# 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.

1

- 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.

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

**Week A**

2

- 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:

Make an online report about the way someone has been comminicating with you online.
CEOP

For advice on wellbeing
Bekindtomymind
www.bekindtomymind.co.uk

Talk to someone confidentially about anything that is troubling you
childline
ONLINE, ON THE PHONE, ANYTIME
Call 0800 1111
Open 24/7

kooth
Kooth is an online **mental wellbeing** community for young people
For ages: 11-18
Sign up for free at Kooth.com

S+J
JUSTITIA TIMORE SINE

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

# Personal Development Curriculum

| 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"* |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

| 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 |
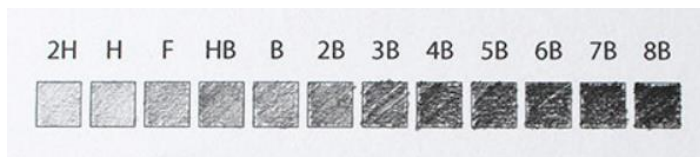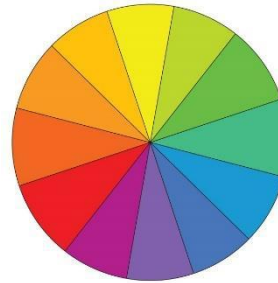
**Colour Theory**
**Primary Colours** are the 3 main colours. They cannot be made, but are used to make all other colours.
**Secondary Colours** are made mixing 2 primary colours.
**Tertiary Colours** are made by mixing a primary and secondary colour together.
**Complimentary Colours** are opposite on the colour wheel.
**Harmonious Colours** are next to each other on the wheel. **Tint** – When you add white to a colour to make it lighter.

**Shade**- When you add black to a colour to make it darker.
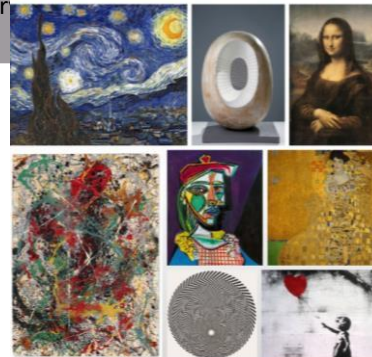
Vincent Van Gogh
Barbara Hepworth
Leonardo DaVinci
Jackson Pollock
Pablo Picasso
Bridget Riley
Gustav Klimt
Banksy

2H  H  F  HB  B  2B  3B  4B  5B  6B  7B  8B

9

| What do you know about **line**? | |
|---|---|
| What do you know about **tone**? | |
| What do you know about **texture**? | |
| What do you know about **shape**? | |
| What do you know about **pattern**? | |
| What do you know about **colour**? | |

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

| Word Bank | Definition |
|---|---|
| Stylized | A cartoon, non-realistic style of artwork. |
| Realistic | The artwork looks like the real object. |
| Abby Diamond | A wildlife artist, who uses watercolor and fine liner pen. She uses bright colour with expressive marks, but her actual drawing of the animal is realistic. |
| Pete Cromer | A stylized artist who creates work of animals. He uses a collage technique, cutting out shapes and reassembling them to create the animal. |
| Collage | Pieces of paper, photographs, fabric etc. are arranged and stuck down onto a supporting surface. |
| Watercolour | A water soluble paint with transparent properties. To make a watercolour more vivid you would use less water, and to make the watercolour lighter you would add more water to your brush. |
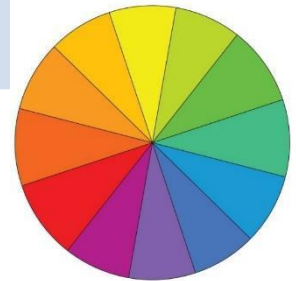
## ART

**Step by step bird drawing**
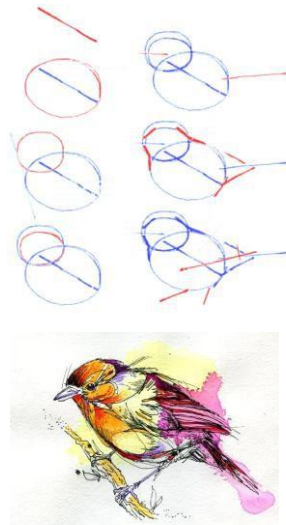
How to build up **tone** with watercolour.
Add **more** water to make the colour **lighter**.
Add **less** water and more paint to make the colour **darker**
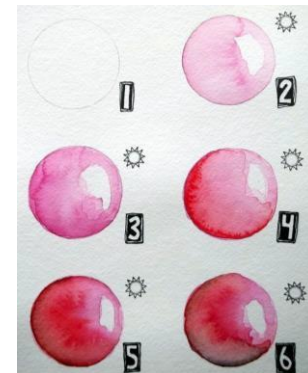
**Collage-** Cutting various shapes out of different coloured papers and then assembling them into an object .

**Mark making –** Creating different lines to suggest tone. The closer and more lines there are the darker that area will appear. The more spread out the lines, the lighter that area will appear.

hatching    contour hatching    cross hatching    stippling    scumbling

Cut    Tear

Compose    Glue
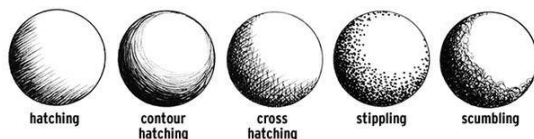
| | |
|---|---|
| How would you describe a **stylized drawing**? | |
| How would you describe a **realistic drawing**? | |
| What is a **collage**? | |
| What is **mark making**? | |

| Colour Theory | |
|---|---|
| What are the **3 Primary Colours?** | |
| What are the **3 Secondary Colours**? | |
| What is a **Tertiary Colour?** | |
| Why are **white** and **black** not on the colour wheel? | |
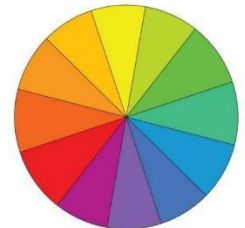
# Computing

## 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. 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 note there are no spaces) Example: 24BloggsJ@st-josephs.bolton.sch.uk

### Citizen Section

| Badge | Done? |
|---|---|
| E-Safety | |
| Safe Online | |
| Fake news | |
| What is the cloud? | |
| Digital Ethics | |
| Cyber Spies | |

### Worker Section

| Badge | Done? |
|---|---|
| Digital Portfolios | |
| Collaboration | |
| User Interfaces | |
| | |
| | |
| | |

### Maker Section

| Badge | Done? |
|---|---|
| Video Editing | |
| Colours | |
| Animation | |
| | |
| | |
| | |

### Entrepreneur Section

| Badge | Done? |
|---|---|
| Growth Mindset | |
| Big Data | |
| Growth Hacking | |
| | |
| | |
| | |

## SMART

**Stay Safe** — Don't give out your personal information to people / places you don't know.

**Don't Meet Up** — Meeting someone you have only been in touch with online can be dangerous. Always check with an adult you trust.

**Accepting Files** — Accepting emails, files, pictures or texts from people you don't know can cause problems.

**Reliable?** — Check information before you believe it. Is the person or website telling the truth?

**Tell Someone** — Tell an adult if someone or something makes you feel worried or uncomfortable.

Follow these SMART tips to keep yourself safe online!

### Safety and Security Top tips

Password—should be strong -over 12 characters and making use of uppercase, lowercase, numbers and symbols. Do not share this with anyone.

Locking computers—Crtl + Alt + Delete—every time you leave your computer.

Anti-Virus—regularly scan your PC with anti-virus software to find any new issues

### Types of cyberbullying -

Trolling • Excluding • harassing • gossiping • impersonating • cyberstalking • derogatory comments to/about someone • threats • Flaming • Masquerading

### Information validity

Web browsers i.e. Chrome, Edge, Safari

Sir Tim Berners-Lee created the first website

### How to check the quality of the information and website accuracy -

- Confirmed by other sources
- Unbiased
- Trusted source
- Up-to-date information

**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.

14

# Computing

## Year 7 A1—E-Safety

What does e-Safety mean?

_____

_____

_____

Explain in your own words how to stay safe online (SMART rules)

_____

_____

_____

_____

What makes a strong password?

_____

_____

Why is it essential to keep your passwords to yourself?

_____

_____

_____

How can people experience cyberbullying?

_____

_____

_____

Where and when can people experience cyberbullying?

_____

_____

Why is it important to ensure that information found online is accurate?

_____

_____

How can we check accuracy and validity?

_____

_____

What are the dangers of sharing too much personal information online?

_____

_____

_____

Key Terms—explain in your own words

Flaming—

Impersonating—

Masquerading—

Browser—

Bias—

Source

# Computing

## Year 7 A2 - PC Basics

## Input/Output/Storage Peripherals



Peripheral devices plug in to the PC to add additional functionality. Input devices allow the user to input data/ instruction whereas output devices allow the user to see/hear etc what the PC is doing!

## Health and Safety

When using computers you need to ensure that you can keep yourself safe and healthy. Poor posture and staring at a screen for too long can be harmful. You could end up with repetitive strain injury (RSI).

Back problems can result of poor posture. The solution—fully adjustable chairs, footrests and screens which can tilt.

Repetitive strain injury is damage to the wrist and thumbs from repeated movements over a long peri-



## Inside a PC

You can remember what different parts of a computer do by thinking about which part of the human body they compare to:

PC casing = skeleton

Processor = Brain

Motherboard = Central nervous system
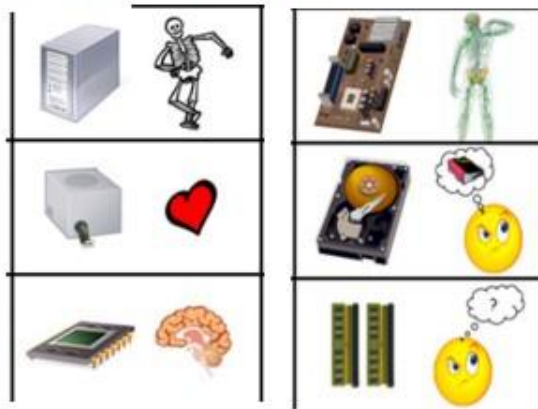


## Key Vocabulary

**Peripheral** - a device which plugs in to the PC to give additional functionality.

**Input** - any device which can be used to put data in to the PC.

**Output** - any device which can be used to view/retrieve data.

**RSI** - Repetitive Strain Injury. An injury usually to the wrists of thumbs from repeated movements.

**Components** - the parts of a computer.

16

# Computing

# Year 7 A2 - PC Basics

## Year 8 Knowledge Organiser: Data Representation

### Binary/Denary/ASCII

**What is Binary?**

**Binary is a number system that only uses two digits: 1 and 0.** All information that is processed by a computer is in the form of a sequence of 1s and 0s. Therefore, all data that we want a computer to process needs to be converted into binary.

**Hexadecimal:** Hexadecimal (or hex) is a **base 16** system used to simplify how binary is represented. A hex digit can be any of the following **16 digits:** 0 1 2 3 4 5 6 7 8 9 A B C D E F. Each hex digit reflects a 4-bit binary sequence.

| Hexadecimal | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | A | B | C | D | E | F |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Denary | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |

Convert Denary and 8 bit Binary into Hexadecimal

Example: convert the Denary number 165 into hexadecimal.

1. Create a binary table:

| 128 | 64 | 32 | 16 | 8 | 4 | 2 | 1 | Answer |
|---|---|---|---|---|---|---|---|---|
| 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 165 |

2. Place the number 1 under each number you need to make up 165 and a 0 under those not used.

| 128 | 64 | 32 | 16 | 8 | 4 | 2 | 1 | Answer |
|---|---|---|---|---|---|---|---|---|
| 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 165 |

3. Split the number into two nibbles:

| 8 | 4 | 2 | 1 | 8 | 4 | 2 | 1 | Answer |
|---|---|---|---|---|---|---|---|---|
| 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 165 |

4. Add up the nibbles separately. In this example, the first nibble adds up to 10, which in Hex is represented by the character A and the second adds up to 5 which means that 165 in Hex is A5.

| 8 | 4 | 2 | 1 | 8 | 4 | 2 | 1 | Answer |
|---|---|---|---|---|---|---|---|---|
| 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 165 |
| A | | | | 5 | | | | A5 |

**Binary Addition**

Binary addition involves adding two or more binary numbers together.

When adding two numbers, you will have the following possible outcomes:

0+0 = 0
0+1 = 1
1+1 = 1

When adding binary numbers, do so right to left.

Example: add 0100 and 0101

| | | | | |
|---|---|---|---|---|
| 1st num | 0 | 1 | 0 | 0 |
| 2nd num | 0 | 1 | 0 | 1 |
| Carried | 1 | | | |
| Answer | 1 | 1 | 0 | 1 |

0 + 1 = 1
0 + 0 = 0
1 + 1 = 11, so the one is carried
0 + 0 + 1 = 1

Therefore, the answer is 1101

**Overflow Error:** An overflow error occurs when the largest number that a CPU register can hold is exceeded.

**ASCII vs Unicode**

| | Advantages | Disadvantages |
|---|---|---|
| ASCII | Only uses 7 bits to store a character, meaning less memory is used. | Limited to 128 different characters. |
| Unicode | Uses up to 32 bits per character meaning it can store a wider range of language characters. | More bits per character means more memory is used. |

**Images**

**Pixel:** A single point in an image.

**Resolution:** The number of pixels that make up an image e.g. 800 x 600

**Colour Depth:** The number of bits used for each colour. E.g. 8 bit colour and 24 bit 'True Colour'.

### Key Vocabulary

**Binary** - sequences of 1's and 0's to represent number

**Denary** - also known as base 10. Whole numbers which can be converted to/from binary.

**ASCII** - can be used to convert denary to letters and punctuation.

**Machine Code—** commands usually in the form of 1's and 0's.

**Pixels** - squares which make up all images. Higher resolution images have more pixels and seem higher quality.

17

# Computing

# Year 7 A2 - PC Basics

**What is the difference between input/output/storage devices?**

_____

_____

_____

**Give examples of types of devices**

| Input | Output | Storage |
|-------|--------|---------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

**What health and safety measures should be put in place to keep you fit, healthy and safe?**

_____

_____

_____

_____

_____

_____

_____

**Which body parts can the below computer components be likened to and what is their purpose?**

| Component | Body part | Main purpose |
|-----------|-----------|--------------|
| Motherboard | | |
| Processor | | |
| PC casing | | |
| Power supply | | |
| RAM | | |
| Hard drive | | |

**Convert these binary numbers to denary**

00010000 = _____

**Explain each key term in your own words**

Peripheral -

Input -.

Output -

RSI -

Components -

Binary-

18

# Computing

# Year 7 Sp1 - Scratch

**What is Scratch?**
Scratch is a visual **programming language** that allows you to create programs by dragging blocks of scripts.

**Sprites**
A **sprite** is a character or object in your game or animation.

In order to give the impression that a character is moving you can change the sprites' **costume**.

**Block menu**
The block menu helps users pick which scripts they need to control various aspects of a program.

| Motion | Events |
| Looks | Control |
| Sound | Sensing |
| Pen | Operators |
| Data | More Blocks |

**Loops**
Loops are used as a way of repeating instructions.
Also known as **iteration**.

Repeats a certain number of times.

Repeats an instruction forever.

**Stage**
The stage is the background of the project. Scratch uses co-ordinates to position different elements around the screen.

Different backgrounds can be imported or you can create your own.

## Key Words

| Program | Variable | Sprite | Script |
|---------|----------|--------|--------|
| Costume | Background | Stage | Data |
| Loop | Operator | Iteration | Interface |

**Operators**
Operators are used for **changing** or **comparing** data.

They can **add**, **subtract**, **multiply** and **divide** data

They can also check if values are **less than**, **greater than**, or **equal to** other values.

**IF Statements**
IF statements can be used to select different scripts of a program depending on a condition

Also known as **selection**.

**Variables**
A variable is used to store data for use in your program.

Variables can be used to store lots of different types of data such as names, numbers and scores.

The data stored in a variable can be changed or "varied" depending on certain conditions within a program.

19
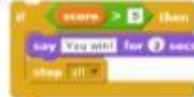
# Computing

# Year 7 Sp1 - Scratch

**Scratch interface**
An **interface** is what a user will interact with in order to use it. Below is the Scratch interface labelled to show what each key part does.
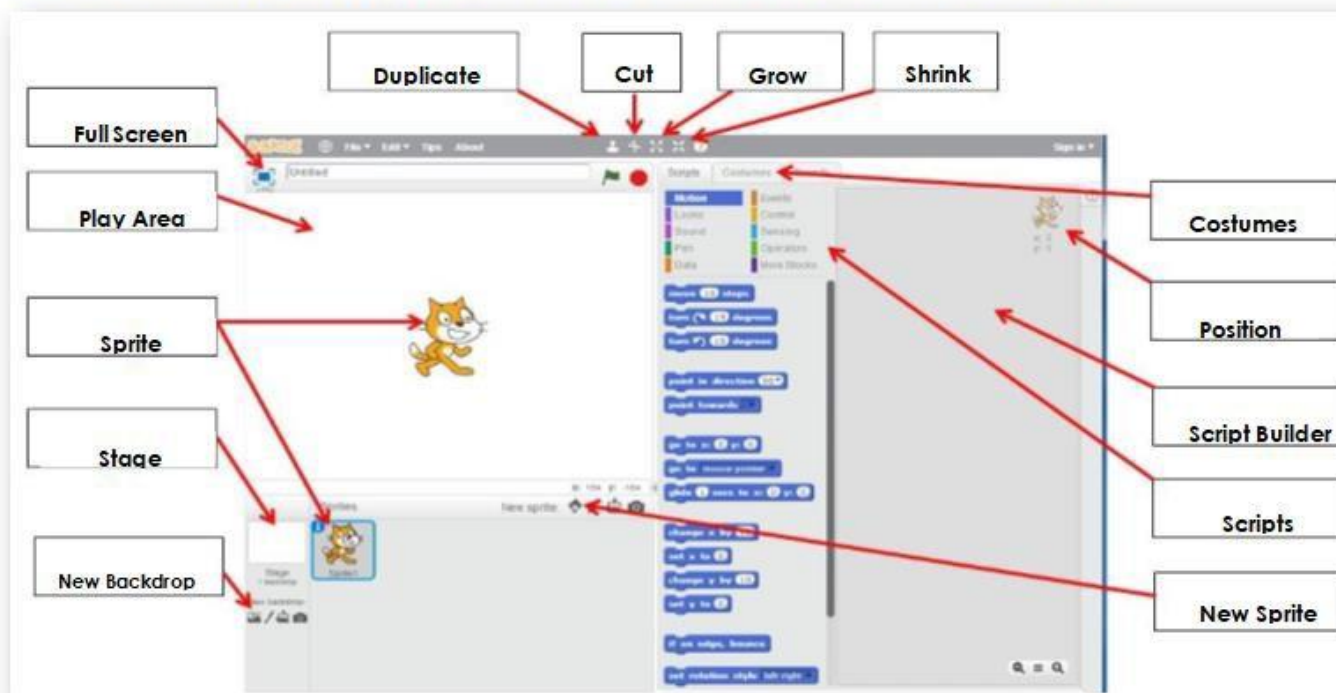
# Computing

## Year 7 Sp1 - Scratch

**What sort of software is Scratch and what can it be used for?**

_____
_____
_____
_____

**What is a sprite and what are they used for?**

_____
_____

**Explain what the stage is?**

_____
_____



**What would the code program the sprite to do?**

_____
_____
_____
_____



**What is the trigger for this algorithm?**

_____
_____

**What happens within the algorithm?**

_____
_____
_____
_____
_____



**Would the sprite turn left when the left button is pressed (if on a grey track)?**

_____
_____
_____
_____
_____
_____

**Why and how can we fix this?**
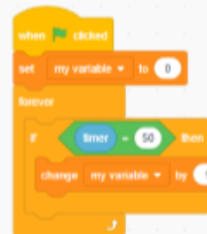
_____
_____
_____
_____

**Explain the key terms in your own words**

**Variable**

_____
_____
_____

**Syntax**

_____
_____

**Algorithm**

_____
_____



**What is the trigger for this algorithm?**

_____
_____

**What happens within the algorithm?**

_____
_____
_____
_____
_____
_____

# Design and Technology – Digital D&T

In this module pupils will be learning the basics of computational thinking, programming and computer systems using a BBC Micro bit. They will learn how these thinking concepts can be applied to everyday life as well other subjects within school.
In addition to this, learners will develop an understanding of graphics and complete an introductory project in Photoshop whereby they create a Robot person.

