFOREST persuasive writing techniques		
Direct Address	When the writer addresses the reader directly using pronouns such as 'you'/'we'	
Alliteration	Using a series of words in succession that begin with the same consonant sound.	
Fact	A statement that is true and can be proven.	
Opinion	Someone's point of view of/about something. It is not always based on fact or knowledge.	
Repetition	To repeat the same word/phrase/sentence more than once for effect.	
Rhetorical Question	A question that does not require an answer, usually posed to emphasise an idea/opinion.	
Exaggeration	A statement/information that is untrue	
Emotive Language	Words deliberately chosen to create emotion in the reader.	
Statistics	Factual data in numerical form used to convince the reader. (Either fractions or percentages)	
Triple (Rule of three)	A list of 3 adjectives/phrases in succession for effect, usually to emphasise a strong idea.	

Vocabulary		
WORD	Definition	
injustice	Lack of fairness or justice	
Segregation	The action of separating someone or something, to keep people or things apart.	
Compassion	To have sympathy or concern for others.	
Forgiveness	To forgive, to stop feeling anger.	
Oppression	Prolonged cruelty or unjust treatment.	
Malevolent	A wish to do harm onto others.	
Prejudice	Preconceived negative opinion that is not based on reason or experiences.	

SMSC & BIG QUESTIONS

Do you think it is ever truly possible to achieve equality in every aspect of our lives?

What brings about inequality and how can we overcome it?

good	bon(ne)
super	chouette
relaxing	relaxant(e)/reposant(e)
great	génial(e)
excellent	excellent(e)
amazing	exceptionnel(le)
interesting	intéressant(e)
fun	marrant(e)
wonderful	merveilleux(euse)
enjoyable	agréable
exciting	passionnant(e)
pleasant	plaisant(e)
funny	rigolo(te)
unbelievable	incroyable
intriguing	fascinant(e)
useful	utile
active	actif(ve)

bad	mauvais(e)
rubbish	nul(le)
boring, dull	ennuyeux(euse)/ barbant(e)
useless	inutile
irritating	énervant(e)
frustrating	frustrant(e)
annoying	embêtant(e)
awful	affreux(euse)
nothing special	rien de spécial
disgusting	dégoûtant(e)
tiring	fatigant(e)
evil	diabolique
a waste of time	une perte de temps
weird	bizarre
strange	étrange
stupid	bête
exhausting	épuisant(e)

Quels sports fais-tu?

Building longer responses - comment fait-on ça?

Start with a simple sentence = je joue au rugby

Add an opinion – j'aime / je n'aime pas / j'adore / je déteste / je préfère

Give a reason, parce que c'est....

au

du

jouer à = to play at faire de = to do)		
je joue	<u>au</u> golf	je fais <u>du</u> cyclisme		
	Le	La	Ľ	Les

à la

de la

àľ

de l'

aux

des











le football le volley-ball le basket-ball le handball le rugby













le badminton le tennis le ping-pong



le snooker

le judo









le skate





le roller





le VTT

le cyclisme l'athlétisme la gymnastique la natation l'équitation

Although a variety of **sports** and games are played and hosted by France, the most popular sports there are football, tennis, and cycling. Football is considered by many as the national game of France.

à

de

Sequencing words & conjunctions – link ideas together.

D'abord = firstly puis = then Ensuite = next après ca = after that Enfin = at last finalement = finally

mais = but cependant = however et = and ou = oralors = so parce que = because

French

To play = jouer

Je joue I play tu joues you (1) play il jou**e** he plays elle joue she plays on joue we play (familiar)

nous jouons we play (formal) vous jouez you (+1) play ils jou**ent** they (M) play elles jouent they (F) play

to do = faire*

je fai**s** I do tu fais you (1) do il fait he does elle fait she does on fait we do (familiar)

nous faisons we do (formal) vous faites*** you (+1) do ils font they (M) do elles font they (F) do



quelquefois often souvent tous les jours tous les soirs

tout le temps de temps en temps

une fois par semaine deux fois par semaine sometimes every day

every evening all the time

from time to time

once a week

twice a week

When I do things

en été in summer en hiver in winter quand il fait beau when it's good weather quand il fait chaud when it's hot quand il pleut when it rains quand il fait froid when it's cold

Opinions

J'adore Llove J'aime I like Je n'aime pas I don't like Je deteste I hate

French – Tu es sportif?

The activities I do

Je fais du judo. I do judo.

Je fais du parkour. I do parkour.

Je fais du patin à glace. I go ice-skating.

Je fais du roller. I go roller-skating.

Je fais du skate. I go skateboarding.

Je fais du vélo. I go cycling.

Je fais de la danse. I do dance.

Je fais de la gymnastique I do gymnastics.

Je fais de la natation. I go swimming.

Je fais de l'équitation. I go horse-riding.

Je fais des promenades. I go for walks.

