Contents

My Knowledge Organiser

What is a Knowledge Organiser?

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 will not understand much of what is included. Gradually, as you work on the content in lessons and at home, 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.
- working on them in lessons and coming up with ways to memorise the information in them.
- working on 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 as homework or to help with homework.

What do I need to know?

This knowledge organiser has been given to you. It is an essential part of school equipment and you must bring it to school everyday. You must have your knowledge organiser with you for each lesson. Fill in your timetable in pencil and use it to plan your equipment each day. Test yourself on the knowledge in this booklet regularly; in class, at home, on the bus, or with help from friends and family. There are some activities for you to do in this knowledge organiser. Don't write in the booklet – use paper so that you can test yourself regularly and see the progress you are making. Sometimes you will use these booklets in cover lessons and for homework.

If you lose your Knowledge Organiser make every effort to find it. They are valuable, look after them. If you can't find it you will be charged for a new one.

- Fill in your timetable very carefully in pencil. Include the teacher's name, the subject and the classroom. Try to learn your timetable off by heart.

Week A								
	Form 8.25-8.45	Lesson 1 8.45-9.45	Lesson 2 9.45-10.45		Lesson 3 11.00-12.00		Lesson 4 12.45-1.45	Lesson 5 1.45-2.45
Monday	Form time or Assembly			Break		Lunch time		
Tuesday								
Wednesday								
Thursday								
Friday								

- Fill in your timetable very carefully in pencil. Include the teacher's name, the subject and the classroom. Try to learn your timetable off by heart.

Week B								
	Form 8.25-8.45	Lesson 1 8.45-9.45	Lesson 2 9.45-10.45		Lesson 3 11.00-12.00		Lesson 4 12.45-1.45	Lesson 5 1.45-2.45
Monday	Form time or Assembly			Break		Lunch time		
Tuesday								
Wednesday								
Thursday								
Friday								

Punctuality and Attendance

It is vital that pupils attend school every day and on time. There is a proven link between attendance, attainment and progress. At St Joseph's we expect all pupils to aspire to 100% attendance and for pupils to be on the school site *before* 8.25am.

If a pupil is going to be absent we ask that a phone call is made to school on the first morning of absence before 8.25am. If contact is not made the school will contact parents / carers. Please send a letter in explaining your child's absence on the first day they return to school.

School attendance is monitored daily and a letter will be sent to parents immediately attendance becomes a cause for concern. Further action may be taken and this may include; further letters home, a school attendance meeting, a fixed penalty notice (fine).

It is important to be on time for school and lessons. Lateness can affect everybody's progress. For this reason, pupils arriving persistently late will be given a detention. Where lateness is not improving school will apply further sanctions and seek parental support.

Holidays or any other events during term-time are strongly discouraged as this can have a detrimental effect on your child's progress, as well as that of others in their class. In almost all cases schools will not authorise holidays take in in term time and this may result in sanctions from Education Welfare Services. We appreciate your ongoing support in this matter.

My attendance term 1	_____ %
My attendance term 2	_____%
My attendance term 3	_____ %

Catholic Life and Mission at St Joseph's

With Christ at the centre, our school seeks to exemplify faith in action, working for justice and compassion, manifest in acts of charity and kindness. We work for those in need, and instil an ethos of care, kindness, and respect. As an inclusive family, we seek to help and care for the most vulnerable and marginalised. Our community is built upon values, which are inspired by the Gospel and the Church. Our values are visible in the environment, relationships, interactions, and our day-to-day life.

#Walk on Water
Will you get out of the boat of your comfort zone, look to Jesus, and achieve beyond your wildest imagination?

Dear young people, make the most of these years of your youth. Don't observe life from a balcony. Don't confuse happiness with an armchair, or live your life behind a screen….Don't be parked cars, but dream freely and make good decisions. Take risks, even if it means making mistakes….. Live! Give yourselves over to the best of life! Open the door of the cage, go out and fly!

Pope Francis, Christus Vivit 143

Christ has no body but yours,
No hands, no feet on earth but yours,
Yours are the eyes with which he looks
Compassion on this world,
Yours are the feet with which he walks to do good,
Yours are the hands, with which he blesses all the world.
Yours are the hands, yours are the feet,
Yours are the eyes, you are his body.
Christ has no body now but yours,
No hands, no feet on earth but yours,
Yours are the eyes with which he looks compassion on this world.
Christ has no body now on earth but yours.
— Teresa of Ávila

All adults at St Joseph's are here to keep you safe

If you have any worries or concerns
please speak to any adult

You WILL be listened to!

They may need to discuss these worries with Mr Singleton, Mrs Anderton, Mr Sylvester or Miss Tebay in order that your issue is dealt with. The websites below may also be helpful out of school time:

www.stjosephsbolton.org.uk/wellbeing-support

St Joseph's Curriculum Structure

Academic Curriculum

Year 7 | Year 8 | Year 9 | Year 10 | Year 11

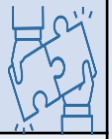
Character Curriculum

PSHEE | RSE | SMSC | Link4Life | Careers | FBV | Citizenship | Enrichment

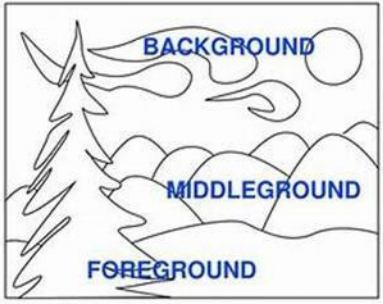
Confidence	Curiosity	Commitment	Compassion	Consideration	Collaboration
- Aspirational - Self-esteem - Individuality - Communication - Self-regulation	- Enquiry in lessons - Engagement - Love of learning	- Resilience - Work hard - Homework - Motivated - Attendance - Determination	- Empathy - Understanding - Respectful - Behaviour towards others - Charity work - Kindness	- Punctuality - Organisation - Engagement - Celebrating differences - Using manners	- Community - Friendship - Extra-curricular and enrichment - Participation - Leadership - Uniform

Personal Development Curriculum

Link4Life

Confidence	Curiosity	Commitment	Compassion	Consideration	Collaboration
Genesis 1:27 "God created man in his own image" 	*Philippians 14:9 "Whatever you have learned or heard or seen from me, put it into practice"* 	*Proverbs 16:3 "Commit to the LORD whatever you do"* 	*John 13:34 "Love one another: just as I have loved you"* 	*Galatians 5:13 "Serve one another humbly in love"* 	*Corinthians 12:12 "We are one body in Christ, together"* 

ART



- Andre Derain
- Vincent Van Gogh
- Paul Cezanne
- Alice Sheridan

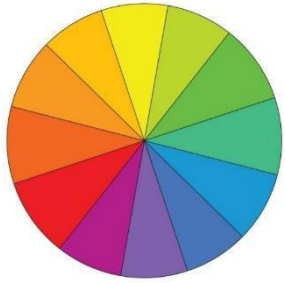
The Formal Element	Definition
Line	The path left by a moving point, e.g. a pencil or a brush dipped in paint, that can take many forms. e.g. horizontal, diagonal or curved.
Tone	The lightness or darkness of something. This could be shade or how dark or light a colour appears
Texture	The surface quality 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.

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 is.
Background – Objects that are furthest away from the viewer.
Middleground - Objects that are in the between the foreground and background.
Foreground – Objects that are closest to the viewer.

ART

How would you describe a **horizon line**?	
How would you describe **perspective**?	
What is the **background** in a landscape?	
What is the **middleground** in a landscape?	
What is the **foreground** in a landscape?	

Colour Theory	
What are the **3 Primary Colours?**	
What are the **3 Secondary Colours**?	
What is a **Tertiary Colour?**	



ART

The formal element	Definition
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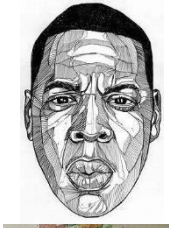


- Paul Gauguin
- Leonardo Da Vinci
- Frida Kahlo
- Johannes Vermeer
- Luke Dixon
- Mark Powell
- Kirsten Britt

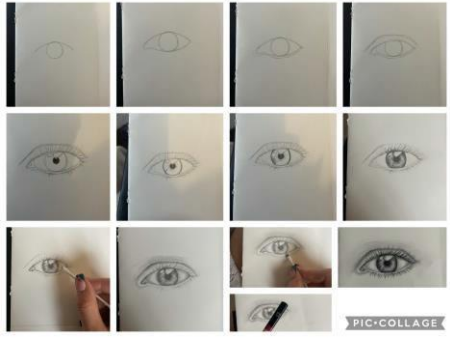
PORTRAITS WORD BANK

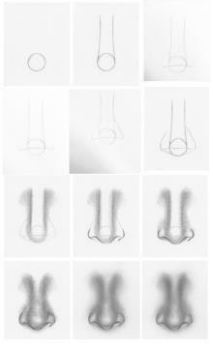
- Media- Materials and Tools used to create a piece of Art work.
- Mark Making- Describes the different lines, patterns and textures.
- Composition- How something is arranged
- Blending- To create a gradual transition.
- Continuous Line/Contour Drawing- To create one continuous line of drawing.
- Observational Drawing- To look at an object/ photograph and draw exactly what you see.

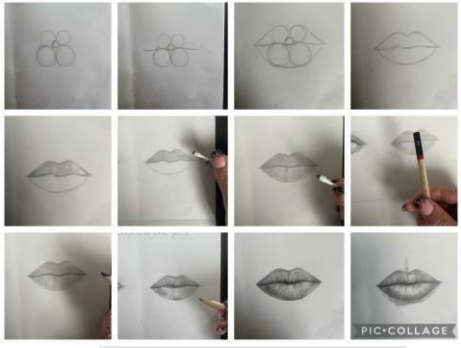
ART

How would you describe a **media?**	
How would you describe a **mark making?**	
What is a **Composition** in art?	

Practice drawing the eyes, nose and mouth in the boxes below







Computing

iDEA Badges (homework)

The iDEA Awards are the digital equivalent to the Duke of Edinburgh Award.
You can achieve the Bronze, Silver and Gold Award and these can be included on CV's in the future to show that you have a high level of digital literacy and help you to stand out from peers. We will work to complete the Bronze Award this year (although some students work faster and achieve Silver also).
You have signed up to this using your school email (see format below) and a password that you have chosen. If you forget your password click on the forgot password link to send a reset email to your school email account.
The below iDEA award badges need to be completed in the first half of the year. Your class teacher will tell you which ones to complete each half term.
School email format: last 2 digits of the year that you have started, surname, first initial@st-josephs.bolton.sch.uk (please not there are no spaces) Example: 23BloggsJ@st-josephs.bolton.sch.uk

Citizen Section

Badge	Done?
Foundation	
Activation	

Worker Section

Badge	Done?
Foundation	
Activation	

Maker Section

Badge	Done?
Foundation	
Activation	

Entrepreneur

Badge	Done?
Foundation	
Activation	

Gamer Section

Badge	Done?
Foundation	

Computing

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
No Derivatives—no changes can be made
Non-commercial—cannot profit from it.

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 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 Horse •Spyware •Adware •Worms

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.

Computing

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

What do we mean by copyright?

What is covered under copyright?

What are the creative commons licences?

Sexting

Is it illegal to send nudes to someone who is under 18 (even if both parties are the same age)?

Digital Footprint

What do we mean when we say digital footprint and how can this affect your future?

In your own words explain what sexual harassment is

Cookies

Why would a website use cookies?

Phishing, spam and viruses

Explain the term phishing

Give an example of a virus and how it can affect a PC

Key Terms

Cyberbullying—

Flaming—

Impersonating—

Masquerading—

Browser—

Bias—

Computing

Year 8 A2 - Graphic Design

Helpful websites

https://kids.kiddle.co/Copyright

https://www.youtube.com/watch?v=8gJ5hkhYLs8

https://www.photopea.com/

https://sites.google.com/view/

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:

Fair Use/Fair Dealing Policy

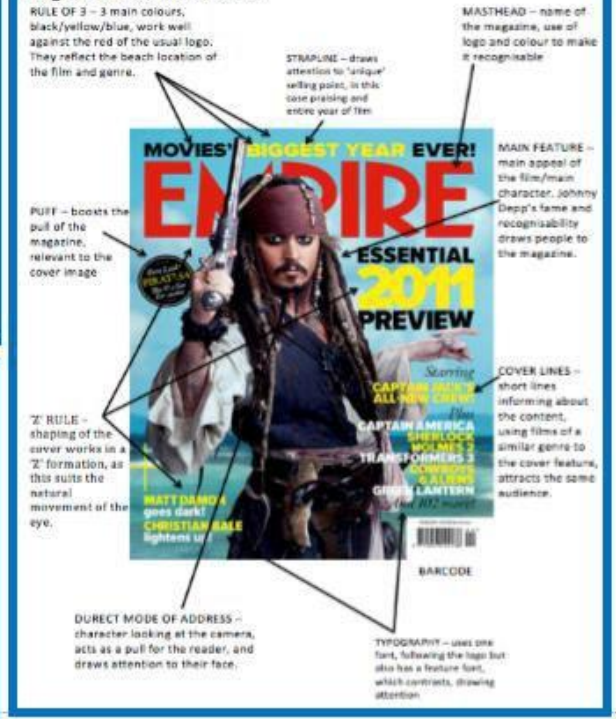
There are four situations where works can be used without permission.

- Education
- Parody
- Criticizing
- News Reporting

You do not need permission in these situations so long as

- You only use a small part of the original work
- Credit the original owner

Magazine Cover Features



Key Vocabulary

Masthead - name of magazine. Stands out the most

Strapline - text used to capture attention

Copyright - legislation to prevent other people stealing work

Creative Commons - Licenses which can be applied to say how work can be used.

Fair Dealing - certain situations where wou=rk can be used without owners permission.

Computing

Year 8 A2 - Graphic Design

Helpful websites

https://kids.kiddle.co/Copyright

https://www.youtube.com/watch?v=8gJ5hkhYLs8

https://www.photopea.com/

https://sites.google.com/view/

Photopea/Photoshop Tools

Key Vocabulary

Editor - software which can be used to edit graphics.

Graphic - visual art

Magic Wand - common tool from editing software. Used to select parts of a graphic and remove.

Transformation - The Transform tool allows for multiple resizing, scaling, warping and perspective changes

Pixels/Pixelated - term used in computer graphics to describe blurry sections or fuzziness in an image due to visibility of single-coloured square display elements or individual pixels.

Computing

Year 8 A2 - Graphic Design

Helpful websites

https://kids.kiddle.co/Copyright

https://www.youtube.com/watch?v=8gJ5hkhYLs8

https://www.photopea.com/

https://sites.google.com/view/

Copyright, Creative Commons licenses and Plagiarism

What are the consequences of not following copyright laws?

Are you an owner of copyright?

Explain the creative commons licence, attribution and what this means?

Fair Use/Fair Dealing Policy

Explain when fair use policy applies?

Magazine Cover Features

Label some of the features of the magazine cover below and explain the design choices

Key Vocabulary

Masthead -

Strapline -

Copyright -

Creative Commons -

Fair Dealing -

Computing

Year 8 Sp1 - Small Basic

Operator	Meaning
==	Equal to
!=	Not equal to
>	Greater than
<	Less than
=>	Equal or more than
<=	Equal or less than

Key Term	Description
Code	The instructions for the computer telling it how to function
Input	Where data is entered into a computer by a user/human
Output	Where data is displayed by the computer. Examples include: text, images, sound, or video displayed on a monitor or through speakers.
Syntax	The rules for how the code is written.
Syntax error	Where the code doesn't work because of a mistake in the code or because of how it is written.
Logic error	A logic error is where the code works but it doesn't give the result that you wanted
Variable	A place to store a single piece of data
Selection	Where code is only run if something is True as if the computer is making a decision
Intellisense	Where the program tries to guess the code you are writing. Similar to autocorrect
Loop	Where code repeats. It can repeat forever, a set number of times or until a condition is met

Key Term	Description
Editor	The area in Small basic where you type the code
Graphics window	The window where drawings are made by the computer based on your instructions/code.
Text window	The window where text appears when running your program. Programs can print text to this window or the user can write text into it
For Loop	Allows you to run a piece of code a set number of times. The following example will print out numbers from 1 to 10 For i = 1 To 10 TextWindow.WriteLine(i) EndFor
While Loop	Allows you to repeat code forever or until a condition has been met The following code will print a set of random numbers until one that is greater than 100 is encountered. While i < 100 i = Math.GetRandomNumber(150) TextWindow.WriteLine(i) EndWhile

Key Term	Description
IF	Allows you to make something happen IF a certain parameter is met i.e. IF colour = "red" Then TextWindow.WriteLine ("That's my favourite too")
Math.RandomNumber()	Randomly generates a number up to the number entered in the brackets.

Helpful websites

https://smallbasic-publicweb-site.azurewebsites.net/

Computing

Year 8 Sp1 - Small Basic

Operator	Meaning
==	Equal to
!=	Not equal to
>	Greater than
<	Less than
=>	Equal or more than
<=	Equal or less than

Key Terms	Description
Code	
Input	
Output	
Syntax	
Syntax error	
Logic error	
Variable	
Selection	
Intellisense	
Loop	

Key Terms	Description
Editor	
Graphics win-dow	
For Loop	
While Loop	

Key Terms	Description
IF	
Math .Ran-dom Num ber()	

Helpful websites

https://smallbasic-publicweb-site.azurewebsites.net/

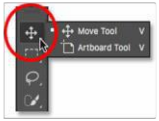
Design and Technology – Digital Graphics

Keywords	Definitions
Graphics	Graphic design is using Compter software to create images. A graphic designer creates the images that can be published, printed, or electronic media, such as brochures and advertising.
Layer	In Photoshop each layer is one image stacked on top of another to form a complete image.
Brand	A brand is a name, term, design, symbol or any other feature that distinguishes one company to another.
Layout	Layout is the arrangement of fixed items such as image, text and style on a page.
Logo	Logos are images, texts, shapes, or a combination of the three that depict the name and purpose of a business
Client	The client is your customer. The person who will be using what you have created.
Cut	A designer can cut out or crop unnecessary parts of an image to improve framing, highlight a specific subject.
Copy and paste	Copy and paste are commands in a computer as a method of transferring data from one location to another.
Typeface	Typeface means the font. There are various styles on Typefaces (fonts).
Resolution	The detail of an image based on the number of pixels is known as resolution. An image looks clearer when it has a higher resolution.
Pixels	Pixels are square-shaped dots that make a digital raster image. The more pixels an image has, the higher its resolution.
Opacity	Opacity is the transparency of an image. The more transparent and image, the lower its opacity.
Hue / Saturation	Hue is pure color. Saturation is defined by the intensity of color.
JPEG, PNG, PSD,	File Formats. JPEG and PNG (Image that cannot be edited) PSD is the Photoshop Document that you can go back to and edit.
Composition	Composition is the arrangement of design elements that form a whole image.

WISDOM HAS BUILT HERSELF A HOUSE.
Department of Design and Technology.

Design and Technology – Digital Graphics

Remove specific areas with the magic wand



Click on the image you want to edit with the Move tool

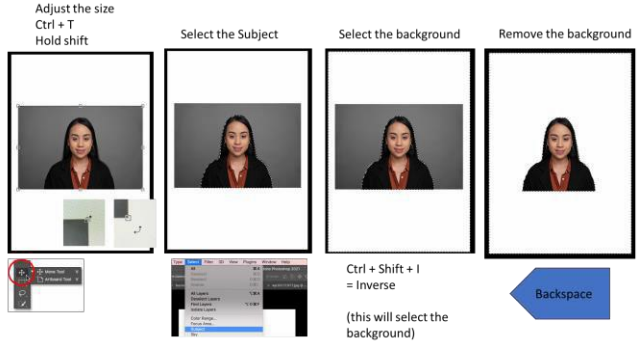
Select the Magic Wand
It might be behind the quick selection tool so to find it click and hold to see the tools behind it

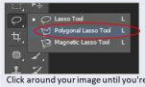
With the magic wand, click what you want to remove

Ctrl + D = Deselect

Backspace

Remove a background on Photoshop



Tool Bar	Select	Edit	File
Move tool 	Deselect Ctrl + D	Undo Ctrl + Alt + Z	Open New File > New > Print > A4
Size of image (Ctrl + T) -Hold shift to keep in shape -Enter, when done 	Select > Subject (person or object) 	Redo Ctrl + Y	Open (Recent) Files > This PC > your area E.g. (21jonesk@st-josephs...)
Magic Wand 	Inverse Ctrl + Shift + I (Backspace to remove)	Cut Ctrl + X	Save as SAVE IT IN YOUR AREA (21jonesk@st-josephs...)
Polygonal lasso tool  Click around your image until you're back to the start and the small circle appears	Size of image (Ctrl + T)  -Hold shift to keep in shape -Enter, when done	Copy Ctrl + C	Film images
Eraser 	Colour range 	Paste Ctrl + V	Robot imagery bank Files > This PC > Students > Year 7 > Design and technology > Graphics > Imagery for Robot me

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.

What is the keyboard shortcut for –
Copy Paste Cut Save Undo Redo Inverse Size

Define the following words –
Layer

Typeface Resolution Opacity

Hue / Saturation Pixels

What is the name of the free web based programme you can use to practice at home?

Year 8 Digital Graphics

Find a piece of graphic design work. Label it to show where you can see where pixels may be, or where typography may have been used, or where the hue or saturation may have been altered.

WISDOM HAS BUILT HERSELF A HOUSE.
Department of Design and Technology.

D & T Food

Tooth decay

Sugar is a leading cause of tooth decay. Every time we eat or drink foods containing starches or free sugars a sticky film builds up on the enamel of the teeth, this is called plaque.
Bacteria feeds on the plaque and turns it into acids. The acids gradually erode the protective white enamel surface of the teeth, leaving a hole into which bacteria can enter and cause an infection and eventual decay of the tooth. Tooth decay can be avoided by limiting sugary foods and drinks, brushing teeth twice a day and drinking water after meals to cleanse the mouth.