**Ps**

| Keywords | Definitions |
|---|---|
| Hardware | The physical components of a computer. |
| Software | Instructions that tell a computer what to do. |
| Algorithm | A set of step by step instructions that help resolve a problem. |
| Decomposition | Breaking down a complex problem or system into smaller parts that are more manageable and easier to understand |
| Evaluation | The process that allows us to make sure our solution does the job it has been designed to do and to think about how it could be improved. |
| Pattern Recognition | Analyzing a problem to recognize trends or behaviors, these patterns can help us to solve complex problems more efficiently. |
| Abstraction | The process of filtering out – ignoring - the characteristics of patterns that we don't need in order to concentrate on those that we do. |

## Questions
How did you use the X computational thinking concept?
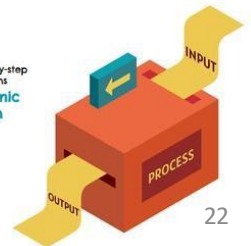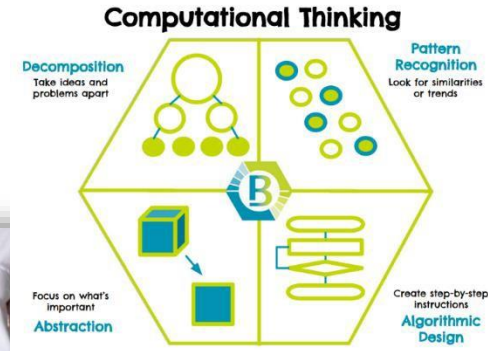Where else can you think of where this concept may apply?
What are the benefits of using X concept?
What is graphic design useful for?
What products can graphic design be printed onto? How do we consider color when designing a product?
What considerations do we need to make when designing any product?
How do we define our target audience?

## Computational Thinking



**Decomposition**
Take ideas and problems apart

**Pattern Recognition**
Look for similarities or trends

**Abstraction**
Focus on what's important

**Algorithmic Design**
Create step-by-step instructions

22

**WISDOM HAS BUILT HERSELF A HOUSE.**

Department of Design and Technology.

## One Point Perspective

STEP 2 – Draw a vanishing point.

STEP 3 – Draw **construction lines** from the corners of the square to the vanishing point.

STEP 1 – Draw a 2D Square.

STEP 4 – Draw in the back lines which are **parallel to the front lines.**

During this module various drawing and presentation skills will be learned. Practice the different techniques skills by drawing different shapes. Try and add tonal shade to improve presentation.
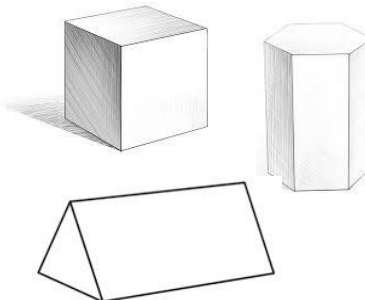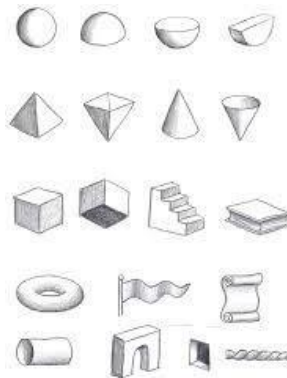
## Two Point Perspective

Step 1 – Draw a line across the page and add two vanishing points at each end.
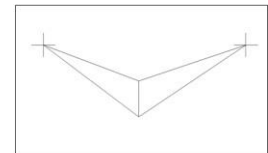
Step 2 – Draw a vertical line below the horizontal and draw four lines going to the vanishing points.
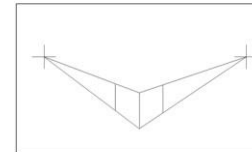
Step 3 – Draw two vertical lines to create the sides of the cube.
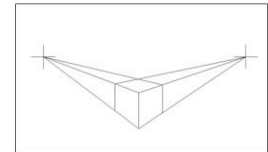
Step 4 – Draw two lines from the back verticals to the opposite vanishing points.

## Isometric Drawing

Step 1 – Draw a 'Y' shape which gives the top front corner of the box.

Step 2 – Add in the base lines which are parallel to the two top lines.

Step 3 – Add in the side lines which define the back of the box. These are parallel to the central front line.

Step 4 – Complete the box by adding in the two lines to complete the top of the box. These should be parallel to the other lines.

## Tonal Shading

Adding **tone** to a drawing when shading makes it look more realistic**.** The three tones used are **light**, **medium** and **dark**. The face that gets most light is lightest, the face that gets the least light is the darkest, and the one left is in the middle.

23

Practice each of the techniques in the space provided.

## One Point Perspective

Make a copy of the drawing below, draw it to the left of the vanishing point.
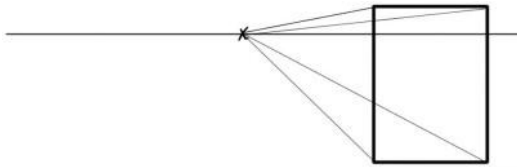
## Two Point Perspective

Draw your own 2 point perspective box to the right of the example using the two vanishing points given.
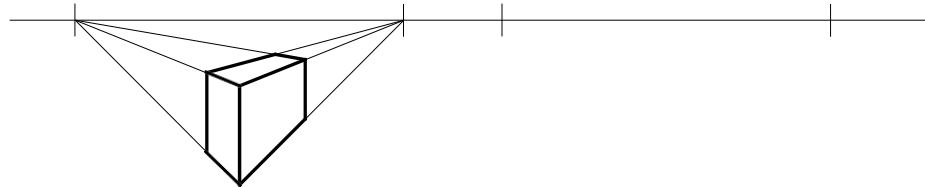
## Isometric Drawing
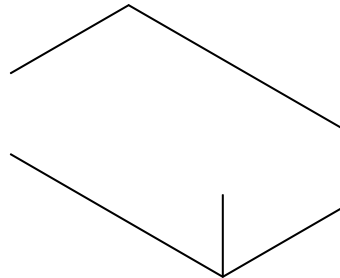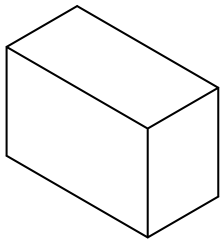
Add the missing lines to complete the isometric drawing.

## Tonal Shading
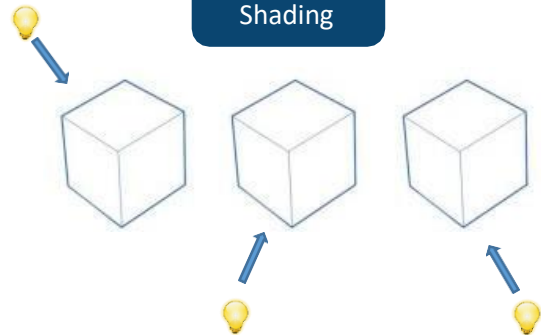
Add tonal shade to each of the three boxes, changing the light, mid and dark faces dependant on where the light is shining from.

## Eatwell Guide



**What is the Eatwell Guide?**
The Eatwell guide is a guide that shows you the different types of food and nutrients we need in our diets to stay healthy.
Why is the Eatwell Guide important?
The Eatwell guide shows you how much (proportions) of food you need for a healthy, balanced diet.
**What are the Consequences of a poor diet?**
A poor diet can lead to diseases and can stop us from fighting off infections.
**What are the Sections on the Eatwell guide?**
1. Fruit and Vegetables
2. Strachy carbohydrates
3. Dairy and alternatives
4. Beans, pulses, fish, egg, meat and other proteins
5. Oils and spreads.

### Cooking Methods

| Dry Heat | Moist heat | Frying |
|---|---|---|
| Baking | Steaming | Deep fat frying |
| Grilling | Boiling | Shallow frying |
| Roasting | Poaching | Stir frying |
| Barbequing | Stewing | Sauteing |
| Basting | Simmering | |

### COLOUR CODED CUTTING BOARDS
eliminate the risk of bacterial cross contamination during food preparation

**RAW MEAT** — RED
**RAW FISH** — BLUE
**COOKED MEAT** — YELLOW
**SALAD & FRUIT** — GREEN
**VEGETABLES** — BROWN
**BAKERY & DAIRY** — WHITE

**Dairy**
**Function:** Needed for CALCIUM which is laid down in bones and teeth to make them strong.
**Needs Vitamin D to work properly**
Sources: Milk, Cheese, Yoghurt, Cream

Claw Grip

Bridge Hold

**Storage**
To prevent cross contamination (the spread of bacteria), foods must be stored separately. Most bacteria grow rapidly at body temperature (37C) but can grow between 5C and 63C. This is known as the danger zone. The more time that food spends in the danger zone, the greater risks of harmful bacteria growing. Therefore, it is vitally important that we try to keep food out of the danger zone during the production process.

25

| | | |
|---|---|---|
| What are the 5 sections of the Eatwell Guide?<br><br>1<br><br>2<br><br>3<br><br>4<br><br>5 | **D&T Food**<br><br><br>Eatwell Guide | What nutrition does each section of the Eatwell guide provide?<br>Yellow -<br><br>Green -<br><br>Pink -<br><br>Blue -<br><br>Purple |
| Foods high in fat, salt and sugar do not appear on the Eatwell guide. Name 3 foods belonging to each group.<br><br>Foods high in fat:<br><br>Foods high in salt:<br><br>Foods high in sugar:<br><br>How many portions of fruit and vegetables should we eat each day?<br><br><br>Why should they be different colours? | **Dairy Produce**<br>Where does dairy come from?<br><br>Name at least 4 dairy products.<br>1<br>2<br>3<br>4<br><br>What nutrition do dairy products give the body?<br><br><br>Which other nutrient is needed to allow calcium to be laid down in the bones and teeth? | Write 7 safety and/or hygiene rules that must be followed when working in the Food room.<br>1<br><br>2<br><br>3<br><br>4<br><br>5<br><br>6<br><br>7 |

# Design and Technology Resistant Materials

**WISDOM HAS BUILT HERSELF A HOUSE.**

In this module pupils will be designing and making a holder for a tea light, this must link to Sacred Space and the prayer life of our school. They will combine traditional and modern techniques and will be shown how to work in a safe manner at all times.

## Language for Learning
Physical Properties
Working Properties
Template
Prototype
Manufactured Boards
Ferrous Metals
Non-Ferrous Metals
Malleable
Recycling

**Non-Ferrous Metals**

Do not contain iron and are not magnetic making them ideal for use in electronics and wiring.
They do not rust but can oxidise. Aluminum is the most widely used.

**Ferrous Metals**

Contain iron are magnetic rust when exposed to moisture and oxygen. Steel is the most common.

## Manufactured Boards

Sterling Board (OSB)
Chipboard
Exterior Plywood (WBP)
Hardboard
Medium Density Fibreboard (MDF)
Laminboard
Blockboard
Battenboard
Birch Ply
Ply Sheathing

27

| What is the difference between ferrous and non-ferrous metals? | Name three safety rules associated with working in the workshop. | Why is a prototype often made before the final product? |
|---|---|---|
| What is the benefit of using CAD when designing products? | Give two examples of non-ferrous metals. | Give two examples of ferrous metals. |
| What is the original source of metals? | What is CAD in relation to Design and Technology? | What is cyanoacrylate commonly known as? |

**D&T Resistant Materials**

# D&T - Textiles

In this project you will learn what Textiles is and why it is important to learn to sew. You will complete a hand embroidery sample and learn to use the sewing machine safely.
You will learn about mechanisms, forces and practical techniques such as tie dye and sublimation printing.
Using the knowledge and practical skills you will design and make a textile product.

STRIPES
TIE-DYE TECHNIQUE

OMBRE
TIE-DYE TECHNIQUE

| Key Words | Explanation |
|---|---|
| Needle | Used with thread to sew fabric together. |
| Thread | Used with a needle to sew fabric together. |
| Dye | Used to add colour to the fabric. |
| 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. |
| Hazard | Something that can use harm. |
| Iron | Used to remove creases from fabric using high heat. |

Running Stitch

Back Stitch

Blanket Stitch

Cross Stitch

Stitch Number 1 for straight stitch

Reverse button to knot the thread

Remove the pins as you go
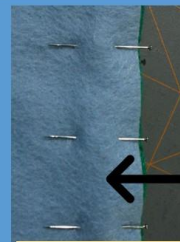
Pin in this direction

29
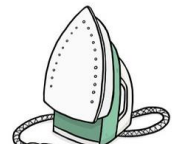
# D&T - Textiles

## 1 : Introduction to Textiles:

What are textiles, and why do you think it's important to learn about them ?

Can you name some common items that are made from textiles ?

## 2 : Hand Embroidery :

What is hand embroidery, and how is it different from sewing with a machine ?

What kind of stitches do you think you could make with hand embroidery ?

## 3 : Sewing Machine Safety :

Why is it important to learn how to use a sewing machine safely ?

Can you list some safety tips for using a sewing machine ?

## 4 : Practical Techniques :

What is tie-dye, and how can you use it to decorate your drawstring bag ?

What different types of tie-dye can you create ?

## 5 : Needle :

What is a needle used for in sewing ?

Why do you think it's important to use a needle carefully ?

## 6 : Thread :

How does thread work with a needle to sew fabric together ?

## 7 : Dye :

What is dye used for in textiles ?

## 8 : Fabric Scissors :

Why should fabric scissors only be used to cut fabric ?

What might happen if you use fabric scissors to cut other materials ?

## 9 : Fabric:

What is fabric, and why is it important in making textile items ?

Can you name different types of fabric and what they might be used for ?

## 10: Pins :

What are pins used for in sewing ?

Why is it important to use pins when sewing pieces of fabric together ?

## 11: Hazard :

What is a hazard, and why is it important to be aware of them in the Textiles room ?

Can you name some hazards you might encounter while in Textiles and how to avoid them ?

**Stage layout.** ALWAYS from the actors point of view. (When you are standing on stage looking at the audience)



| Upstage Right | Upstage Center | Upstage Left |
| Stage Right | Stage Center | Stage Left |
| Downstage Right | Downstage Center | Downstage Left |

Proscenium Line

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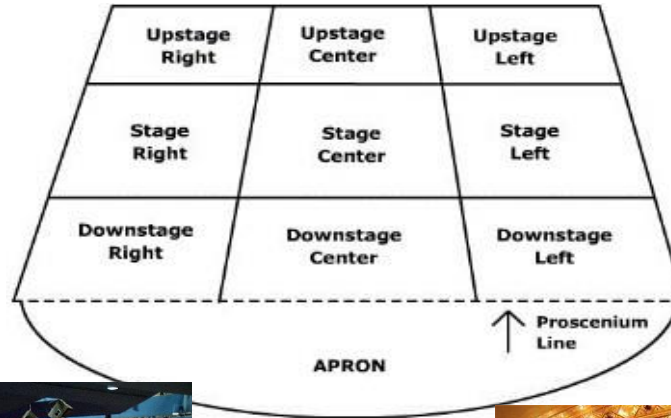
| DO'S of mime ✓ | DON'TS of mime ✗ |
|---|---|
| DO Exaggerate characteristics | DON'T Turn your back on the audience |
| DO Face the audience | DON'T Laugh on stage |
| DO Be confident! | DON'T Look at the floor |
| DO Carry on if things go wrong | DON'T Rush through your lines |
| DO Make eye contact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

**Elements of Drama**

**Script:** The Text of the play

**Cast of Characters:** All of the characters, usually portrayed by actors

**Narrator:** The person who tells the audience what is happening during the performance.

**Setting:** The time and place

**Act and Scene**: The chapters in the play

**Stage Directions:** Written instructions telling the actor what to do.

ELEMENTS OF DRAMA

SCRIPT · CHARACTERS · NARRATOR · SETTING · ACT · SCENE · DIALOGUE · STAGE DIRECTIONS
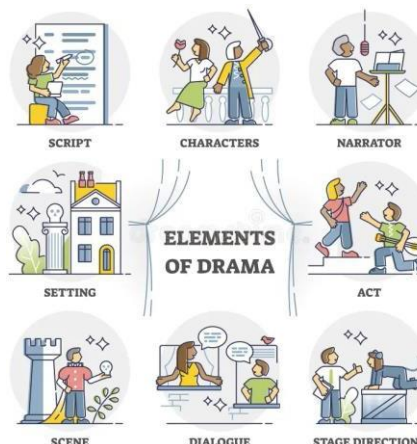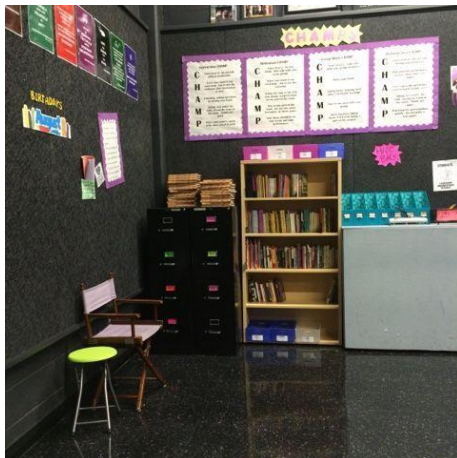
## Areas for Assessment

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

## Dramatic Mediums to consider when Performing

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

KEY WORDS

Volume, Pitch, Pronunciation, Accent, Tone, Projection, Choral speaking, Stance, Posture, Facial Expressions, Eye Contact, Proxemics, Gestures, Body Language, Pace, Rhythm, Energy, Levels, Mime, Introduction, Catastrophe, Comedy

*Actor's Tool Box*

*Use these tools to develop performance skills in Drama*

Vocal Skills

Use of space

Gestures

Body Language

Energy

Facial Expressions
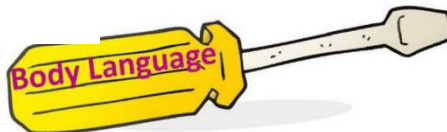
Year 7 Drama - questions
1) How can you use the actors tools to create a clear character?


2) What is audience awareness?


3) How can a narrator be used effectively in a performance?


4) What is a still image? What are the rules?


5) Choose 5 key words list them and write a definition.
-
-
-
-
-
6) What Is your performance aim and who will you achieve it?