Sports that I play

I play ...

au basket basketball au billard billiards/snooker au foot(ball) football

au hockey hockey au rugby rugby au tennis tennis

au tennis de table/ table tennis

au ping-pong

puis

Je joue ...

au volleyball volleyball

à la pétanque/aux boules boules

sur la Wii on the Wii

Useful words I will use

sur on

en (été) in (summer)

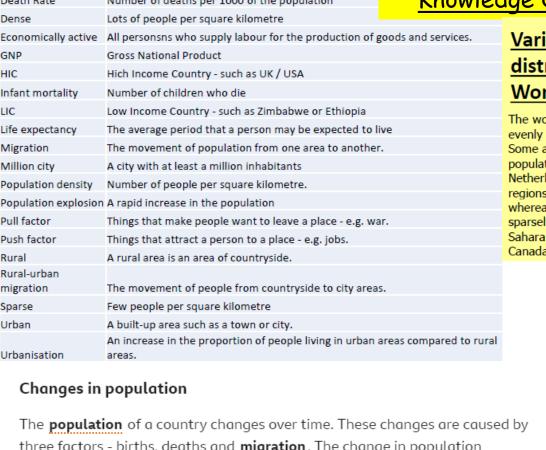
quand when

all tout/toute/tous/toutes

par (deux fois par semaine) per (twice a week)

then/next

d'habitude usually d'abord first of all ensuite then/next



Changes in population

Definition

Population explosion A rapid increase in the population

Number of births per 1000 of the population

Number of deaths per 1000 of the population

Lots of people per square kilometre

Hich Income Country - such as UK / USA

A city with at least a million inhabitants

Number of people per square kilometre.

A rural area is an area of countryside.

A built-up area such as a town or city.

Few people per square kilometre

Things that attract a person to a place - e.g. jobs.

Low Income Country - such as Zimbabwe or Ethiopia

Gross National Product

Number of children who die

Term

GNP

HIC

Birth Rate

Death Rate

Infant mortality

Life expectancy

Population density

Migration

Million city

Pull factor

Push factor

Rural-urban

Urbanisation

migration

Sparse

Urban

The **population** of a country changes over time. These changes are caused by three factors - births, deaths and migration. The change in population caused by births and deaths is called natural change. The population will get larger or smaller depending on birth rates and death rates. If the birth rate is higher than the death rate there will be a natural increase. If the death rate is higher than the birth rate there will be a natural decrease.

Population is also affected by migration. Migration includes both immigration, when people move to a country, and emigration, when people move away from a country.

People Everywhere Knowledge Organiser

Variations in the distribution of the World population

The world population is not evenly spread across the planet. Some areas are densely populated – such as India & Netherlands (where the darker regions are on the whole map) whereas other areas are sparsely populated - such as the Sahara desert and northern Canada.

(billions

population

World

500 BC

1000

1500

1800

1900

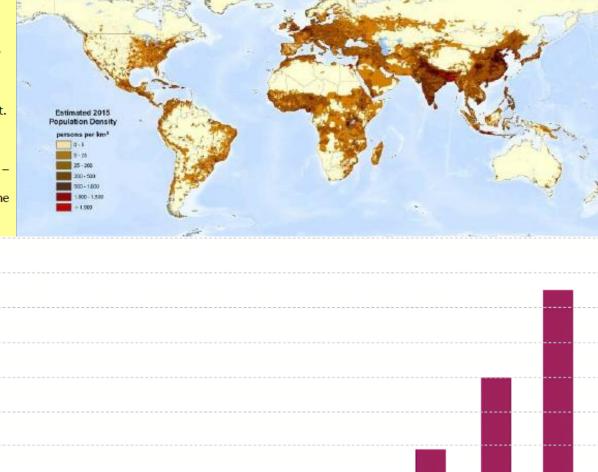
Year

1950

1975

1999

2025



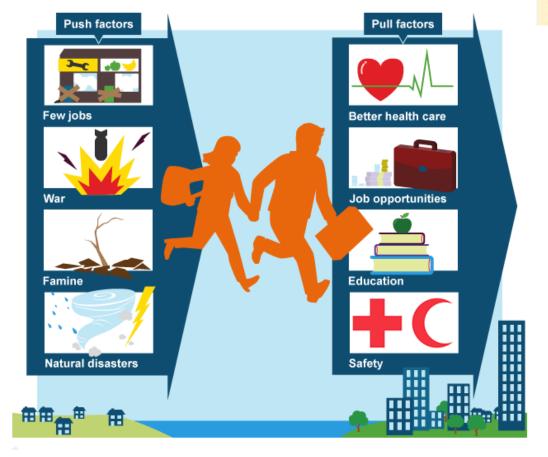
Population density and distribution



Why do people migrate?

Migration is the movement of people from one area to another. This may be temporary or permanent and may be international or within a country.

The decision to migrate is often a difficult one and one taken out of dire need, for safety, or for the hope of a better life. The reasons why people choose to leave one area and go to another are known as **push and pull factors**. Push factors are things which make people want to leave and pull factors are things attracting them to the new location. Often the decision to move from one area to another is based on a mix of both push and pull factors.





Poor medical facilities Low paid jobs Poor literacy rates and poor education prospects 40% unemployment

PULL FACTORS

Excellent medical facilities Well paid jobs Good education prospects Many job opportunities and much lower unemployment IMPACTS ON MEXICO
A shortage od economically active people in the countryside
Gender imbalance as many men are leaving
Age imbalance younger people migrating, leaving and older population behind
Mexican migrates send around \$6

IMPACTS ON USA

Illegal migration cost the USA millions of dollars for border patrols and prisons Migrant workers keep wages low Some cities have cultural and racial tensions Lower wages benefit the economy

billion dollars back to Mexico

Many people want to move away from poverty and poor living conditions (push factors) to areas where there are good living conditions and more wealth (pull factors). The USA and Mexico have a long border where both legal and illegal migration occurs.

How do you think Brexit might affect European migration to and from the UK?

The effects of migration

Migration can have consequences for both the host and the source countries and these can be both **positive** and **negative**.