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

The government recommend that 50% of the food that we eat daily should be carbohydrates, most of which come from starch and naturally occurring sugars. The recommended daily amounts of free sugars are shown below

- Children aged 4-6 – 19g **(4 teaspoons)**
- Children aged 7-10 – 24g **(5 teaspoons)**
- Children aged 11-adults – 30g **(6 teaspoons)**

Bridge hold

Claw Grip

Type 2 diabetes

Glucose enters the bloodstream after it has been absorbed from the food we eat. In order to get into the bodies cells (muscles) it needs a hormone called insulin which is produced in the pancreas. Imagine that each of the bodies cells has a door which needs to be unlocked before glucose can get in. The key to unlock the door is insulin. If there are no 'keys' (insulin) the door will stay shut & the glucose will stay in the bloodstream. This is what happens in type 2 diabetes. Symptoms include: feeling weak/tired, weight loss and blurred vision.
Type 2 diabetes can develop in people who eat too many refined/sugary carbohydrates e.g. white bread, rice, cake, sweets. This is because the pancreas has to keep producing lots of insulin to deal with the large amounts of glucose in the blood and eventually the locks on the doors to the bodies cells become damaged.
People who are overweight or obese are more likely to develop type 2 diabetes.

D & T Food

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- Children aged 4-6 – 19g **(4 teaspoons)**
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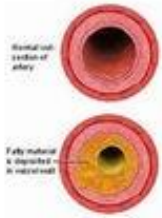

Coronary heart disease (CHD)

The heart has its own blood supply that is brought to it by the coronary arteries, these need to be kept clear inside otherwise the blood will struggle to pass through them & CHD develops. The coronary arteries can become blocked with fatty deposits. If people are overweight or obese, this can put extra strain in the heart as it tries to pump blood around the body leading to CHD. If the heart muscle does not receive enough oxygenated blood because the arteries are blocked, the heart will stop working. This may result in a heart attack which will permanently damage the heart muscle and could result in death.

Saturated Fats

Obesity

All foods contain energy (calories). Obesity is cause by not being in energy balance. If a person consumes more energy than their body uses this will be stored as fat and gradually they will become over-weight or obese. Many processed foods such as snack foods, fast food & cold drinks provide lots of energy (calories) because they contain lots of hidden fat and sugar. The extra weight being carried by the body puts stress and strain on the heart and blood vessels, liver, kidneys, skeleton and muscles. Obesity can lead to serious health conditions such as **heart disease, high blood pressure, cancer, arthritis and type 2 diabetes.**

Key Practical Skills

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

List 3 types of food for each type of carbohydrate:

Complex Carbohydrates (starches)
1
2
3
Simple carbohydrates (naturally occurring sugars)
1
2
3
Free Sugars (refined or processed carbohydrates
1
2
3

1. What types of foods contribute to Coronary Heart Disease?

2. Explain how the arteries become blocked.

3. What can happen if the arteries become blocked?

4. How can we help to prevent CHD?

1. What is obesity?

2. Name at least 5 types of foods which are more likely cause obesity
1
2
3
4
5

3. What damage can being obese do to the body?

1. Which types of foods can cause diabetes type 2?

2. What are the symptoms of diabetes type 2 – how can it make people feel?

3. How can diabetes type 2 be prevented?

1. Which Foods cause of tooth decay?

2. How does tooth decay happen?

3. How can tooth decay be prevented?

4. What does the term 'energy balance' mean?

5. How can people try to stay a healthy weight?

D & T Textiles

In this project you will consolidate your learning from Year 7- using machine sewing skills.
You will learn about fibers and how they are processed to created
different fabrics. You will learn where different fabrics come
from and the properties of various fabrics.
Using a design brief you will complete a task analysis and choose a client to design a product for.
Using the knowledge and practical skills you will design and make a textile product and will used recycled or sustainable fabric of your choice.

Key Words	Explanation
Needle	Used with thread to sew fabric together.
Layplan	A 'Layplan' or 'Layplanning' is a term used to describe the important part of placing templates and cutting them out.
Thread	Used with a needle to sew fabric together.
Stitch Unpicker	This piece of equipment can undo any stitches when you have made a mistake
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.
Pattern	A paper template of the sections of your product
Fibres	Fibers make yarns and yarns are further converted into knitted or woven fabrics of which end products are made using different textile processes.

Layplanning

Pattern cutting

The fibres are short and fluffy → They are brushed in the same direction → They are spun into yarn. → Then they are made into fabric

D & T Textiles

Design Brief and Task Analysis:

- What is a design brief, and why is it important to complete a task analysis before starting your project?
- How do you choose a client for your design, and what factors should you consider?

Recycled or Sustainable Fabric:

- Why is it important to use recycled or sustainable fabric for your textile product?
- Can you give examples of sustainable fabrics and explain their benefits for the environment?

Layplan:

- What is a layplan, and why is it important in Textile projects?
- How can a layplan help you make the most of your fabric when cutting out patterns?

Stitch Unpicker:

-What is a stitch unpicker, and how is it used in sewing?
-Why is it helpful to have a stitch unpicker when working on textile projects?

Fabric:

-What is fabric, and why is it important to understand its properties when choosing materials for a project?
-How do different types of fabric affect the look and feel of the final product?

Pins:

-What are pins used for in sewing, and how do they help during the construction of a bucket hat?
-Why is it important to use pins carefully to avoid damaging your fabric?

Pattern:

-What is a pattern in sewing, and how is it used to create a bucket hat?
-How can you ensure that your pattern pieces are placed correctly on the fabric before cutting?

Fibres:

- What are fibres, and how are they processed to create fabric?

Drama

Developing your ability to **communicate character and story tell.** Using **stimuli, given circumstances and improvisation** to create performances.

Key words	Meaning
Improvise	To make something up not using a script.
Given Circumstance	These are what the playwright gives you, this could be a location, a set of characters
Stimuli	This is a starting point, it could be a picture, song, a piece of dialogue, a book
Development	To make changes to improve you performance to improve.
Creating	The ability to work within a group and develop a performance

Key skills for an effective improvisation:

Creativity
Discipline
Respect
Communication

Actors skills	Definition
Facial expression	Using your face to communicate character feelings or emotions
Gait	The way your character walks
Tone	The way your emotions effect your voice
Emphasis	Putting stress on a word or phrase

Drama

Question	Your answer
What is a stimuli?	
What is gait?	
What are the 4 key skills an effective performance?	
Improvisation is…….	

In this scheme of work what are the 2 things we are focusing on developing?

Looking at the image to the right. How have the actors used facial expressions to show their emotions?

Drama

Developing your ability to **communicate tension and suspense** through a **dramatic performance.** Using a plot line from famous **Urban Myths as a starting point.**

Key terms for the topic	Definitions
Suspense	a state or feeling of excited or anxious uncertainty about what may happen
Tension	a feeling of nervousness before an important or difficult event
Urban Myth	a traditional story, especially one concerning the early history of a people or explaining a natural or social phenomenon, and typically involving supernatural beings or events. They can vary in narrative dependent on who is telling the story.
Development	The process of changing and improvement

Key skills for an effective performance:
Clear story
Build tension and suspense
Setting the scene

Actors skills	Definitions
Gesture	Using your hand or arms to communicate meaning
Proxemics	Use of space and closeness to your fellow actors
Volume	How loud or quiet your voice
Body language	Using your body to communicate how your character is feeling for example scared, shy, annoyed.

Drama

What is the difference between a story and an urban myth?

Question	Your answer
What does suspense mean?	
What is gesture?	
What are the 3 key skills an effective performance?	
What does development mean in drama?	

In this scheme of work what are the 2 things we are focusing on developing?

Can you research 2 urban myths and put the titles below:

Drama

Explore the **theatrical style of Verbatim**. Develop an understanding of why and how Verbatim theatre can be used and deepen understanding of **difficult societal topics**.

Key words	Meaning
Verbatim	Using peoples real word to create a performance. This could include, news reports, court transcripts, interviews, videos, TikToks and much more.
Monologue	A long speech by one actor on stage
Truth	Something that is a fact or reality
Opinions	A view or judgement that belongs to a person, that can be agreed with or disagreed with.
Recorded Delivery	Is a technique used by Alecky Blythe and other Verbatim practitioners to record their interviewees, to make sure their performance is accurate.

Key skills for an effective performance:
Creativity
Discipline Respect
Accuracy with people's words

Actors skills	Definition
Posture	They way your character sits or stands
Pause	Moments of silence within speech, these can add tension or get the audience to think
Tone	The way your emotions effect your voice
Pitch	How high or low your voice is this can show your age or gender.

Drama

What is verbatim used for?

Question	Your answer
What does recorded delivery mean?	
Who is Alecky Blythe?	
What are the 4 key skills an effective performance?	
What is a monologue?	

What are the some of the things we can use to create Verbatim theatre?

Can you think of any other ways to gather information that you could create a script?

English – Freedom & Injustice- What will I study?

In this unit, you will explore the themes of Freedom and Injustice, looking at real world examples with the focus on racism in particular. You will read our key text for this unit entitled 'Windrush Child' by Benjamin Zephaniah. The book, which has been endorsed by Amnesty, is considered an essential read for young people as it depicts the integral contribution the Windrush generation made to Britain but also the issues they faced when arriving to the UK. You will learn about inclusivity and diversity, looking at how the novel gives a voice to a generation of children whose stories have often been overlooked. In Windrush Child, Benjamin Zephaniah brings to life an important moment in modern British history, contextualising the Windrush Scandal, and tracing the terrible impact of the scandal right up to the present day.

English

Plot Summary: Windrush Child

A young boy, Leonard, 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.

Set in 1958, Leonard travels with his mother from Jamaica to England to join his father. The novel follows Leonard as he struggles to adapt to life in Britain.

Although Windrush Child is a fictional story, Benjamin Zephaniah was inspired by historical events when he wrote Windrush Child. He also drew on his own experience of growing up in Britain in the 1960s.

Key Skill: Evaluate

Point	Focus on the question.	I agree that...
Evidence	Refer to a method and quotation	The writer uses...
Analysis	Explain how the method supports your point	This suggests...
Zoom in	Make specific reference to a detail from the method	The use of....
Link / Evaluate	Explain/evaluate how the method further clarifies your point	This further creates a sense of ... through ...

Core Knowledge: Writing to argue

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 and 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?
- Should one man's sacrifice be for the greater good?
- What is meant by democracy?
- Why is community cohesion so important?
- Do you think we can ever be rid of injustice and segregation?

English – Questions – Freedom and Injustice Unit

1. Write the definition of the following word: Injustice
2. What is the term used to describe the action of separating someone or something, to keep people or things apart?

   (a) Compassion (b) Segregation (c) Oppression (d) Prejudice
3. What is a direct address?
4. What does it mean to EVALUATE?
5. What does the word COMPASSION mean?
6. What acronym do we use to write an analytical paragraph? Can you explain what each letter stands for?
7. Explain what it means to persuade someone.
8. What is the name of the writer of 'Windrush Child'?
9. What word, beginning with O, means prolonged cruelty or unjust treatment?
10. What does MALEVOLENT mean?
11. What is the name of the main character in the story?
12. Where does the character travel from and to in the story?
13. Who does the main character leave behind?
14. When is the story set?
15. Who does the character travel with and who do they join in England?

English – One World, Many Voices – What will I study?

In this unit, you will begin by being able to discuss and identify the differences between authors from different centuries. Using a range of extracts from 19th, 20th and 21st Century authors, spanning different genres. Bronte, Shelley and Jacobs feature in the 19th Century texts. Moving onto Regency England with Jane Austen and studying a range of 21st Century poets and Authors such as Angelou, Agard and Armitage.

English

Key Writing Skill: Narrative

Language Devices to use in a narrative:	
Vocabulary	Using sophisticated Vocabulary.
Alliteration	Using a series of words in succession that begin with the same consonant sound.
Metaphor	Can be a surprising comparison, could symbolise…., could shock the reader into thinking…
Personification	Giving an object a human quality
imagery	Using strong vocabulary or devices to create a clear visual description in the reader's mind.
Repetition	To repeat the same word/phrase/sentence more than once for effect.
(Rule of three)	A list of 3 adjectives/phrases in succession for effect, usually to emphasise a strong idea.
Emotive Language	Words deliberately chosen to create emotion in the reader.
Simile	Using like or as 'glimmered like a ghost'.
Pathetic Fallacy	Helps to reflect atmosphere / rising tension in the plot. Could foreshadow events in the story.

Key Vocabulary

Key Word:	Definition:
Utopia	An imagined place or state of things in which everything is perfect:
Peace	Freedom from disturbance; tranquillity:
Integrity	The quality of being honest and having strong moral principles
Corruption	Dishonest or fraudulent conduct by those in power, typically involving bribery

Core Skill: Narrative Writing

Narrative Format and Structure

- **Introduction – makes an insight into the story, states the purpose of writing, and includes an engaging element to hook the reader;**
- **Main body paragraph 1 – rising action;**
- **Main body paragraph 2 – climax;**
- **Main body paragraph 3 – falling action;**
- **Conclusion – lessons learned from the story.**

Core Knowledge: How to approach an Unseen poem

1. Read the poem and write down one word to summarise what you think it is about. Think about
   - Who might be speaking
   - How they might be feeling
2. Read the poem again. Pick out three quotations that present the writer's thoughts and feelings.
3. Read the poem again. Start to label your quotations with notes/annotations about what certain words and phrases suggest to you.
4. Look for deeper messages. Think about:
   - What is the poem saying? Why has it been written? What ideas are they using?
   - What response does it get from the reader?

English Questions – One World Many Voices Unit

1. Write the definition of the following word: Utopia
2. What is the term used to describe dishonest or fraudulent conduct by those in power, typically involving bribery?

   (a) Compassion (b) Collaboration (c) Corruption (d) Coercion
3. In this unit we will explore works of authors from three different centuries. What are those three centuries?
4. What is a NARRATIVE?
5. What does the word INTEGRITY mean?
6. How many steps are there to approaching an unseen poem?
7. What word, beginning with P, means freedom from disturbance?
8. Name a writer we will explore from the 21st century.
9. What is personification?
10. What is imagery?
11. What is the name of the device where the weather reflects the mood or atmosphere of a text?
12. Explain what a metaphor is.
13. How many sections are there to a successful narrative structure?
14. What is rising action?
15. Give an example of alliteration.

Le Français

French: Autumn Term

Frequency

quelquefois	*sometimes*
souvent	*often*
tous les jours	*every day*
tous les soirs	*every evening*
tout le temps	*all the time*
de temps en temps	*from time to time*
une fois par semaine	*once a week*
deux fois par semaine	*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	I love
J'aime	I like
Je n'aime pas	I don't like
Je deteste	I hate

Tu es sportif? – Are you

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

Je joue ...	*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/ au ping-pong	*table tennis*
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*
tout/toute/tous/toutes	*all*
par (deux fois par semaine)	*per (twice a week)*
d'habitude	*usually*
d'abord	*first of all*
ensuite	*then/next*
puis	*then/next*

Tu es sportif? Tu es sportive? *Are you sporty?*					
Je suis *I am*	assez *quite* très *very*	sportif. *sporty.* sportive. *sporty.*	Je joue *I play*	au	basket. *basketball* billard. *pool.* foot(ball). *football.* hockey. *hockey.* rugby. *rugby.* tennis. *tennis.* volleyball. *volleyball.*
				à la	pétanque. *boules.*
Je ne suis pas *I am not*	très *very*			aux	boules. *boules.* cartes. *cards.* échecs. *chess.*

Tu fais quel sport? *Which sport do you do?*		
Je joue *I play* Tu joues *You play* Il joue *He plays* Elle joue *She plays* On joue *We/People play* Nous jouons *We play* Vous jouez *You play* Ils jouent *They play* Elles jouent *They play*	au	basket. *basketball.* billard. *pool.* foot(ball). *football.* hockey. *hockey.* rugby. *rugby.* tennis. *tennis.* volleyball. *volleyball.*
	à la	pétanque. *boules.*
	aux	boules. *boules.* cartes. *cards.* échecs. *chess.*

Qu'est-ce que tu fais? *What do you do?*			
Je fais *I do / go*	du	judo *judo* patin à glace *ice skating* skate *skateboarding* ski *skiing* théâtre *drama* vélo *cycling*	tout le temps. *all the time.* tous les jours. *every day.* tous les week-ends. *every weekend.* tous les lundis. *every Monday.*
	de la	cuisine *cookery* danse *dancing* gymnastique *gymnastics* natation *swimming*	
	de l'	athlétisme *athletics* équitation *horse riding*	
	des	randonnées *hiking*	
Je ne fais pas de sport. *I don't do sport.*			

souvent *often* parfois *sometimes*	Je fais parfois de la natation. *I sometimes go swimming.* Je fais souvent du skate. *I often go skateboarding.*

Qu'est-ce que tu fais? *What do you do?*			
Je fais *I do/go* Tu fais *You do/go* Il fait *He does/goes* Elle fait *She does/goes* On fait *We/People do/go* Nous faisons *We do/go* Vous faites *You do/go* Ils font *They do/go* Elles font *They do/go*	du	judo *judo* patin à glace *ice skating* skate *skateboarding* ski *skiing* théâtre *drama* vélo *cycling*	tout le temps. *all the time.* tous les jours. *every day.* tous les week-ends. *every weekend.* tous les lundis. *every Monday.*
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	de l'	athlétisme *athletics* équitation *horse riding*	
	des	randonnées *hiking*	

Le sport dans les pays francophones

On fait quel sport? *What sport do people do?*		
On fait *We / People do/go*	du	canoë-kayak. *canoeing.* canyoning. *canyoning.* rafting. *rafting.* ski. *skiing.* snowboard. *snowboarding.*
	de la	luge. *tobogganing.* lutte. *wrestling.* motoneige. *snowbiking.* planche à voile. *wind-surfing.* voile. *sailing.*
	de l'	alpinisme. *mountaineering.*
	des	sports d'hiver. *winter sports.* sports d'été. *summer sports.* sports nautiques. *water sports.*

Le Français

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….

jouer à = to play at — faire de = to do

je joue **au** golf — je fais **du** cyclisme

	Le	La	L'	Les
à	au	à la	à l'	aux
de	du	de la	de l'	des

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**.

Sequencing words & conjunctions – link ideas together.

D'abord = firstly
Ensuite = next
Enfin = at last

puis = then
après ça = after that
finalement = finally

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

To play = **jouer**

Je joue	*I play*
tu joues	*you (1) play*
il joue	*he plays*
elle joue	*she plays*
on joue	*we play (familiar)*
nous jouons	*we play (formal)*
vous jouez	*you (+1) play*
ils jouent	*they (M) play*
elles jouent	*they (F) play*

to do = **faire***

je fais	*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*

Mon temps libre

Est-ce que tu est sportif? / Tu es sportive? Are you sporty?	
Qu'est-ce que tu aimes faire (pendant ton temps libre)? What do you like to do (during your free-time)?	
Quels sports fais-tu? What sports do you do?	
Qu'est-ce que tu fais quand il fait beau / il pleut (etc)? What do you do when it is nice / it rains (etc)?	

Geography - Population

Key Terms and Definitions

Population: The total number of people living in a particular area.
Population Distribution: How people are spread across a given area.
Population Density: The number of people living per unit of an area (usually per square kilometre).
Sparsely populated: When there are fewer than 100 people per km2.
Densely populated: When there are fewer than 100 people per km2.

Birth Rate: The number of live births per 1,000 people per year.
Death Rate: The number of deaths per 1,000 people per year.
Natural Increase: The difference between the birth rate and the death rate.

Migration: The movement of people from one place to another.
Immigration: Moving into a country.
Emigration: Moving out of a country.

Urbanisation: The increase in the proportion of people living in urban areas compared to rural areas.

Key Concept 1: Factors Affecting Population Distribution

•**Physical Factors:** Climate, relief (landscape), soil fertility, water supply, availability of natural resources.

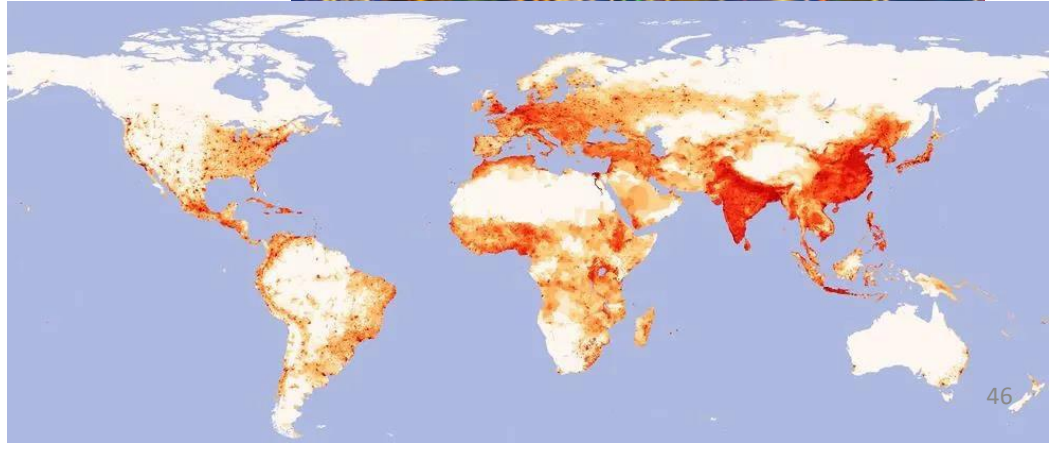
•**Human Factors:** Employment opportunities, political stability, infrastructure (roads, electricity availability, etc), cultural factors.

Geography

A map showing population density across the world.

Darker colours = high population density

Lighter = low population density



Key Concept 2: Migration

- **Types:** Internal (within a country) and International (between countries).
- **Push Factors:** Reasons for leaving a place (e.g. flooding, war, lack of jobs, earthquakes).
- **Pull Factors:** Reasons for moving to a new place (e.g. more suitable climate, better jobs, safety).

We studied an example of a very common migration route (where thousands of people every year leave Mexico to move into the USA). Make sure you know some of the push and pull factors that have resulted in this trend:

Push factors (forcing people out of Mexico):

Unemployment and Underemployment: Limited job opportunities and low wages drive people to seek better prospects elsewhere.