In this unit, you will begin by exploring what 'Culture' means. We will learn about the culture of St Joseph's as a school community and take time to explore your own individual culture. Our learning journey will take us on a trip around the globe exploring different cultures and traditions, stopping to appreciate texts from different countries by a range of talented writers. For example, in our studies of American culture, students have the opportunity to study the biographies of culturally significant figures such as Michelle Obama as well as texts from more recent figures of interest such as Amanda Gorman's poem 'The Hill We Climb'. Students will develop skills such as learning how to analyse language, both in poetry and prose, as well as using some of the texts we study as a springboard for their own writing.

| Key skill: Travel Writing | | Key Vocabulary | |
|---|---|---|---|
| DAFOREST persuasive writing techniques | | Key Word: | Definition |
| Direct Address | When the writer addresses the reader directly using pronouns such as 'you'/'we' | Discrimination | The unfair treatment of others, usually on the grounds of religion, race, gender, age or disability. |
| Alliteration | Using a series of words in succession that begin with the same consonant sound. | Metaphor | Where a writer describes/compares something to something else but it is not literal. E.g. She was a shining star. |
| Fact | A statement that is true and can be proven. | Prejudice | A judgement made about another person that is unfair, usually on the grounds of class, race, religion, gender, age or disability. |
| Opinion | Someone's point of view of/about something. It is not always based on fact or knowledge. | Tolerance | Understanding and acceptance of feelings, habits, or beliefs that are different from your own. |
| Repetition | To repeat the same word/phrase/sentence more than once for effect. | Empathy | Being aware of and understanding another person's feelings, experiences, and emotions. |
| Rhetorical Question | A question that does not require an answer, usually posed to emphasise an idea/opinion. | Identity | The fact of being whom or what a person or thing is. |
| Exaggeration | A statement/information that is untrue | Culture | A pattern of behaviour, ideas and traditions shared by a society or group of people. |
| Emotive Language | Words deliberately chosen to create emotion in the reader. | Traditions | The handing down of information, beliefs, or customs from one generation to another. |
| Statistics | Factual data in numerical form used to convince the reader. (Either fractions or percentages) | Civilisation | A large group of people who share certain ways of living and working. |
| Triple (Rule of three) | A list of 3 adjectives/phrases in succession for effect, usually to emphasise a strong idea. | Society | A community or group of people having common traditions, institutions, and interests. |

| Core Knowledge: Poetic Features | | | Core Skill: Language analysis | |
|---|---|---|---|---|

| Forms/Types of Poems | Structural Features | Language Features | | |
|---|---|---|---|---|
| Acrostic Cinquain Free verse Haiku Limerick Narrative Nonsense Shape Sonnet | Stanza Rhyme Scheme Pattern Rhythm Alternate Couplet Flashback Chronological | Alliteration Imagery Metaphor Onomatopoeia Personification Simile Adjectives Verbs Adverbs | | |

**PEAZL writing frame. Use this for support when writing an analytical paragraph.**

| Point | Begin your paragraph with a clear opening sentence focusing on the question. It should state your opinion. |
|---|---|
| Evidence | Identify a relevant quotation from the text to support your idea/opinion. Push yourself to embed this quotation into a sentence. |
| Analyse | Explain literal and deeper meanings of the quotation. E.g. 'This suggests…' |
| Zoom | Zoom in to words more closely to analyse the effect. The words you zoom in to must be from your quotation. Try to zoom in to as many significant words/techniques as possible. Push yourself to use subject terminology when zooming in e.g. name the device. |
| Link | Make a statement about how your analysis links to the writer's purpose, big ideas or wider messages in the text. Try to link back to the question to ensure your explanations are well focused. |

36

**Questions - Culture Unit**

1. Write the definition of the following word: Prejudice
2. What is the term used to describe the way of life, including beliefs, values, customs, and practices shared by a group of people?
3. Tradition (b) Heritage (c) Culture (d) Society
4. What is a verb?
5. Define what a simile is.
6. Name three different types/forms of poetry.
7. What acronym do we use to write an analytical paragraph? Can you explain what each letter stands for?
8. What is the name of the device where a writer addresses a reader directly, using pronouns like "you" or "we"?
9. Name all of the techniques in DAFOREST.
10. What word, beginning with D, means the unfair treatment of others?
11. What does TOLERANCE mean?
12. What is a TRIPLE? Can you also give an example?
13. What is ALLITERATION?
14. What word, beginning with E, means being aware and understanding of other's feelings and experiences?
15. Explain what CULTURE means.
16. Explain what EXAGGERATION is. Can you also give an example?

# 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?

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?

## What will I study?

In this unit, you will begin by exploring the features of the Gothic genre, discovering the key 'ingredients' that make up a Gothic story. You will also learn the difference between Gothic and Horror genres. We will read examples of Gothic Fiction such as *The Woman in Black*, *Dracula* and *Frankenstein*, exploring Gothic characters and Gothic settings. We will develop your narrative writing skills and you will create your own Gothic story too!

## Core Reading Skill: Analysing Structure



**BEGINNING**
How does the writer choose to open the extract? How does the opening interest the reader?

**MIDDLE**
After the opening, what does the focus of the extract change to? Why do you think it changes to focus on this now? How does it interest the reader?

**END**
How does the extract end? How does the ending interest the reader?

## Core Knowledge: Structural Features

- Character
- Setting
- Action
- Change in focus
- Time shift
- Focus on sounds
- Speech

## Core Knowledge: Language Features

- Metaphor
- Simile
- Personification
- Pathetic Fallacy
- Onomatopoeia
- Adjective
- Adverb

## Core Reading Skill: Writing an analytical paragraph

| Point | Begin your paragraph with a clear opening sentence focusing on the question/statement. It should state your opinion. |
| Evidence | Identify a relevant quotation from the text to support your idea/opinion. Push yourself to embed this quotation into a sentence. |
| Analyse | Explain literal and deeper meanings of the quotation. E.g. 'This suggests…' |
| Zoom | Zoom in to words more closely to analyse the effect. The words you zoom in to must be from your quotation. Try to zoom in to as many significant words/techniques as possible. Push yourself to use subject terminology when zooming in e.g. name the device. |
| Link | Make a statement about how your analysis links to the writer's purpose, big ideas or wider messages in the text. Try to link back to the question to ensure your explanations are well focused. |

## Key Vocabulary

| Key Word: | Definition: |
|---|---|
| Grotesque | Repulsively ugly, distorted, disgusting. |
| Ominous | Giving the impression something bad will happen. |
| Sinister | Something harmful and evil. |
| Pathetic Fallacy | Where the weather/nature reflects the mood/atmosphere in a story. |
| Dilapidated | In a state of disrepair or ruin. Neglected, falling apart. (Usually a building) |
| Afflicted | To cause pain or trouble for someone. (A problem or illness) |
| Romanticism | A movement where writers/artists created works to purposely spark strong emotions in people. (Started in 18th Century/Victorian period) |
| Mercy | Compassion and forgiveness shown towards others. |

## Core Knowledge: Conventions of Narrative

**What are the key components of a narrative (story)?**

- Protagonist (main character)
- Setting
- Plot (series of events)
- Conflict or a problem
- Resolution

## Core Knowledge: Conventions of the Gothic Genre

**What are the key 'ingredients' found in a Gothic narrative?**

- Wild and remote settings
- Darkness
- Supernatural elements
- Unusual disasters and unnatural discoveries
- Secrets and mysteries
- References to death and decay
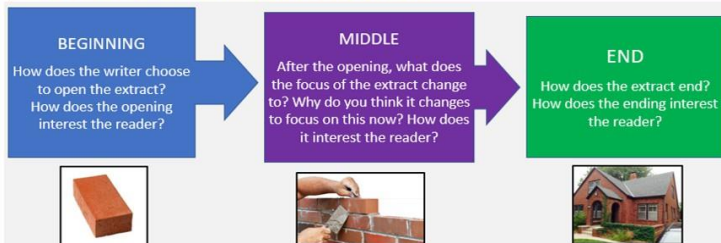- Creatures such as werewolves, vampires and ghosts

English - Gothic

# English – Questions – Gothic Unit

1.  Write the definition of the following word: Sinister
2.  What is the term used to describe a movement where writers/artists created works to purposely spark string emotions in people?
3.  Victorian    (b) Bildungsroman        (c) Romanticism (d) Renaissance
4.  What is an adjective?
5.  Define what we mean by the term STRUCTURE.
6.  What is a protagonist?
7.  What acronym do we use to write an analytical paragraph? Can you explain what each letter stands for?
8.  What is the name of the device where a writer purposely doesn't give away all information at once in a story?
9.  Name three other structural features.
10. What word, beginning with G, means repulsively ugly, disgusting and distorted?
11. What does OMINOUS mean?
12. What is a SIMILE? Can you also give an example?
13. What is PATHETIC FALLACY?
14. What word, beginning with P, means being extremely poor?
15. Explain what the word DILAPIDATED means.
16. List 3 features we associate with Gothic stories.

# Pronouncing words in French

**Consonants**

**j** and **g** (followed by **i** or **e**)
In French, the letter **j** sounds like the letter **s** in the English word television.
*J*e *j*oue au foot le *j*eudi - I play football on Thursdays.

When a **g** is followed by **e** or **i**, it has the same sound.
La *g*irafe est *g*igantesque mais *g*entille - The giraffe is huge but nice/friendly.
(Emphasis on the letters in italics.)

**ch**
In French, the letters ch make the sound **sh**.
•*ch*ou - cabbage
•*ch*aussures - shoes
•clo*ch*e - bell

**il**
Sometimes, the letters il in French can make the sound **'eey'** in English, for example in the following words:
•fam*il*le - family
•b*il*let - note, ticket
•f*il*le - girl
•van*il*le - vanilla

**gn**
The letters gn sound like **n** followed by **y**. For example:
•si*gn*e - sign
•campa*gn*e - countryside
•monta*gn*e - mountain

**qu**
When a French word starts with qu, it is almost always pronounced **k**, rather than 'kw' (as it often is in English).
Il est *qu*atre heures et *qu*art - It's quarter past four.
There are a few exceptions to this rule, as in the words aquarium and aquatique.

**r**
In French, when there is an r at the start (and often in the middle) of a word, the **r** sound comes from the back of your throat. At the very end of a word, it is usually silent.
*R*obert aime manger les *r*aisins et *r*egarder les films *r*omantiques - Robert likes eating grapes and watching romantic films.

**Nasal vowels**
When a vowel is followed by m or n in French, they become 'nasal' and the m or n isn't pronounced. 'Nasal' means that they are pronounced using the nose and sound a little bit like they would if you had a cold!
Le garço*n* est dans un cha*m*p avec so*n* chien - The boy is in a field with his dog.

**o**
The phoneme o can be made up of a number of different letter combinations in French, such as 'eau', 'au' 'aux' and simply using o.
•*eau* - water / gât*eau* - cake
•g*au*che - left
•journ*aux*- newspapers
•m*o*t - word

**eu**
Many words with the letters eu are pronounced similarly to the '**er**' in teacher in English.
•b*eu*rre - butter
•s*œu*r - sister
•h*eu*re - hour

42

**Pronouncing words in French**

**oo**
There is a small, but important, difference between
the **oo** sound in the French words tu (you)
and tout (everything). The **oo** sound in tout is longer and
more rounded than the shorter **oo** sound in tu. Here are
some examples of both sounds:
•tu - you
•tout - everything
•rue - street
•roue - wheel
•bu - drunk (past participle of 'boire' - to drink)
•boue - mud

**Understanding silent letters in French**

**The silent 'h'**
In French, the letter h is silent. Before most words that start
with h, if you need a definite article use l' rather than le or la.
•L'*h*ippopotame est *h*eureux - The hippo is happy.
•L'*h*ôtel est en *H*ongrie - The hotel is in Hungary.
•L'*h*omme est très *h*onnête - The man is very honest.

**Silent letters at the ends of words**
When the following letters are at the very end of a word, they are
usually not pronounced:
n, p, s, t, x, z.
•bo*n* - good
•beaucou*p* - a lot
•les parent*s* - parents
•cha*t* - cat
•gâteau*x* - cakes
•vous mange*z* - you (plural, formal) eat

**Liaisons**
When a word ends in s, x, t or n and the next word starts with
a vowel or an h, the s and x will sound like z, and the t and
the n will be pronounced.
This is called a 'liaison', as the words are linked together.
•Le_s_ enfants aiment jouer au tennis - The children like
playing tennis.
•C'est trè_s_ ennuyeux - It's very boring.
•Ma grand-mère avait deu_x_ enfants - My grandmother had
two children.
•Il es_t_ heureux - He is happy.
•Il est allé dans un bo_n_ hôtel en Italie - He went to a good
hotel in Italy.

| | | |
|---|---|---|
| Bonjour. *Hello.*<br><br>Salut! *Hi!* | Comment t'appelles-tu? *What's your name?* | Je m'appelle Georges. *My name is George.* |

| | |
|---|---|
| Ça va? *Are you OK?*<br><br>Comment ça va? *How are you?* | Ça va très bien, merci. *I'm very well, thanks.*<br><br>Pas mal, merci. *Not bad, thanks.*<br><br>Ça ne va pas! *Not good!* |

Au revoir. *Goodbye.*

À plus! *See you later!*

**L'alphabet français:**

- A ah
- B bay
- C say
- D day
- E eugh
- F eff
- G jay
- H ash
- I ee

J jee
K kah
I ell
M emm
N enn
O oh
P pay
Q koo
R air

S ess
T tay
U oo
V vay
W dooblevay
X eeks
Y ee grec
Z zed

**Qu'est-ce qu'il y a dans la salle de classe?**   *What is there in the classroom?*

| | | | | | |
|---|---|---|---|---|---|
| Dans la salle de classe, il y a<br>*In the classroom, there is/are*<br><br>Dans mon sac, il y a<br>*In my bag, there is/are*<br><br>Dans ma trousse, il y a<br>*In my pencil case, there is/are* | un   *a* | écran   *screen*<br>tableau blanc   *whiteboard*<br>tableau noir   *blackboard*<br>ordinateur   *computer*<br>poster   *poster*<br>professeur   *teacher (male)* | au fond.<br>*at the back.* | C'est   *It's* | génial.   *great.*<br><br>moderne.   *modern.* |
| | une   *a* | fenêtre   *window*<br>porte   *door*<br>professeur   *teacher (female)*<br>tablette   *tablet* | au centre.<br>*in the middle.*<br><br>à gauche.<br>*on the left.* | | sympa.   *nice.*<br><br>démodé.   *old-fashioned.* |
| | des   *some* | chaises   *chairs*<br>élèves   *pupils*<br>tables   *tables* | à droite.<br>*on the right.* | | nul.   *rubbish.*<br><br>triste.   *sad.* |

| |
|---|
| et   *and* |
| aussi   *also* |

| |
|---|
| Il y a un ordinateur et un poster.   *There is a computer and a poster.* |
| Il y a aussi une tablette.   *There is also a tablet.* |

## My life - my friends, my family and myself

### Greetings:
Salut - Hi
Bonjour - Good morning
Bonsoir - Good evening
Ça va? - How are you?
Très bien - Very good
Mal - Bad
Au revoir! - Goodbye!
A bientôt! - See you soon!
S'il vous plaît - Please
Merci - Thank you
Je m'appelle - My name is
Comment t'appelles-tu? - What's your name?
Quelle est la date de ton anniversaire? - When's your birthday?
Mon anniversaire, c'est le... - My birthday is on...
Quel âge as-tu? - How old are you?
J'ai … ans - I am … years-old

### Countries and nationalities

L'Ecosse
L'Angleterre
L'Irlande
Le Pays de Galles
La France
La Belgique
L'Espagne
L'Allemagne

Je suis - I am
écossais(e) - Scottish
anglais(e) - English
irlandais(e) - Irish
gallois(e) - Welsh
J'habite en/au - I live in

Il / Elle est - he / she is
français(e) - French
belge - Belgian
espagnol(e) - Spanish
allemand(e) - German
Où habites-tu? - Where do you live?

*Why is there an 'e' in brackets at the end of the nationalities?*
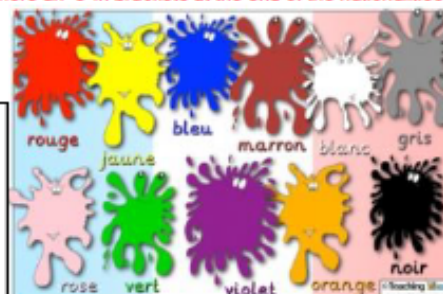
### Classroom language

Est-ce que je peux…? - Can I…?
Pouvez-vous…? - Can you…?
Avoir… - (to) have
Répéter - (to) repeat
Ouvrir / Fermer - (to) open / (to) close/shut
Enlever - (to) take off
Je ne comprends pas - I don't understand
Je ne sais pas - I don't know
Comment ça s'écrit? - How do you spell it?

la fenêtre
un stylo
la porte
ma veste

| 1 | un | 16 | seize |
| 2 | deux | 17 | dix-sept |
| 3 | trois | 18 | dix-huit |
| 4 | quatre | 19 | dix-neuf |
| 5 | cinq | 20 | vingt |
| 6 | six | 21 | vingt-et-un |
| 7 | sept | 22 | vingt-deux |
| 8 | huit | 23 | vingt-trois |
| 9 | neuf | 24 | vingt-quatre |
| 10 | dix | 25 | vingt-cinq |
| 11 | onze | 26 | vingt-six |
| 12 | douze | 27 | vingt-sept |
| 13 | treize | 28 | vingt-huit |
| 14 | quatorze | 29 | vingt-neuf |
| 15 | quinze | 30 | trente |
| | | 31 | trente-et-un |

| 40 | quarante |
| 50 | cinquante |
| 60 | soixante |
| 70 | soixante-dix |
| 80 | quatre-vingts |
| 90 | quatre-vingts-dix |
| 100 | cent |

rouge
jaune
bleu
marron
blanc
gris
rose
vert
violet
orange
noir

| janvier | février | mars |
| avril | mai | juin |
| juillet | août | septembre |
| octobre | novembre | décembre |

## My life - my friends, my family and myself

### Physical description

J'ai - I have    Il/Elle a - he/she has
Je porte - I wear
Il/Elle porte - he/she wears
Les cheveux... - ... hair

bouclés    raides

longs    courts

les yeux

*Can you write your own rules regarding the spelling of the adjectives?*

**Je voudrais = I would like**

*Create some flashcards with the keywords.*

### Family members

Ma mère - my mother       Mon père - my father
Ma soeur - my sister      Mon frère - my brother
Ma tante - my aunt        Mon oncle - my uncle
Ma grand-mère - my grandmother
Mon grand-père - my grandfather
Dans ma famille - In my family
Il y a - there is / there are

### Useful adjectives

Drôle - Funny             Intelligent(e) - Smart
Bavard(e) - Chatty        Actif/ive - Active
Créatif/ive - Creative    Sportif/ive - Sporty
Courageux/euse - Brave    Paresseux/euse - Lazy
Travailleur/euse - Hard-working

### Animals

un oiseau    un cheval    un hamster

un chat    un phasme    un chien    une tortue

un poisson    un cochon d'inde    un lézard    un lapin

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### Verbe Avoir
Indicatif présent

J'ai
Tu as
Il a
Nous avons
Vous avez
Ils ont

www.linstif.com

### Verbe être
Indicatif présent

Je suis
Tu es
Il est
Nous sommes
Vous êtes
Ils sont

www.linstif.com

Families come in different shapes and sizes – show your integrity and be sensitive to the diversity in our school.
What sort of things do we want to say about ourselves and others to identify ourselves? Age? Birthday? Our family? What we look like?