Positive impacts of migration for source country	Negative impacts of migration for source country	
Reduction in unemployment .	As the population decreases, so too does the amount of money received from taxation.	
Less demand for services such as healthcare in the country due to the now lower population.	Those who leave are often those who are highly skilled and educated, leaving fewer skilled workers in the source country. This is known as 'brain drain'.	
Money sent back home from the host country can help boost the source country's economy.	Goog	

History - The Agricultural Revolution,



Key words:

Revolution – a sudden and important change in a society

The Open Field System - a three field system from the middle ages.

Three Field Crop Rotation Field 1 = Wheat; Field 2 = Barley and Field 3 = Fallow

The Common Land - Land that was shared by the villagers.

Enclosure - the process of enclosing the open fields. **Poverty** - the poor people.

Agricultural improvers people who brought new farming ideas.
Selective breeders -

new methods of breeding animals.

The Propagandists - people who spread the new farming ideas.

Turnip Townshend - who introduced the Norfolk Four Course Crop rotation system.



Key ideas

Key ideas

- During the Agricultural Revolution villages were enclosed which increased the amount of food & allowed more people to leave the countryside & move to towns.
- Turnip' Townshend introduced the Norfolk four-course rotation of wheat-turnips-barley-clover.
- Robert Bakewell used selective breeding to develop the New Leicester sheep.
- Coke of Holkham publicised the new ideas by inviting hundreds of people to his 'sheep shearings' competitions-Coke's Clippings.
- Arthur Young wrote about the new methods.
- The enclosure of the land was good for the country because it meant that the growing population could be fed.
- The countryside became much more productive. The landowners and tenant farmers became wealthy.
- The poor farmers lost their land in the open fields and were forced off the common land and out of their villages
- Some became landless labourers and others moved to the growing towns and cities.

History - Industrial Movements

Industrial revolution and life in the factories: Key words

Industry - making raw materials into goods on a large scale

Factory system - a new method of making goods using new machinery Mills - factories that spun and wove cotton cloth

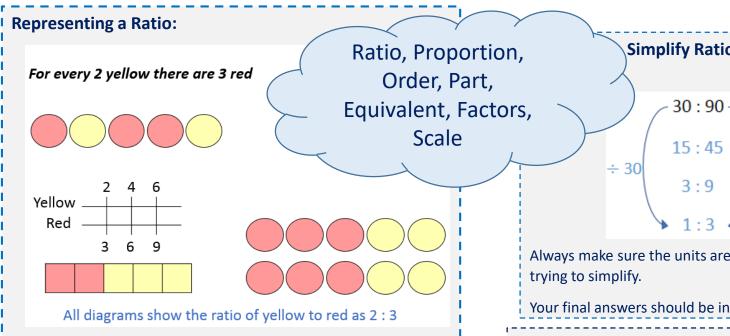
Pauper Apprentice - orphan children who were sold by orphanages and workhouses to work in the factories

Steam power - the new method of driving the factory machinery

Inventions - new machines invented to spin and weave cotton, including the spinning jenny, the flying shuttle, the water frame and the power loom

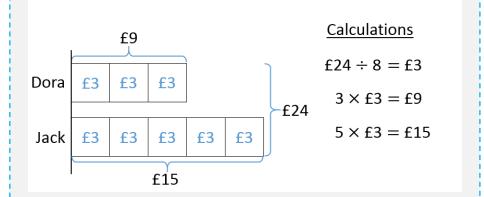
The industrial revolution and life in the factories: Key ideas

- •The industrial revolution ended the domestic system, using the new power of steam and new machines to produce goods in factories.
- •Workers moved from the countryside to the towns, to take jobs in the factories, especially the textile mills. Conditions in the factories and mills were harsh:-
- ·Long working hours: 14 hours a day, longer in busy periods.
- ·Low wages: all workers were paid badly with women and children paid much less than men
- •Pauper Apprentices were not paid and were often treated cruelly: there was frequent "strappings"; other punishments included hanging iron weights around children's necks or hanging them above machinery
- For adults there was a system of fines: for talking or whistling, being late or having dirt on a machine etc.
- Frequent accidents: from forcing children to crawl under dangerous, unguarded machinery & long hours meant exhausted children had accidents.
- Health: cotton thread had to be spun in damp, warm conditions. Going straight out into the cold night air led to many cases of pneumonia. The air was full of dust, which led to chest/breathing problems.
- Living conditions in the towns and cities were terrible, leading to sickness and disease.

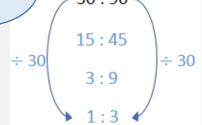


Share a whole into a given ratio:

Dora and Jack share £24 in the ratio 3:5 How much money do they each receive?



Simplify Ratio:



Always make sure the units are equal before

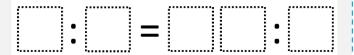
Your final answers should be integers

What should I be able to do?

- Simplify any given ratio
- Share an amount in a given ratio
- Solve ratio problems given a part

Challenge:

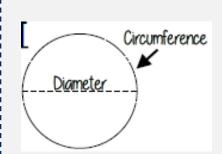
Using the digits 0 to 9, no more than once, complete this ratio with a unit rate that has the greatest possible value



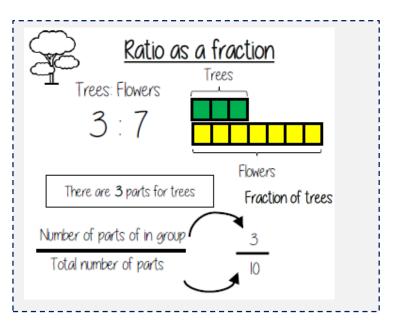
Maths Autumn Term 1a RATIO AND SCALE



Circumference of a circle:



The ratio of a circles' circumference to it's diameter is 3:1



What should I be able to do?