Poverty: High levels of poverty in many areas push individuals to migrate in search of better living standards.

Crime and Drug Cartels: High levels of violence, crime, and the presence of drug cartels make certain areas unsafe, prompting people to leave for safer environments.

Education and Healthcare: Poor access to quality education and healthcare services can push families to move out.

Pull factors (attracting these people into the USA):

Job Availability: The US labour market offers more diverse job opportunities and higher wages compared to Mexico.

Better Education Opportunities: Access to better education for children is a significant pull factor.

Advanced Healthcare: Higher quality healthcare services attract families seeking better medical care.

Lower Crime Rates: Many areas in the US are safer compared to certain regions in Mexico.

Geography

Questions	Your answers
What is the meaning of sparsely populated?	
What is the meaning of the term birth rate? (be precise)	
What is the movement of people between two places?	
List 3 physical factors that affect population density.	1. 2. 3.
List 3 human factors that affect population density.	1. 2. 3.
What is the meaning of the term pull factor?	
List 3 push factors that force people out of Mexico.	1. 2. 3.
List 3 pull factors that attract Mexicans into the USA.	1. 2. 3.

Geography – Africa - Kenya

1. Introduction to Africa

Location and Size:

•Africa is the second-largest continent, covering 30.37 million km².

•Located south of Europe, bordered by the Mediterranean Sea (north), Atlantic Ocean (west), Indian Ocean (east), and the Red Sea (northeast).

Major Physical Features:

•The Sahara Desert (largest hot desert).

•The Nile River (longest river in the world).

•Mount Kilimanjaro (highest peak).

•The Great Rift Valley (geological feature).

•The Congo Rainforest (second-largest tropical rainforest).

Climate Zones:

•Tropical: Hot and humid (e.g., Congo Basin).

•Arid: Hot and dry (e.g., Sahara Desert).

•Mediterranean: Mild and wet winters, hot dry summers (e.g., North Africa coastline).

•Savannah: Grasslands with distinct wet and dry seasons.

Natural Resources:

•Rich in resources like gold, diamonds, oil, and coffee.

•Uneven distribution has led to economic disparity.

Geography – Africa - Kenya

2. Kenya: A Case Study

Location and Physical Geography:

Kenya is located in East Africa, bordering the Indian Ocean.

Neighboring countries: Uganda (west), Tanzania (south), Ethiopia (north), Somalia (east).

Features: Rift Valley, Lake Victoria (shared), Mount Kenya, and savannahs.

Human Geography:

Population: Over 55 million.

Capital City: Nairobi.

Economic Activities:

Agriculture: Mainstay of the economy (e.g., tea, coffee, flowers).

Industry: Processing of agricultural products, textiles.

Trade: Export of agricultural goods, import of machinery.

Challenges: Poverty, unemployment, reliance on agricultur

Tourism and Conservation:

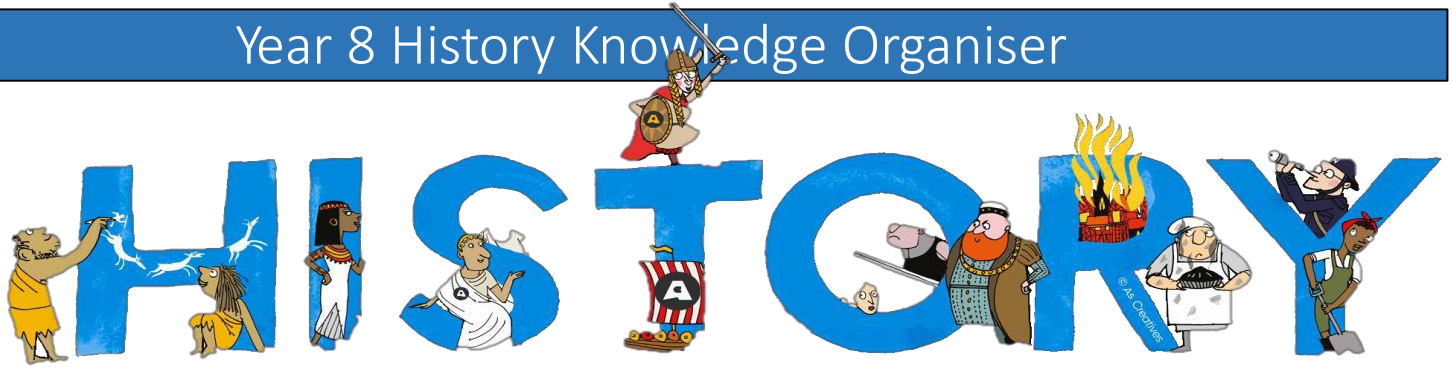
Famous National Parks: Maasai Mara, Amboseli, Tsavo.

Wildlife: Lions, elephants, rhinos, and giraffes.

Role of Tourism: Generates income, promotes conservation, and creates jobs.

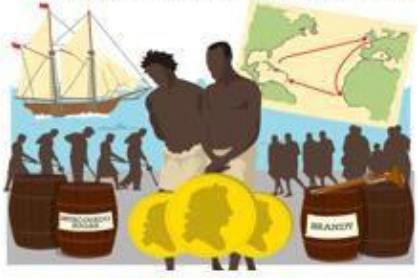
Challenges: Poaching, climate change, human-wildlife conflict.

Year 8 History Knowledge Organiser



Local Study: Pretoria Pit

Slavery, Empire and Protest



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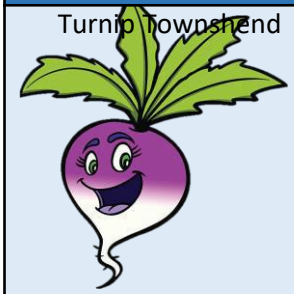
JUSTITIA TIMORE SINE

History Year 8 .1 : The Agricultural Revolution

Turnip Townshend



The Tullian Seed Drill

Coke of Norfolk

Key Ideas

During the Agricultural Revolution the open field system came to an end when villages were enclosed. This 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.
- Enclosure of the land was good for the country because the growing population could be fed.
- The countryside became much more productive. The landowners and tenant farmers became wealthy.
- Poor farmers lost their land in the open fields and were forced off the commons and out of their villages
- Some became landless labourers and others moved to the growing towns and cities.

Key Vocabulary

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** – spread the new farming ideas.

Retrieval Practice

1. Which type of villages were enclosed in the 18th and 19th centuries?
2. Who developed the Norfolk Four Course Crop Rotations System?
3. Who used selective breeding to develop the New Leicester sheep.
4. Who ran "Coke's Clippings?"
5. What did the "Propagandists" do?
6. What happened to the poor farmers?

History - Year 8 . 2 : The Industrial Revolution

Key Terms

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.

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.

Retrieval Practice

1.Which system were goods made under before the industrial revolution?

2.What were mills?

3.Who invented the flying shuttle?

4.Who developed the power loom?

5.What were conditions like inside the textile mills?

6.How were the pauper apprentices treated?

7.How were adults punished?

8.Why did the workers get ill from the cotton mills?

9.What were living conditions like?

10.Who was Robert Blincoe & what happened to him?

The industrial Revolution

Before factories, goods were made at home, on a small scale and the work was done in cottages. The women spun the yarn and the men wove cloth and hand looms. This system was called the domestic system and it was slow and inefficient. Good quality cloth was made in the domestic system, but there was not enough being made to clothe the growing population of Britain and a faster system of production was needed.

When new machinery was invented, it led to the development of factories. The first new machine which really sped up weaving was John Kay's Flying Shuttle. This moved the bobbin across the loom much more quickly, but the process was still manpowered. Once the process of weaving had been speeded up, there was a shortage of thread and so the process of spinning had to be speeded up. The first major change to spinning was James Hargreaves' Spinning Jenny, but this was also still a hand powered machine and the thread was not strong. After the water frame was developed by Richard Hargreaves, new spinning factories began to be opened, including one at Quarry Bank Mill in Styal, Cheshire. With the development of Samuel Crompton's Spinning Mule and Edmund Cartwright's Power Loom, large steam powered spinning and weaving mills opened up across the north west of England.

Children in the factories

Life for the children who worked in the new mills and factories could be very harsh. Some children were apprenticed as young as 7 or 8. Many children were worked too hard by unscrupulous employers and ended up with their health ruined. The children who were most at risk were the "pauper apprentices", who were bought from orphanages and workhouses to work until they were 21 in the factories. Robert Blincoe was a workhouse orphan who was apprenticed to a cotton mill. He was left disabled by his experience – a combination of the beatings, poor nutrition and back breaking working, left him with a twisted spine and disfigured head. Eventually he wrote his memoirs and gave evidence to Parliament about the lives of the factory children.

History - Year 8. 3: Local Study – the Pretoria Pit Disaster

Trappers	Very young child miners who opened and closed the wooden trap doors to allow the coal drams to pass. Could be as young as four.
Coal face	The exposed surface of coal in a mine.
Seam	A coal seam is a banded deposit of coal that is visible within layers of rock.
Shaft	Vertical access hole which stretches down to the location of the seam.
Ventilation	The process of supplying sufficient fresh air to the miners underground and controlling the air that returned to the surface as contaminated air.
Roadways	Pathways inside the mine which the coal tubs were dragged along. Later, rail tracks were laid for the drams to be dragged by pit ponies.
Drams	The wheeled tubs, filled with coal and dragged along the roadways of the mine to be brought up to the surface.
Hurriers	Harnessed to the dram and pulled the coal to the shaft.
Bearers	Often women, sometimes older boys, carried the coal on their backs down the roadway to the mine shaft.
Colliers	Miners who cut the coal from the coal face.
Haulers	In some pits, a haulier used a pit pony to drag the coal to the shaft.
Choke Damp	Poisonous gas found in the mines – often it was carbon dioxide and nitrogen.
Fire Damp	Flammable gas found in coal mines, usually methane.
Cages	A safer way to transport miners down to the coal face, preventing them falling out of a bucket.
Current	A current of air was created. This was to help protect minors from choke damp and fire damp.

Key ideas: Dangers in the Mines

Mining in deep seams of coal meant a constant threat of collapse and being **buried alive.** Steel pit props made the roof more secure. Deep mines flooded quickly and so there was a constant threat of **drowning.** Steam pumps helped to pump water out and saved lives.

Fire Damp was flammable gas, found in coal mines, usually **methane.** It was very dangerous and gas explosions killed many miners. The introduction of the Davy lamp prevented the flame from reacting with the gas and changed colour when there was fire damp, to warn the miners.

Choke Damp was poisonous gas – carbon dioxide and nitrogen, after an explosion it could be carbon monoxide. Many miners died from poisonous gas. They took canaries down the mines to give them a warning to get out if it died. Later, ventilation shafts were dug to remove poisonous gas and make the mines safer.

History- The Pretoria Pit Disaster, Dec 21st 1910

What was the Pretoria Pit Disaster?

The Pretoria Pit disaster was a mining accident which took place on 21st December 1910.

There was an underground explosion at the Hulton Colliery, known as the Pretoria Pit, in Over Hulton, Westhoughton. 344 men and boys died. It was one of the worst mining disasters in UK history. The youngest who lad who died was thirteen.

What caused the accident?

The explosion was caused by a build of methane gas after a roof collapsed and it was ignited by a defective safety lamp. Only four workers survived the blast and one died when he got to the top. Another miner, William Turton, died fighting the fire.

Impact of the disaster

Many of the men and boys who died were from the same family. The worst affected was the Tyldesley family, with Mrs Miriam Tyldesley losing her husband, four sons and two brothers.

What was done to help the families who lost relatives?

A relief fund was set up for the families who had lost a loved one and all the families were given a lump sum and weekly payments.

The Public Enquiry

There was a detailed public enquiry under the 1881, Mining Act, which said:

(1)There should be more men to deal with safety in the mine

(2)A proper inspection of all lamps and a record kept of any repairs needed

(3)Stronger support for the roof.

How is the disaster remembered?

There is a memorial to the victims in Westhoughton cemetery and a service is held there each year on 21st December.

Retrieval Practice

1. What was the Pretoria Pit Disaster?
2. What caused the accident?
3. What was the impact of the disaster?
4. What was done to help the families who lost relatives?
5. What did he Public Enquiry say?
6. How is the disaster remembered?

Year 8 Knowledge Organiser 4 : The Atlantic Slave Trade

Key Terms Atlantic Slave Trade – the trade in people, stolen from Africa

Triangular Trade– the three way trade: British and European traders exchanging manufactured goods for African people and, selling African people in America, to buy raw goods for the factories in Britain/Europe.

The Middle Passage – the terrible journey taken by the slaves on the slave ships, from Africa to America.

Slave Auctions – the selling of slaves to plantation owners in the Americas.

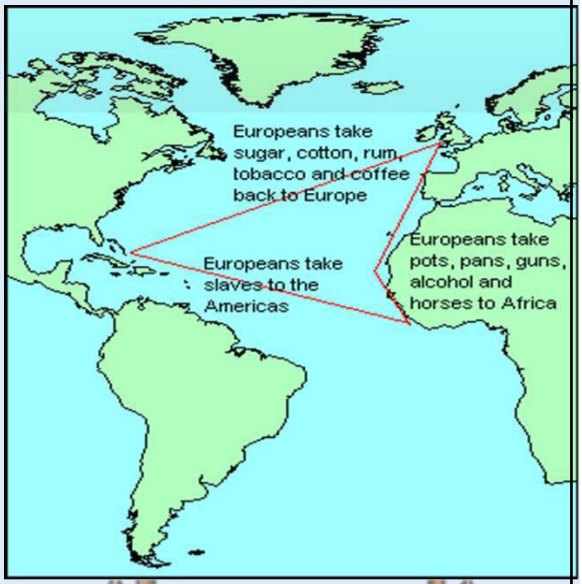
Plantations – large farms that grew one type of crop in the Americas e.g. cotton, tobacco or sugar.

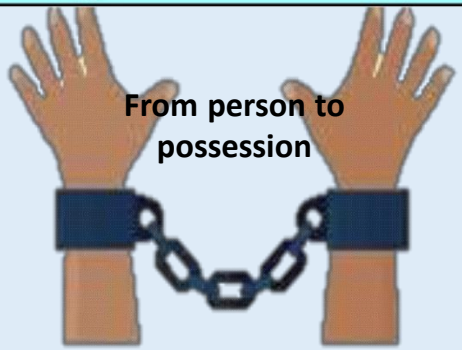
Resistance – Slaves who refused to do as their masters told them.

Key ideas

- Africa had its own civilizations, which were destroyed by the slave trade
- Before the Atlantic Slave Trade, slavery was not based on skin colour.
- At least 12 million people were taken from Africa and most were men, which badly affected the West of Africa.
- The trade caused wars and rivalries between the African kingdoms and introduced guns to Africa.
- Slavery completely dehumanized the people caught up in it.
- The Middle Passage was a horrific experience for the slaves, most of whom were chained up below decks in filthy conditions.
- People were whipped, beaten and assaulted and the sick were thrown overboard to drown. Many of the African people did not survive the voyage.
- Those who made it through the Middle Passage were sold at auction. Almost all of them were separated from anyone they had made the voyage from Africa with.

The Atlantic Slave Trade or Triangular Trade



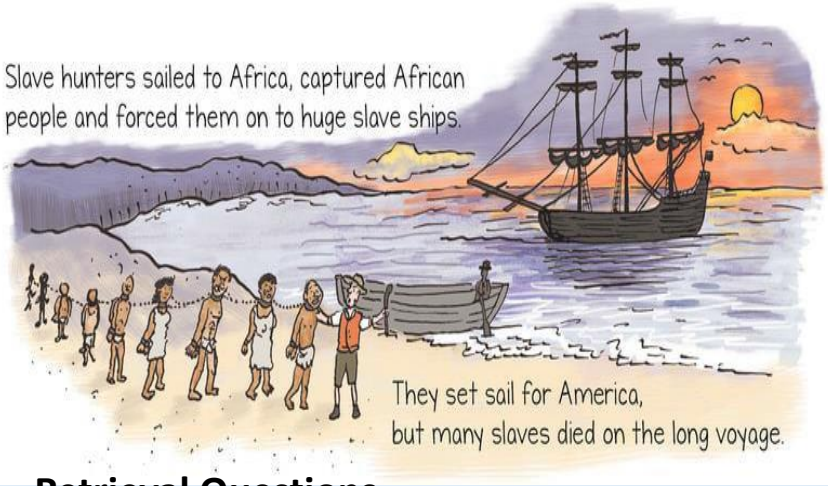


How did the Atlantic Slave Trade work? British and European ships were filled with manufactured goods to trade in Africa – cotton cloth, pots and pans and guns. The ships were sailed to Africa, where the captains traded their goods for African people. Slavers went out to the villages of Africa, where they raided them, grabbing people, tearing them away from their families, putting them in chains and marching them to the coast, where they were traded and put onto the waiting ships.

What was the Middle Passage and why was it such a terrible experience for the slaves?

The middle passage was the middle part of the triangular trade, which was the journey that the captured African people made from Africa to enslavement in the Americas. The journey often took four months. Slaves lived in the underbelly of a dark, stench-filled, airless wooden ship, men, women and children were chained hand and foot and were left near starvation. Separated from family, friends, and loved ones, many slaves died on the Middle Passage.

Once the Africans, (who had managed to survive the appalling middle passage), arrived in the Americas they were sold. If any of them had managed to stay with a family member or friend for the middle passage, at this point they were certain to be separated from them forever.



Retrieval Questions

1. What was the Atlantic Slave Trade?
2. What was slavery like before the Atlantic Slave Trade?
3. Why is it also called the "Triangular Trade?"
4. Approximately how many people were taken from Africa for the Atlantic Slave Trade?
5. What was the middle passage?
6. What happened to sick slaves during the middle passage?
7. Why was the middle passage so so terrible?
8. What happened at the slave auction?
9. What were plantations?
10. What was slave resistance?

Maths

Year 8 Knowledge Organiser

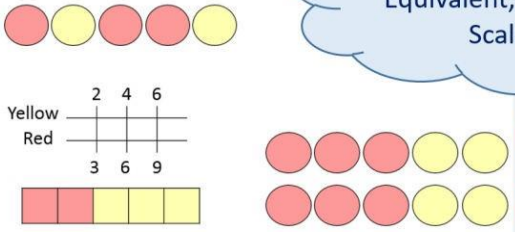
Maths Autumn Term 1a

RATIO AND SCALE

Ratio, Proportion, Order, Part, Equivalent, Factors, Scale

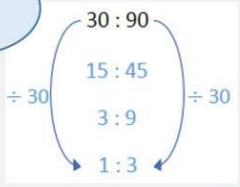
Representing a Ratio:

For every 2 yellow there are 3 red



All diagrams show the ratio of yellow to red as 2 : 3

Simplify Ratio:



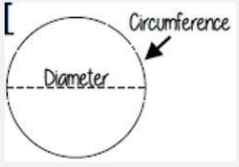
Always make sure the units are equal before trying to simplify.

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

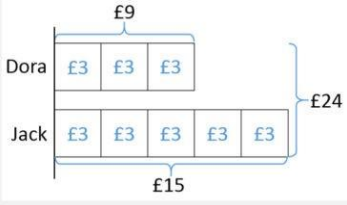
Circumference of a circle:



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

Share a whole into a given ratio:

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



Calculations

£24 ÷ 8 = £3

3 × £3 = £9

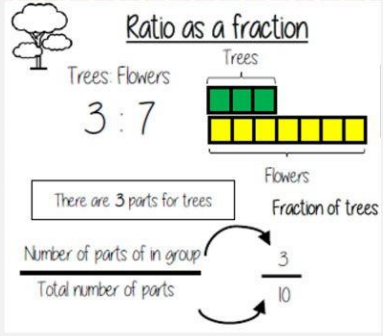
5 × £3 = £15

Challenge:

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

□ : □ = □□ : □

Ratio as a fraction



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.

÷ 2 ÷ 2

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 → 18 : 900 ml) × 3

This multiplier acts in the same way as with ratio

Year 8 Knowledge Organiser

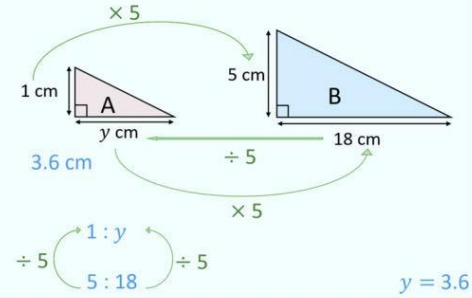
Maths Autumn Term 1b

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.



Interpret maps with scale factors:

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

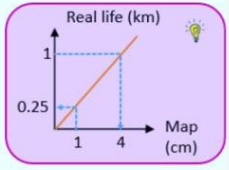
1 cm : 25 000 cm

1 : 2.5 × 10⁴

1 cm : 250 m

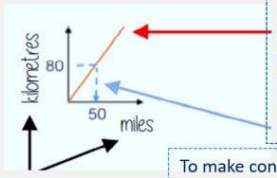
1 cm : 0.25 km

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



Ratios need to be in the same units

Conversion Graphs: Compare two variables



Always a straight line because as one variable changes so does the other at the same rate

Labelling of both axes is vital

To make conversions between units you need to find the point to compare – then find the associated point by using the graph

Conversion between currencies:

Currency can be converted using a conversion graph.

It is directly proportional

Maths

Year 8 Knowledge Organiser - Test Your Knowledge

Maths Autumn Term 1

RATIO, SCALE, MULTIPLICATVE CHANGE and MULTIPLICATION AND DIVISION OF FRACTIONS

1. The ratio of grey to red squirrels in a forest is 15 : 1. There are 165 grey squirrels. How many red squirrels are there?

2. A shop orders red and yellow flowers in a ratio of 5 : 2. One week they order 140 flowers altogether. How many more red flowers than yellow did they buy?

3. 3 numbers in the ratio 2 : 3 : 7 have a mean of 48. What is the median of the numbers?