You will often hear or see the word 'your' (**ton**, **ta** or **tes**) in a question. When you answer, remember to use 'my' (**mon**, **ma** or **mes**) instead.

| Quel âge as-tu? *How old are you?* | | |
|---|---|---|
| J'ai *I have* | dix *ten* <br><br> onze *eleven* <br><br> douze *twelve* <br><br> treize *thirteen* | ans. *years old.* |

| C'est quand, ton anniversaire? *When is your birthday?* | | |
|---|---|---|
| Mon anniversaire, c'est le *My birthday is on the* | premier *1st* <br><br> deux *2nd* <br><br> trois *3rd* <br><br> cinq *5th* <br><br> douze *12th* <br><br> seize *16th* <br><br> vingt-et-un *21st* <br><br> trente *30th* | janvier. *January.* <br><br> février. *February.* <br><br> mars. *March.* <br> avril. *April.* <br> mai. *May.* <br><br> juin. *June.* <br> juillet. *July.* <br><br> août. *August.* <br><br> septembre. *September.* <br> octobre. *October.* <br><br> novembre. *November.* <br><br> décembre. *December.* |

| J'ai | un lapin (a rabbit) | blanc (white) | mais | je voudrais | avoir | un lapin (a rabbit) | blanc (white) |
|---|---|---|---|---|---|---|---|
| (I have) | un cheval (a horse) | gris (grey) | (but) | (I would like) | (to have) | un cheval (a horse) | gris (grey) |
| | un chat (a cat) | bleu (blue) | | | | un chat (a cat) | bleu (blue) |
| | un hamster (a hamster) | vert (green) | | | | un hamster (a hamster) | vert (green) |
| | un oiseau (a bird) | noir (black) | | | | un oiseau (a bird) | noir (black) |
| Je n'ai pas de | un chien (a dog) | jaune (yellow) | | | | un chien (a dog) | jaune (yellow) |
| (I don't have) | un poisson (a fish) | rouge (red) | | | | un poisson (a fish) | rouge (red) |
| | un cochon d'Inde (a guinea pig) | marron (brown) | | | | un cochon d'inde (a guinea pig) | marron (brown) |
| | un serpent (a snake) | orange (orange) | | | | un serpent (a snake) | orange (orange) |
| NB: When using "Je n'ai pas de", you **must not** use "un / une" afterwards, i.e., je n'ai pas de chat | | rose (pink) | | | | | rose (pink) |
| | une tortue (a tortoise / turtle) | blanche (white) | | | | une tortue (a tortoise / turtle) | blanche (white) |
| | une souris (a mouse) | grise (grey) | | | | une souris (a mouse) | grise (grey) |
| | une araignée (a spider) | bleue (blue) | | | | une araignée (a spider) | bleue (blue) |
| | une perruche (a budgie) | verte (green) | | | | une perruche (a budgie) | verte (green) |
| | une vache (a cow) | noire (black) | | | | une vache (a cow) | noire (black) |
| | une poule (a chicken) | jaune (yellow) | | | | une poule (a chicken) | jaune (yellow) |
| | | rouge (red) | | | | | rouge (red) |
| | | marron (brown) | | | | | marron (brown) |
| | | orange (orange) | | | | | orange (orange) |
| | | rose (pink) | | | | | rose (pink) |

| et | *and* |
|---|---|
| aussi | *also, as well* |
| en plus | *as well* |

| **Elle est comment, ta famille?** *What is your family like?* | | | | |
|---|---|---|---|---|
| Dans ma famille, *In my family,* <br><br> Dans ma famille d'accueil, *In my foster family,* | il y a *there is/are* | mon *my* | père. *father.* <br> beau-père. *step-father.* <br> grand-père. *grandfather.* <br> frère. *brother.* <br> demi-frère. *half-brother/step-brother.* | Il s'appelle Leo. *He is called Leo.* |
| | | ma *my* | mère. *mother.* <br> belle-mère. *step-mother.* <br> grand-mère. *grandmother.* <br> sœur. *sister.* <br> demi-sœur. *half-sister/step-sister.* | Elle s'appelle Yasmine. *She is called Yasmine.* |
| | | mes *my* | parents. *parents.* <br> grands-parents. *grandparents.* <br> frères. *brothers.* <br> sœurs. *sisters.* | Ils s'appellent Mark et Rose. *They are called Mark and Rose.* <br><br> Elles s'appellent Asha et Maya. *They are called Asha and Maya.* |

| **As-tu des frères et sœurs?** *Do you have any brothers or sisters?* | |
|---|---|
| Non, je n'ai pas de frères et sœurs. *No, I don't have any brothers or sisters.* | |
| Non, je suis *No, I am* | fils unique. *an only child (son).* <br><br> fille unique. *an only child (daughter).* |

50

## Décris toi – describe yourself

| | | | |
|---|---|---|---|
| J'ai les cheveux [I have … hair] <br><br> il a les cheveux [he has … hair] <br><br> elle a les cheveux [she has … hair] | châtains [light brown] <br> bruns [brown] <br> noirs [black] <br> roux [red] <br> blonds [blonde] <br> grey [gris] | et [and] | courts [short] <br> en épis [spiky] <br> longs [long] <br> mi-longs [mid-length] <br> raides [straight] <br> en brosse [very short/ crew-cut] <br> frisés [curly] <br> ondulés [wavy] |

| | | | | |
|---|---|---|---|---|
| J'ai les yeux [I have … eyes] <br><br> il a les yeux [he has … eyes] <br><br> elle a les yeux [she has … eyes] | bleus [blue] <br> marron [brown] <br> verts [green] <br> noirs [black] <br> noisette [hazel] <br> gris [grey] | et | je porte [I wear] <br><br> il porte <br> elle porte | des lunettes [glasses] |
| | | | j'ai [I have] <br><br> il a <br> elle a | une moustache <br> une barbe [a beard] <br> des boutons [spots] <br> des taches de roussure [freckles] <br> une cicatrice [a scar] <br> un tatouage [a tattoo] <br> des rides [wrinkles] |

| | **MASCULINE** |
|---|---|
| je suis [I am] <br><br> il est [he is] | gros [fat] <br> mince [thin] <br> de taille moyenne [average height] <br> grand [tall / big] <br> petit [short / small] <br> moche [ugly] <br> beau [beautiful] <br> musclé [muscly] <br> chauve [bald] |
| | **FEMININE** |
| elle est [she is] | gros<u>se</u> <br> mince <br> de taille moyenne <br> grand<u>e</u> <br> petit<u>e</u> <br> moche <br> bel<u>le</u> <br> musclé<u>e</u> <br> chauve |

# Comment es-tu? – What are you like?

| OPINION PHRASE | SUBJECT | QUANTIFIER | MASCULINE adjective | FEMININE adjective |
|---|---|---|---|---|
| mes amis disent que [my friends say that] | Je suis | très [very] | casse-pieds [annoying] | casse-pieds |
|  | je ne suis pas | assez [quite] | cool | cool |
| mes parents disent que [my parents say that] |  | un peu [a bit] | égoïste [selfish] | égoïste |
|  |  | vraiment [really] | honnête | honnête |
|  |  | trop [too] | sage [well behaved] | sage |
| à mon avis [in my opinion] | mon père est [my dad is] |  | sympa [nice] | sympa |
|  | mon grand-père est [my grandad is] |  | timide | timide |
| je pense que [i think that] | mon frère est [my brother is] |  | amusant | amusante |
|  | mon demi-frère est [my step-brother is] |  | bavard [chatty] | bavarde |
|  |  |  | intelligent | intelligente |
|  | ma mère est [my mum is] |  | intéressant | intéressante |
|  | ma grand-mère est [my grandma is] |  | marrant [funny] | marrante |
|  | ma sœur est [my sister is] |  | méchant [naughty/mean] | méchante |
|  | ma demi-sœur est [my step-sister is] |  | têtu [stubborn] | têtue |
|  |  |  | sportif | sportive |
|  |  |  | gentil [kind] | gentille |
|  |  |  | ennuyeux [boring] | ennuyeuse |
|  |  |  | généreux | généreuse |
|  |  |  | paresseux [lazy] | paresseuse |
|  |  |  | travailleur [hard-working] | travailleuse |

| | |
|---|---|
| **Comment t'appelles-tu?**<br>*What's your name?* | |
| **Comment ça va?**<br>*How are you?* | |
| **Quel âge as-tu?**<br>*How old are you?* | |
| **C'est quand ton anniversaire?**<br>When is your birthday? | |
| **As-tu des frères et sœurs?**<br>*Do you have any brothers or sisters?* | |
| **Comment est ta famille?**<br>What is your family like? | |
| **Tu es comment?**<br>*What are you like?* | |
| **Comment est ton frère / ta soeur?**<br>What is your brother / sister like? | |

**Maps**

A map is a drawing of a place as seen from above (from a bird's eye view). The Ordnance Survey (OS) is the national mapping agency for Great Britain. This organisation produces maps
of different areas of the country in great detail. These maps are commonly used by geographers. A map is essential for telling us which direction to travel in.

**Key idea 1 = Measuring Direction**

Direction is measured using a compass. There are three types of compass:

A four-point compass - The four main compass points are north, east, south and west. A compass showing only these four points is a simple four-point compass.
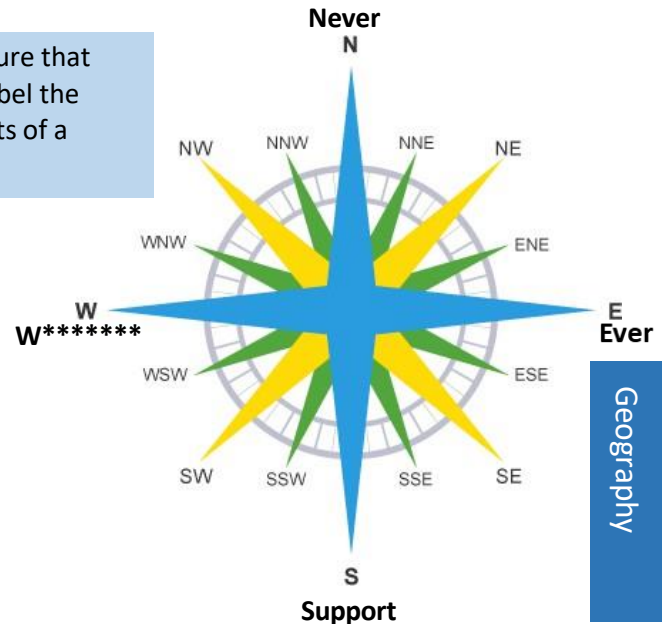
An eight-point compass - Sometimes things need to be more precise. To be more precise when giving directions, an eight-point compass can be used. In addition to north, east, south and west, an eight- point compass includes north-east, south-east, north-west and south-west.

A sixteen-point compass - To be even more precise, we can use a sixteen-point compass. This includes north-north-east, east-north-east, east-south-east, south-south-east, south-south-west, west-south- west, west-north-west and north-north-west.

Understanding where north, east, south and west are, is key to map reading.

Here is an easy way of remembering the points of the compass: **Never Ever Support W_ _ _ _ _ _**. Most typical maps are always printed so that north is at the top of the sheet.

Try to ensure that you can label the main points of a compass

**Never**
N

NW    NNW    NNE    NE

WNW    ENE

**W**
**W*********    **E**
**Ever**

WSW    ESE

SW    SSW    SSE    SE

S
**Support**

Geography

54

**Key idea 2 = Map Symbols**

Maps contain a lot of information about the areas of land that they show. There are too many features to label everything using text, so we use map symbols.

Map symbols can include letters, coloured areas, pictures or lines. These symbols can be used to show the location of different features such as roads, viewpoints, bus stations, train stations, schools and post offices.

Some common OS map symbols can be seen to the right: try to remember them.



**Key idea 3 = Showing Height on a Map**

To show height on a map, contour lines are used. What are contour lines?

Contour lines join areas of equal height and are shown in orange on an Ordnance Survey (OS) map.

The number written on the contour line shows the height above sea level in metres.

The interval between contours is usually five metres, although in mountainous regions it may be ten metres.

What do contour lines show?

The distance between contour lines shows how steep or flat the land is.

If the contour lines are very far apart, it means the land is flat.

If the contour lines are close together, it means the land is steep.
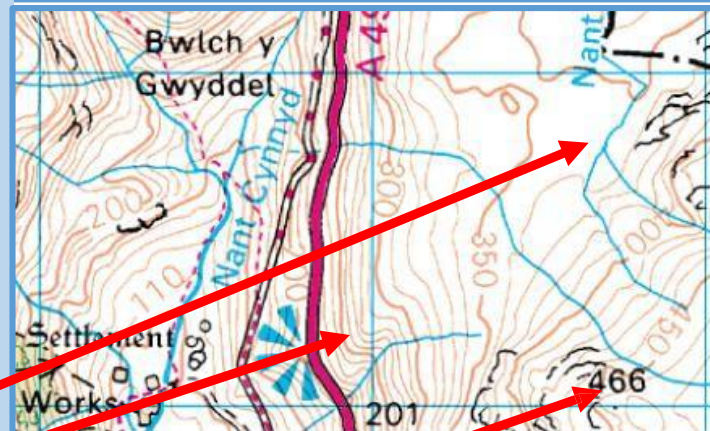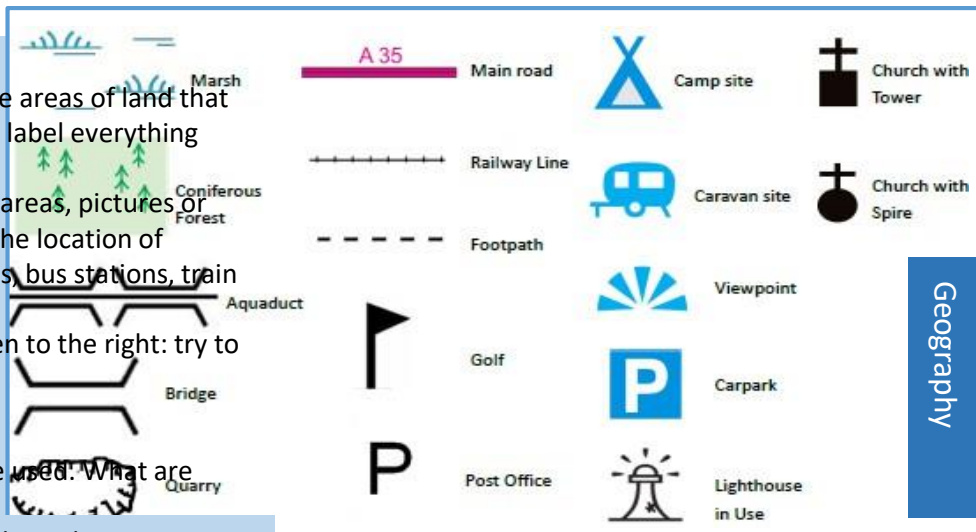


A map may also include **spot heights**. These show the exact height (in metres above sea level).

55

## Key idea 4 = 4 Figure Grid References

A grid reference is a useful tool for identifying any square on a map. This is done by reading the numbers from the eastings and northings. This gives you the grid reference of the square.
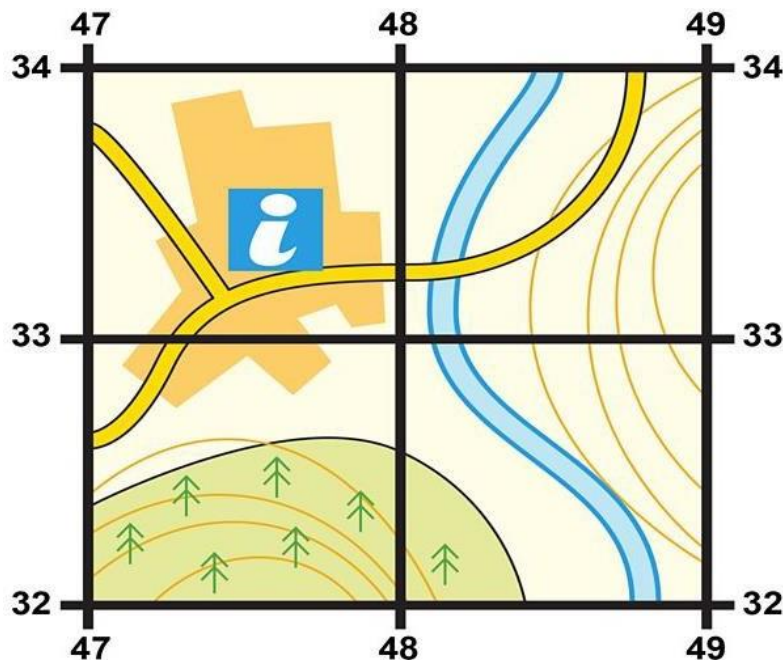Here are the steps you should follow to produce a four-figure grid reference:

Step 1 - Start at the left hand side of the map and follow the eastings (the vertical lines) along until you come to the bottom left-hand corner of the square you are looking for. Write down the two-figure number, eg 47.

Step 2 - Follow the northings (the horizontal lines) from the bottom of the map up until you find the same corner and make a note of this number, eg 33.

Step 3 - Combine this number with the original number. When put together, these two sets of numbers give the four-figure grid reference. For example, if the easting is 47 and the northing is 33, the grid reference is 47 33.

Always write down the eastings first and then the northings. An easy way to remember this is that you always have to go along the corridor (eastings) before you go up the stairs (northings).

## Key idea 5 = 6 Figure Grid References

If we want to be more accurate, we can use six-figure grid references. To do this, we need to picture the grid square divided into 100 smaller squares.

Here are the steps you should follow to produce a six-figure grid reference:

Step 1 - Split each grid square into tenths.
Step 2 - Measure or estimate how many tenths of the square the point you are looking for lies between the eastings to the left and right of the point. Write this number after the original eastings. For example, if it was six tenths into the square you would write 476
Step 3 - Repeat this step for the northings and write this down after the original northings. If this was four tenths into the square you would write 334.
Step 4- Put these two sets of numbers together to get the six-figure grid reference: 476 334.

**Key idea 6 = Measuring Distance**

What is scale?
Maps have different scales depending on what they are used for. The scale tells you how much you would have to enlarge your map by to get the actual size in real life. For example, on a 1:100000 scale map, 1cm on the map equals 1km on the ground.
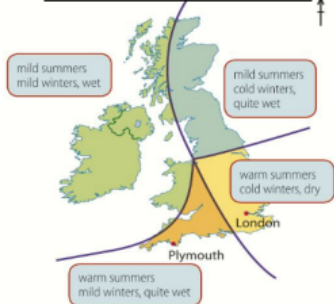
It's impossible to draw life-size maps so instead a scale is used. Every map has a scale printed on the front. The scale might look like this
1:25000.
This means that every 1cm on the map is equivalent to 25,000cm (or 250m) in real life.

Usually a map will also have a scale bar. This is usually found at the bottom of the map and looks like a small ruler.

**Using scale to measure distance**
Once the scale of the map is known, it is possible to measure the distance between two points. The easiest way to do this is to measure the straight-line distance using a ruler, then convert it using the scale.

However, this method will not work if you are trying to work out the distance on a road that isn't straight.

cm on the map

| 0 | 1 | 2 |

| 0 | 0.5 | 1 |

km on the ground

**Measuring roads that are not straight**
To measure a road that is not straight, lay a piece of string along the route or use a piece of paper to work out the distance.

Step 1 - mark on the map the route you wish to measure.
Step 2 - place the paper on the map and make a mark at the start of the route.
Step 3- every time the route curves, pivot (turn) the paper to continue to follow the route and make another mark.
Step 4- pivot the paper until you get to the end point.
Step 5- either hold the paper against the scale bar at the bottom of the map or measure it to work out the distance.

| Geography Questions | Your answers | | |
|---|---|---|---|
| Which organisation produces very detailed maps of Great Britain? | | | |
| What are the three main types of compass? | 1. <br> 2. <br> 3. | | |
| Draw the following map symbols: | Campsite = <br><br> Post office = | Church with a spire = <br><br> Quarry = | Marsh = <br><br> Coniferous wood = |
| What does it mean when contour lines are widely spaced? | | | |
| What do spot heights do on a map? | | | |
| The vertical lines on a map (used for grid references) are called what? | | | |
| The horizontal lines on a map (used for grid references) are called what? | | | |
| Why do all maps need a scale? | | | |

## CLIMATE GRAPHS

Temperature is shown as a line graph (red).