- Solve problems and explain direct proportion
- Use conversion graphs to make statements, comparisons and form conclusions
- Understand and use scale factors for length

Proportion, Variable, Approximation, Scale Factor, Currency, Conversion, Axes **Direct Proportion:** As one variable changes, the other changes at the same rate. **This is a multiplicative change.**

A recipe for 6 pancakes uses 300 ml of milk.

How much milk is needed to make 3 pancakes?

For every 6 pancakes there is 300 ml of milk.

For every 3 pancakes there is 150 ml of milk.

How much milk is needed to make 18 pancakes?

Pancakes: Milk

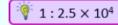
× 3 6 : 300 ml × 3

This multiplier acts in the same way as with ratio

Interpret maps with scale factors:

1 cm on the map is 25 000 cm in real life.

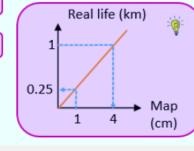
1 cm : 25 000 cm



1 cm : 250 m

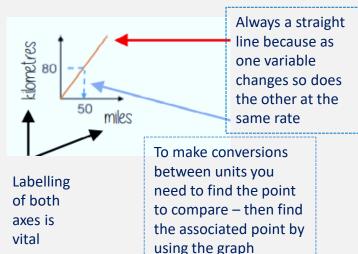
1 cm: 0.25 km

4 cm on the map is 1 km on the ground.



Ratios need to be in the same units

Conversion Graphs: Compare two variables



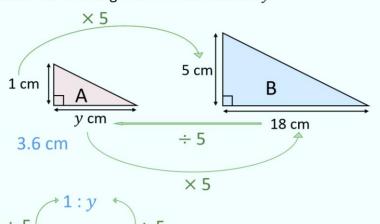
Maths Autumn Term 1b MULTIPLICATIVE CHANGE



Similar Shapes: Angles in similar shapes do not change

Triangles A and B are similar.

Work out the length of the side marked y.



Conversion between currencies:







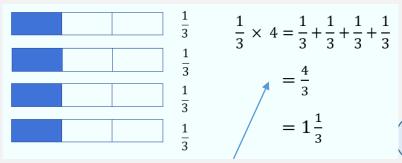


v = 3.6

Currency can be converted using a conversion graph.

It is directly proportional

Repeated addition = multiplication by an integer:



When adding fractions with the same denominator, add the numerators

Dividing Fractions:

$$\frac{1}{3} \div \frac{7}{8} = \frac{1}{3} \times \frac{8}{7} = \frac{8}{21}$$

Multiplying by the reciprocal gives the same answer.

What should I be able to do?

Carry out any multiplication or division using fractions and integers

Numerator,
Denominator,
Whole,
Commutative,
Dividend, Divisor,
Quotient, Reciprocal

Multiplying by cancelling down:

$$\frac{5}{2} \times \frac{3}{4}$$
 the 3 and 6 have a common factor and can be simplified

The Reciprocal: When you multiply a number by it's reciprocal the answer is always 1

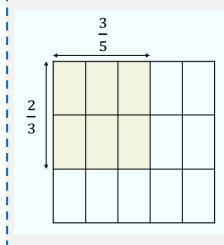
$$3 \times \frac{1}{3} = \frac{1}{3} + \frac{1}{3} + \frac{1}{3} = 1$$

The reciprocal of 3 is $\frac{1}{3}$ and vice versa

Maths Autumn Term 1c MULTIPLYING AND DIVIDING FRACTIONS



Quick Multiplying:

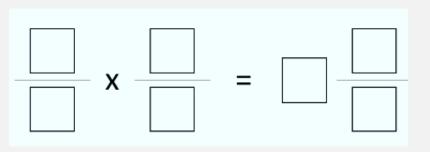


Use a diagram or multiply the numerators and multiply the denominators.

Make sure you check to see if the answer can be simplified

$$\frac{3}{5} \times \frac{2}{3} = \frac{6}{15} = \frac{2}{5}$$

Challenge Question: Using the digits 1 to 9, at most once, fill in the boxes to make a true statement



Music – Keyboard skills / Ostinatos

		S+J
The speed of the music. Italian musical	Peer feedback prompts	

Pitch	High	The highness or lowness of a sound.
	Low	
	Stepwise	Moving one note at a time
	Leap	Jumping to the next note.
Articulation	Smooth	Playing notes in a long, smooth way
	Legato	
	Detached	Playing notes in a short, detached,
	Staccato	spiky way.
Dynamics	Loud	The volume of the music. Italian mu-
	Soft	sic terms are used to describe this.
	<i>pp</i> pianissimo	Very quiet
	p piano	Quiet
	<i>mp</i> mezzo piano	Moderately quiet
	<i>mf</i> mezzo forte	Moderately loud
	<i>f</i> forte	Loud
	<i>ff</i> fortissimo	Very loud
	Crescendo	Gradually getting louder
	Diminuendo	Gradually getting quieter

Tempo	Fast	The speed of the music. Italian musical	
	Slow	terms are used to describe this.	
	Lento	Slow	
	Andante	At a medium (walking) pace	
	Moderato	At a moderate speed	
	Allegro	Fast	
	Accelerando (accel)	Getting faster	
	Rallentando (rall)	Getting slower	
Duration	Long	The length of a sound or note	
	Short		
Texture	Thin texture	A solo or small number of instruments	
	Thick texture	Lots of instruments.	
Timbre	Sonority	Instrumentation – the unique sound or	
	Instrumental sound	tone quality of different instruments,	
		voices or sounds.	