4. Simplify each of these ratios to find out which ones are the same.

$8a : 10a$ $\quad 16 : 20$ $\quad 4 : 5$

$0.8 : 1$ $\quad \frac{28}{45} : \frac{35}{45}$ $\quad 4 \times 10^3 : 5 \times 10^2$

5. Write $5 : 3$ in the form $1 : n$

6. Calculate the circumference of a circle with:

a) Diameter 4cm

b) Radius 12m

c) Radius 1.2cm

7. Find the perimeter of a semicircle with diameter 6m

8. 5 scoops of ice-cream cost £4.50. How much would it cost for:

10 scoops, 8 scoops, 1 scoop, 9 scoops?

9. If a car is travelling at a constant speed, the distance it travels is directly proportional to the time it has been travelling. Complete the table.

Time (mins)	30	60		114.2
Distance (miles)	18		300	

Extension: Can you draw a conversion graph displaying this information?

10. Give your simplified answers to these

a) $2 \times \frac{4}{15}$ b) $\frac{1}{5} \times \frac{1}{2}$ c) $\frac{2}{3} \div \frac{2}{5}$ d) $2\frac{2}{5} \div \frac{3}{4}$

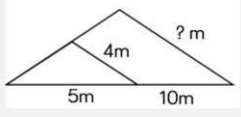
11. Put the following in ascending order

$\frac{1}{5} \times \frac{3}{8}$ $\quad \frac{2}{5} \times \frac{3}{8}$ $\quad -\frac{1}{15} \times \frac{9}{16}$ $\quad \frac{2}{15} \times \frac{15}{16}$ $\quad \left(\frac{3}{5}\right)^2$

12. Write these in their simplest form:

$\frac{2}{5} \times \frac{w}{r}$ $\quad \frac{4}{5w} \div \frac{r}{w}$ $\quad \frac{3r}{5w} \times \frac{w}{3r}$ $\quad \frac{2w}{5} \times \frac{w}{r} \div 2$

13. These 2 triangles are similar. Can you work out the missing length?



14. A pirate sails from her island to find treasure. She travels 15 km North, turns East and sails 30 km, and then turns North again for the final 40 km to take her to some treasure.
Draw a scale map of her journey using a scale of 1 : 500 000
Her parrot flies directly to the treasure. **Use your map** to find out how much further the pirate travelled than the parrot.

Maths

Maths Autumn Term 1 - Test Your Knowledge

RATIO, SCALE, MULTIPLICATVE CHANGE and MULTIPLICATION AND DIVISION OF FRACTIONS

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b) Radius 12m

c) Radius 1.2cm

7. Find the perimeter of a semicircle with diameter 6m

8. 5 scoops of ice-cream cost £4.50. How much would it cost for:

10 scoops, 8 scoops, 1 scoop, 9 scoops?

9. If a car is travelling at a constant speed, the distance it travels is directly proportional to the time it has been travelling. Complete the table.

Time (mins)	30	60		114.2
Distance (miles)	18		300	

Extension: Can you draw a conversion graph displaying this information?

10. Give your simplified answers to these

a) $2 \times \frac{4}{15}$ b) $\frac{1}{5} \times \frac{1}{2}$ c) $\frac{2}{3} \div \frac{2}{5}$ d) $2\frac{2}{5} \div \frac{3}{4}$

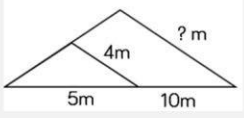
11. Put the following in ascending order

$\frac{1}{5} \times \frac{3}{8}$ $\quad \frac{2}{5} \times \frac{3}{8}$ $\quad -\frac{1}{15} \times \frac{9}{16}$ $\quad \frac{2}{15} \times \frac{15}{16}$ $\quad \left(\frac{3}{5}\right)^2$

12. Write these in their simplest form:

$\frac{2}{5} \times \frac{w}{r}$ $\quad \frac{4}{5w} \div \frac{r}{w}$ $\quad \frac{3r}{5w} \times \frac{w}{3r}$ $\quad \frac{2w}{5} \times \frac{w}{r} \div 2$

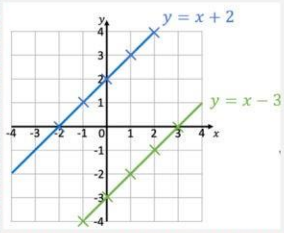
13. These 2 triangles are similar. Can you work out the missing length?



14. A pirate sails from her island to find treasure. She travels 15 km North, turns East and sails 30 km, and then turns North again for the final 40 km to take her to some treasure.
Draw a scale map of her journey using a scale of 1 : 500 000
Her parrot flies directly to the treasure. **Use your map** to find out how much further the pirate travelled than the parrot.

Maths

Lines in the form $y = x + a$:



The lines are parallel because the gradients are the same

These lines are a translation of the line $y = x$
The $\pm a$ dictates by how much it moves vertically

What should I be able to do?

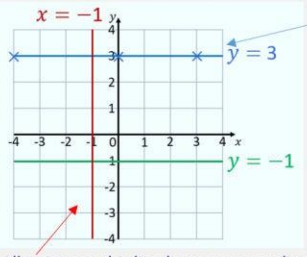
- Label and identify lines parallel to the axes
- Recognise and use basic straight lines
- Identify positive and negative gradients
- Plot $y = mx + c$ graphs

Maths Autumn Term 2a

WORKING IN THE CARTESIAN PLANE

Quadrant, Coordinate, Vertical, Horizontal, Origin, Parallel, Gradient, Intercept

Lines parallel to the axes:



All points on this line have y coordinates of 3

For example, (3,3), (0,3) and (-4,3) all lie on this line, shown by the crosses

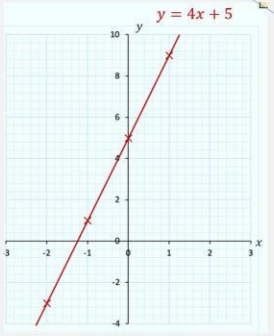
All points on this line have an x coordinate of -1

Plotting $y = mx + c$ graphs:

$y = 4x + 5$ → 4 multiplied by the x coordinate then +5

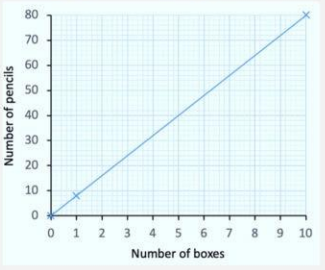
x	-2	-1	0	1	2
y	-3	1	5	9	13

Draw a table to display the calculations



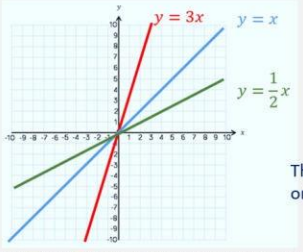
This represents a coordinate pair (2,13)

Direct proportion using $y = kx$:



The line must be straight to be directly proportional. They always start at (0,0) as they describe the relationship between 2 variables.

Recognise and use the lines $y = kx$:



The bigger the value of k the **steeper** the line will be

They will always go through (0,0), the origin

Maths

What should I be able to do?

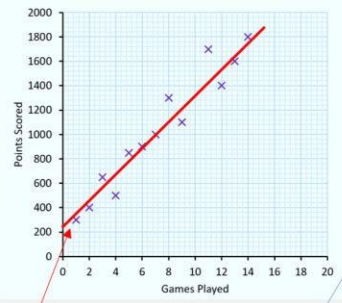
- Draw and interpret Scatter graphs
- Describe correlation and relationships
- Design and complete an ungrouped frequency table
- Read and interpret grouped tables
- Represent data in two way tables

Variable, Relationship, Correlation, Outlier, Quantitative, Qualitative, Continuous, Discrete, Frequency

Maths Autumn Term 2b

REPRESENTING DATA

Draw and interpret a Scatter graph:



Games Played	Points
13	1,600
7	1,000
8	1,300
4	500
6	900
3	650
5	850
9	1,100
2	400
12	1,400
1	300
11	1,700
14	1,800

The data forms information pairs for the scatter graph

The **line of best fit** is used to make estimates about the information.
It **does not** need to go through the origin.
There should be approximately the same number of points above and below the line.
The line extends across the whole graph

Ungrouped Data:

Number of siblings	Frequency
0	3
1	7
2	5
3	3

3 people had no siblings, 3 x 0 = 0
7 people had 1 sibling, 7x1=7
5 people had 2 siblings, 5x2=10
3 people had 3 siblings, 3x3=9

The total frequency 3+7+5+3 = 18 shows how many people were asked,

Overall there 0+7+10+9 = 26 siblings.

Grouped Data: For a large set of data it is better to group it.

Discrete Data

Score	Frequency
0 to 5	9
6 to 10	4
11 to 15	3

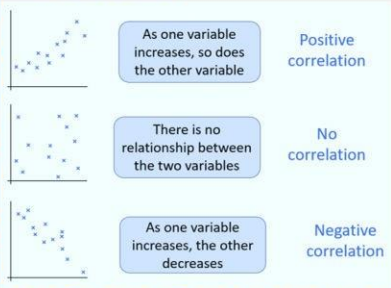
We don't know the exact value of each term in a group

Continuous Data

Time taken, t minutes	Frequency
$0 \leq t < 2$	3
$2 \leq t < 4$	8
$4 \leq t < 6$	17

This group includes 4 and above up until, but not including, 6

Linear Correlation:



Representing data in two-way tables:

	Male	Female	Total
Glasses	28	17	45
No glasses	19	36	55
Total	47	53	100

17 females wear glasses, $\frac{17}{100}$ of the group

Maths

What should I be able to do?

- Construct a sample space diagram
- Systematically list outcomes
- Find the probability from two-way tables
- Find the probability from Venn diagrams

The product rule:

The number of items in event a × The number of items in event b

Outcomes, Probability, Set, Chance, Event, Biased, Union

Maths Autumn Term 2c

TABLES AND PROBABILITY

Probability from sample space: What is the probability that an outcome has an even and a tails?

This is the set notation that represents the question **P**

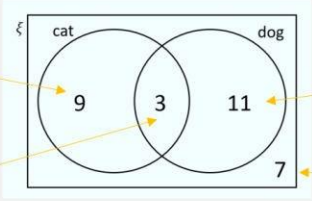
P(Even number and Tails)= $\frac{3}{12}$ ← There are 3 even numbers with tails; There are 12 possible outcomes

In between the ( ) is the event asked for

		Dice					
		1	2	3	4	5	6
Coin	Heads	H1	H2	H3	H4	H5	H6
	Tails	T1	T2	T3	T4	T5	T6

Probability from Venn diagrams: 30 children were asked if they owned a cat or dog. 12 owned a cat, 14 owned a dog and 3 owned both

This whole curve includes everyone who owns a cat. Because 3 have both, we calculate those **just** owning a cat as $12 - 3 = 9$



This whole curve includes everyone who owns a dog. Because 3 have both, we calculate those **just** owning a dog as $14 - 3 = 11$

The intersection represents those children owning both cat **and** dog

The number outside represents those that had **neither** a cat **or** dog

P(Just own a cat)= $\frac{9}{30}$

Probability from two-way tables:

	Male	Female	Total
Glasses	28	17	45
No glasses	19	36	55
Total	47	53	100

The event

P(Female wears glasses)= $\frac{17}{100}$ ← The total in the set

Construct sample space diagrams: Sample space diagrams provide a systematic way to display outcomes from events

		Dice					
		1	2	3	4	5	6
Coin	Heads	H1	H2	H3	H4	H5	H6
	Tails	T1	T2	T3	T4	T5	T6

This is the set notation to list the outcomes

S = {H1, H2, H3, H4, H5, H6, T1, T2, T3, T4, T5, T6}

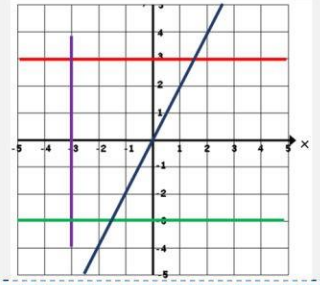
In between the { } are all the possible outcomes

Maths

Maths Autumn Term 2 - Test Your Knowledge

THE CARTESIAN PLANE, REPRESENTING DATA and TABLES AND PROBABILITY

1. Write down the equations of the lines shown. Could you add the graph of $y = 3x - 1$ to this?



2. Which of these will produce a non-linear graph?

$y = x - \frac{7}{2}$ $\quad$ $y - 4 = 0.5x$

$y = x^2 + 3$ $\quad$ $y = \frac{4}{x}$

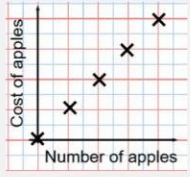
3. Calculate the midpoint of each pair of coordinates:

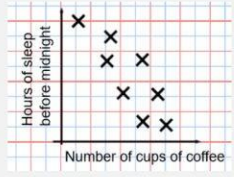
(6,8) and (6,20)

(4,7) and (12,19)

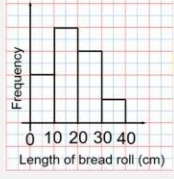
(2,7) and (−2,15)

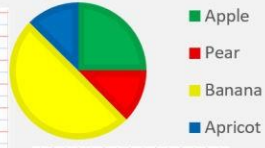
4. For each graph, state the type of correlation shown and describe the relationship between the two variables.

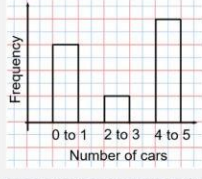




5. Decide whether discrete, continuous or qualitative data is being represented in these







6. Continue completing the table for rolling two regular dice and adding the numbers together. Work out,

+	1	2	3	4	5	6
1	2	3				7
2						
3						
4						
5						
6						

- P(total is even)
- P(6 or 7)
- P(Number>4)
- P(0)
- P(prime number)
- P(square number)

7. In a group of 45 people, 15 belong to a cricket club, 18 belong to a tennis club and 9 belong to both a cricket and a tennis club. Draw a Venn diagram to represent this information and write the probability that a random person selected does not belong to a cricket club but does belong to a tennis club.

8. Can you represent the following information in a two-way table?

There are 24 chocolates in a box. $\frac{1}{3}$ are dark chocolate and the rest are milk chocolate. Of these, some have a soft centre and the rest have a chewy centre. 5 of the milk chocolates have a chewy centre. 25% of the dark chocolates have a soft centre.

Maths

What should I be able to do?

- Form expressions
- Expand and factorise single brackets
- Form and solve equations
- Solve equations with brackets
- Represent inequalities
- Form and solve inequalities

Directed numbers:

$+ + \rightarrow +$

$+ - \rightarrow -$

$- + \rightarrow -$

$- - \rightarrow +$

Simplify, Substitute, Equivalent, Coefficient, Product, Highest Common Factor (HCF), Inequality, Expression, Equation, Term, Identity, Formula

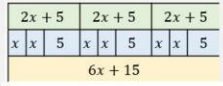
Maths Spring Term 1a

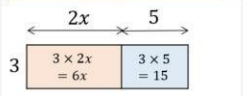
BRACKETS, EQUATIONS AND INEQUALITIES

Multiply Single Brackets:

$3(2x + 5) = 6x + 15$

Multiplication can be represented by repeated addition





$3(2x + 5)$ is the area

Solve Equations with Brackets:

$3(x + 5) = 12$

Expand the brackets

$3x + 15 = 12$

Subtract 15 from both sides

$3x = -3$

Divide both sides by 3

$x = -1$

Challenge question:

Solve $3(x + 5) = 12(x - 3) - 12$

$2(a + b)$

Expression

$P = 2(a + b)$

Formula

$2(a + b) \equiv 2a + 2b$

Identity

Inequalities:

$>$ Greater than

$<$ Less than

$\geq$ Greater than or equal to

$\leq$ Less than or equal to

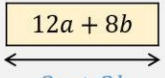
What is the smallest integer, when three more than double my number is greater than 10?

$2x + 3 > 10$

$x > 3.5$

Smallest possible integer value $= 4$

Factorise into a single bracket:



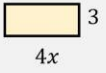
$12a + 8b = 4(3a + 2b)$

Select the HCF of the terms in the question

Form Expressions: For unknown variables, a letter is normally used in it's place.

More than implies add.
Less than/difference implies subtract
Eg: 4 more than t $\longrightarrow t + 4$

Reminder: only similar terms can be grouped together



The perimeter of this shape is:
$4x + 3 + 4x + 3 \equiv 8x + 6$

Maths

Maths Spring Term 1b

SEQUENCES

What should I be able to do?

- Generate a sequence from term to term rules or position to term rules
- Recognise arithmetic sequences and find the nth term
- Recognise geometric sequences and other sequences that arise

Sequence, term, position, linear, non-linear, difference, arithmetic, geometric

Linear Sequences – increase by addition or subtraction and the same amount each time.

Non-linear sequences – do not increase by a constant amount – quadratic, geometric, Fibonacci

- Do not plot as straight lines when modelled graphically
- The differences between the terms can be found by addition, subtraction, multiplication or division

Fibonacci sequence

$$0, 1, 1, 2, 3, 5, 8, 13, \ldots \ldots .$$

Each term is the sum of the two previous terms

Sequences from Algebraic Rules:
Substitution

$2n + 5$ term — Substitute the number of the you are looking for in place of 'n'

1st term $2(1) + 5 = 7$

2nd term $2(2) + 5 = 9$

3rd term $2(3) + 5 = 11$

So the sequence is **7, 5, 9, ….**

This is a linear sequence and can also be identified by the single power of n

To check if 201 is in this sequence, form an equation

$2(n) + 5 = 201$ and solve to see if there is an integer solution

Complex Algebraic Rules:
Take care with the subtle differences between the way terms are written.

$2n^2$ means 2 multiplied by whatever n squared is

1st term $2 \times 1^2 = 2$

2nd term $2 \times 2^2 = 8$

3rd term $2 \times 3^2 = 18$

$(2n)^2$ means 2 multiplied by n and then square the answer

1st term $(2 \times 1)^2 = 4$

2nd term $(2 \times 2)^2 = 16$

3rd term $(2 \times 3)^2 = 36$

Finding the Algebraic Rule: What is the nth term for the sequence **7, 11, 15, 19, …..?**

$4n$ is the 4 times table,

4, 8, 12, 16, …..

7, 11, 15, 19,…..

This has the same constant difference, but is 3 more than the 4 times table

$4n + 3$

$4n + 3$

This is the constant difference between the terms in the sequence

This is the comparison (difference) between the times table it links to and the sequence

Maths

What should I be able to do?

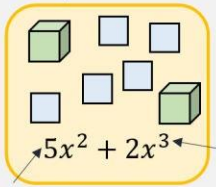
- Add/Subtract indices with powers
- Multiply expressions with indices
- Divide expressions with indices
- Know the addition and subtraction law for indices

Base, Power, Exponent, Indices, Coefficient, Simplify, Product

Maths Spring Term 1c

INDICES

Addition/Subtraction with indices



Each square represents x^2 and each cube represents x^3

$5x^2 + 2x^3$

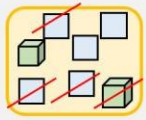
Power

Coefficient

$2x^3$ is a term

Only similar terms can be simplified. If they have different powers, they are unlike terms

$5x^2 + 2x^3 - 3x^2 - x^3$



$2x^2 + x^3$

Multiply expressions with Indices:

$5a \times 3b$
$\equiv 5 \times a \times 3 \times b$
$\equiv 5 \times 3 \times a \times b$
$\equiv 15ab$

$7c \times 2c$
$\equiv 7 \times c \times 2 \times c$
$\equiv 7 \times 2 \times c \times c$
$\equiv 14c^2$

$5d^3 \times 3d^2$
$\equiv 5 \times d \times d \times d \times 3 \times d \times d$
$\equiv 5 \times 3 \times d \times d \times d \times d \times d$
$\equiv 15d^5$

This is one way to do a calculation like this. Breaking down the question and writing it in full can help.

Divide expression with indices:

$$\frac{18}{60} = \frac{\cancel{2} \times \cancel{3} \times 3}{\cancel{2} \times 2 \times \cancel{3} \times 5} = \frac{3}{10}$$

$$\frac{5a^3b^2}{15ab^5} = \frac{\cancel{5} \times \cancel{a} \times a \times a \times \cancel{b} \times \cancel{b}}{3 \times \cancel{5} \times \cancel{a} \times \cancel{b} \times \cancel{b} \times b \times b \times b} = \frac{a^2}{3b^3}$$

$\frac{23a^3d^2}{5eb^5}$

This expression cannot be divided (cancelled down) because there are no common factors or similar terms

Addition/Subtraction laws for indices:

$3^2 \times 3^4$
$= (3 \times 3) \times (3 \times 3 \times 3 \times 3)$
The base number remains the same so it can be simplified

$\rightarrow 3^6$

Addition law for indices

$a^m \times a^n = a^{m+n}$

$$3^5 \div 3^2 = \frac{\cancel{3} \times \cancel{3} \times 3 \times 3 \times 3}{\cancel{3} \times \cancel{3}}$$

$\rightarrow 3^3$

Subtraction law for indices

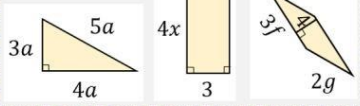
$a^m \div a^n = a^{m-n}$

Maths

Maths Spring Term 1 - Test Your Knowledge

BRACKETS, EQUATIONS, INEQUALITIES, SEQUENCES and INDICES

1. Write simplified expressions for the perimeter and area of each of these.



2. Expand these brackets:

$3(x+6)$ $\quad 7(y-2)$ $\quad 5(4-x)$
$-2(m+3)$ $\quad d(d+4)$ $\quad 2a(4-a+c)$

3. Expand and simplify

$3(5a+2)+4(2a+3)$

$2(6m+3)+5(2m-1)$

$4(3y-2)+2(5y-10)$

$3(5a+2)-4(2a-3)$

4. Expand and simplify

$(x+12)(x-3)$ $\quad (y-5)^2$

5. Factorise :

$6x+9y$ $\quad 12pq-15qt$

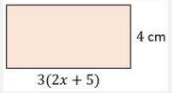
$20d^2+15d$ $\quad a^2+ab+6a$

5. Solve the following equations

$5x+1=71$ $\quad 17=4x-3$

$2x=4x-3$ $\quad 5x+1=2x+7$

6. If the area of this rectangle is $72cm^2$ find it's perimeter.



7. Solve the following inequalities

$2x+2<7$	$4x+2\geq -7$	$3+5x\leq 7$

8.
Annie has £100
She wants to buy three T-shirts and a jumper.
The jumper costs £45, and she doesn't have enough money to buy everything she wants.
What can be worked out about the price of the T-shirts?