Rainfall is shown as a bar graph (blue).

### CLIMATE ZONES OF THE UK

N

mild summers mild winters, wet

mild summers cold winters, quite wet

warm summers cold winters, dry

London

Plymouth

warm summers mild winters, quite wet

peak rainfall

rainfall axis

months of the year

Temperature axis

Manila
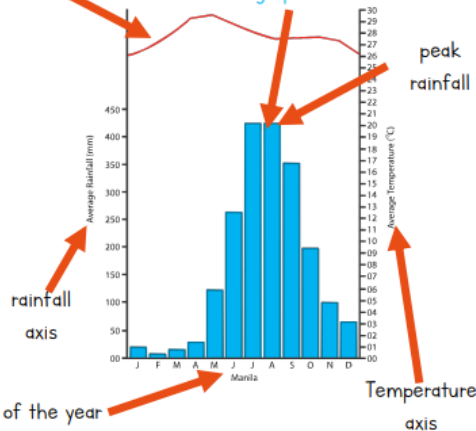
**Types of Rainfall:**

### FRONTAL RAINFALL

2. The warm air mass is forced to rise above the cold one.

3. The warm air cools and the water vapour condenses into clouds and rain.

1. A warm air mass meets a cold air mass.

### RELIEF RAINFALL

3. The rising air cools and the water vapour condenses to form clouds and rain

2. The air is forced to rise over hills or mountains.

1. The prevailing wind brings, warm, moist air from the ocean.

4. The rain falls on the windward side of the mountain the leeward side stays dry (rain

### CONVECTIONAL RAINFALL

2. Currents of warm air rise.

1. The sun heats the ground warming the air above it.

3. As the warm, moist air rises it cools and condenses into clouds and eventually rain.
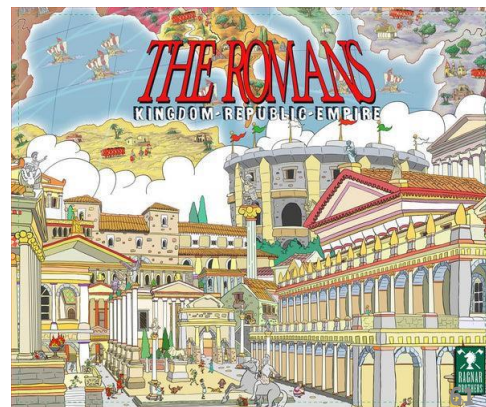
How do we use evidence in history?

How do we write a history essay?

# History 1 : The Neolithic Revolution

## Introduction

The first humans were hunter gatherers, who did not settle in one place and followed the herds of animals they hunted. They also gathered fruits, vegetables and berries.

At the end of the last ice age, the temperature rose and the ice began to melt. As the sea levels rose, the humans began to move to higher ground.
They took their favourite plants and animals with them as they moved and this led to farming.

This period is called the Neolithic Revolution, when humans made the change to a settled lifestyle and farming.

## Chronology: what happened on these dates?

**2.5 million BC:** In the Palaeolithic period (2.5 million years ago to 10,000 B.C.), humans lived in caves or simple huts and were hunter gatherers.

**10,000 BC:** The Neolithic Revolution started around 10,000 B.C. in the 'Fertile Crescent', a boomerang-shaped region of the Middle East where humans first took up farming. After this, Stone Age humans in other parts of the world also began to farm.

**3180 BC:** The site at Skara Brae was occupied from 3180 BC to about 2500 BC and is Europe's most complete Neolithic village.

**2600 BC:** A large settlement dating back to 2600 BC was discovered near the ancient stone monument of Stonehenge in Wiltshire.
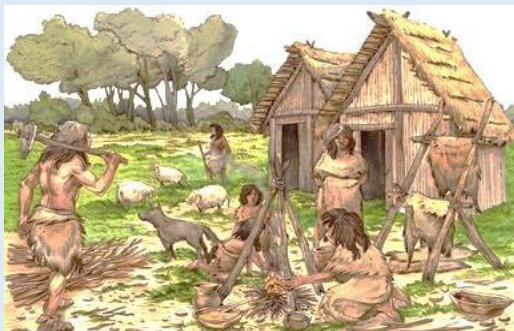


## Key Vocabulary

**Palaeolithic** – Oldest known prehistoric period: humans were hunter gatherers.

**Nomads** – hunter-gatherers who move from place to place to hunt animals and gather fruits and berries

**Archaeologist** - Person who learns about the past through digging up artefacts to study.

**Artefact** - Object made by a human.

**Revolution** – A fundamental change in the way people live.

**Neolithic** – The News Stone Age, when humans discovered farming and began to live a settled life.

**Settlement** - A place where people establish a community.

**Temperature** – Measurement of heat.

**Skara Brae** - Stone-built Neolithic settlement, in the Orkneys in Scotland.

**Stonehenge** - A prehistoric monument in Wiltshire

## What were the effects of the Neolithic Revolution?

**1.Population Growth:**

(a)Living in one place meant more children. Hunter-gather women needed a gap of at least four years between children, as it wasn't possible to keep moving with several babies. Being permanently settled meant women could have more children.

(b)Staying in one place meant people could grow their own plants and raise their own animals and this meant there was

more food. Surplus food led to population growth because it was possible to feed everyone and still have food left over for the winter months.

(c)Farmers had a higher chance of survival, because it was not dangerous like hunting was.

**2.New skills developed**

Surplus food meant that not everybody had to work to produce it. People had time to do other things and this led to new skills being developed, such as tool-making, pottery-making, weaving, and carpentry. This led to the technological revolution that continues today.

**3.Inequality**

New skills led to a new class of specialist workers, who did not produce their own food, because they traded their goods instead. Some become much wealthier than the farmers, which meant everyone was equal. New structures were then needed to deal with inequality.

**4.Property Ownership**

Once people owned property, there had to be rules of ownership, which would lead to the development of the modern day legal system.

**5.The development of government and Kingship**

Population increase led to problems: there were disputes because of different groups living closely together. Communities had to develop laws, which led to government. Over time, kingship and a political system developed.

**6.Crime and Outside threats**

The threat of crime meant the communities had to develop laws to punish criminals. The new communities also faced threats from outside, which led to wars. Societies developed warriors first, and later armies, to defend themselves and fight wars.

**7.        Disease**

A settled lifestyle brought disease because large groups of humans and their animals were living together. Organisms jumped species, so humans were infected with diseases during the Neolithic revolution, including smallpox, tuberculosis, measles, influenza and malaria.

**8.        Other effects**

Pet ownership developed and people selectively bred better farm animals. Cereal crops and fruit and vegetables developed as well as other foods that we eat today, including bread, milk, beef, chicken and eggs and the fabrics that we wear, wool, cotton and leather.

**Overall: The transformation to farming took several thousand years, but it was the crucial moment in human progress. The Neolithic Revolution is so significant because it was the basis for all the developments that followed.**

**Retrieval Practice**

1 Why did the population grow during the Neolithic Revolution?

2 Why did staying in one place mean more food available?

3 What new skills developed because of the surplus food during the Neolithic Revolution?

4 How did the development of new skills lead to inequality among people?

5        What changes occurred in property ownership during the Neolithic Revolution?

6 What led to the development of government and kingship?

7 How did crime and outside threats influence Neolithic communities?

8        What diseases emerged due to the settled lifestyle of Neolithic communities?

9        How did pet ownership and the selective breeding of farm animals change during the Neolithic Revolution?

10        Why is the Neolithic Revolution is considered a crucial moment in human progress?
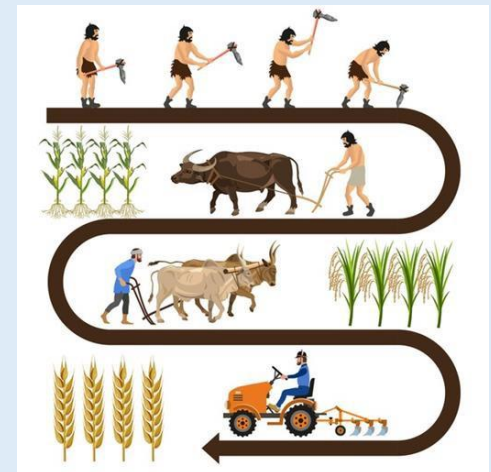
# History - Year 7.2 : The Romans

## Key Knowledge

- ✓ What was the Roman Empire
- ✓ The Roman Army
- ✓ Roman Britain
- ✓ The Revolt of Boudica

### Who were the Romans?

Rome is a city in Italy. 2000 years ago it was the most powerful and important city in the world. The people from Rome owned and controlled a massive **EMPIRE**

### Summary of your learning:

- ❖ We will investigate the Roman Empire and the chronology of Rome
- ❖ We will investigate why the Roman Army was so successful
- ❖ We will look at why the Romans invaded Britain

## Key Vocabulary

**Empire** - A group of countries ruled by a more powerful state or country

**Emperor** – The ruler of an Empire

**Chronology** - The arrangement of dates or events in the order in which they occurred

**BC** - Before Christ. A way of dating years before the birth of Jesus. The bigger the number BC, the longer ago in history is was, because BC numbers decrease in size.

**AD** - Anno Domini - "in the year of our Lord". AD is used to show dates after the birth of Jesus. This year is 2019 AD

**Invade / Invasion** – to take control of another country often by violence

**Revolt** - When a group of people refuse to be ruled and take action against their rulers

**Legion** – A group of 5,000 men under the command of a Legate.

**Cohort** – each legion was divided into ten cohorts

**Centuries** – each century had 80-100 men

**Barbarians** – the name the Romans gave to the people who lived outside the Roman Empire.

**Trade** – making money by buying and selling goods

**Legionary** – A Roman soldier **Centurion** – in charge of a century **Testudo or tortoise** – a defensive tactic **Boudica** – leader of the Iceni tribe

## Chronology

**54 BC** Julius Caesar attempts to invade Britain.

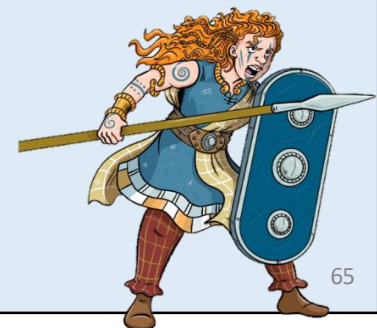**43 AD** Emperor Claudius conquers Britain.

**49 AD** Roman London founded.

**60 AD** Boudica's revolt against the Romans fails. **84 AD** Romans conquer Wales and Scotland.

**133 AD** Construction of Hadrian's Wall to keep the Picts of Scotland out.

**306 AD** Constantine the Great proclaimed Emperor in York.

**409 AD** Romans withdraw

| # Rome | History |
|---|---|

Rome was founded in 753 BC and it fell in 476 AD. The Roman Empire conquered and controlled much of Europe, the Middle East and parts of Africa. The culture of Rome spread throughout its Empire and as a result, Rome's culture still has an impact in the today, especially in areas such as government, engineering, architecture and literature.

# The Roman Army

**Why was the Roman Army so successful?**

**Recruitment:** There are many reasons why the Roman army was so successful. A key reason is that the soldiers were carefully chosen to be tall and physically fit. Only healthy men were chosen and anyone who was too short, too slow or too weak was turned away.

**Organisation:** The Roman army was very carefully organised, it was split into legions of 5,000 men, commanded by a Legate, and this was further divided into ten cohorts and each cohort had six centuries. The centuries were made up of eighty men, each commanded by a centurion. The centurions were very important and were responsible for organising their men. In battle every soldier knew exactly what they had to do and there were many different sections to the army, including cavalry soldiers, archers, soldiers who fired the ballistas, as well as foot soldiers.

**Training:** The soldiers were very carefully trained. The training was very hard and it turned out tough soldiers who would be successful in battle. Soldiers who fell behind during their training had their rations of food cut. There were three 30km marches each month, when the soldier would carry 25 kilos of equipment. This made the men fit and ready for battle.

66

## Why was the Roman Army so successful? (continued)

**Discipline:** The Roman army was also successful because it was so well disciplined. Life in the army was harsh disobedience was not tolerated, which meant the men were trained to do exactly what their Centurion ordered them to do. A Centurion carried a vine-staff as a sign of his power to beat any man who did not do his job properly and the men were punished by being flogged for anything they did wrong. Every soldier knew their role and carried it out fearlessly because cowards were executed: if you ran from a battle, you got your head chopped off because cowardice was not tolerated and soldiers who failed to work as a team during a battle were stoned to death.

**Tactics:** The Romans were also successful was because of their tactics. They always chose the time and place of their battles and used a range of successful tactics, including the Tortoise which was used to protect the soldiers from spears and arrows at they were advancing. Another tactic was The Wedge, which was used to divide the enemy, with a V formation. The Romans also had tactics for breaking a siege, including using a Battering Ram to break through walls or a Siege Tower to allow the Roman soldiers to scale the walls without being attacked. The Romans also used a ballista, sometimes called a bolt thrower, to break a siege. It was used to help break walls down.

**Overall**: Why did the Romans win their battles? Their soldiers were carefully chosen; they were organised; they trained and were disciplined and they used excellent tactics. Thanks to all of these issues, the Roman Army were practically unbeatable.

History

**Retrieval Practice**
1. When was Rome founded and when did it fall?
2. What areas did the Roman Empire conquer and control?
3. What did men have to be, to be chosen for the Roman army?
4. How was the Roman army organized?
5. What was the role of a centurion in the Roman army?
6. How did training help Roman soldiers become successful in battle?
7. What would happen to soldiers who fell behind during their training?
8. Give an example of a strict punishment in the Roman army.
9. What was the "Tortoise" tactic used by the Romans?
10. How did the Romans Battering Ram during battles?

67

# History - Year 7.3 : The Normans

## Key Knowledge
1. The four contenders in 1066
2. The Battles of 1066 and the events of the Battle of Hastings
3. Norman castles
4. The Harrying of the North
5. The Feudal System
6. The Domesday Book

**Summary of your learning:**
* January 1066 the King of England, Edward the Confessor dies with no heir.
* Four men had claims to the throne.
* The first one to be crowned King was Harold Godwinson.
* Harald Hardrada, the King of Norway, invaded to try to take the throne from Harold Godwinson.
* Hardrada and Godwinson fought at the Battle of Stamford Bridge. Hardrada lost.
* William of Norrmandy then invaded and Harold Godwinson fought a second battle at Hastings.
* Harold lost and William became King of England.
* William built castles all over England and established the Feudal System.

**Anglo-Saxon England:** Early medieval England
**Edward the Confessor:** King of Anglo-Saxon England from 1042 to 1066.
**Heir to the throne**: the next King.
**Witan:** The most powerful men in Anglo Saxon England, who could choose the next king if there was no accepted heir to the throne.
**Tostig Godwinson:** The brother of Harold Godwinson. Tostig was exiled by his brother Harold and fought against him.
**Viking;** Fierce warriors from Scandinavia, including Norway and Denmark
**Normandy**: A Dukedom in France, ruled over by the Dukes of Normandy **Atheling:** An Anglo-Saxon Prince

## Contenders in 1066
In 1066 Edward the Confessor died without having a child.
There were four with potential claims to the throne:
**Harold Godwinson**
Most powerful earl in England and Commander of the army and supported by the people of England.
**William of Normandy**
Fierce fighter from France who claimed Edward promised him the throne. **Harald Hardrada**
Viking whose ancestors had been Kings of England. Supported by Harold Godwinson's brother, Tostig
**Edgar the Atheling**
Edward's great-nephew, who was 14 and had no supporters.



68

**Why was there a contest for who would be the King of England in 1066?**

In January 1066 Edward the Confessor was the King, but he was a sick old man who was dying without an heir. The question was, 'who would be the next King of England?' There were 4 main contenders to be King: Harold Godwinson; William of Normandy; Harald Hardrada & Edgar the Atheling

**Contender 1 Harold Godwinson:** Harold was the Earl of Wessex, he was an English contender and the most powerful nobleman in England. He led the English army and helped Edward to rule England. He was a *very* fierce warrior and his sister Edith was married to Edward. Harold claimed that, on his deathbed, King Edward had promised the Kingdom to him. He also had the support of the Witan, which was a council of the most powerful men in England, whose job it was to choose the next King, if there was no heir to the throne. Harold was absolutely determined to be King.

**Contender 2 William Duke of Normandy:** William ruled Normandy, which was part of France. Edward the Confessor had grown up in Normandy, before he became King of England and so there was a close bond between Edward and the Dukes of Normandy. Edward's mother was William's Aunt. William claimed that Edward had promised him the throne in 1051. He also claimed that in 1064 Harold Godwinson had been sent to Normandy by Edward the Confessor, so that Harold could swear loyalty to William. William said Harold swore a holy oath to support him as the next King of England. When Harold broke this oath and was crowned King, the Pope supported William. William was a brave and experienced fighter and he was determined to become King of England.

**Contender 3 Harald Hardrada:** Harald was King of Norway and he was a vicious and experienced warrior. He believed he had a right to the throne of England because his ancestor King Canute had ruled Norway and England from 1016 to 1035.

Hardrada was determined to take back control of England. Harald also had the help of Tostig, the brother of Harold Godwinson. Tostig had been banished from England in 1065 and wanted to get his lands back. Hardrada was completely determined to become King of England.

**Contender Edgar the Atheling:** Edgar was the fourth potential rival for the throne. He was the nephew of Edward the Confessor and an English prince. He was Edward's closest blood relative but he was only a child in 1066 and he had very little support.

History

69
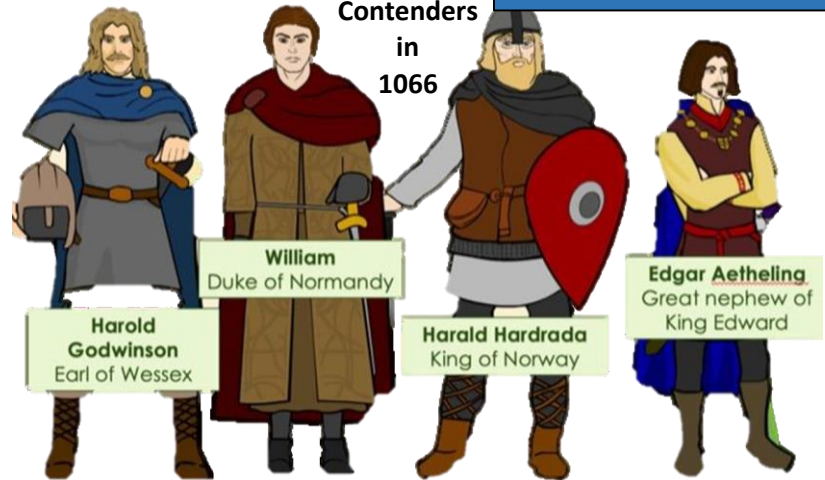
**The Contenders in 1066**

**Think about it…**

**Did Edward the Confessor promise the throne to William?** Edward grew up in Normandy and was *very* close to William's family. He also hated the Godwin family, who had dominated him as King of England. **Did Edward the Confessor promise the throne to Harold Godwinson?** Throughout his time as King, Edward felt threatened by the power of the Godwinsons and so he may not have made Harold the promise. However, most people in England believed that Harold Godwinson would be the next King.

**Did Harold Godwinson promise to help William to become the King of England?**
Harold did go to Normandy on an embassy for Edward the Confessor and may have been pushed into making a promise to support William or risk becoming William's hostage. However, whether he made the promise or not, Harold was determined that he was going to be King of England.

**Why did Tostig support Harald Hardrada?** Tostig was Earl of Northumbria but he had angered the people by being a bad leader. Harold knew he needed the north to support him to be King, so he exiled Tostig and replaced him with Morcar, who was his brother-in-law. Tostig was furious with Harold and went to join Harald Hardrada.