Key word bank

Major = ⊕ Minor = ⊖

WWW EBI What went well... Even better if... Self-reflection What step are you working at? What do you need to do to achieve the next step? Note names and durations

Quaver Crotchet Minim Semibreve





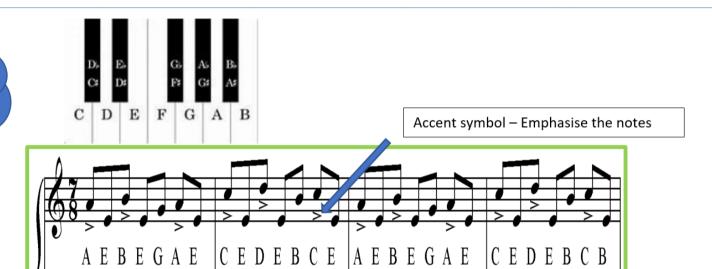
½ beat

1 beat 2 beats 4 beats

Dissonance -Notes that clash together to create suspense

Accelerando – When the music gradually gets faster

Riff/Ostinato – A repeated pattern



Key Skills:

- Controlling the ball using different parts of the body this could be the feet or thigh. Remember to cushion the ball.
- Passing there are 3 types of passes. Side foot pass, driven pass with the laces and a lofted pass. Using the side of the foot allows you to pass accurately over a short distance, a driven pass allows you to pass the ball on the floor, but a greater distance. Finally, a lofted pass allows you to lift the ball in the air over players and change direction. Remember to keep your standing foot next to the ball when you make the pass.
- Dribbling dribbling allows you to move the ball quickly around the pitch using the inside and outside of your feet and keeping the ball close to your feet and your head up.
- Turning with the ball and outwitting a defender turning with the ball allows you to change direction using different techniques, such as dragging the ball back with the sole of your boot. Outwitting and opponent allows you to beat a defender using different techniques such as a step over.
- Shooting there are different types of shots that allows you to score goals. You instep can be used to control and place the ball into the goal. If you use your laces then this allows more power to be produced.
- Heading you can use an attacker header, a defensive header or a controlled header, which might be passing the ball back to someone with your head.
- Attacking keeping possession making a number of passes allows your team to keep possession and advance up the field.

Tackling techniques – tackling, jockeying and forcing the player onto their weaker foot.



Basic Rules

- 1. Game is started by kicking the ball from the centre spot.
- 2. The U12 game has 9 players goalkeepers, defender, midfielders and attackers.
- 3. Referee and two assistants with officiate the game.
- 4. If a ball goes over a touch line a throw in is taken (kick in on the astroturf). If an attacker kicks over the goal line it is goal kick and if a defender kicks it over the goal line it is a corner.
- 5. To score the ball must cross the opposition's goal line.
- 6. The offside rule also applies where an attacker is in front of all opposing defenders when the ball is kicked.



PE Department – Year 7 Netball

Key Skills:

Passing and receiving –including chest pass, bounce pass, shoulder pass and overhead pass.

Attacking – getting free from an opponent in order to receive the ball. Includes sprinting, dodging and changing direction.

Shooting – With one hand under the ball and the other steadying it at the side, keep your eyes on the hoop, bend your knees and push the ball with the fingers.

Defending – Marking your opposite player both with and without the ball.

Footwork – You must land with a 1-2 landing or with 2 feet. You must then not move the landing foot.

POSITIONS

Goal Shooter (GS) – Can only play in their attacking goal third. Marks the GK. Goal Attack (GA) – Plays in the goal third and centre third. Marks the GD. Wing Attack (WA) – Plays in the centre third and their teams attacking third. Marks the WD.

Centre (C) - Only player to be able to play in all 3 thirds. Marks C.

Wing Defence (WD) – Plays in centre third and their defending third. Marks the WA.

Goal Defence (GD) Plays in the centre third and their defending third. Marks the GA

Goal Keeper (GK) Can only play in their defending goal third. Marks the GS

Key content and Terms to learn

Passing and receiving

Shooting

Attacking

Defending

Footwork

Contact

Dodging



Rules: The game starts with a centre pass and the ball must be caught in the centre third. You must comply with the footwork rule e.g. a 1-2 landing.

You only have 3 seconds to release the ball.

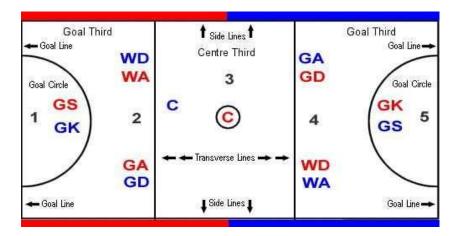
When defending you must be 1 metre away from the player.

There must be no contact with an opposing player.

Only GS and GA may score a goal.

You must stay in the correct area of the court for your position Teams take it in turns to take a centre pass.

The ball must be touched in each third of the court.



Take your learning further

- Watch an international or super league game of netball online. You could use England Netball | Home
- Draw a court and mark on the positions for 2 teams in different colours.