9. Describe each of these sequences:

11, 14, 17, 20, 23..... and 10, 4, -2, -8, -14.....

10. Work out the first 5 terms of the sequences given by:

$5n+1$ $\quad 10-2n$ $\quad n^2+7$ $\quad (n+3)^2$

11. What is the nth term for the following sequences?

5, 9, 13, 17, 21,..... 3, 8, 13, 18, 23,.....

12. Simplify these expressions

$3x^2+2x^2$ $\quad 9x^3-5x^3$ $\quad 4x^2+3x+9x^3$

$5a\times 6b$ $\quad 8y\div 2$ $\quad 10b\times 3b$ $\quad 18mn\div 6m$

13. Write these, simplified, in index form

$2^3\times 2^{10}$ $\quad a^5\times a^4$ $\quad m^4\times m$

$9^6\div 9^2$ $\quad y^8\div y$ $\quad 2^3\times 2^5\div 2^2$

$(2^7)^3$ $\quad (2^3)^7$ $\quad (5^5)^5$

$24a^2\div 6a$

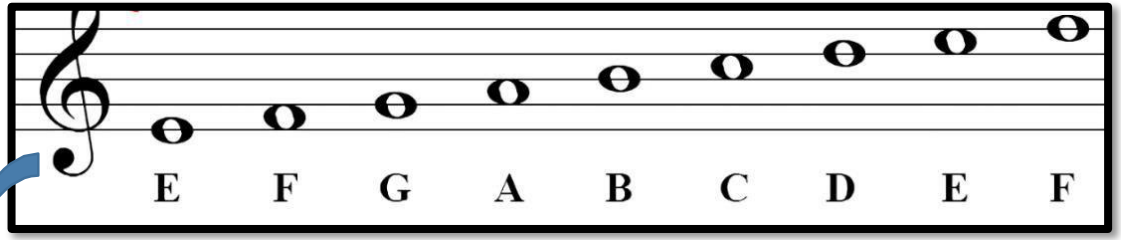
$30a^2b\div 6ab$

14. Solve: $3^5\times 3^6\div 3^a=3^{20}$

$3^{14}\div (3^b)^3=3\times 3^3\times 3$

Maths

Music



Key words	Definition
Treble clef	Tells us the notes in the right hand
Bass clef	Tells us the notes in the left hand

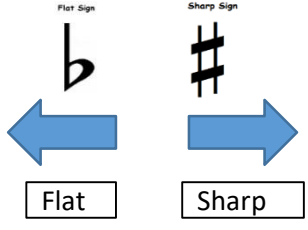
The treble clef tells us the notes in the right hand.

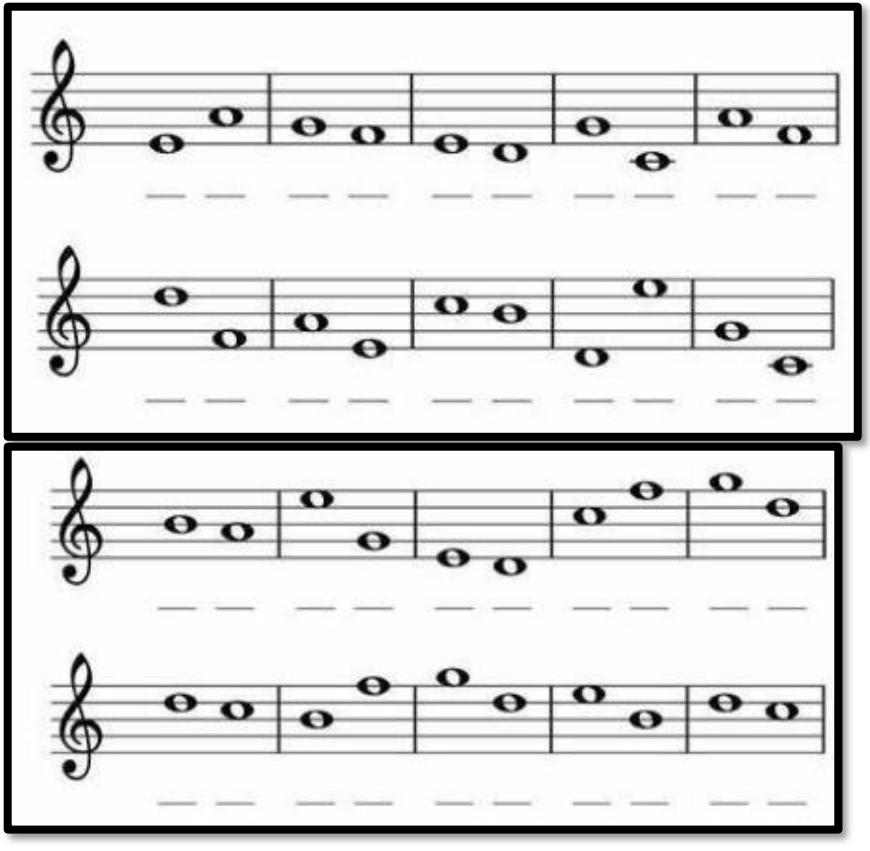
The acronyms to remember these notes are;

Lines = **E**very **G**ood **B**oy **D**eserves **F**ootball

Spaces = **FACE** in the space.

We see the sharps and flat symbols in our music. The flat tells us to play the black note to the left of the note and the sharp tells us the black note to the right.



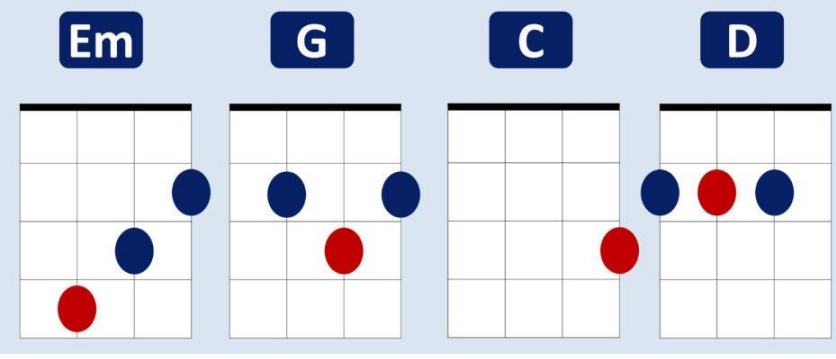


Use the acronyms learnt to identify the correct note names.

Fill in the gaps

The four letter word that tells us the note names in the spaces are ____. We can remember the line note names by saying the acronym, Every, Good, Boy, _____, _____. The ____ _____clef tells us the notes in the _____hand, and the _____clef tells us the notes in the _____hand.

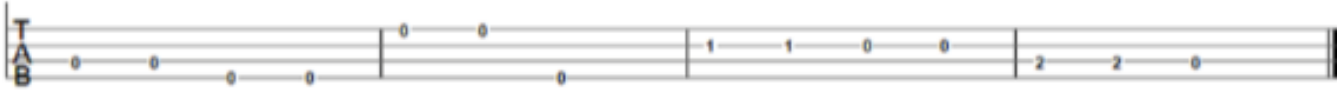
Music



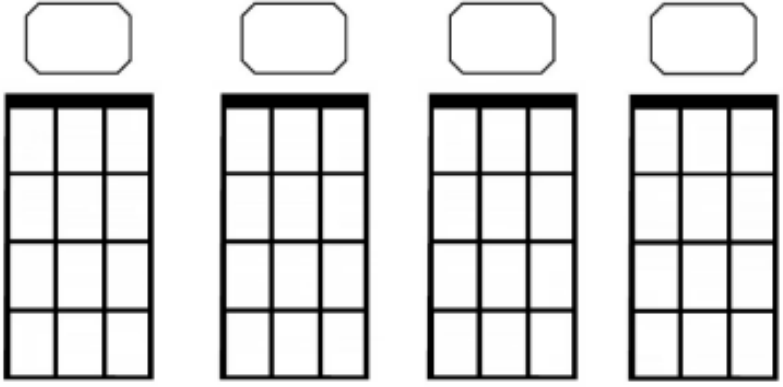
As well as recapping the four chords from last year; C, G, Am, F we are now learning some new ukulele chords and adding these to different songs; Em, D.

In ukulele and guitar music we can read 'TAB' to be able to play melodies. TAB stands for 'tablature' and it is a simplified way of reading sheet music. TAB acts as a visual fret board. The numbers tell you which string on the fret to hold down.

Key words	Definition
Unison	All the musicians play the same thing at the same time
Canon	When the musicians perform the same thing one after each other.
TAB	**A method of reading sheet music on the ukulele/ guitar involving numbers.**



Music



Fill in the blank chord charts for the following chords;

C, G, Am, F

Fill in the gaps

A _____is where we play ___or more notes at the same time. A _can either be major or _____. We can tell the difference because major sounds _____and minor sounds _____. We can also play melodies or riffs on the guitar/ukulele from reading _____. TAB uses _____to tell us what string to hold down.

What is TAB?

Does TAB tell us chord or melodies?

TAB, Minor, Chord, Sad, Happy, Two, Chord, numbers

Physical Education – Participation Policy

- It is expected that your child brings full kit and changes into it for every physical education lesson even when a note has been written to excuse them from active participation in the lesson.
- The reasons for this are that, in addition to performance, part of their assessment and curricular provision comprises several other factors. Including;
  - Understanding the health related components of physical education
  - Evaluating their own and others performance.
  - The role of the coach, referee or umpire etc.
  - Some students may still be able to participate in certain aspects of the lesson for example the warm up to maintain fitness and involvement of the lesson.
- In view of this your son/daughter, whilst possibly excused from active performance is expected to officiate, coach and organise, for example, warm up and cool down activities for the rest of the group.
- If your son/daughter arrives at the lesson without appropriate PE kit, we will provide kit from the supply we have in school.

I have read and understand the PE policy for participation

- Signed (Parent/Carer) _____
- Signed (Child) _____
- Date _____

Physical Education - Badminton

Key skills: READY POSITION – balanced position, side on, racket up and ready, on toes.

SERVING –There are several types of serve – short/backhand, long ,flick. A backhand serve should land close to the service line on your opponents side of the net. The racket head must start from below the waist.

UNDERARM CLEAR (long serve) **–** This shot is played high to the back of your opponents court. Start sideways on and use a whip action with the wrist to create power.

OVERHEAD CLEAR – Played to the back of your opponents' court and is a defensive shot. Start sideways on, racket up and behind you, focus on making contact with the shuttle in front of you.

DROP SHOT- a shot played with finesse to land the shuttle as close as possible to the net on your opponent's side.

SMASH SHOT – This is the main attacking shot in badminton. It is an overhead shot, hit in front of the body, that aims to get the shuttle down on the floor at a shar angle. The wrist needs to "snap" to get it down.

TACTICS - Hitting into space – moving partner aroun the court

Shot selection – selecting the right shot for the right situation

Targeting opponents weaknesses

Disguised shots – trying to make it look like y are going to play a particular shot but t pla different shot to fool an opponent.

Doubles play – role of players in doubles. Front/back formations or side to side.

Rules

Game starts with a diagonal serve- right hand side to right hand side

Serve must land over the service line

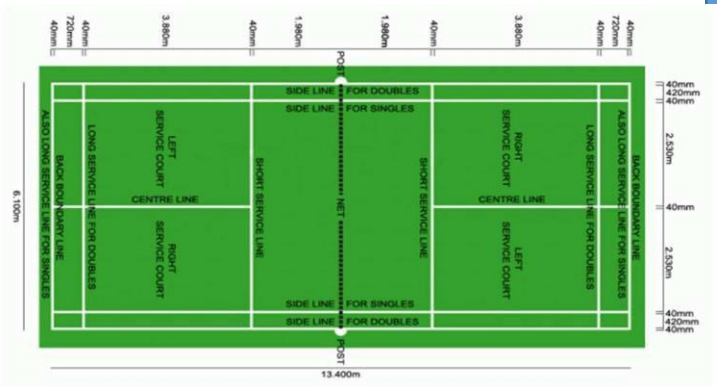
Play to 21 points – but must win by 2 clear points. A point is won every rally

Whoever wins the point serves next

When score is even, serve from right, when score is odd, serve from left

Court is long and thin for singles, short and wide for doubles

You cannot hit the net with your racket or body



Key words

Grip and ready position

Drop shot

Rally Serve – backhand/short, long, flick

Ready position

Overarm clear

Underarm clear

Smash

Disguised shot

Physical Education – Badminton questions

1. Name 3 pieces of Badminton equipment.

2. Name the rules for serving.

3. Name 2 components of fitness that would be useful for a badminton player.

4. List 2 ways that you can win a point in Badminton.

5. If an opponent was stood at the back of the court, what shot would be best to play?

6. Explain the difference in court dimensions between doubles and singles badminton.

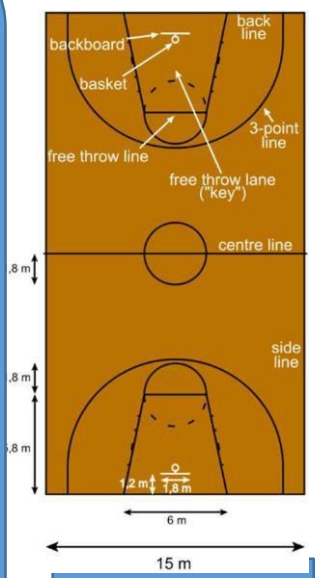
Stretch and Challenge Task:
-Draw a badminton court in your book and label it correctly with the lines that are in/out for both singles and doubles.
-When might you use front and back play in doubles and when might you use side to side?
- Go online and watch some doubles play form the Olympics or Commonwealth games.

Physical Education - Basketball

Key skills: Dribbling: Head up, spread fingers and fingertips, waist height.
Chest Pass: W grip, step, chest to chest, follow through, short distance. **Bounce Pass**: W grip, step, chest to chest, follow through, bounce before player, short distance.
Pivoting, footwork and jump stop: Landing on alternative feet- first foot to land is the static pivoting foot.
Landing on simultaneous feet- either foot can become static pivoting foot/can be used at the end of a dribble or when receiving a pass.
On the move- release ball before third step.
Set shot: Knees bent, dominant foot slightly in front of other, strong hand at bottom, supporting hand on side, and elbow at 90 degrees.
Lay-up Strong hand at bottom, supporting hand on side, keep it high, right hand dribble, step right, jump left aim for top right hand corner of box, left hand dribble, step left, jump right, aim for top left corner of box.
Defending Man to man- knees bent, back straight, head up, arms out, watch opponent's belly-button.
Attacking: Dribble into space, screen defenders, dribble out wide and quick inward passes, drive towards ball to receive pass losing defender, overload zone defence.

Rules

Played with two teams of five
Score by shooting through a hoop
A side line ball is taken from the opposite team who touched it last
Outside of the three point arc a basket is scores 3pts and inside scores 2pts
Once the offense has brought the ball across the mid-court line, they cannot go back across the line during possession
Personal fouls include hitting, pushing and holding
Fouling a shooter results in one, two or three free throws, worth 1pt each, depending on where and how they were fouled
Players cannot travel with the ball or double dribble
Players cannot hold the ball for longer than 5 seconds



Key Content and Terms to learn:
Dribbling
Chest Pass Set Shot Lay-up

Physical Education – Basketball questions

1. True or false, when dribbling over the half way line from defence you are allowed to dribble back into your defensive half?
2. Describe ‘man-to-man’ marking when defending?
3. What does the term ‘zonal marking’ mean?
4. Explain what a successful ‘lay-up’ shot would look like?
5. Identify on court the 3 point line?
6. What is the name given to the start of a basketball match?
7. Explain what a ‘rebound’ is?
8. How does a basketball match re-start following a foul on an attacking player when they are in the act of shooting?

Stretch and Challenge Task:

Draw a basketball court in your book and label it correctly with the lines that are the 3-point line and the free throw line.

Watch a video of a NBL game, identify key players and their positions and write what they did well.

Physical Education – 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

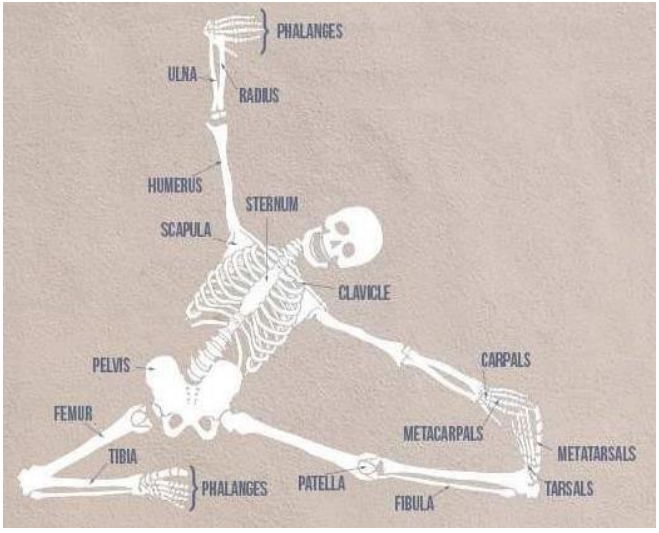
Balance- The ability to maintain centre of mass over a base of support. Stork Balance Test

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

Main bones



Key Content and Terms to learn: Endurance; Aerobic; strength; Flexibility; Agility; Balance; Coordination; Power; Reaction Time; Speed and Body Composition.

Physical Education – Fitness Questions

1. What is a pulse raising activity and why is it important?

2. Name 2 lower and 2 upper body muscles.

3. What is the difference between Aerobic and Anaerobic exercise?

4. List 3 lower and 3 upper body circuit training stations.

5. How could we measure our heart rate and what units do we measure heart rate in?

6. What is the difference between dynamic and static stretching? Name 2 of each stretch.

Stretch and Challenge Task:
Link the Components of fitness to specific Sports/activities.
Describe Training that could be undertaken to improve components of Fitness.

Physical Education – Football

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. Using the width is very important when attacking. It is important teams keep possession and play one and two touch to move the ball quickly. Also,'switch' the play using a lofted pass. **Defending** – players are normally marked man to man, but can be marked zonal from corners.

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

Rules

Game is started by kicking the ball from the centre spot.

The U12 game has 9 players – goalkeepers, defender, midfielders and attackers.

Referee and two assistants with officiate the game.

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.

To score the ball must cross the opposition's goal line. The offside rule also applies where an attacker is in front of all opposing defenders when the ball is kicked.

Key words Passing, dribbling, shooting, heading, attacking, defending, possession, width, depth, different formations

Physical Education – Football questions

1. Describe what a lofted pass is?
2. Describe how to control the ball effectively with the inside of your foot when receiving the ball off the ground?
3. What is a step over when dribbling 1v1?
4. Explain the outside hook turn?
5. What is a 'sweeper' when defending?
6. Where should a goalkeeper position themselves when their team is in the attacking third?
7. What is the difference between an central attacking midfielder (CAM) and a central defensive midfielder (CDM)?
8. Explain the positions in a 4-4-2 formation?

Stretch and Challenge Task:

1. What are the advantages of using man to man marking when defending?
2. Research the different types of formations (pictured) and positions.
3. Why is it important to use width in a game.

Physical Education – Netball

Key skills:

Passing and receiving – different types of passes include chest pass, bounce pass, shoulder pass and overhead pass.

Attacking – getting free from an opponent in order to receive the ball. Includes the skills of 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.

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

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.

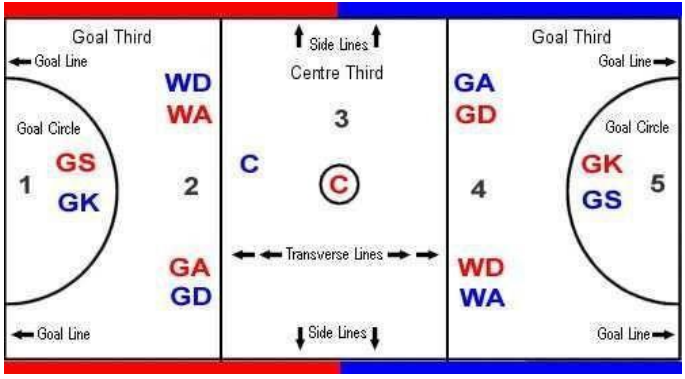
You only have 3 seconds to release the ball.

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



Key words
Passing and receiving
Shooting
Attacking
Dodging
Defending
Penalty
Footwork
Obstruction
Contact

Physical Education – Netball questions

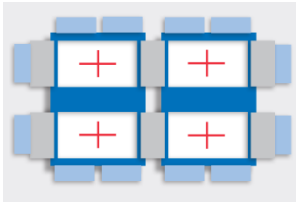
1. Explain the footwork rule in detail and how you would use this to gain space?
2. How many seconds after catching the ball does a player have to pass or shoot the ball?
   A. 3
   B. 5
   C. 10
3. How many players are on a team ?
   A. 5
   B. 7
   C. 11
4. When is a point scored in Netball?
5. Explain man to man marking
6. Write in your own words what a held ball is in detail
7. Name a type of marking used in Netball

Stretch and challenge task

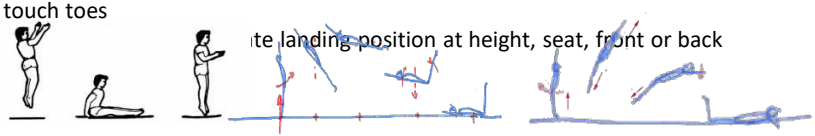
1. Watch an international game of netball and try and spot if any of the players do not obey the footwork rule and if they contact any other players.
2. List the reasons why you might get a free pass.
3. List reasons why you might get a penalty pass.