**William**
Duke of Normandy

**Harold Godwinson**
Earl of Wessex

**Harald Hardrada**
King of Norway

**Edgar Aetheling**
Great nephew of King Edward

**Retrieval Questions**
1. Who was the King of England in January 1066?
2. What did Edward the Confessor not have?
3. Why did Harold Godwinson believe he should be King?
4. Why did William of Normandy, claim the English throne?
5. Why did Harald Hardrada think he should be King?
6. What was Edgar the Atheling's claim to the throne?
7. Why did Harald Hardrada have the support of Tostig?
8. What role did the Witan play in deciding the next King of England?
9. What did William claim Harold Godwinson did in 1064?
10. Who supported William's claim to the throne?

70

## What should I be able to do?

- Use inverse operations
- Substitute into single function machines
- Write expressions from single function machines
  - Find functions from expressions
  - Substitute values into simple expressions
  - Understand like and unlike terms and the meaning of equivalence
- Simplify algebraic expressions

Function, Input, Output, Operation, Inverse, Commutative, Substitute, Expression, Equality, Variable

**Algebraic Notation**:

$$f + f + f + f + f + f \quad 6f \qquad 7 \times g \quad 7g$$

$$t \div 5 \quad \frac{t}{5} \qquad 5 \div t \quad \frac{5}{t}$$

$$m \times m \quad m^2 \qquad d \times c \quad cd$$

**Function Machines**:

$$8 \rightarrow \boxed{\times 10} \rightarrow 80$$

$$8 \rightarrow \boxed{+ 100} \rightarrow 108$$

$$8 \rightarrow \boxed{\div y} \rightarrow \frac{8}{y}$$

$$? \rightarrow \boxed{+ 6} \rightarrow 12w + 9$$
$$\leftarrow - 6$$
$$12w + 3 \rightarrow \boxed{+ 6} \rightarrow 12w + 9$$

**Substitution**: Replace the variable with the appropriate values
If $a = 7$ and $c = 10$

$$11a = 11 \times 7 = 77$$

$$\frac{80}{c} = \frac{80}{10} = 8$$

**Like and Unlike Terms:**

| Like terms | Unlike terms |
|---|---|
| $5a, 6a$ | $5a, 5b$ |
| $10t, -3t$ | $-10t, -3$ |
| $2xy, 4xy$ | $2xy, 4xz$ |
| $10. -7$ | $10, 7a$ |
| $3a^2, 7a^2$ | $3a^2, 7b^2$ |

The same variables     Different variables

**Collecting like terms :**

**The symbol $\equiv$ means equivalent to**

$$3a + 4 + 5a \equiv 8a + 4$$

$$6b + 2c - 2b + 6c \equiv 4b + 8c$$

$$5d + 3e + 2d - 3e \equiv 7d$$
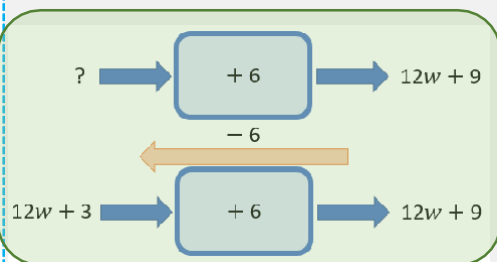
**What should I be able to do?**

- Find inputs and outputs for two step function machines
- Substitute values into two step expressions
- Describe and continue a sequence diagrammatically
- Predict the next terms in a sequence
- Describe and continue linear and non-linear sequences
- Represent sequences in tabular and graphical forms
- Explain the term to term rule
- Generate sequences given an algebraic rule

Function, Input, Output, Operation, Inverse, Substitute, Expression, Variable, Term, Sequence, Linear, Position, Rule, Difference, Arithmetic, Geometric

**Two step functions:**

$$3.7 \longrightarrow \boxed{\times 5} \longrightarrow \boxed{+1} \longrightarrow 19.5$$

$$? \implies \boxed{\div 3} \implies \boxed{-5} \implies 19$$
$$\overset{\times 3}{\longleftarrow} \quad \overset{+5}{\longleftarrow}$$
$$24$$
$$72 \implies \boxed{\div 3} \implies \boxed{-5} \implies 19$$

$$a \longrightarrow \boxed{\times 3} \overset{3a}{\longrightarrow} \boxed{+2} \longrightarrow 3a+2$$
$$b \longrightarrow \boxed{+2} \overset{b+2}{\longrightarrow} \boxed{\times 3} \longrightarrow 3(b+2)$$

**Linear sequences:** These can be displayed via pictures, in a table or graphically
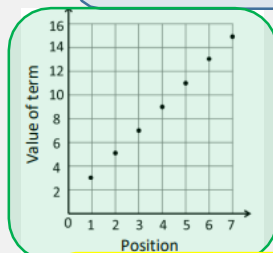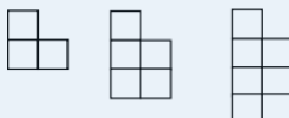


| Position | 1 | 2 | 3 | 4 |
|----------|---|---|---|---|
| Term | 3 | 5 | 7 | 9 |

increases by 2 each time, starting from 3

**Non-linear Sequences:**

The following are all **non-linear** sequences.

This is because they increase by a different amount each time.

To get the next term in this one, **double** the previous term

- $1, 2, 4, 8, \_\_\_, \_\_\_$
- $64\,000, 32\,000, 16\,000, \_\_\_, \_\_\_$
- $1, 3, 6, 10, , \_\_\_, \_\_\_$
- $100, 150, 225, \_\_\_, \_\_\_, \_\_\_$
- $1, 1, 2, 3, 5, 8, \_\_\_, \_\_\_$

To get the next term in this one, **add** the previous 2 terms together. This is part of the **Fibonacci sequence**

These sequences are linear because each term

**Maths**

**What should I be able to do?**

- Understand the meaning of equality
- Explore links between how simple equations can be written
- Solve one step linear equations in all four operations

Equation, Equals, Solution, Inverse, Operation, Solve, Term, Coefficient, Like

## Understand Equality:

- $6 + 3 = 9$
- $8 = 5 + 3$
- $5 + 6 = 8 + 3$
- $312 + 99 = 312 + 100 - 1$
- $12 + 9 = 3 \times 7$
- $8 \div 0.2 = 80 \div 2$
- $6700 - 67 = 99 \times 67$

## Know other relationships that might help when trying to solve an equation:

| 18 | |
|---|---|
| 7 | $y$ |

$7 + y = 18$
$y + 7 = 18$
$18 - y = 7$
$18 - 7 = y$

| 18 | | | | |
|---|---|---|---|---|
| $a$ | $a$ | $a$ | $a$ | $a$ |

$a \times 5 = 18$
$5 \times a = 18$ → $5a = 18$
$18 \div 5 = a$ → $\frac{18}{5} = a$
$18 \div a = 5$ → $\frac{18}{a} = 5$

## Solve one step equations:

### Solve the equation

$$\frac{y}{3} = 4.7$$

| | $y$ | |
|---|---|---|
| 4.7 | 4.7 | 4.7 |

$y \div 3 = 4.7$
$y \div 4.7 = 3$
$y = 4.7 \times 3$
$y = 3 \times 4.7$

$y = 14.1$

### Solve the equation

$$8g = 42$$

| 42 | | | | | | | |
|---|---|---|---|---|---|---|---|
| $g$ | $g$ | $g$ | $g$ | $g$ | $g$ | $g$ | $g$ |

$42 = 8 \times g$
$42 = g \times 8$
$g = 42 \div 8$
$8 = 42 \div g$

$\div 8$
$5.25 \longrightarrow \boxed{\times 8} \longrightarrow 42$

### Solve the equation

$$7.8 = 29.3 - b$$

| 29.3 | |
|---|---|
| $b$ | 7.8 |

$29.3 = b + 7.8$
$29.3 = 7.8 + b$
$7.8 = 29.3 - b$
$b = 29.3 - 7.8$

$b = 21.5$

## ALGEBRAIC NOTATION, EQUIVALENCE, SEQUENCES, FUNCTON MACHINES and EQUALITY
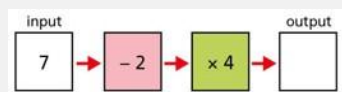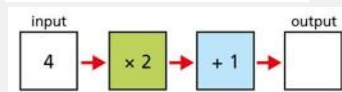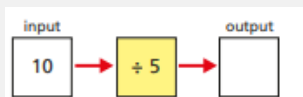
**1. Simplify the following:**

a) $g + g + g + g$

b) $h \times h \times h$

c) $5 \times c \times f \times 2$

d) $8 \div m$

e) $12a + 3 - 5a + 4a$
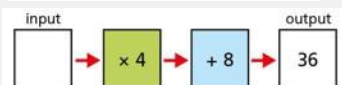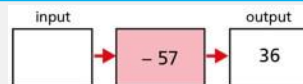
f) $7c + 2d - 3c + 8d$

**2. Work out the following if**

$c = 6$ and $d = 10$

a) $5c$

b) $d^2$

c) $c - d$

d) $\dfrac{d}{c}$

**3. Find the output from the following function machines**

input → 10 → ÷ 5 → output

input → 4 → × 2 → + 1 → output

input → 7 → − 2 → × 4 → output

**4. Find the input from the following function machines**

input → − 57 → output 36

input → × 4 → + 8 → output 36

**5. How many lines are in each term in this sequence?**



How many lines will be in the next term in the sequence?

How many will be in the 10th term of the sequence?

**6.Is the sequence 1, 3, 9, 27, 81….. linear or non-linear?     Can you explain why?**

7.Find the missing terms in these **linear** sequences

4, _____, 16

97, _____, _____, 82

**6. Solve the following equations:**

a) $g + 17 = 30$   b) $3h = 28$

c) $5c = 19$   d) $\dfrac{a}{5} = 2.3$

e) $7.1 = b + 1.9$

f) $4.6 = 15 - y$

**What should I be able to do?**

- Understand and use place value and the number system for integers and decimals
- Order positive and negative numbers, fractions and decimals
- Use the symbols $=, \neq, \leq, \geq$
- Work with terminating decimals and their corresponding fractions
- Round numbers to an appropriate accuracy
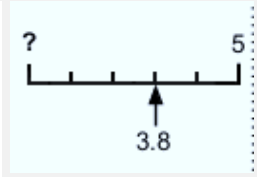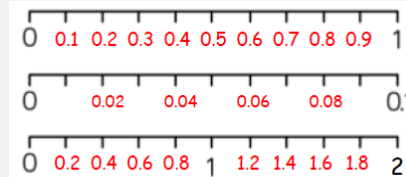- Describe, interpret and compare data distributions using the median and range

**Round to 1 Significant Figure:** Round to the first non-zero digit 370 to 1 significant figure is 400

0.37 to 1 significant figure is 0.4

0.000037 to 1 significant figure is 0.00004

Approximate, Integer, Interval, Range, Median, Negative, Significant Figure

**Decimal intervals:**



**Median and Range:**

The table shows the heights of the highest mountains in some of the countries in Europe.

| Country | Height (m) |
|---------|-----------|
| France | 4808 |
| Belgium | 694 |
| England | 978 |
| Sweden | 2104 |
| Russia | 5642 |
| Croatia | 1831 |

Work out the range of these heights.    $5642 - 694 = 4948$

For the median, arrange the numbers in numerical order and then find the middle one

**Comparing values:**

Two and a half million $=$ 2 500 000

300 000 000 $\neq$ Three billion

Six thousand and eighty $<$ 68 000

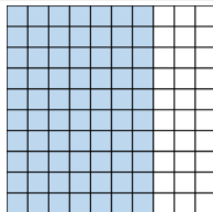0.42 $>$ 0.3021

**Integer Place Value:**



Placeholder

Three billion, one hundred and forty eight million, thirty three thousand and twenty nine

**What should I be able to do?**

- Convert fluently between fractions, decimals and percentages

**Fractions, Decimals and Percentages:**
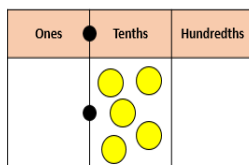
$$\frac{7}{10}$$

0.7

70%

**Maths Autumn Term 2b**

**FRACTIONS, DECIMALS AND PERCENTAGES EQUIVALENCE**
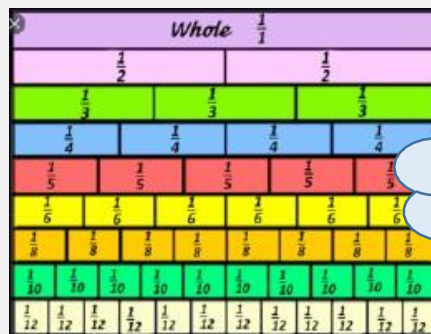
**Tenths and Hundredths:**

| Ones | Tenths | Hundredths |
|------|--------|------------|

e.g. 5 tenths, 0.5, $\frac{1}{2}$, $\frac{5}{10}$

e.g. 3 tenths and 2 hundredths, 0.32, $\frac{32}{100}$

**Equivalent fractions:**

Whole $\frac{1}{1}$

**Pie Charts:**

A pie chart has $360^0$ so all calculations are out of 360
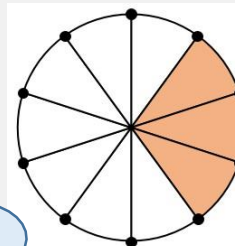
$\frac{3}{10}$ is shaded.

30% is shaded.

Fraction, Decimal, Percentage, Tenth, Hundredth, Sector, Recurring

**Challenge Question, fraction and percentages:**

Write these percentages as fractions in their simplest form

$1\frac{2}{3}$ %         $2\frac{1}{2}$ %

$37\frac{1}{2}$ %         $9\frac{3}{8}$ %

**Challenge Question, fractions and decimals:**

Given the fact that $\frac{29}{32} = 0.90625$ what are the values of the following fractions (no calculator allowed):

$$\frac{290}{320} \qquad \frac{29}{320} \qquad \frac{290}{32} \qquad \frac{58}{16}$$

**Maths Autumn Term 2**

**ORDERING INTEGERS and DECIMALS and LOOK AT THE EQUIVALENCE OF FRACTIONS, DECIMALS and PERCENTAGES**

1. **Round these to 1 significant figure:**

   a) 3180

   b) 467

   c) 98

   d) 0.0439

   e) 0.08701

2. Write the following in words and also **round them to the nearest 100 and then the nearest 1000.**

   a) 57813

   b) 437081

   c) 2045328

**3. Fill in the gaps with < or >**

a) 978 ◯ 1,111

b) 3,500 m ◯ 3,000 m

c) 945 ◯ 799

d) £50,000 ◯ £9,000

**4. Place these amounts in ascending order and then calculate the range and the median of them.**

a) 4 litres, 3 litres, 250 ml, 2.5 litres, 500ml

b) 3 minutes, 220 seconds, 2.5 minutes, 1 minute and 15 seconds, 125 seconds

**5. Write the next 3 terms in these sequences?**

a) 0.1, $\frac{3}{5}$, 30% , ____, ____, ____

b) $\frac{1}{5}$, 0.25, 30%, ____ , ____ , ____

Can you answer the above question in 3 different ways, so that your answers are all fractions, then all decimals and then all percentages?

**6. Work out the following :**

◆ $\frac{3}{10} + 0.6$

◆ $\frac{21}{100} - 0.1$

◆ $1 - \frac{9}{10}$

**7. Given the fact that** $\frac{7}{8} = 0.875$

what are the values of the following fractions (no calculator allowed):

$\frac{70}{80}$   $\frac{7}{80}$   $\frac{70}{8}$

$\frac{14}{4}$   $\frac{70}{4}$

## Maths Spring Term 1a

## SOLVING PROBLEMS WITH ADDITION AND SUBTRACTION

**Cloud:** Commutative, Associative, Inverse, Placeholder, Perimeter, Polygon, Balance, Credit, Debit

### What should I be able to do?

- Understand properties of addition and subtraction
- Use formal methods of addition and subtraction for integers and decimals
- Solve problems in context of perimeter
- Solve problems with finance, tables, frequency trees, bar and line charts

### Addition/Subtraction with integers and decimals:

| H | T | O |
|---|---|---|
|   | 3 | 8 | 6 |
| + | 2 | 1 | 5 |
|   |   |   |   |

| H | T | O |
|---|---|---|
|   | 4 | 2 | 7 |
| − | 2 | 4 | 9 |
|   |   |   |   |

Remember the place value of each column. You may need to move 10 ones to the ones column to subtract

For decimals, you may want to fill 'empty' places with the value 0

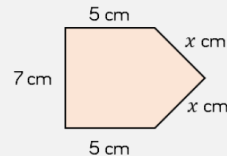| 4 | . | 3 | 8 |
|---|---|---|---|
| 7 | . | 9 | 0 | + |

$5.43 + \frac{8}{10}$

Chance to revisit fraction and decimal equivalence
= 5.43 + 0.8

### Solve problems with Perimeter:

Perimeter is the length around the outside of a polygon

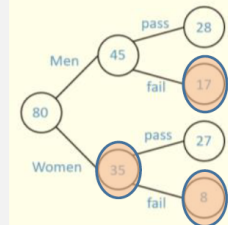This pentagon has a perimeter of 26.4 cm. Find the value of $x$.

5 cm
$x$ cm
7 cm
$x$ cm
5 cm

$$2x + 5 + 7 + 5$$
$$= 26.4$$
$$2x + 17 = 26.4$$
$$x = 4.7 \text{cm}$$

### Frequency Trees:

A frequency tree is made from 'part whole' models. One piece of information leads to another.

80 people took their driving test one week.
45 of the people were men.
28 of the men passed their test.
27 of the women passed their test

Probabilities or statements can be taken from the completed trees. Eg There were 35 women

(Frequency tree diagram: 80 → Men 45 (pass 28, fail 17), Women 35 (pass 27, fail 8))

### Tables:

London
| 211 | Cardiff |
| 556 | 493 | Glasgow |
| 518 | 392 | 177 | Belfast |

|  | Left-handed | Right-handed | Total |
|---|---|---|---|
| Girls | 34 | 327 | 361 |
| Boys | 76 | 463 | 539 |
| Total | 110 | 790 | 900 |

Add the rows and columns to get the totals, subtracting to calculate missing values

### Bar and Line Charts:
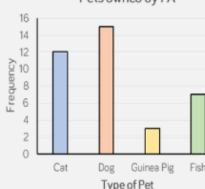
Use addition/subtraction methods to extract information from bar charts
Eg the difference between those who have a dog and those who have a cat
Dog frequency – Cat frequency

(Bar chart: Pets owned by 7H — Frequency vs Type of Pet: Cat, Dog, Guinea Pig, Fish)

When describing changes or making predictions
- Extract information from your data source
- Make comparisons of difference or sum of values
- Put into context of the scenario

### Finance:

Profit = Income - Costs

Credit is the money coming into an account

Debit is the money leaving an account

## What should I be able to do?

- Understand and use factors and multiples
- Multiply and Divide integers and decimals
- Understand and use order of operations
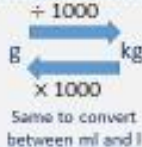- Solve area problems
- Solve problems using the mean

**Metric Conversions:**

$\div 10$    $\div 100$    $\div 1000$

mm    cm    m    km

$\times 10$    $\times 100$    $\times 1000$

$\div 1000$

g ⟷ kg

$\times 1000$

Same to convert between ml and l

**Maths Spring Term 1b**

## SOLVING PROBLEMS WITH MULTIPLICATION AND DIVISION

Multiples, Factor, Millimetre, Centimetre, Kilometre, Quotient, Dividend, Divisor

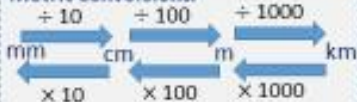## Factors and Multiples:

Factors of 36

| 1, 36 |
| 2, 18 |
| 3, 12 |
| 4, 9 |
| 6 |

Writing the factors in pairs can help you not to miss any

Multiples of 9    9, 18, 27, (36) 45, 54,.....