PE Department - Fitness

Key Skills: Components of Fitness/ Tests for Components of Fitness:-

Muscular endurance- The ability to use muscles repeatedly for a long period. 1 Minute Sit-Up Test &

1 Minute Press-Up Test

Cardiovascular/Aerobic Endurance - Being able to exercise the whole body for a long period using oxygen and nutrients efficiently. Cooper 12-Minute Test; multi stage & Harvard Step Test Muscular Strength- The amount of force that muscle produces in one contraction. Grip Dynamometer

Flexibility- The range of movement possible at a joint. Sit and Reach Test **Body Composition**The measure of how much of your body is made up of fat-free mass, vital organs and fat. Body
Mass Index

Agility- The ability to change direction at speed (quickly) without losing balance. Illinois Agility Run Test

Balance- The ability to maintain centre of mass over a base of support. Stork Balance Test **Co-ordination-** The smooth flow of movement needed to perform a motor task efficiently and accurately using two or more body parts together.

Alternate Hand Wall Toss Test

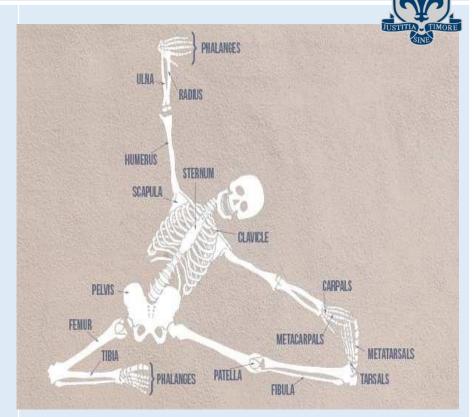
Power- Speed X Strength Vertical Jump Test

Reaction time- How quickly someone can react to a stimulus. Ruler Drop Test **Speed-** How quickly an object or human moves from 'A' to 'B'. 30m/40mSprint Test

Stretch and Challenge Task:

Link the Components of fitness to specific Sports/activities.

Describe Training that could be undertaken to improve components of Fitness



Key Content and Terms to learn:

Endurance; Aerobic; strength; Flexibility; Agility; Balance; Coordination; Power; Reaction Time; Speed and Body Composition.

Glossary of Key Vocabulary

Bible – From the Latin *Biblos;* the Christian holy book also called the Word of God.

Old Testament – the first section of the Bible containing the story of Creation, the history if the Israelites and the prophecies of Jesus.

New Testament – the second section of the Bible containing the life and teachings of Jesus and the early church.

Gospels – means 'good news' – the books of Jesus' life written by Matthew, Mark, Luke and John.

Prophecy – a message from God to his people. **Deuterocanonical** – the 7 extra books in a Catholic Bible.

Pope – the head of the Roman Catholic Church.

Apostolic Succession – the unbroken line of popes from St Peter to the Pope Francis today. **Magisterium** - the teaching authority of the Roman Catholic Church, made up of the Pope and Bishops.

Catechism - the summary of the doctrine (principles) of the Roman Catholic Church. **Laity** – ordinary baptised members of the church.

Vocation – a divine call to God's service or the Christian life.

Disciple – a follower of Jesus.

Canonisation – when the Pope declares someone a saint.

Year 8 RE Autumn 1 – The Bible and Church





Overview

This half term you will learn all about the origins and importance of the Bible for Christians and how the magisterium helps Catholic Christians understand the Bible today. You will learn about how the teachings of the Bible lead people to have a vocation in life, considering the examples set by our form patrons.

Hebrews 1 Peter 2 Peter 1 John 2 John 2 John 2 John 2 John 3 John 4 ACTS BIOLIEPIANS 1 LORINTHIANS BIOLIEPIANS 1 LORINTHIANS BIOLIEPIANS 1 LORINTHIANS BIOLIEPIANS 1 LORINTHIANS BIOLIEPIANS CERRICAL AMOS AMOS CERRICAL COLONICIOS CERRICAL AMOS CERRICAL AMOS CERRICAL AMOS CERRICAL COLONICIOS CERRICAL AMOS CERRICAL AM

Key Sources of Wisdom and Authority (Religious Teachings):

- "All scripture is God breathed." (2 Timothy 3:16)
- "You are Peter and on this rock I will build my church." (Matthew 16:18)
- "Go and make disciples of all nations." (Matthew 28:19)

Checklist of what you will learn this half term:

- ☐ The Bible; what it is, how we use it, where it came from and its importance today.
- ☐ Apostolic Succession
- ☐ The Magisterium and Catechism
- ☐ The role of priests and nuns in the Catholic Church
- Vocation
- ☐ Form Patrons





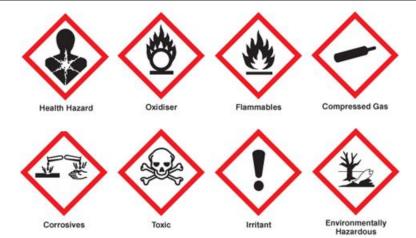
Science - Working Scientifically

Below are some important safety rules, which should always be followed in a laboratory (lab)

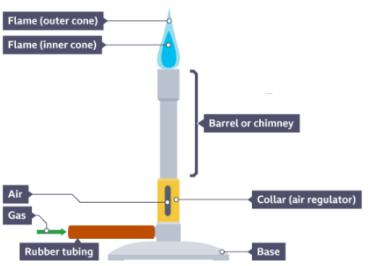
- Always wear eye protection during a practical.
- Carry out a practical while standing up.
- Do not eat or drink in the laboratory.
- Tie long hair back and tuck loose clothing in during practicals.
- If something is spilled or broken, tell the teacher.
- Ensure that the floor and work space is clear of obstacles.

Hazard symbols show people how dangerous a chemical is, and what care should be taken when handling them.