Physical Education – Trampolining

Key skills:
Shapes – perform straight, tuck, straddle, pike in isolation



Straight bounce - legs together, point toes, make circle motion with arms, keep body in straight position, stay on the cross
Tuck - in the air tuck legs up to chest and arms come down to touch shins
Straddle - split legs out to the side, point toes and attempt to touch toes
Pike - lift legs out in front keep legs together, point toes and try to lean over to
touch toes



te landing position at height, seat, front or back

Seat landing Back drop Front drop

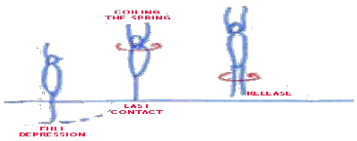
Seat Drop – land on the cross, palms down by the side, legs out straight, point toes
Back Drop – back to land on cross, arms in round position across chest, legs slightly bent, toes pointed in air
Front Drop – land on stomach (belly button to land on cross) arms and palms flat making diamond shape on bed, lift head to look at the end bed, legs lifting slightly off the trampoline ensuring they are together and toes are pointed.

Key words
Shapes, landings, twist, twist rotation, advanced rotations

Trampoline safety
Setting up
Set mats and end beds out. Cover any holes between the beds with a mat. Ensure end beds are secure. Place mats on the floor around the trampoline. Have spotters around trampoline.
Getting on and off a trampoline
Use a chair to assist getting on/ off trampoline when necessary. If not using the chair use arm strength to push up and sit on the side of the trampoline. When getting off walk to the side of the trampoline, sit down slide feet to chair or floor.
General rules All jewellery/ piercings removed. Remove shoes. Socks or grip socks to be worn.
Never go underneath the trampoline. Stay on the cross when bouncing. Only one person allowed on the trampoline at a time. Use "kill the bed" to stop when you lose control. Only perform movements your teacher has taught you
Competition rules
Land on two feet. Perform compulsory and voluntary routine. Routines must include 10 skills. Wear plain white socks. Can use 3 bounces before starting routine. Out bounce can be used if necessary at the end of routine. Cannot repeat single moves.

Twist

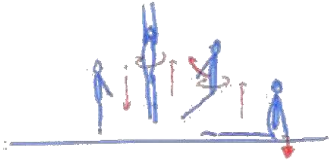
Perform 1/2 twist, full twist on trampoline with straight legs and arms (above head)



Half twist – stand on cross, perform half twist in the air. Start by facing one end bed and twist to face the opposite end bed. Arms out to the side to start, working towards placing them above head. Keep legs together an point toes

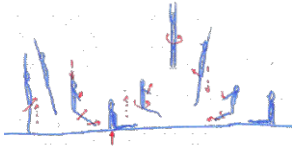
Full twist - stand on cross, perform full twist in the air. Start by facing one end bed and twist around to face the same end bed. Arms out to the side, working towards placing them above head. Keep legs together an point toes

Twist/ Rotation



Half twist to seat drop

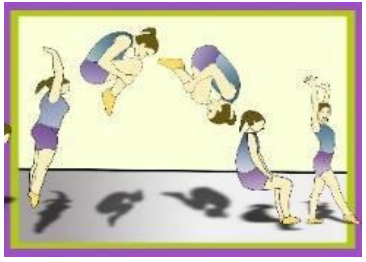
Seat drop half-twist out



Swivel hips

Advanced Rotation

Hands and knees turnover onto the mat including a bounce



PE - Trampolining

Physical Education – Trampolining Questions

1. Name three shapes
2. Describe how to perform a shape of your choice
3. Name three landing positions
4. Using coaching points, describe how to perform a landing position of your choice
5. Explain the progressions used to work towards performing swivel hips
6. Create a 5 bounce routine
7. Tariff the following movements
8. Full Twist –
9. Half Twist –
10. Front Drop –

Stretch and challenge task

a) - Perform 5 bounce routine using at least 3 different key skills

b) - Attempt to twist in and out of movements from height

c) - Perform somersault with height in isolation

d) - Tariff movements

e) - Attend extra-curricular

Religious Education - RE

Contents

Autumn 1: Creation and Covenant:
- *The Fall, Sin, Covenants and Commandments*
- *Conscience*
- *Baptism*

Autumn 2: Prophesy and Promise:
- *Prophets and Prophesies*
- *Old and New Testament Prophets*
- *Advent and Prophecy*

Spring 1: From Galilee to Jerusalem:
- *The Kingdom of God*
- *Kingdom Parables*
- *Miracles*

Questions

Creation and Covenant - Key Words

Imago Dei: Made in God's image.
The Fall: The story in Genesis 3 when humans commit the first sin and fall away from God's grace.
Original Sin: The state of sin in which all humans are born, meaning they inherit the consequences of Adam and Eve's first sin.
Baptism: The first sacrament that washes away Original Sin and welcomes you into the church.
Concupiscence: Lust that causes people to sin.
Sinai Covenant: The covenant Moses made with God at Mount Sinai, when he was given the Ten Commandments as part of the Law.
Decalogue: The ten 'words' or sayings of God that guided the Jewish people to live as God wanted; also called the Ten Commandments.
Freedom: The power or right a person has to act, speak or think as they want; being able to choose their own destiny, independent of influence from anyone or anything else.
Responsibility: Having control or power over something, which leads to a duty or moral obligation to behave correctly.
Conscience: An intuitive knowledge of right and wrong, which leads to an instinctive desire to do right and to avoid wrong.

Prophecy and Promise - Key Words

Prophet: A messenger of God.
Priest: A religious leader who can perform religious rites.
King: A ruler of a kingdom.
Messianic: To do with the time of the Messiah who was promised in the Old Testament.
Advent: The time of waiting and preparation leading up to Christmas.
Amos: Old Testament prophets who spoke about God's judgement and the coming of the Messiah.
Elijah: Old Testament prophet.
Isaiah: Old Testament prophet.
Jeremiah: Old Testament prophet.
John the Baptist: A preacher in the New Testament who prepared people for the coming of Jesus. Also Jesus' cousin.

From Galilee to Jerusalem' - Key Words

Kingdom: A territory ruled by a king or queen.
Moral sense of scripture: The moral meaning/lessons that are learned from the Bible.
Miracles: Extraordinary events that cannot be explained by science or the laws of nature, meaning only God could have made them happen.
Parables: Made up stories that Jesus told to teach a moral lesson.
Anointing of the Sick: The sacrament administered to people who are very ill or close to death.
Divinity: The state of being God.
Atonement: Making up for a wrong.
Absolve: Declaring free from guilt or wrongdoing.
Mercy: Not punishing someone for what they might deserve.
Lourdes: Place of pilgrimage in France where Mary appeared to St Bernadette.

RE – Creation & Covenant – The fall, Sin, Covenants and Commandments

The Fall and human sin

The story of the Fall in Genesis 3 helps Christians to understand why there is sin in the world.

The Fall	Human Sin
God gives humans the freedom to choose between right and wrong. In the story of the Fall, Adam and Eve use this free will to disobey God and commit sin.	Christians believe a sin is an act against the will of God or when someone goes against what their conscience tells them is right.
When Adam and Eve sin, they spoil their relationship with God, with each other and with nature.	Personal sin is the sin we have chosen to do ourselves. We have free will so we can choose to do good or wrong.
Catholics believe all humans are marked with original sin from Adam and Eve's sin. This means humans are more tempted to sin.	Original sin is the state that all humans are born into, inheriting the consequences of Adam and Eve's sin.
Catholics believe that the story of the Fall is figurative: it uses metaphors to explain why we have sin in the world.	
The story of the Fall emphasises God's goodness: God shows people how to avoid sin and promises that evil will be overcome.	

Covenants and God's Commandments

Covenants are agreements between two or more people. God has made covenants with humans:

- In the Sinai covenant, God gave the Ten Commandments to Moses. These commandments teach humans how to love God and others.
- Jesus taught humans that the greatest commandment is to love God with all your heart, soul and mind, and to love your neighbour as yourself.
- By keeping God's commands, Christians express their love for God and stay committed to the covenant.

RE – Creation & Covenant – Conscience and Baptism

Conscience

Catholics believe that conscience is God's law written on their heart, and that God guides people through their conscience to do good and avoid evil.

Catholics believe that:

- People have an intuitive knowledge of right and wrong because they are created *imago Dei*.
- They need to inform their conscience (for example by reading the Bible and praying) so that they grow in faith and keep God's word at the centre of their lives.
- They should always obey their conscience, but it must be well informed.

Baptism

- Baptism is a Sacrament of Initiation that welcomes a person into the Church.
- Baptism cleanses a person of their original sin and personal sins.
- The idea of water washing away sin is found in Numbers in the Old Testament.
- In the New Testament, John the Baptist baptised Jesus and others. Jesus then instructed his disciples to baptise all new Christians.
- Most Catholics are baptised as babies or young children (infant baptism).
- St Augustine taught that infant baptism is important to ensure that a person is cleansed of original sin and able to live a Christian life as soon as possible.
- Some Christians believe that baptism should only be celebrated by people who are old enough to decide to be baptised (believers' baptism).
- They say that Jesus himself was baptised as an adult, and that the promises made in baptism are personal and life-changing, so people should be old enough to understand how important they are.

Some symbols used in baptism:

Water – the washing away of original sin and the rebirth in Christ.

Candle - the light reflects the belief that in baptism, Catholics rise to new life, illuminated by Christ

Oil – a reminder that the candidate is part of the royal priesthood and has a special role to play in the life of the Church

RE – Prophecy and Promise: Prophets and Prophecies

What is a Prophet?
The word prophet defines someone specially chosen and called by God to tell his truth to others.

- The Hebrew word for prophet is ***Nebi***, which is derived from the verb 'act on,' "to bubble forth" like a fountain.
- The English word for prophet comes from the Greek word ***prophetes*** which means to "speak for another, especially one who speaks for a god."

The Biblical prophets spoke the truth which came from God. Their unique vocation allowed them to authoritatively speak on God's behalf. They never spoke on their own authority, nor did they share their own opinions. They only shared their message as God instructed them. Their role was to make God's will known, as well as his holiness, and to instruct God's people to reject idolatry and sin. As well as reminding the people to live how God wanted, they also gave messages about how, hundreds of years in the future, God would send a Messiah (Jesus) to be the saviour of the world.

In the Bible we have the books of 4 **Major Prophets:** *Isaiah, Jeremiah, Ezekiel and Daniel* …and 12 **Minor Prophets:** *Hosea, Joel, Amos, Obadiah, Jonah, Micah, Nahum, Habakkuk, Zephaniah, Haggai, Zechariah, and Malachi*

The prophecies we read in the Bible follow this pattern:

- **Call:** God chooses the person and makes himself known to them.
- **Message:** Having chosen and called the person, God gives them a special message or a particular task they need to do.
- **Fulfilment:** The promise of the prophecy will come true, even if it isn't in the prophet's own lifetime.

Christians believe that when God calls someone to do something, he doesn't just leave them to it. God will always be with the person, helping and equipping them to carry out the task he has given them. This applies to us today, and it applied to the Old Testament prophets too.

The Catechism tells us that Jesus has a 'threefold office', which means he has three special functions: to be a **priest, prophet and king:**

Title	Definition	How does Jesus show this?
Prophet	A **messenger** of God.	Jesus explained how the Kingdom of God would be created on both heaven and earth.
Priest	A religious **leader** who can perform religious rites, especially sacrifices.	Jesus showed people how to be faithful to God and sacrificed himself for the forgiveness of sins, so humans could reconcile with God.
King	A **ruler** of a kingdom who has responsibility, authority and **care** for his people.	Jesus was God on earth with responsibility for those in his care.

RE – Prophecy and Promise: OT and NT Prophets

Jeremiah

Jeremiah was called by God even though he thought he was too young. God told him not to be afraid, and that he had been specially chosen to tell people about God.

"Before I formed you in the womb I knew you, before you were born I set you apart; I appointed you as a prophet to the nations." **Jeremiah 1**

Amos

Amos lived around the time of the Prophets Isaiah and Hosea. He preached God's message to the people of northern Israel.

God gave Amos visions that were warnings for Israel. God gave him a vision of locusts. The locusts would devour everything in the land. Amos cried out to the Lord and asked Him to forgive and asked how God's people could survive after such devastation? God heard Amos and reversed this punishment He was going to send.

When God gave Amos a vision of fire that would burn up the land, Amos once again asked the Lord how His people could survive with such a devastation of fire. God again reversed His punishment and did not send a fire to devour the land.

God gave Amos a vision of a plumb line that showed that God's people did not measure up to His laws and commandments.

The final vision God gave to Amos was of a basket of ripened fruit that meant that God's people were ripe and ready to receive God's punishment for their sin.

Isaiah

Isaiah prophesied about the Messiah around the Eighth Century. The Israelites had been conquered many times and wanted God to protect them. One day in the temple, God called a man named Isaiah to teach the people about the coming of the Messiah to save the people from sin. Isaiah prophesied that the Messiah would be born of a virgin, would suffer, die but be raised to new life, and would bring peace and justice:

"…a new king will arise from among David's descendants. The spirit of the LORD will give him wisdom and the knowledge and skill to rule his people. He will not judge by appearance or hearsay; he will judge the poor fairly and defend the rights of the helpless... He will rule his people with justice and integrity…" **Isaiah 11**

John the Baptist

John lived his life spreading the message that the Messiah would soon come. The following passage tells you about the end of John's life:

"People's hopes began to rise, and they began to wonder whether John perhaps might be the Messiah. So John said to all of them, "I baptize you with water, but someone is coming who is much greater than I am. I am not good enough even to untie his sandals. He will baptize you with the Holy Spirit and fire.

In many different ways John preached the Good News to the people and urged them to change their ways. But John reprimanded Governor Herod, because he had married Herodias, his brother's wife, and had done many other evil things. Then Herod did an even worse thing by putting John in prison." **Luke 3**

RE – Prophecy and Promise: Advent and Prophecy

Advent is a time of waiting and preparation in the Church's Liturgical year. For Christians it marks the period spent preparing and waiting for the season of Christmas, when we celebrate the great mystery of the Incarnation, when God became flesh in the person of Jesus. The season of Advent begins a new Liturgical year in the Church and spans the four Sundays up to Christmas Day. The first Sunday of Advent begins on the Sunday closest to St Andrew's Day on 30th November.

The Advent wreath connects to the Book of Isaiah, which prophesised that the Messiah would be a 'suffering servant'. The wreath is made of evergreens, which have symbolic meanings:

- Cedar and laurel: These are a traditional symbol of victory over suffering. Cedar symbolises strength and laurel the strength to overcome suffering.
- Holly: This has a special Christian meaning as the prickly leaves symbolise Jesus' crown of thorns.
- Pine, Holly and Yew: These symbolise immortality and Jesus' victory over death.

The circular shape of the wreath also has a symbolic meaning as it has no beginning or end. This links to the eternal nature of God, recognised in Jeremiah through a reference to God's 'everlasting love', the immortality of the soul, and the everlasting life found in Jesus.

1. The Prophecy Candle
This is a purple candle, thought to symbolise hope and the messianic expectation. It is a reminder of the prophets who foretold the birth of Jesus, in particular the prophet Isaiah.

3. The Shepherd's Candle
This is a pink candle and is thought to symbolise joy. Priests wear rose-coloured vestments to reflect the joy experienced at the birth of Jesus.

2. The Bethlehem Candle
This is a purple candle, thought to symbolise faith. It is seen as a reminder of the journey of Mary and Joseph to Bethlehem, Where Mary gave birth to the foretold Messiah.

5. The Christ Candle
This is white and is thought to symbolise purity. It is a modern addition and is thought to represent the sinless nature of Christ, sent as the saviour. It is lit on Christmas Eve and kept alight through to the Epiphany.

4. The Angel's Candle
This is purple and is thought to symbolise peace. It is seen as a reminder of the peace the Messiah is foretold to bring, and the message of peace on earth the Angels brought to the shepherds.

RE – From Gailee to Jerusalem: The Kingdom of God

The **Kingdom of God** and **reign of God** are both phrases used to refer to a time when people act and live as God wants.

"Jesus went into Galilee, proclaiming the good news of God. "The time has come," he said. "The kingdom of God has come near. Repent and believe the good news!" ***Mark 1:14-15***

Christians believe that the **Kingdom of God was established by Jesus, and has continued ever since**. However, they also believe that the fullness of the Kingdom will not be revealed until the end of time; so **in the meantime Christians must try to make the Kingdom present in their own lives** by truly following God's will and commandments – when they do this, **this is the reign of God.**

The Kingdom of God is not exclusive – everyone is called to enter. Jesus showed this by interacting with people who were marginalised in society at the time. This means people who could not fully participate in everyday life. They include:

- Sinners
- Gentiles (non-Jews)
- Women
- The sick

In fact, because of this, Catholics believe that these people are welcomed by Jesus above everyone else. *"The Kingdom belongs to the poor and lowly." (Catechism)*

To grow, a plant needs:

- a seed
- good conditions (water, light etc.)

The Kingdom of God is the same:

- the seed is Jesus
- the good conditions (water, light etc.) are people living as God wants us to.

RE – From Galilee to Jerusalem: Kingdom Parables

The Parable of the Lost Son:
Jesus told a story about a father and two brothers. One brother demands his inheritance early and leaves home to live a life of luxury and greed while the other brother stays home working. But when his money runs out, he realises the mistake he has made. He goes home to his father because he has no other option, deeply sorry for what he has done and intending to ask his father to hire him to work. However, his father is so glad he has returned home safely he throws him a feast and forgives him completely. The other brother is quite jealous, but the father is full of joy because the son he thought was dead has come home safely.

What Jesus was teaching through this story:
Just like the dad in the parable, God is our Father who loves all people so very much and everyone is welcome in his kingdom (family), even when we make terrible mistakes and turn away from him. When someone who has sinned repents and turns back to God, he rejoices because he loves us so much, no matter what we've done.

The Parable of the Sower:
Jesus told a story about a farmer who went out to sow seeds. Some fell on the path and were eaten by the birds. Some fell on rocky ground and grew quickly at first, but were soon scorched by the sun because their roots were not deep in soil. Some fell into thorns which choked the plants. But the seeds that fell onto good soil grew well and produced good grain. Jesus said, "Whoever has ears to hear, let them hear."

What Jesus was teaching through this story:
That we need to be wise and listen to what Jesus has taught us. The seeds represent the words of God and the soil represents the different ways people respond. The parable teaches that his words need to take root in our hearts for us to be kingdom people.

The Parable of the Sheep and the Goats:
Jesus told a story about separating sheep from goats like a farmer would. The sheep represent people who follow God's teachings and are therefore kind, selfless and charitable, helping others in need. The goats represent people who don't follow God's teachings and are selfish and greedy, not helping others in need.

What Jesus was teaching through this story:
That we should be like sheep who follow their shepherd well. We should follow Jesus and his teachings on how to treat others, if we want to be part of his kingdom.

RE – From Galilee to Jerusalem: Miracles

Miracles are extraordinary events that cannot be explained by science or the laws of nature, meaning only God could have made them happen. An important part of Jesus' ministry was the miracles he did. The Gospels have recorded at least **37** miracles that Jesus performed in his lifetime. These miracles tended to fall into one of four categories:

- **Power over evil** e.g. Jesus Heals a Man with a Demon
- **Power over death** e.g. Jesus Heals Jairus' Daughter
- **Power over sickness** e.g. Jesus Heals Blind Bartimaeus
- **Power over nature** e.g. Jesus Calms the Storm

To Christians, Jesus' miracles are **signs of the Kingdom of God** breaking the chains of sins and death. They believe that the resurrection of Jesus manifests the '**death of death**' and the end of its power over humankind. Jesus' miracles are a **foretaste of the Kingdom in glory,** where there will be no evil, sickness or death.

Modern day miracles:
The pilgrimage site of Lourdes is near the Pyrenees mountains in France.
Every year, thousands of pilgrims visit Lourdes to see the site of a famous vision experienced by a young girl called Bernadette Soubirous and in the hope of being healed by its miraculous waters. Many people visit to be cleansed of their sins and to be cured of their illnesses. It is believed that spring water from the grotto can heal people if they are sick.

The International Medical Committee of Lourdes began in 1947 and passes judgement on whether or not any of the healings that take place in Lourdes are miracles. 70 cases have been officially recognised as miracles by the Roman Catholic Church, although many more people have reported healing.

If a Catholic is sick they may receive the sacrament 'Anointing of the Sick' either a**t home or in a hospital**.

- The rite begins with a **Biblical reading** linked to healing. Then the priest will **lay his hands** on the person, which indicates the **gifts of the Holy Spirit** being brought down, for example courage and strength.
- The **sign of the cross** is made on the person's forehead and hands using the **oil** of the sick.
- The priest **absolves** the person of their sins and blesses them, which is a form of spiritual healing.
- If the person is nearing death and are able, they will receive **Holy Communion** as spiritual nourishment for the journey ahead.

Autumn 1: Creation and Covenant Questions	Autumn 2: Prophesy and Promise Questions	Spring 1: From Galilee to Jerusalem Questions
1. What happened in the story of The Fall? 2. What impact does The Fall have for Catholics today? 3. What is original sin? 4. What is personal sin? 5. Give three examples of personal sin. 6. Design an illustration of The Fall and it's consequences. 7. Where do we get the 10 Commandments from? 8. What does Jesus say the Greatest Commandment is? 9. What is your conscience? 10. Why do people have an intuitive knowledge of right and wrong? 11. What does Baptism do? 12. What did St. Augustine teach about Baptism? 13. What is it called when you get baptised as an adult? 14. Choose 5 key words for this topic. Write the word and the definition out, and then draw a symbol to help you remember the meaning of the word.	1. What is a prophet? 2. Where does the word prophet come from? 3. How many Major Prophets are there? Name three. 4. How many Minor Prophets are there? Name three. 5. Explain the pattern that prophecies in the Bible follow? 6. Who was John the Baptist? 7. Tell me one thing that happened in John the Baptist's life. 8. Explain the four visions Amos received and what they meant. 9. How do you think it would feel to be a prophet? 10. How do you think you would react if someone told you they were a prophet today? Why? 11. Design your own Advent wreath and label it to explain your ideas. 12. Choose 5 key words for this topic. Write the word and the definition out, and then draw a symbol to help you remember the meaning of the word.	1. Retell the Parable of the Lost Son in your own words. 2. What message was Jesus teaching in the Parable of the Lost Son? 3. Retell the Parable of the Sheep and Goats in your own words. 4. What message was Jesus teaching in the Parable of the Sheep and Goats? 5. Retell the Parable of the Sower in your own words. 6. What message was Jesus teaching in the Parable of the Sower? 7. For each Parable, design a symbol that represents the *meaning* of the Parable. 8. Why do you think that Jesus taught using Parables? 9. Which Parable do you think most clearly illustrates beliefs about the Kingdom of God? Explain why as fully as you can. 10. Choose 5 key words for this topic. Write the word and the definition out, and then draw a symbol to help you remember the meaning of the word.