Multiples of 12    12, 24, (36) 48,.....

The **Lowest Common Multiple** of 9 and 12 is 36 as it is the first multiple which appears in both lists

## Multiplication

$326 \times 32 = 10,432$

| H | T | O |
| 1 | 8 | 7 |

| | 3 | 2 | 6 |
| | | 3 | 2 |
| | 6 | 5 | 2 | $(326 \times 2)$ |
| + | 9 | 7 | 8 | 0 | $(326 \times 30)$ |
| 1 | 0 | 4 | 3 | 2 |

For decimals, use integer calculations and then adjust your answer to match the question

$17 \times 8 = 136$
$1.7 \times 8 = 13.6$
$0.17 \times 8 = 1.36$
$0.8 \times 17 = 13.6$
$0.8 \times 0.17 = 0.136$

## Division:

$$4 \overline{| 5\ ^1 2\ ^2 9\ ^1 1.^1 0\ ^10 0}$$   $1\ 3\ 2\ 2\ .7\ 5$

$24 \div 0.02 = \dfrac{24}{0.02} = \dfrac{240}{0.2} = \dfrac{2400}{2} = 1200$

All these calculations give the same answer as they are all the same proportion

## Order of Operations:

Brackets

Indices or roots

$\times$ & $\div$    Multiplication or Division

$+$ & $-$    Addition or Subtraction

$12 + 46 \div 2 = 12 + 23 = 35$

## Area:

### Rectangle

Area = base $\times$ perpendicular height

### Parallelogram

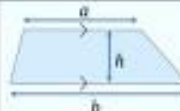Area = base $\times$ perpendicular height

### Triangle

Area $= \frac{1}{2} \times$ base $\times$ perpendicular height

### Trapezium

Area $= \frac{1}{2}(a + b)h$

"Half of the sum of the parallel sides multiplied by the perpendicular height."

## Problems with the Mean: The mean is a measure of average

24 in total

Mean $= 24 \div 3 = 8$

The mean amount of squares is the number of squares which would be in each row if they were spread out equally

**Challenge:**
The mean of these numbers cards is 12
What is the missing number?

19    18    7    ?

**What should I be able to do?**

- Find a fraction of a given amount
- Use a given fraction to find the whole or other fractions
- Find the percentage of an amount using mental methods
- Find the percentage of a given amount using a calculator

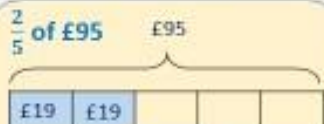Fraction, Equivalent, Whole, Percentage, Place value, Convert, Multiplier

Maths Spring Term 1c

**FRACTIONS AND PERCENTAGES OF AMOUNTS**

---

**Fraction of a given amount:**

What do you notice about these equal pairs of values?

$\frac{2}{5}$ of £95    £95

| £19 | £19 | | | |

£95 ÷ 5 = £19
£19 × 2 = £38

$\frac{1}{2}$ of 30 = $\frac{1}{4}$ of 60

$\frac{6}{7}$ of 210 = $\frac{2}{7}$ of 630

$\frac{2}{3}$ of 60 = $\frac{1}{3}$ of 120

$\frac{3}{4}$ of 80 = $\frac{3}{8}$ of 160

---

**Use a fraction of an amount:**

60

$\frac{3}{5}$ of a number is 60
What is the number?
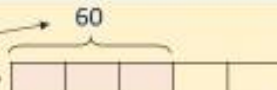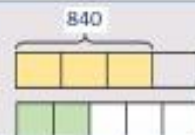
60 ÷ 3 = 20
So, each part equals 20
20 × 5 = 100
The whole number is 100

$\frac{3}{4}$ of a number is 840
What is $\frac{2}{5}$ of the number?

840

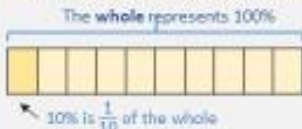Find the whole: 840 ÷ 3 = 280
280 × 4 = 1120
Use the whole: 1120 ÷ 5 = 224
224 × 2 = 448

Challenge: $\frac{2}{3}$ of an expression is 12x. What is the expression?

---

**Finding the percentage of an amount:**

The whole represents 100%

10% is $\frac{1}{10}$ of the whole

Finding 10% or $\frac{1}{10}$ by dividing by 10 can then help find lots of other percentages

5% of 120 = 6
10% of 120 = 12
20% of 120 = 24

÷ 2    ÷ 2
× 2    × 2

So, 65% of 120 = (12 × 6) + 6 = 78
or, 65% of 120 = (24 × 3) + 6 = 78

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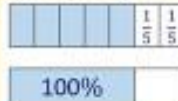
When working out with a calculator, use the **multiplier**

$65\% = \frac{65}{100} = 0.65$    So, 65% of 120 = **0.65** × 120 = 78

You can have more than 100%
If a company's profits grew by $\frac{2}{5}$ between 2022 and 2023, the latest profit is 140% of that in 2022.

| | | | $\frac{1}{5}$ | $\frac{1}{5}$ |

$\frac{1}{5}$ = 20%

100%

So new profit is 100% + 20% + 20% = 140%

Challenge: Investigate the following 2 calculations: 37% of 42 and 42% of 37
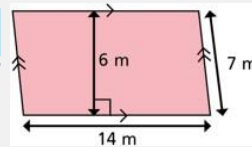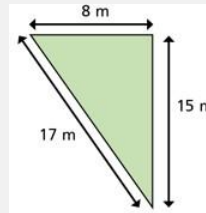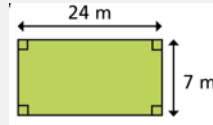
**1. Work out the following:**

a) $283 + 561$

b) $9831 - 247$

c) $25 \times 34$

d) $2889 \div 9$

e) $12.1 \times 0.3$

f) $7.6 \div 0.2$

g) $19 + 4 \times 11$

**2. Write down all the factors of 48**

**3. Write down the first six multiples of 9**

**4. What is the lowest common multiple of 16 and 40?**

**5. Calculate the area and perimeter of the following shapes:**
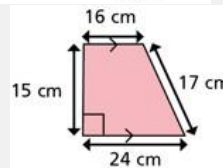


**6. Find the mean of the following sets of numbers:**

a)   6, 8, 2, 1, 6, 8, 4

b)   14, 9, 10, 8, 2, 0, 7, 2

**7. If the mean of these 4 numbers is 5, calculate the missing value: 4, 5, 9, _____**

**8. Calculate the value of the following:**

a) $\frac{1}{7}$ of 840      b) $\frac{2}{5}$ of 65      c) $\frac{3}{8}$ of 92.8

**9. If $\frac{3}{10}$ of a number is 12, what is the number?**

**10. If $\frac{2}{5}$ of a number is 180, what is of the $\frac{3}{5}$ number?**

**11. Work out the following without a calculator.**

a)  10% of 820        b) 25% of 140 c) 5% of 60

d)  35% of 420        e) 95% of 30     f) 45% of 62

**12. Work out the following using multipliers on a calculator.**

a)  11% of 820        b) 27% of 140 c) 5% of 60

d)  3.5% of 420       e) 115% of 30  f) 212% of 62

# Music

| | |
|---|---|
| Dynamics | The volume of the music |
| Forte | Loud volume |
| Crescendo | Gradually louder |
| Piano | Quiet volume |
| Tempo | The Speed of the music |
| Allegro | Fast Speed |
| Largo | Slow Speed |
| Pitch | How high or low the music is. |
| Staccato | Short, detatched notes |
| Legato | Smooth notes |
| Chord | Two or more notes played at the same time |
| Melody | The main tune of the song |

**Conductor:** Stands at the front of the orchestra and directs it. They will indicate the main beats in the music using a 'baton'.

**Composer** – The person who has written the music.

**Strings:** Made from wood and have strings. They are usually played with a bow but can also be plucked (called pizzicato)

**Woodwind**: A selection of instruments divided into 2 subfamilies: flutes and reeds. Flutes create sound by air passing over a small hole. It creates a light breathy tone. Reed instruments use a piece of bamboo reed to create a vibration.

**Brass**: Made out of metal. The sound vibrations are created by the player's lips.

**Percussion**: Instruments which are hit. These fall into 2 subfamilies: tuned (able to play different pitch) and untuned (e.g. drums)

## Note values

C is to the left of the two black keys.
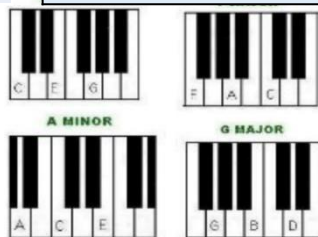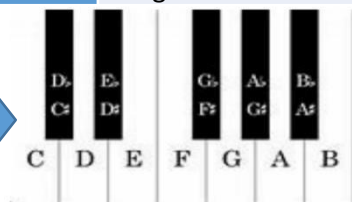
| ½ beat | 1 beat | 2 beats | 4 beats |
|---|---|---|---|
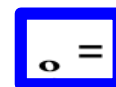
**Activity – Fill in the missing terms.**

| Key words | Definition |
|-----------|------------|
| Dynamics | |
| Forte | |
| Crescendo | |
| Piano | |
| Tempo | |
| Allegro | |
| Largo | |
| Pitch | |
| Staccato | |
| Legato | |
| Chord | |
| Melody | |

What is the role of a composer?

What are the four main instrument groups?

Draw two musical symbols and say what they mean.

How can you describe where 'C' is on a keyboard?

**Instrument groups**

| Brass | Strings | Woodwind | Percussion |
|-------|---------|----------|------------|
| | | | |

# Music

| Key words | Definition |
|---|---|
| Ukulele | a small four-stringed guitar of Hawaiian origin. |
| Fret | The different segments that divide the neck of the ukulele. |
| Tuners | Pegs on the ukulele that can be turned to change the pitch of the strings |
| Capo | A small device that clamps onto the strings to raise the pitch to allow musicians to change key |
| Chord | Two or more notes played at the same time |
| Tonality | If a piece is major or minor |
| Ensemble | A group of musicians |
| Syncopation | Off-beat rhythms |

C

G

Am

F

**Parts of a Ukulele**

Use the terms to correctly label the ukulele parts – Headstock Body Nut Neck
Fretboard Tuning peg Sound hole Strings Bridge Sound board Saddle
Frets

Which chord chart belongs to which chord?

C                    F

G

Am

85

# Physical Education – Policy

Participation
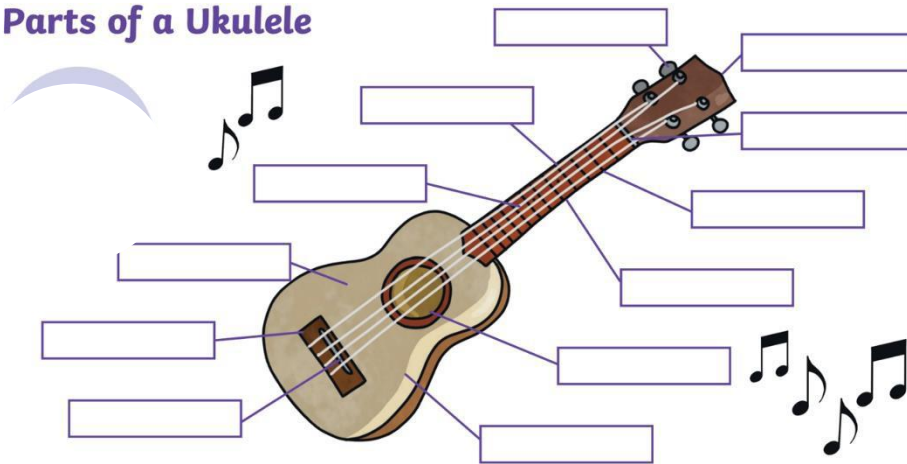
- It is expected that your child brings full kit and changes into it for every physical education lesson even when a note has been written to excuse them from active participation in the lesson.

- 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.

**GRIP-** shake hands with the racket sideways on. Wrap fingers round the tape.

**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.

**TACTICS -**    Hitting into space – moving partner around the court

Shot selection – selecting the right shot for the right situation

Targeting opponents weaknesses

**Stretch and Challenge Task:**

-Draw a badminton court in your knowledge book and label it correctly with the lines that are in/out for both singles and doubles.

-Find out who our best players in the country are for men's and ladies doubles, singles and mixed.

**www.badmintonengland.co.uk** is a good site to use.

## 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 the right, when the score
is odd, serve from the left.
Court is long and thin for singles, short and wide for doubles.
You cannot hit the net with your racket or body.

# Physical Education – Badminton questions

1. Name 2 pieces of Badminton equipment.

2. Name 1 rule for serving.

3. Name 1 component 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 front of the court, what shot would be best to play?

# 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.

**: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.

**Stretch and Challenge Task:**

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

Learn about the different positions and write them down in your knowledge book

## 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

89

# Physical Education – Basketball questions

1. What does the term 'travelling' mean?

2. Describe how high off the floor the ball should bounce when dribbling

   effectively?

3. Explain what a successful chest pass is?

4. Describe what a 'double dribble' is?

5. True or false, basketball is a contact sport?

6. What is the signal given by a referee for 'travelling'?

7. What is the signal given by a referee for a 'double dribble?

8. Can you identify where the 'key' is on a basketball court?

# Physical Education - Fitness

**Key skills:**

**Elements of a Warm up**

- **Pulse raiser** – This allows us to increase our heart rate and the amount of blood pumped around our body which carries more oxygen to the muscles we are using.
- **Stretching** – Increased blood flow to the muscles. Increased range of motion at the joints. Reduced risk of injury.
- **Increased intensive activity** – This allows the participant to take part in activities relevant to the sport/ activity to be undertaken.
- **Increase mental preparation**

**Purpose of a cool down**

Return heart rate to resting levels gradually.

Remove LACTIC ACID from the body (reduce muscle soreness).

**Effects of exercise on the body**

Breathing and Heart Rate increase with intensity of exercise. Pulse rate – Pulse rate (the number of times your heart beats in a minute) can be taken at either your wrist or neck. The normal rate =70-100BPM

**How to take your pulse rate: -**

Gently place 2 fingers of your other hand on this artery.

Do not use your thumb, because it has its own pulse that you may feel.

Count the beats for 30 seconds, and then double the result to get the number of beats per minute.

**Stretch and Challenge Task:**

Note where the Radial and Carotid sites are for taking the pulse.

Describe activities that may raise the pulse rate.

**Main muscles**

deltoids
pectoralis
biceps
obliques
abdominals
quadriceps

trapezius
triceps

rhomboids
latissimus dorsi
erector spinae
gluteus
hamstrings
gastrocnemius & soleu

**Key Content and Terms to learn: Warm up; Cool Down; Heart Rate; Body Temperature**

# Physical Education – Fitness questions

1. What is a pulse raising activity?

2. Name 1 lower and 1 upper body muscle

    a.)

    b.)

3. Does aerobic exercise use oxygen? Yes/No

4. List as many circuit training stations as you can

5. How could we measure our heart rate?

6. What is the difference between dynamic and static stretching? Name 1 of each stretch.

# 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.

**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 and depth

## Physical Education – Football questions

1. Describe why it is important to keep the ball close when dribbling the ball?
2. When making a pass to a teammate why is it important to have a strong ankle?
3. Describe a successful defensive header?
4. Explain how an attacker should head the ball when in a goalscoring position against a goalkeeper?
5. Describe an ideal body position when turning with the ball?
6. When shooting against a goalkeeper why is it beneficial to keep the ball low and in the corner?
7. Describe how to control the ball with your chest when receiving the ball in mid-air?
8. What size football should be used at Under 12's (Y7) age category?

**Stretch and Challenge Task:**
1. How do you keep the ball low when passing and shooting?
2. What technique would you use to tackle a player?
3. Why is jockeying important?
4. Research the different types of formations (pictured) and positions.

**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

**Stretch and challenge task**

Watch an international or super league game of netball online. You could use the England netball website.

Draw a court and mark on the positions for 2 teams in different colours.

## Rules

The game starts with a centre pass and the ball must be caught in the centre third. You must comply with the footwork rule e.g. a 1-2 landing.
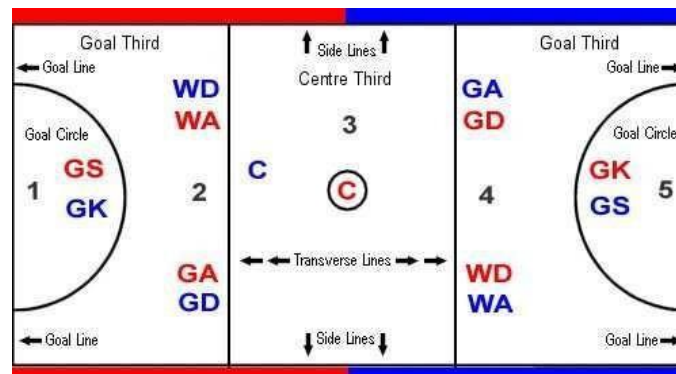
You only have 3 seconds to release the ball.

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

There must be no contact with an opposing player.

Only GS and GA may score a goal.

You must stay in the correct area of the court for your position Teams take it in turns to take a centre pass. The ball must be touched in each third of the court.

**Key words**
Passing
Receiving
Shooting
Attacking
Defending
Footwork
Contact
Dodging

# Physical Education – Netball questions

1.  Can you explain the footwork rule in netball?

2.  Name the 7 netball positions.

3.  Name 3 different passes

4.  Name the players who are allowed in the D

5.  The Netball court is split into ………

6.  Which two players can score a goal?

7.  How far must a defender stay away from an opponent who is in possession of

    the ball?