Symbols can be used all over the world and are immediately recognisable, so it does not matter which language is used



Bunsen burner



Air hole	Flame	Use
Fully open	Roaring flame	Heating strongly
Partly open	Blue flame	Heating gently
Closed	Safety flame	When not in use

How to use a Bunsen burner:

- 1. Make sure there are no breaks or holes in the gas hose.
- 2.Put the Bunsen burner on a heat-resistant mat, making sure it isn't near the edge of the bench.
- 3. Turn the collar to ensure the air hole of the Bunsen burner is closed.
- 4.Hold a lit splint 1-2 cm above the top of the barrel of the burner.
- 5. Turn on the gas at the gas tap, and the Bunsen burner will burn with a yellow flame.
- 6.Extinguish the splint and place it on the heat-resistant mat.

Independent variable: The variable that you change Dependent variable: The variable that is measured Control variable: A variable that should be kept the same

Prediction: What you think your results will show and why.

Risk assessment: Identify hazards, the harms they can do and how you will minimize any risks in a practical investigation.

Method: Step-by-step instructions for how to carry out a practical investigation.

Results table: As the practical is carried out, write the results in a table.

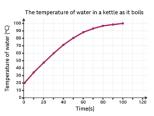
Anomalies: result that is much higher or lower than the general pattern

Calculating a mean

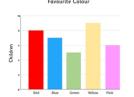
- 1. Check for anomalies circle them and ignore
- 2. Add up the remaining results for that value
- 3. Divide the total by the number of results

The most common ways of presenting data in science are:

 A line graph should be used when the independent and dependent variables are continuous.



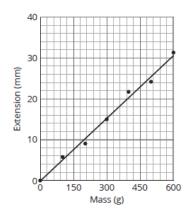
• A **bar chart** should be used if the independent variable is discontinuous .

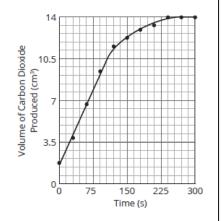


Once points have been plotted for a line graph, draw a line of best fit:

- Does NOT have to go through 0,0
- The line should be drawn through as many points as possible,
- Equal numbers of points above and below the line.
- Anomalies should be ignored.
- ✓ It may be straight







Diagrams are used when drawing practical equipment to make it easier to recognize, and quicker to draw

Name of apparatus	Drawing	2D cross section diagram
Beaker		
Test tube		
Conical flask		
Measuring cylinder		
Tripod		
Gauze		

Name of apparatus	Drawing	2D cross section diagram
Bunsen burner		
Evaporating basin		
Filter funnel		
Condenser	-CHWWWW	
Round-bottom flask		



Science—chemical reactions

Conservation of mass

During a chemical reaction, the atoms are rearranged. There is NO creation or destruction of matter, and so there is no creation or destruction of mass

Total mass of reactants = total mass of products

In chemical reactions where a gas is involved, it may appear that there has been a change in mass...

If a reactant is a gas, it will appear that the mass of the products has increased. An example of that is metal + oxygen \rightarrow metal oxide

If a product is a gas, it will appear that the mass of the products has decreased. An example of that is metal + acid \rightarrow metal salt + hydrogen

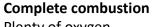
Incompl	ete	com	bust	ion

Limited oxygen available

Air hole closed on a Bunsen burner

Less energy released

The fuel burns incompletely

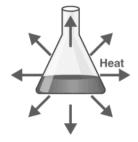


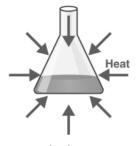
Plenty of oxygen available

Air hole open on a Bunsen burner

More energy released

The fuel burns completely





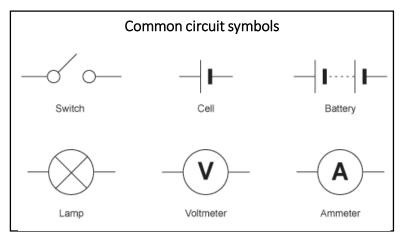
Exothermic

Endothermic

Keyword	Meaning
Reactants	Substances at the beginning of a chemical reaction (before arrow in a word equation)
Products	Substances at the beginning of a chemical reaction (after arrow in a word equation)
Endothermic	Chemical reaction that takes in energy from the surroundings, the temperature decreases
Exothermic	Chemical reaction that releases energy to the surroundings, the temperature increases
Catalyst	A substance that increases the speed of a reaction, without being used up or changed itself
Combustion	When a fuel burns, an example of an exothermic reaction
Complete combustion	When a fuel burns in plenty of oxygen. This releases carbon dioxide and water Fuel + oxygen -> carbon dioxide + water
Incomplete	When a fuel burns when there is a limited supply of oxygen. This also releases carbon monoxide and carbon (in the form of soot)
Thermal decomposition	When a substance breaks down when heated, an example of an endothermic reaction Metal carbonate → metal oxide + carbon dioxide



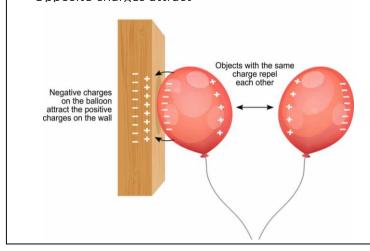
Science – electricity



Static electricity

Electrons can move from one substance to another when objects are rubbed together. You may have done this with a party balloon: if you rub a balloon on your sweater, you can get the balloon to stick to the wall or to your hair. This is because of static electricity...