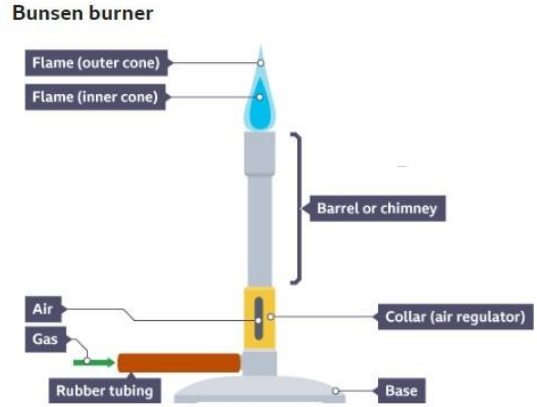
Science - Working scientifically

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



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.

Science

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.

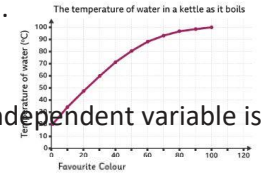
Results table: As the practical is carried out, write the results in a table.

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

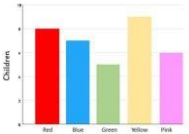
Calculating a mean

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

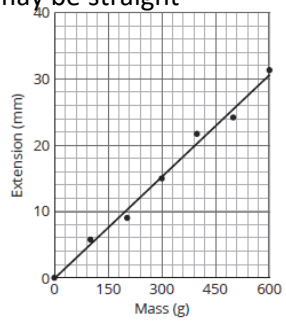
The most common ways of presenting data in science are:
•A **line graph** should be used when the independent and dependent variables are continuous.

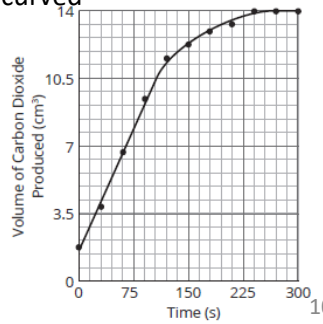


•A **bar chart** should be used if the independent variable is discontinuous .



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 or curved





Science - Energy

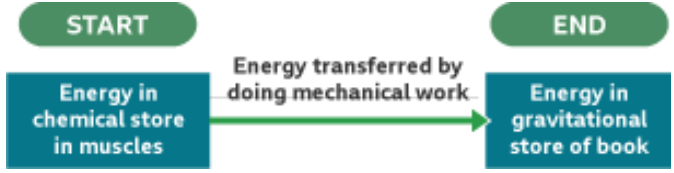
Energy can be described as being in different 'stores'.
- It cannot be created or destroyed.
- It can be transferred from one store to another.

Store	Description
Kinetic	Any object that is moving
Gravitational potential	Any object that is above the ground
Chemical	Foods, fuels and batteries
Elastic potential	An object that is stretched
Thermal	Any object that is warm
Nuclear	An object made from radioactive material

Pathways
Energy can be transferred by:
•mechanical working – when a force is applied to move an object through a distance
•electrical working – when charge flows (electricity)
•heating – when energy is transferred between hotter and colder regions
•radiation – when energy is transferred as a wave, for example as light or sound

Energy transfers:

A force is applied to move an object, for example when a person lifts a book onto a high shelf:



Charges flow in a circuit, for example in a battery powered toy train:

Energy moves from the thermal store of a hotter object to the thermal store of a cooler object, for example when a handwarmer is used to warm up your hands.

Electricity can be generated using a number of energy resources. These can be divided into renewable and non-renewable resources.

Science

Renewable = will not run out:

Wind

Hydropower

Solar

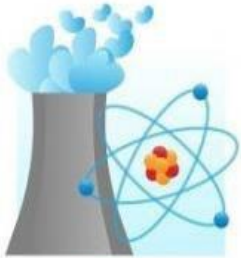
Geothermal

Biomass

Non-renewable = will run out:

Oil

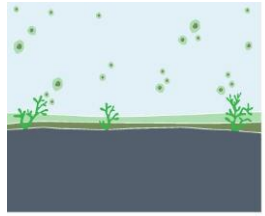
Coal



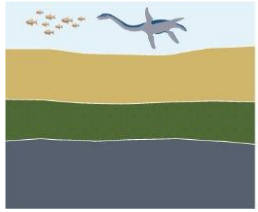
Nuclear

Natural Gas

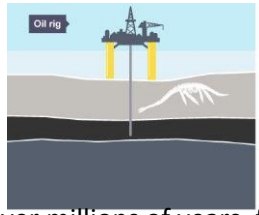
Fossil fuels: coal, oil and gas. Formed over millions of years, from the remains of plants and animals.



Dead plankton collects on the sea bed



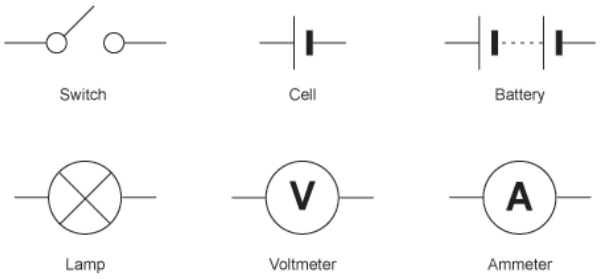
Covered in layers of sediment



Over millions of years, fuel forms

Science - Electricity

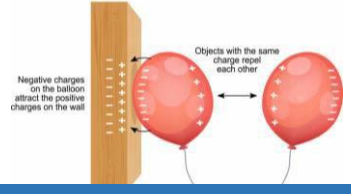
Common circuit symbols

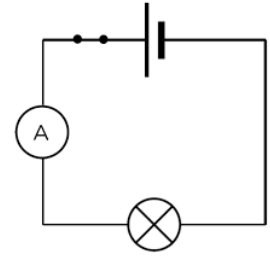
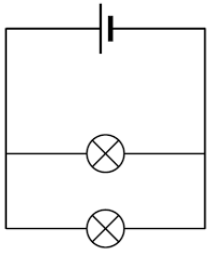


Static electricity

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
	
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

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

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 → 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 → metal salt + hydrogen

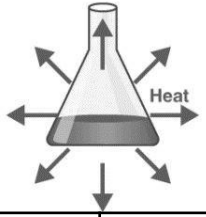
Incomplete combustion

Limited oxygen available
Air hole closed on a Bunsen burner
Less energy released
The fuel burns incompletely

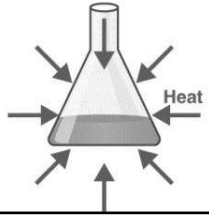
Complete combustion

Plenty of oxygen available
Air hole open on a Bunsen burner
More energy released
The fuel burns completely

Exothermic



Endothermic

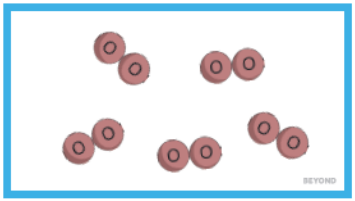


Keyword	Meaning
Reactants	Substances at the beginning of a chemical reaction (before arrow in a word equation)
Products	Substances at the beginning of a chemical reaction (after arrow in a word equation)
Endothermic	Chemical reaction that takes in energy from the surroundings, the temperature decreases
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
Thermal decomp-osition	When a substance breaks down when heated, an example of an endothermic reaction Metal carbonate → metal oxide + carbon dioxide

Elements, compounds, mixtures

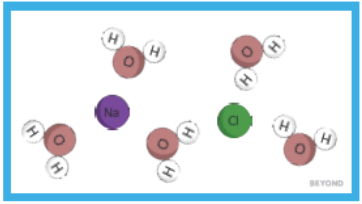
Elements = substances that are made up of only ONE TYPE of atom.

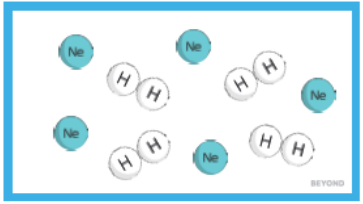
- Can be found as molecules, as well as atoms.
- Found on the Periodic Table



Mixtures = substances that are made up of more than one type of atom, NOT chemically combined

- So can be separated into the substances they are made from.
- Some examples include: air, tap water (dissolved salts in it)

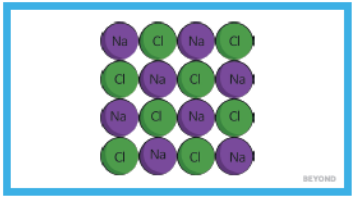


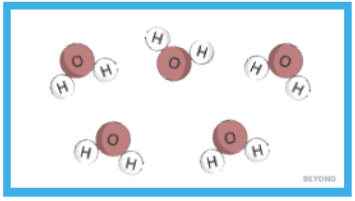


We can use physical methods to separate substances in a mixture. These separating techniques include - chromatography, filtration, using a magnet, evaporation, distillation, fractional distillation

Compounds = substances that are made up of more than one type of atom, chemically combined.

- Chemical and physical properties are different to the elements they are made up of.
- CANNOT be separated into the elements it is made from
- Are always found as molecules.
- Names often made up of two parts – for instance sodium chloride, copper sulphate
- Formulae is ALWAYS more than one CAPITAL letter e.g. H_2O, CO_2





Word equations

Show us what happens during a chemical reaction.

Reactants → products

Chemical Formula = show us what elements are present in compound. The symbols used are from the Periodic Table
For example the chemical formula:

$CaCO_3$

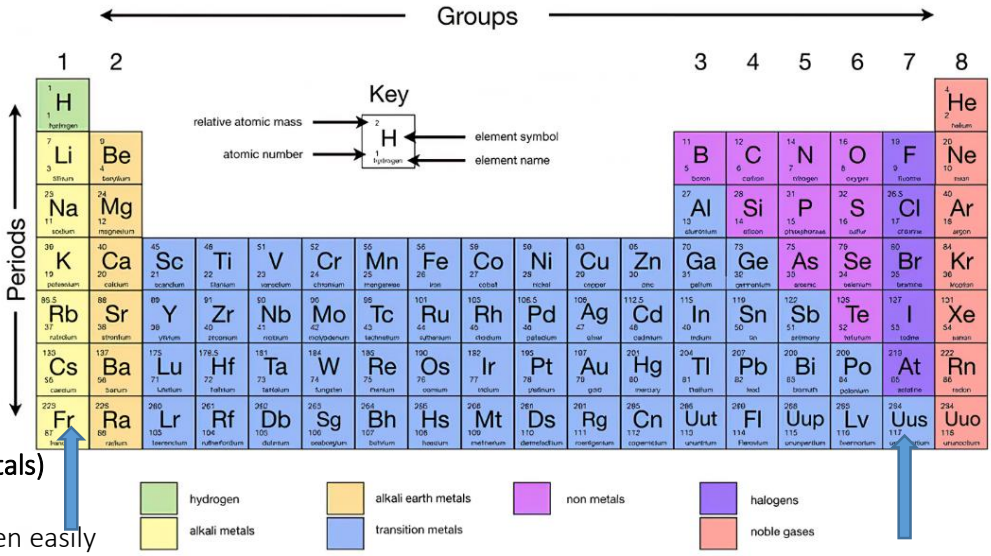
- Tells us it contains 3 elements: Ca – calcium, C - carbon, and O – oxygen
- Also tells us how many atoms of each: calcium – 1, carbon – 1 and oxygen - 3

Periodic Table

- Elements represented by 1 or 2 letter symbols
- Elements with similar properties are arranged in vertical columns are called **groups**.
- Horizontal rows are called **periods**.

Developing the Periodic Table

- A number of scientists developed and improved the way the Periodic Table is organized, over a long period of time.
- This happens in all areas of science – ideas change as new evidence is found.
- The modern Periodic Table was developed by Dmitri Mendeleev.



Group 1 (Alkali metals)

- Reactive metals
- React with oxygen easily
- React with water to make an alkaline substance (a hydroxide solution)
- Get more reactive as you go down the group.

Group 0 (Noble Gases)

- Very unreactive .non-metals
- Do NOT form compounds

Group 7 (Halogens)

- Reactive non-metals
- Get less reactive as you go down the group.

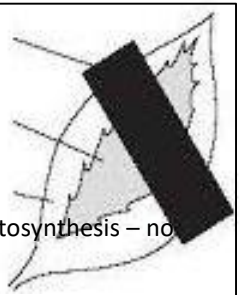
Science - Bioenergetics

Photosynthesis
- A chemical reaction IN PLANTS that produces glucose
- Needs carbon dioxide from the air, and water from the soil
- Also needs light energy (from Sun) and chlorophyll to absorb the light energy
- Happens in chloroplast

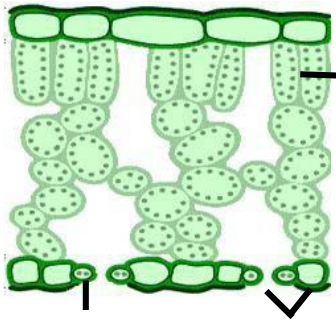
light energy
Carbon dioxide + water → (chlorophyll) glucose + oxygen

Uses of glucose in a plant - GLUCOSE IS A SUGAR
The two main uses of glucose in a plant are – **respiration** (to release energy) and making **starch** (for storage)
When the plant cannot make glucose (overnight, during the winter) it breaks starch back down to glucose, this can then be used in respiration (to release energy)

Testing leaves for starch
Covered part of leaf – no light energy – no photosynthesis – no glucose – no starch
Green part of leaf – photosynthesis – glucose – starch
White part of leaf – no chlorophyll – no photosynthesis – no glucose – no starch



Structure of a leaf:



Respiration
- A chemical reaction that **releases energy from glucose**
- Happens in ALL living cells, ALL of the time – animals, plants and microbes
- There are two types – **aerobic** and **anaerobic**

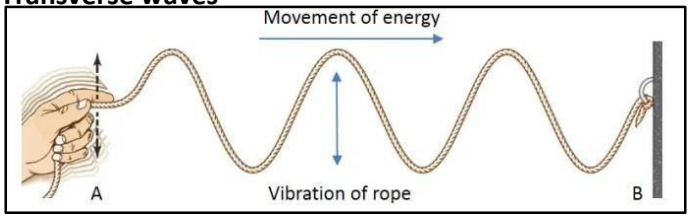
Aerobic respiration
- Releases MORE energy from glucose
- Needs oxygen
- Glucose + oxygen → carbon dioxide + water

Anaerobic respiration - Happens when there is no oxygen
- Releases LESS energy from glucose, as it is incompletely broken down
- IN ANIMALS: Glucose → lactic acid

Happens during strenuous exercise. The lactic acid produced makes the muscles ache.
- IN PLANTS & YEAST: Glucose → carbon dioxide + ethanol. In yeast, this is called fermentation.

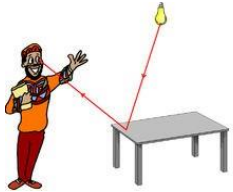
Science – Waves and Light

Transverse waves



- ALL waves transfer energy
- Light waves are an example of a transverse wave
- The oscillations (vibrations) are at right angles to the direction of energy transfer
- Water waves are another example of transverse waves

How we see

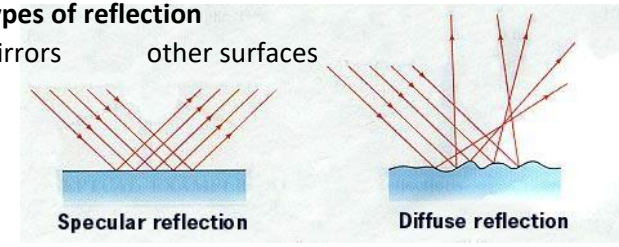


- Light reflects off objects, and into our yes
- We see coloured objects as different colours because they absorb and reflect different wavelengths of light

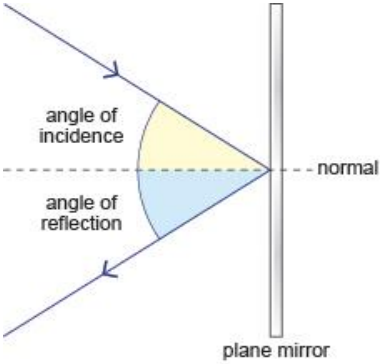
Keyword	Meaning
Opaque	A substance that does not allow light through
Transparent	A substance that allows light through
Translucent	A substance that allows some light through
Reflect	Light bounces off
Absorb	Light is soaked up
Transmit	Light goes through
Filter	A substance that allows some wavelengths of light through, but not all
Refract	Light changes speed and direction when moving from one medium to another
Medium	a substance through which light travels
Dispersion	White light is split into the colours of the spectrum. A type of refraction that occurs in prisms.

Types of reflection

mirrors other surfaces



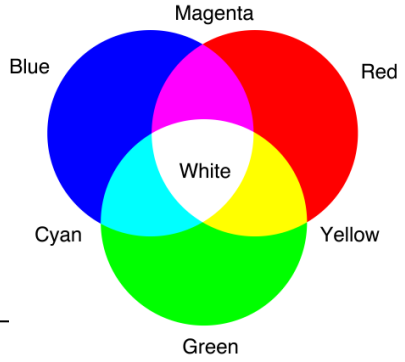
Reflection ray diagram



Arrows to show direction AWAY from light source

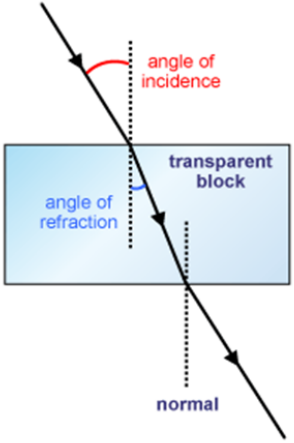
Normal is an imaginary line, drawn at 90° to the surface

Angle of incidence = angle of reflection



Refraction

When light moves from one transparent medium to another it changes speed and direction



When entering a more dense material
- e.g. from air to glass, or water
- Light slows down
- So it bends towards the normal

When entering a less dense material
- e.g. from glass (or water) to air
- Light speeds up
- So it bends away from the normal

Colour vision

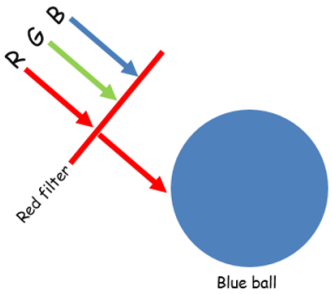
We see colours because objects reflect and absorb different colours of light

	Colour of object	Colours reflected into eye	Colours absorbed by object
	White	Red, blue, green	None
	Black	None	all
Primary colours	Red	Red	Green, blue
	Green	Green	Red, blue
	Blue	Blue	Red, green
Secondary colours	Cyan	Blue, green	Red
	Magenta	Red, blue	Green
	Yellow	Green, red	Blue

Filters

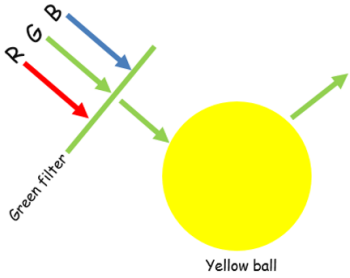
- Filters transmit some colours, but absorb others
- This alters the appearance of objects, because the light reaching them is altered

A red filter on a blue object



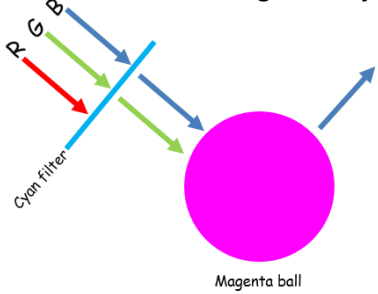
- Filter absorbs blue and green, red is transmitted
- Red light is absorbed by the ball, so the ball looks black

A green filter on a yellow object



- Filter absorbs red and blue, green is transmitted
- Green light is reflected by the ball, so the ball looks green

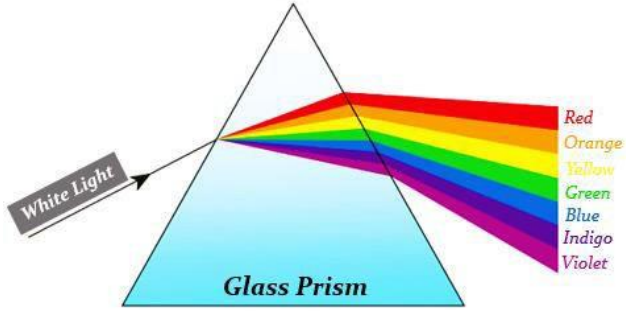
A cyan filter on a magenta object



- Filter absorbs red, blue and green are transmitted
- Green light is absorbed by the ball, so the ball looks blue

Science

Dispersion



- Spectrum = red, orange, yellow, green, blue, indigo, violet
- Red light is refracted (bent) the least
- Violet light is refracted the most

Science - Atmosphere

Atmosphere – the gases that surround the planet. The function of the atmosphere is to protect us from harmful rays, provide gases that sustain life and warm the planet.

Gas	% of atmosphere
Nitrogen	78
Oxygen	21
Others	1

Development of the atmosphere:

1.The Earth's surface was covered in volcanoes which released a lot of gases.
2.The early atmosphere began to form and was mostly carbon dioxide with no oxygen.
3.Water vapour condensed to form oceans.
4.Carbon dioxide gas dissolved in the oceans and formed sediments on the sea bed.
5.Green plants and algae evolved and used the carbon dioxide for photosynthesis.
6.Photosynthetic organisms released oxygen which built up in the atmosphere.
7.Animal life began to evolve.