- Like charges repel
- Opposite charges attract



Series	Parallel	
A		
Components arranged in a single loop	Components arranged on branches	
If one component breaks, all the others will go off	If one component on a branch breaks, the components on other branches still work	
Current is the same everywhere	Current is shared amongst the branches	
Potential difference of the cell(s) is split across the components	Potential difference of the cell(s) is the same on each branch	

Keyword	Meaning
Current	A measure of the rate (speed) of charge (electrons) flowing through a circuit. Measured in Amps – using an ammeter
Potential difference	The difference in energy between two parts of a circuit. Measured in Volts – using a voltmeter
Resistance	A measure of how hard it is for charge to flow. Measured in Ohms

Revision section Important verbs

Important verbs
Soy - I am
Eres - you are
Es - he / she is
Tengo - I have
Tienes - you have
Tiene - he / she has

Writing better sentences

Make your sentences matter by using:

- connectives (y, pero, o, también, porque)
- o intensifiers (muy, bastante, un poco)
- sequencers (primero, luego)
- expressions of frequency (a veces, normalmente).

Haga un click en su país Costa Rica Chile

The points of the compass Norte – nordeste / noroeste Este Sur – sudeste/ suroeste Oeste

Año 8 - Mi casa

¿Dónde vives?

Where do you live?

¿Vives en un piso o en una casa?

Spanish Speaking Nations

To be – WHERE

He / she /it is

I am

You are

We are

You all are

They are

Do you live in a flat or a house?

¿Cómo es tu casa?

What is your house like?

¿Dónde está tu casa?

Where is your house?

Estar

Estoy

Estás

Está

Estamos

Estáis

están

¿Qué hay en tu casa?

What is in your house?

Vivo en Bolton

I live in Bolton

Vivo en una casa.

I live in a house.

Mi casa es grande y bonita.

My house is big and pretty.

Mi casa está en el campo.

My house is in the countryside.

Hay una cocina, y tres dormitorios.

There is a kitchen and 3 bedrooms.

Qualifiers

No muy - not very Muy - very Bastante - quite Un poco - a bit

Demasiado - too

Hola, me llamo Pablo. Vivo en España.
Vivo con mi familia. Vivo en un piso
muy grande en el centro de Madrid.
Me gusta mi casa porque es grande y
bonita pero no tiene jardín y no tiene
garaje. Hay una cocina, dos baños y 4
dormitorios.

Present tense verb endings Person AR ER IR 0 0 0 You as es He/she/it е е We emos imos amos You (you lot) áis éis They an en

<u>Connectives</u>

Y - and Pero - but

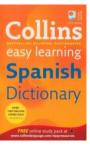
También – also

Porque - because

o- or

How often and when

Todos los días - every day A veces - sometimes Nunca - never Primero - firstly Luego - then



Year 7 revisited

Numbers 1-100 Personal information

Hobbies

Family

School

House

Grammar

Articles

Adjectives - agreement & word

order

Present tense - AR/ ER / IR Irregular verbs - tener / ser/ ir

Stem-changing verbs - jugar





Año 8 - Mi ciudad

¿Qué hay en tu ciudad?

What is there in your city?

¿Qué haces en la ciudad?

What do you do in the city?

¿Qué vas a hacer?

What are you going to do?

¿Te gusta tu ciudad?

Do you like your city?

En mi ciudad hay un polideportivo.

In my city there is a sports centre.

Voy al cine en la ciudad.

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

I go to the cinema in the city.

Voy a salir con mis amigos.

I am going to go out with my friends.

Sí, me gusta porque hay muchos museos.

Yes, I like it because there are lots of museums.



es la una	y cinco
son las dos	y diez
son las tres	y veinte
son las cuatro	y veinticinco
son las cinco	y cuarto
son las seis	y media
son las siete	
son las ocho	menos veinticinco
son las nueve	menos veinte
son las diez	menos diez
son las once	menos cinco
son las doce	menos cuarto

odde nay en 10 cioc	iau: Wildi is illere ill	your lowing	
Нау	There is	una universidad	a university
un castillo	a castle	En	In
un centro comercial	a shopping centre	mi barrio	my neighbourhood
un estadio	a stadium	mi ciudad	my town, my city
un mercado	a market	mi pueblo	my village, my town
un museo	a museum	No hay museo.	There isn't a museum.
un parque	a park	No hay nada.	There's nothing.
una piscina	a swimming pool	unos museos	some museums
una plaza	a square	unastiendas	some shops
un polideportivo	a sports centre	muchos museos	a lot of museums
un restaurante	a restaurant	muchas tiendas	a lot of shops
una tienda	a shop		

PLURAL Masculine Feminin **Indefinite** Unos Unas article -a Definite Los Las article - the Quantifier Muchos

Weachtepping stone: THE NEAR FUTURE TENSE - 'going to do'

Present tense of IR + A + INFINITIVE

Voy a visitar mis amigos – I am going to visit my friends.

Va a hacer los deberes – he is going to do his homework.

Vamos a jugar en el parque – we are going to play in the park. Van a ir de paseo – They are going to go for a walk.

Next steps in learning

Have you ever studied another language? What similarities can you find? How can learning one language help you learn the next one and the one after that?

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

Most imporant verbs

IR – to go

Present tense

Voy – I go

Vas – you go

Va – he / she goes

Vamos – we go

Vais – Youse go

Van – they go

Tiempo libre – free time

Voy de compras – I go shopping No hago nada – I don't do anything

Salgo con mis amigos – I go out with my friends

Voy al cine – I go to the cinema Voy al parque – I go to the park Voy a la cafeteria – I go to the café

Voy a la playa – I go to the beach Voy a la bolera – I go bowling Voy de paseo con mi famila – I go for a walk with my family.

Fly ahead

Fiestas! Look up different FIESTAS in Spain. How are they similar how are they different from eachother? What is the main difference between each one? Which interests you the most?