Global warming - A gradual increase in the overall temperature of the earth's atmosphere because of the greenhouse effect caused by increased levels of greenhouse gases e.g. methane and carbon dioxide

Producing greenhouse gases:

1) Methane

Cattle farming

Using landfill

2) Carbon dioxide

Deforestation

Burning fossil fuels

Effects of global warming:

1)Loss of habitat and extinctions

2)Ice caps melting and sea levels rising

3)More droughts and floods

4)More extreme weather

Carbon dioxide is a greenhouse gas which affects the temperature of the Earth. Without it, the temperature on Earth would be too low to sustain life. However, as levels rise, the average air temperature is increasing too much.

Science

Carbon cycle:

Carbon is a key part of all living organisms – it is a building block of fats, carbohydrates and proteins.

The natural carbon cycle moves carbon between the air, the ground and living things. Processes that take in carbon dioxide:

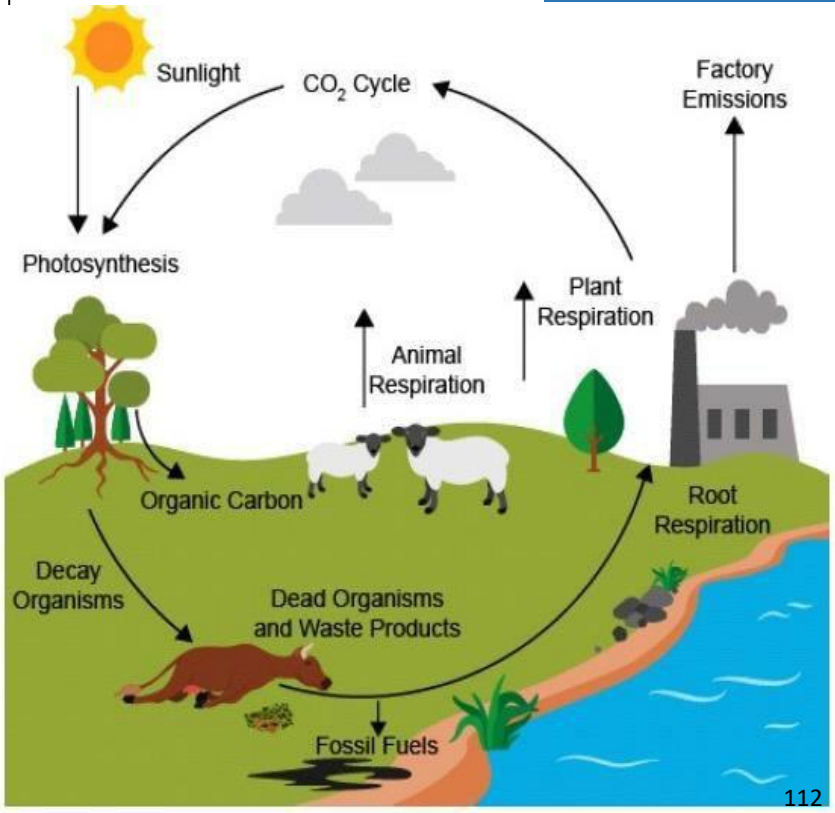
•Photosynthesis of plants

Process that moves carbon between plants and other organisms

- Eating
- Decomposition

Processes that release carbon dioxide:

- Respiration by plants
- Respiration by animals and
- decomposers Burning fossil fuels



Skills

1. What is meant by the dependent variable?
2. Why do we have control variables?
3. Which type of variable is changed?
4. How do you deal with anomalies?
5. What is this the hazard symbol for?

6. Which flame do you light a Bunsen Burner on?
7. What type of chart do you need for discontinuous data?
8. What is a prediction?
9. What sort of data is a line graph used for?

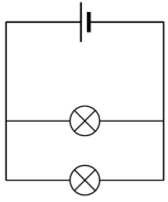
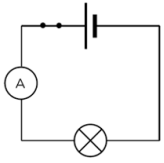
Bioenergetics

1. What is the purpose of photosynthesis?
2. What is the word equation for photosynthesis?
3. What are the uses of glucose in a plant?
4. How does carbon dioxide enter a plant?
5. Which part of a leaf carries out photosynthesis?
6. What are the two types of respiration?
7. What is the purpose of respiration?
8. What is the word equation for aerobic respiration?
9. What does anaerobic respiration produce in animals?
10. What does anaerobic mean?

Reactions

1. What is an exothermic reaction?
2. What is an endothermic reaction?
3. What is combustion?
4. What are the two types of combustion?
5. Which type releases more energy?
6. What does conservation of mass mean?
7. What is a thermal decomposition reaction?
8. What is a catalyst?
9. What is meant by the reactants in a reaction?
10. What is meant by the products of a reaction?
11. What is the definition of an element?
12. What is the definition of a compound?
13. Give two examples of mixtures
14. What is a group on the Periodic table?

Electricity

1. What is this the symbol for? 
2. What is the meaning of current?
3. What is the unit for current?
4. What is the meaning of potential difference?
5. What are the units for potential difference?
6. What is resistance?
7. What are the units for resistance?
8. What type of circuit is this? 
9. What type of circuit is this? 

10. What is the symbol for a battery?

Light

1. What is reflection?
2. What does opaque mean?
3. What does transparent mean?
4. What does translucent mean?
5. What is refraction?
6. What is white light?
7. What does absorb mean?
8. Which colours are absorbed by a red object?
9. Which colours are absorbed by a blue object?
10. What colours are combined to make cyan?
11. What colours of light will a magenta filter transmit?

Atmosphere

1. What gases are in the atmosphere?
2. Give two functions of the atmosphere?
3. Which two human activities produce methane?
4. Which two human activities produce carbon dioxide?
5. Give some effects of global warming
6. Which natural process carried out by plant removes carbon dioxide from the atmosphere?
7. Which natural process carried out by all living things releases carbon dioxide to the atmosphere?

Energy

1. Finish this sentence. Energy cannot be …… or …… but it can be …… From one store to another
2. Which energy store will a hot objet have?
3. Which energy store will a moving object have?
4. Which energy store is found in food, fuel and batteries?
5. Name the three types of fosssil fuel
6. Name three renewable energy resources
7. Name three non-renewable energy resources
8. How do fossil fuels fom?
9. What does non-renewable mean?
10. Which store of energy is found in objects that are streteched?
11. What are the four pathways by which energy can be transferred?

Spanish: Autumn Term

Las vacaciones

Key verbs and vocab

Present		Past	
Voy	I go	Fui	I went
Vas	You go	Fuiste	You went
Va	He/she goes	Fue	He/she went
Vamos	We go	Fuimos	We went
Vais	You lot go	Fuistei s	You lot went
Van	They go	Fueron	They went

a… - to…

Escocia – Scotland
Italia – Italy
Egipto – Egypt
Alemania – Germany
Gales – Wales
Grecia – Greece
Irlanda – Ireland
Estados Unidos – USA

Con… - with

En… - by

Avión – plane
Autobús – bus
Tren – train
barco – boat
autocar – coach
coche – car

Opinions

Fue… - it was

Guay – cool
Flipante – awesome
Genial - great
Regular - ok
Horroroso - terrible
Un desastre – a disaster
Raro – strange/weird

¡Lo pasé bomba! – I had a fantastic time
¡Lo pasé fenomenal! – I had a wonderful time
¡Lo pasé guay! – I had a great/cool time
Lo pasé mal – I had a bad/terrible time

Activities

El primer día - On the first day
El ultimo día – on the last day
Primero – first
Luego – then
Después – after
Más tarde - later

Visité monumentos – I visited monuments
Compré una camiseta – I bought a t-shirt
Saqué fotos – I took photos
Monté en bicicleta – I rode a bike
Descansé en la playa – I relaxed on the beach
Mandé SMS – I sent a message
Bailé – I danced
Nadé en el mar – I swam in the sea
Tomé el sol – I sunbathed
Escribí SMS – I wrote messages
Comí una paella – I ate paella
Bebí una limonada – I drank a lemonade
Conocí a un chico guapo – I met a good-looking boy
Salí con mi hermana – I went out with my sister
Vi un castillo interesante – I saw an interesting castle

Let's show off!

Acabo de ir a… - I have just been to…
Siempre he soñado con ir a… - I've always dreamed of going to…
Ojalá pudiera ir a… - I wish I could go to…
Cuesta un ojo de la cara – It costs an arm and a leg
El hotel era… - the hotel was…
El hotel tenía… – the hotel had…

Look at this model text about holidays – do you think you could replicate it with your own information?

Normalmente voy de vacaciones a **Grecia**.	Normally I go on holiday to **Greece**.
Voy con **mi familia** y vamos en **avión**	I go with **my family** and we go by **plane**
ya que es **rápido** pero también es **aburrido**.	because it's **fast** but also it's **boring**.
Acabo de ir a **Francia** y fue **guay**.	I've just been to **France** and it was **cool**.
Fui con **mi clase** y fuimos en **autocar**.	I went with **my class** and we went by **coach**.
El primer día **visité monumentos** y **saqué muchas fotos**.	On the first day **I visited monuments** and **I took lots of photos.**
Después compré **una camiseta roja.**	After, I bought a **red t-shirt.**
El ultimo día **tomé el sol** en la playa	On the last day **I sunbathed** on the beach
y más tarde, **nadé en el mar**.	and later, **I swam in the sea**.
¡Lo pasé **bomba**!	I had a **fantastic** time!
Siempre he soñado con ir a **Estados Unidos**	I've always dreamed of going to **America**
porque me encanta **la comida** y **la cultura**.	because I love **the food** and **the culture**
Sin embargo, cuesta un ojo de la cara.	However, it costs an arm and a leg.

¿Adónde fuiste de vacaciones? *Where did you go on holiday?*	El año pasado *Last year* El verano pasado *Last summer*	fui a *I went to*	Escocia. *Scotland.* España. *Spain.* Francia. *France.* Gales. *Wales.* Grecia. *Greece.* Inglaterra. *England.* Irlanda. *Ireland.* Italia. *Italy.*	¡Qué bien! *How great!* ¡Qué bonito! *How nice!* ¡Qué divertido! *What fun!* ¡Qué guay! *How cool!* ¡Qué suerte! *What luck!* ¡Qué aburrido! *How boring!* ¡Qué horror! *How dreadful!* ¡Qué lástima! *What a shame!* ¡Qué mal! *How bad!* ¡Qué rollo! *How annoying!*
	No fui de vacaciones. *I didn't go on holiday.*			
¿Con quién fuiste? *Who did you go with?*	Fui con *I went with* Fuimos con *We went with*	mis amigos/as. *my friends.* mi clase. *my class.* mi familia. *my family.* mis padres. *my parents.*		
¿Cómo fuiste? *How did you get there?*	Fui *I went* Fuimos *We went*	en autocar. *by coach.* en avión. *by plane.* en barco. *by boat/ferry.* en coche. *by car.* en tren. *by train.*		

Fui *I went* Fuiste *You (singular) went* Fue *He/She went* Fuimos *We went* Fuisteis *You (plural) went* Fueron *They went*	a Italia *to Italy* a Escocia *to Scotland* a Grecia *to Greece*	en autocar. *by coach.* en avión. *by plane.* en barco. *by boat/ferry.*	¡Qué bien! *How great!* ¡Qué guay! *How cool!* ¡Qué aburrido! *How boring!* ¡Qué mal! *How bad!*

Visité *I visited* Visitaste *You (singular) visited* Visitó *He/She visited* Visitamos *We visited* Visitasteis *You (plural) visited* Visitaron *They visited*	monumentos. *monuments.*

Mandé *I sent* Mandaste *You (singular) sent* Mandó *He/She sent* Mandamos *We sent* Mandasteis *You (plural) sent* Mandaron *They sent*	SMS. *texts.*

Saqué *I took* Sacaste *You (singular) took* Sacó *He/She took* Sacamos *We took* Sacasteis *You (plural) took* Sacaron *They took*	fotos. *photos.*

¿Cómo te fue? *How was it?*		
Fui a Escocia *I went to Scotland* Fui a España *I went to Spain* Fui a Francia *I went to France* Fui a Grecia *I went to Greece* Fui a Italia *I went to Italy*	con *with*	mis amigos/as. *my friends.* mi familia. *my family.* mis padres. *my parents.*

¡Qué bien!	How great!
¡Qué bonito!	How nice!
¡Qué divertido!	What fun!/How funny!
¡Qué guay!	How cool!
¡Qué rico!	How tasty!
¡Qué suerte!	What luck!/How lucky!

Fue *It was*	divertido *fun/funny* estupendo *brilliant* fenomenal *fantastic* flipante *awesome* genial *great* guay *cool* horrible *horrible* horroroso *terrible* raro *weird* regular *OK* un desastre *a disaster*	porque *because*	comí algo malo y vomité. *I ate something bad and vomited.* hizo buen tiempo. *the weather was good.* llovió. *it rained.* perdí mi móvil. *I lost my mobile.*	¡Me gustó! *I liked it!* ¡Me encantó! *I loved it!* ¡No me gustó! *I didn't like it!*
			visité *I visited*	muchos monumentos interesantes. *many interesting monuments.* muchas ruinas. *many ruins.*
			no conocí a un chico guapo. *I didn't meet a good-looking boy.* no conocí a una chica guapa. *I didn't meet a good-looking girl.* no perdí mi pasaporte. *I didn't lose my passport.*	

Spanish: Spring Term

Mi vida

Key phrases

Present		Past	
Chateo con mis amigos	I chat with my friends	**Chateé con mis amigos**	I chatted with my friends
Comparto mis vídeos favoritos	I share my favourite videos	**Compartí mis vídeos favoritos**	I shared my favourite videos
Descargo melodías o aplicaciones	I download ringtones or apps	**Descargué melodías o aplicaciones**	I downloaded ringtones or apps
Hablo por Skype	I talk on Skype	**Hablé por Skype**	I spoke on skype
Juego	I play	**Jugué**	I played
Leo mis SMS	I read my messages	**Leí mis SMS**	I read my messages
Mando SMS	I send messages	**Mandé SMS**	I sent messages
Saco fotos	I take photos	**Saqué fotos**	I took photos
Veo	I watch	**Vi**	I watched
Salgo con mis amigos	I go out with my friends	**Salí con mis amigos**	I went out with my friends
Voy al cine	I go to the cinema	**Fui al cine**	I went to the cinema
Hago mis deberes	I do my homework	**Hice mis deberes**	I did my homework

Music

Escucho de todo – I listen to everything
Escucho la música de… - I listen to ____'s music
Escucho… - I listen to…
El rap - rap
El R 'n' B - RnB
El rock - rock
La música clásica - classical music
La música electrónica – electro music
La música pop - pop music
La música Latina – Latin music
La música de los años sesenta – 60s music
Me gusta… - I like
La letra – the lyrics
La melodía – the tune
El ritmo – the rhythm
…**canta bien** - …sings well

TV and film

Un programa de deportes – a sports programme
Una comedia – a comedy
Un concurso – a gameshow
Un documental – a documentary
Un reality – a reality show
Una serie policíaca – a police series
Un dibujo animado – a cartoon
Una telenovela – a soap
El telediario – the news

Una película de terror – a horror film
Una película de amor – a love/romantic film
Una película de guerra – a war film
Una película de acción – an action film
Una película de ciencia-ficción – a sci-fi film

Opinions

educativo – educational
gracioso - funny
informativo - informative
importante - important
inútil - pointless
interesante - interesting
estúpido/tonto – stupid/silly
útil - useful
entretenido - entertaining
pueril/infantil - childish
aburrido - boring
impresionante - impressive
bueno / malo – good/bad
emocionante – exciting

Look at this model text about your life – do you think you could replicate it with your own information?

Normalmente **chateo con mis amigos** o	Normally **I chat with my friends** or
saco fotos con mi móvil	**I take photos** on my phone
pero ayer escuché música.	but yesterday I listened to music.
Siempre me ha gustado la música de **Adele**	I've always liked **Adele's** music
porque es **entretenida**	because it's entertaining
sin embargo odio **la música de los años sesenta**	however I hate **60's music**
ya que es **aburrida**.	because it's **boring**.
Además, ayer vi un **documental** en la tele	Moreover, yesterday I watched a **documentary** on the tv
y fue muy **educativo**	And it was very **educational**
pero normalmente me gusta ver **películas de acción**	But normally I like to watch **action films**
porque son **emocionantes**.	because they're **exciting**.
La semana que viene **voy a ir al cine**	Next week **I'm going to go to the cinema**
Para ver una **película de terror**.	To watch a **horror film**.
Me encanta ir al cine pero cuesta un ojo de la cara.	I love going to the cinema but it costs an arm and a leg.
¡Qué **pena**!	What a **shame**!

Let's show off!

Siempre me ha gustado ver/escuchar – I've always liked watching/listening to…

Cuesta un ojo de la cara – it costs an arm and a leg

Lo bueno es que… - The good thing is that

Lo malo es que… - the bad thing is that

¿Qué haces con tu móvil? *What do you do with your mobile?*			
Todos los días *Every day* Dos o tres veces a la semana *Two or three times a week* A veces *Sometimes* De vez en cuando *From time to time*	hablo por Skype *I talk on Skype* juego *I play* leo mis SMS *I read my texts* mando SMS *I send texts* saco fotos *I take photos*	y *and* o *or*	chateo con mis amigos/as. *I chat with my friends online.* comparto mis vídeos favoritos. *I share my favourite videos.* descargo melodías o aplicaciones. *I download ringtones or apps.* veo vídeos o películas. *I watch videos or films.*
		pero *but*	nunca descargo melodías ni aplicaciones. *I never download ringtones or apps.* nunca veo vídeos ni películas. *I never watch videos or films.*

Saco *I take* Sacas *You (singular) take* Saca *He/She takes* Sacamos *We take* Sacáis *You (plural) take* Sacan *They take*	fotos. *photos.*

Leo *I read* Lees *You (singular) read* Lee *He/She reads* Leemos *We read* Leéis *You (plural) read* Leen *They read*	SMS. *texts.*

Comparto *I share* Compartes *You (singular) share* Comparte *He/She shares* Compartimos *We share* Compartís *You (plural) share* Comparten *They share*	vídeos. *videos.*

¿Qué tipo de música te gusta? *What type of music do you like?*				
Me encanta *I love* Me gusta mucho *I really like* Me gusta *I like* No me gusta *I don't like* No me gusta nada *I really don't like*	el rap *rap* el R'n'B *R'n'B* el rock *rock* la música de Adele *Adele* la música clásica *classical music* la música electrónica *electronic music*	porque *because*	en mi opinión *in my opinion*	es guay. *it is cool.* es horrible. *it is terrible.* es muy original. *it is very original.* es triste. *it is sad.*
			me encanta la letra. *I love the lyrics.* me gusta la melodía. *I like the tune.* me gusta el ritmo. *I like the rhythm.*	

¿Qué tipo de música escuchas? *What type of music do you listen to?*	Escucho rap. *I listen to rap.* Escucho de todo. *I listen to everything.*

¿Qué tipo de programas prefieres ver? *What type of programmes do you prefer to watch?*						
Prefiero *I prefer*	los concursos *game shows* los documentales *documentaries* los programas de deporte *sports programmes* los realitys *reality shows* las comedias *comedies* las series policíacas *police series* las telenovelas *soap operas*	porque son *because they are*	más *more* menos *less*	aburridos/as *boring* divertidos/as *funny* emocionantes *exciting* interesantes *interesting*	que *than*	el telediario. *the news.* los concursos. *game shows.* los documentales. *documentaries.* los programas de deporte. *sports programmes.* los realitys. *reality shows.* las comedias. *comedies.* las series policíacas. *police series.* las telenovelas. *soap operas.*
	el telediario *the news*	porque es *because it is*		aburrido *boring* divertido *funny* emocionante *exciting* informativo *informative* interesante *interesting*		

¿Qué hiciste ayer?

¿Qué hiciste ayer? *What did you do yesterday?*				
Ayer por la mañana *Yesterday morning* Ayer por la tarde *Yesterday afternoon*	bailé en mi cuarto *I danced in my room* hablé por Skype *I talked on Skype* hice gimnasia *I did gymnastics* hice kárate *I did karate* jugué en línea *I played online* monté en bici *I rode a/my bike* salí con mis amigos/as *I went out with my friends* vi una película *I watched a film*	y luego *and then* y un poco más tarde *and a bit later*	bailé en mi cuarto. *I danced in my room.* hablé por Skype. *I talked on Skype.* hice gimnasia. *I did gymnastics.* hice kárate. *I did karate.* jugué en línea. *I played online.* monté en bici. *I rode a/my bike.* salí con mis amigos/as. *I went out with my friends.* vi una película. *I watched a film.*	¡Qué divertido! *What fun!* ¡Qué guay! *How cool!*

¿Qué haces normalmente? *What do you do normally?*			
Normalmente *Normally*	bailo en mi cuarto *I dance in my room* hablo por Skype *I talk on Skype* hago gimnasia *I do gymnastics* hago kárate *I do karate* juego en línea *I play online* monto en bici *I ride a/my bike* salgo con mis amigos/as *I go out with my friends* veo una película *I watch a film*	pero ayer *but yesterday*	bailé en mi cuarto. *I danced in my room.* hablé por Skype. *I talked on Skype.* hice gimnasia. *I did gymnastics.* hice kárate. *I did karate.* jugué en línea. *I played online.* monté en bici. *I rode a/my bike.* salí con mis amigos/as. *I went out with my friends.* vi una película. *I watched a film.*

Las vacaciones

¿Adónde fuiste de vacaciones? Where did you go on holiday?	
¿Con quién fuiste? Who did you go with?	
¿Como fuiste? How did you get there?	
¿Qué hiciste en tus vacaciones (de verano)? What did you do in your (summer) holidays?	
¿Cómo te fue? How was it?	

Mi vida

¿Qué haces con tu móvil? What do you do on your mobile phone?	
¿Qué tipo de música te gusta? What type of music do you like?	
¿Qué tipo de programas te gustan? What type of programmes do you like?	
¿Qué hiciste ayer? What did you do yesterday?	