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



Tuck    Straddle    Pike

**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
**Landing –** Demonstrate basic landing; seat, front and back in isolation from crouched position
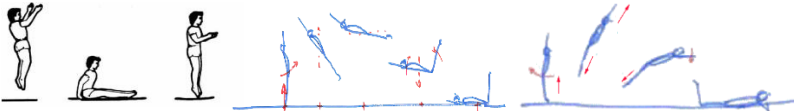


**Seat Drop –** land on the cross, palms down by the side, legs out straight, point toes
**Back Drop –** back to land on cross, arms in round position across chest, legs slightly bent, toes pointed in air
**Front Drop –** land on stomach (belly button to land on cross) arms and palms flat making diamond 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.
**Twist – twist – half-twist – full twist        Advanced rotation**
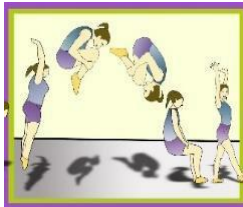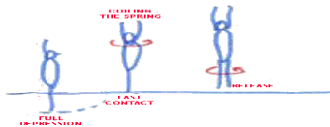


**General rules**
All jewellery/ piercings/ footwear removed
Socks or grip socks to be worn Stay on the cross when bouncing
Only one person allowed on at a time Never crawl under the trampoline
Use the "kill bed" to stop when you lose control
Only perform movements your teacher has taught you
**Competition rules**
Land on two feet
Perform compulsory and voluntary routine (must include 10 skills) Plain white socks
Can use 3 bounces before starting routine
Out bounce can be used if necessary at the end of the routine
Cannot repeat single moves

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

## Physical Education – Trampolining questions

1. How should the trampolines be set out?

2. How do you get on and off a trampoline?

3. Where should you stand when on the trampoline?

4. Where should you stand when not on the trampoline?

5. What are you called when you are not on a trampoline?

6. What are the 5 key skills of trampolining?

7. Describe how you stop safely on a trampoline

8. Create a 3 bounce routine

9. Stretch and challenge task
- Perform the three shapes within a routine keeping on the cross
- Link movements together (3 bounce routine) e.g. seat drop, ½ twist, tuck
- Attempt to twist in and out of movements
- Attend extra-curricular

# Religious Education

## Contents

## Creation and Covenant - Key Words

**God**: The eternal, supreme being who created all things.

**Revelation**: Ways God has revealed himself to humanity.

**Natural revelation**: Humans understanding God through their own reason and experiences.

**Special revelation**: How God is revealed in scripture (the Bible) and tradition.

**Literal sense**: The meaning of a passage of text as the author intended it.

**Literary form**: The genre, historical context and intended audience of a text.

**Creation**: When God made the world.

**Creationism**: The belief that the world really was created by God in 6 days.

**Scientism**: The belief that science answers all of life's questions.

**Prayer**: Communicating with God, usually through words.

**Stewardship**: The responsibility to care for the world on behalf of God.

## Prophesy and Promise - Key Words

**Revelation**: Ways God has revealed himself to humanity.

**Dei Verbum**: Latin for 'Word of God.'

**Scripture**: Sacred/holy texts. For Christians, the Bible.

**Inspired**: Influenced by God through the power of the Holy Spirit.

**Canon**: The set of texts that make up what we call the Bible.

**Old Testament**: The first and biggest section of the Bible set before Jesus was born.

**New Testament**: The second section of the Bible set after Jesus was born.

**Hebrew**: The original language of the Jewish people and the Old Testament.

**Aramaic**: The language that Jesus and his disciples spoke.

**Greek**: The language the New Testament was first written in.

**Liturgy of the Word**: The part of Mass where the Bible is read and the priest gives a homily (talk).

## From Galilee to Jerusalem – Key Words

**Incarnation**: When God came to earth in human form (the person of Jesus).

**Trinity**: The Christian belief that God is three in one.

**Hypostatic union**: A term used to describe Jesus being both fully human and fully divine (God).

**Son of Man**: A title for Jesus, showing he was fully human as well as God.

**Son of God**: A title for Jesus showing he was fully divine (God) as well as human.

**Christ**: A title for Jesus, from the Greek word 'Christos,' that shows he is the Messiah.

**Lord**: A title for Jesus that shows he is ruler of all.

**Heresy**: Beliefs or opinions that go against true Christian belief.

**Arianism**: A type of heresy that denied Jesus was really God in human form.

**Lex orandi, lex credendi**: A Christian motto meaning that prayer and belief are inseparable.

## Autumn 1: Creation and Covenant: What is God like?

Catholics find out about God through **Revelation.** Revelation means the way God reveals himself (shows what he is like) to humans.

God does this through two different ways:

| Natural revelation | Special revelation |
|---|---|
| Humans understanding God through their own experiences, such as the vastness of the universe, the beauty of a flower, the way different elements of the world work together. | Humans understanding God through scripture and tradition. This means humans will read the Bible or listen to the teachings of Popes and Bishops to understand what God is like. |

He is a creator

He does not live on earth

### Acts 17:24-28
The God who **made the world and everything** in it is the Lord of heaven and earth and **does not live in temples built by human hands.** And he is not served by human hands, as if he needed anything. Rather, **he himself gives everyone life and breath and everything else.** From one man he made all the nations, that they should inhabit the whole earth; and he marked out their appointed times in history and the boundaries of their lands. God did this so that **they would seek him and perhaps reach out for him and find him,** though **he is not far from any one of us.** 'For in him we live and move and have our being.' As some of your own poets have said, '**We are his offspring.**'

Everything we have, including life, comes from him

God wants us to know him

God stays close to us
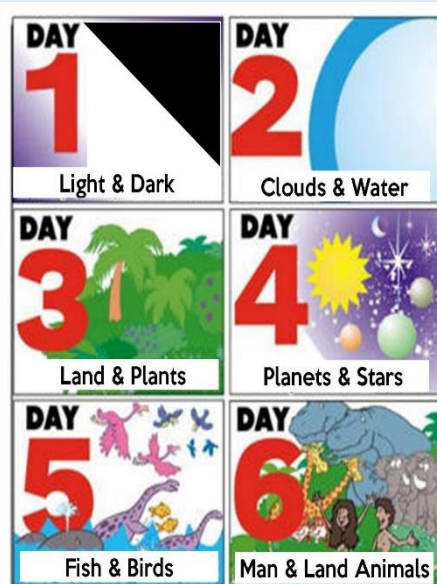
God is our Father and we are his children

100

## Autumn 1: Creation and Covenant: The Story of Creation

**Creation in Genesis 1:**

**Creation in Genesis 2:**



Then the LORD God placed the man in the Garden of Eden to cultivate it and guard it. He told him, "You may eat the fruit of any tree in the garden, except the tree that gives knowledge of what is good and what is bad. You must not eat the fruit of that tree; if you do, you will die the same day." Then the LORD God said, "It is not good for the man to live alone. I will make a suitable companion to help him." So he took some soil from the ground and formed all the animals and all the birds. Then he brought them to the man to see what he would name them; and that is how they all got their names. So the man named all the birds and all the animals; but not one of them was a suitable companion to help him. Then the LORD God made the man fall into a deep sleep, and while he was sleeping, he took out one of the man's ribs and closed up the flesh. He formed a woman out of the rib and brought her to him. Then the man said,

"At last, here is one of my own kind—
Bone taken from my bone, and flesh from my flesh.
'Woman' is her name because she was taken out of man."

That is why a man leaves his father and mother and is united with his wife, and they become one.
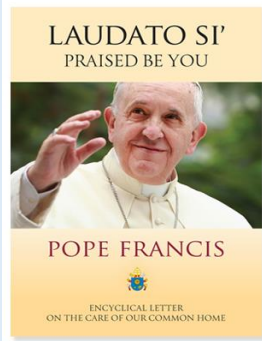
The man and the woman were both naked, but they were not embarrassed.

**Interpretations of the Creation stories:**
- **Scientism** – the view of some scientists that Genesis is completely untrue and doesn't teach us anything.
- **Creationism** – the view of some Christians that Genesis is literal, exact truth and God really did create the world in 6 days.
- **Catholicism** – the view of Roman Catholics (also many other Christians) that Genesis is symbolic truth - it is a metaphor story.

# Religious Education

## Autumn 1: Creation and Covenant: Laudato Si'

**LAUDATO SI'**
**PRAISED BE YOU**

**POPE FRANCIS**

ENCYCLICAL LETTER
ON THE CARE OF OUR COMMON HOME

Laudato Si' is an **encyclical** written by Pope Francis, it was published on the **18 June 2015**.
**Encyclicals offer Catholics guidance from the Pope** concerning issues which affect their lives and beliefs. Laudato Si' discusses the damage being inflicted on the Earth by humans and calls on '**every person living on this planet**' to make urgent changes to our lifestyles and how we consume energy in order to protect the planet. The Earth is **God's gift to us.** But what we see today is that our common home has **never been so hurt and mistreated** as it has been in the last 200 years.

**OUR PLANET. THEIRS TOO.**

We have **developed at a greater speed** than we could have ever imagined. We have **treated the Earth like it has an unlimited supply of resources, taking more than our fair share**

Our increasing use of **polluting** fossil fuels, especially coal, oil, and gas, is helping to drive climate change which is one of the biggest challenges we face today. Climate change affects us all, but it is the **poorest communities** who suffer the most.

Yet, despite all of this, all is not lost. **Young people demand change**. Young people want to build a better future, which takes seriously the environmental crisis and the sufferings of the poor.

To protect our common home, we need a **common plan**. The whole human family needs to work together, so that we may sow beauty, not pollution and destruction.

Our use of polluting fossil fuels also needs to be replaced **without delay**. And we need to stop treating the world's resources as an **object for profit**, with no thought on how our actions might affect the environment or future generations.

Sr Dorothy Stang was born in America in 1931. She became a **nun and worked as a school teacher**. In 1966 Sr Dorothy moved to Brazil. Part of her mission was to share the Gospel and help build Christian communities. Within these communities, Sr Dorothy **helped to support settler farmers who had been given land in the area so that they could make a living.**
Sr Dorothy was passionate about **protecting the rainforest,** so she helped bring the farmers together to give them greater power in challenging deforestation. Her faith in God motivated her to spend the rest of her life doing his work in Brazil.

The Bible is the Christian holy text and although it is printed as one big book it is actually a collection of many books, written in many different genres (styles), over many thousands of years, by many different authors. The names of the different books can be seen on the picture on the right hand side of this page.

The Bible is made up of 66 books across the Old and New Testaments. There are 39 books in the Old Testament and 27 in the New Testament. Catholic Bibles have an extra 7 books between the Old and New Testaments called the **deuterocanonical** books.

The Old Testament was originally written in Hebrew and the New Testament in Greek. Now the entire Bible is available in 704 languages. It is still being translated today.

The Bible contains many genres of writing including: biographies, letters, songs and poems, prophecies, laws, historical accounts and parables.

The Bible may also commonly be referred to as 'The Word of God.'

# Religious Education – Prophecy & Promise – Bible referencing – How the Bible came to be

To navigate the Bible you need 3 pieces of information. This information is called the Bible reference:

1. The **book** name

2. The **chapter** number (comes first)

3. The **verse**(s) number(s) (comes second)

The Bible reference will look like this:

**Genesis 1:1-20**

Book    Chapter    Verses

## How the Bible came to be:

**2000BC**
Since earliest times, scribes wrote down their experiences and beliefs about God but there was no official collection of these yet.

**By 100CE**
People wrote down the stories about Jesus and their beliefs about him. The Gospels and letters of St Paul started to circulate.

**405CE**
Scholars had already begun translating the Bible. A man called Jerome translated the Bible into Latin. This Latin version was called the Vulgate. Scholars then started translating the Vulgate into more languages.

**1611CE**
King James VI authorized a new English translation of the Bible. This became known as the 'King James Version' or 'KJV Bible' and is still read by some people today.

**By 400BC**
Some of these writings had been gathered together into a canon, an official collection of Hebrew (Jewish) writings. These are what we call the Old Testament. By this time they had been translated into Greek too. These were the scriptures Jesus would have known.

**300CE**
The early church put a canon of writings about Jesus together. This collection became what we call the New Testament. In 331CE under Emperor Constantine, the Old and New Testaments were put together as one for the first time, forming what we call the Bible.

**c.1400CE**
In 1385 a man called John Wycliffe translated the Bible into English. In 1440CE the invention of the printing press meant the Bible could be printed quickly instead of having to be translated. More people had access to the Bible for the first time.

**Present Day**
Translation of the Bible continues. There are many different versions in English so we can read the Bible in modern day language. Work continues around the world to translate the Bible further so more people around the world can read it.

**Why is the Bible important?**
- It contains commandments and teachings about how to live so that people can please God and get into heaven.
- It's the Big Story of God's epic masterplan to save his creation. It tells all about how God sent laws, prophets and ultimately his own Son, Jesus, to die on the cross and save us from sin.
- The message at the heart of the Bible's teaching is about love – love of God and love for your neighbour.
- People even still swear on the Bible in court.
- It is God's word, so by reading it Christians feel closer to God. St Paul said "All Scripture is God-breathed."
- It isn't just important for Christians – our Old Testament is the Jewish Tenakh, and Muslims view the Bible as telling part of God's revelation too. Even Gandhi, a famous Hindu, was influenced by Jesus' teaching in it.
- It forms the basis of Christian worship today, containing prayers like the Our Father and the instruction to share the Eucharist.

**Psalms**

The Psalms are some of the most widely read portions of the Old Testament. The Psalms are about people, the joys and struggles of living life as a part of God's people. The Psalms were poetry intended to be set to music and prayed in worship. Much of the language in the Psalms is metaphorical and symbolic.

Praying through the Psalms can teach you to build a healthy relationship with God. The Psalms teach us that our prayers shouldn't just end with our complaints or desires, but should end in praise and trust in God no matter what.

The **'Liturgy of the Word'** is the part of **Mass** where the Bible is read out. There will always be readings from the Old and New Testaments, including a Psalm and Gospel passage. The priest will then give a talk based on this.

The word 'incarnate' means 'made flesh' so the Incarnation means when God came to earth in human form, as Jesus.

**Jesus is not a separate being sent down by God: he is God**
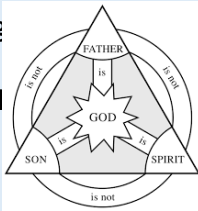
In Jesus we have a hypostatic union. This means that he is fully man and fully God – not half man and half God.

This is why Christmas is an important festival for Christians as it celebrates the Incarnation.

We know about the Incarnation from the **Nicene Creed:**

**The Nicene Creed**

The Nicene Creed is the main Christian statement of belief. In it, it emphasises the importance of the Incarnation.

I believe in one Lord Jesus Christ, the Only Begotten Son of God, born of the Father before all ages. God from God, Light from Light, true God from true God, begotten, not made, consubstantial with the Father; through him all things were made. For us men and for our salvation he came down from heaven, and by the Holy Spirit was incarnate of the Virgin Mary, and became man.

This tells us that Jesus is the same as God.

This means that Jesus is the son of the Father and wasn't created like everything else that exists.

The word 'consubstantial' means 'of the same substance,' showing God and Jesus are the same.

God came to earth as Jesus to save humanity.

Heresy is beliefs or opinions that go against true Christian belief. If you commit heresy, you are called a heretic.

**Heresy:**
- **Can only be committed by a baptised person**
- **Is publically and persistently against Church teachings**
- **Distorts, denies or doubts a Church teaching**

**This means:**

You can only be a heretic if you are already a member of the Church.

You say these beliefs in public more than once.

Distort – twist the truth
Deny – say it is a lie
Doubt – say you are unsure

## Arius and Arianism

Arius was an early Christian priest who lived in Egypt in the fourth century.

Arius held some beliefs about Jesus that differed from Church teachings. He said:

This would mean that there was a time when Jesus didn't exist, therefore God the Father was more powerful than Jesus.

Jesus was created by God, when God created the world.

Arius argued that Jesus was born and died. This shows that God the Father is the only Almighty one.

Therefore, Jesus could not have the same nature as God the Father, which means the incarnation could not be true.

## St Athanasius

St Athanasius, who also lived in Egypt at the same time as Arius, disagreed with him completely. He said:

If God the Father and God the Son were separate then they would be separate Gods.

Christianity has to only believe in one God.

Therefore, Arius's belief in more than one God was a sin and heresy.

Over time, debate raged so the Church officials called together a council (meeting) to talk about these issues. This was how the Nicene Creed was written.

# Religious Education – From Galilee to Jerusalem: Heresy

| Title | Explanation | Old Testament Example | New Testament Example |
|---|---|---|---|
| **The Son of God** | The Nicene Creed refers to Jesus as the '*Only Begotten Son of God.*' This means he is more than a man. | Psalm 27: "*You are my son, today I have begotten you.*" | In Jesus' Baptism God says "*You are my Begotten son.*" |
| **The Son of Man** | This title suggests that Jesus is both human and divine. Jesus often uses this title to refer to himself. | David has a vision of the Messiah and describes him coming to earth – "*there came one like the son of man...and to him was given dominion and glory.*" | When Jesus heals a paralyzed man he says that he acts with the authority of God: "*the Son of Man has authority on earth to forgive sins.*" |
| **Lord** | Lord is a title of absolute authority given to someone who is superior, and in Jesus' case – divine. | God said to Moses "*The Lord, the God of your Father… has sent me to you.*" | The disciples go fishing after Jesus' resurrection and when they recognized Jesus they said "*It is the Lord.*" |
| **Christ / Messiah** | Christ comes from the Greek word 'Christos' (Messiah), which means 'anointed one'. To be anointed means you are a person chosen by God. | Priests, Prophets and Kings were all anointed with oil. | Mark's Gospel starts by saying: "*The beginning of the Gospel of Jesus Christ.*" |
| **Son of David** | Jews believe the Messiah would be a descendant of King David. | 1Kings: "*Then I will establish your royal throne over Israel forever, as I promised David*" | When Jesus heals a blind man, he shouts of "*Son of David, have mercy on me.*" |

# Religious Education – Questions

## Autumn 1: Creation and Covenant Questions

1. What is revelation?
2. What are the two ways that God can reveal himself?
3. What does Acts 17:24-28 tell us about God?
4. How would you describe God? Explain your answer.
5. What does Genesis 1 tell us about how God created the world?
6. What can we learn from Genesis 2?
7. Explain the three different interpretations of the creation stories.
8. Which interpretation of the creation story do you most agree with? Why?
9. What is Laudato Si'?
10. Who wrote Laudato Si'?
11. Summarise what Laudato Si' says into five bullet points.
12. What can you do to help the world? List as many things as you can think of.
13. Write your own encyclical (letter) about the state of the world and how we should better care for it.
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.

## Autumn 2: Prophesy and Promise Questions

1. What is the Bible?
2. List 10 facts about the Bible.
3. Who reads the Bible?
4. Name 5 books od the Bible.
5. How many extra books does a Catholic Bible have? What are these called?
6. Write simple instructions explaining how to look up a Bible Reference.
7. Explain, in as much detail as you can, how the Bible came to be.
8. Explain at least four reasons why the Bible is important. Tell me which is the most important reason, and why you think that.
9. What is a Psalm?
10. Why are Psalms important?
11. Attempt to write a Psalm. (This means write a poem about God.)
12. Draw an illustration to go with the Psalm 23 which says 'the Lord is my shepherd.'
13. Do you use the Bible in your life? Explain why or why not.
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.

## Spring 1: From Galilee to Jerusalem Questions

1. What does the word 'incarnate' mean?
2. Explain what the Incarnation is.
3. What does hypostatic union mean?
4. Explain why some people may find it hard to understand how Jesus could have a hypostatic union.
5. What does the Nicene Creed tell us about Jesus?
6. What is Heresy?
7. Explain the three criteria you need to meet to be classed as committing Heresy.
8. What did Arius believe?
9. What did St Athanasius believe?
10. Who, out of Arius and St. Athanasius, was called a heretic? Why?
11. For each title of Jesus, design a symbol to represent the meaning of the title.
12. Which title do you think best describes Jesus? Explain why you think that.
13. 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.

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.

**Bunsen burner**



- Flame (outer cone)
- Flame (inner cone)
- Barrel or chimney
- Air
- Gas
- Collar (air regulator)
- Rubber tubing
- Base

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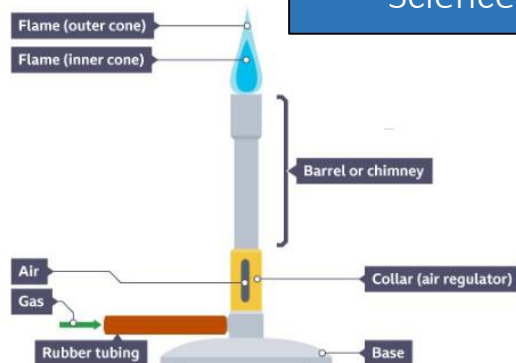
| Air hole | Flame | Use |
|----------|-------|-----|
| Fully open | Roaring flame | Heating strongly |
| Partly open | Blue flame | Heating gently |
| Closed | Safety flame | When not in use |



Health Hazard   Oxidiser   Flammables   Compressed Gas

Corrosives   Toxic   Irritant   Environmentally Hazardous

**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.

110

# 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



The temperature of water in a kettle as it boils
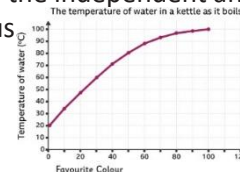
• A **bar chart** should be used if the independent variable is discontinuous .



Favourite Colour
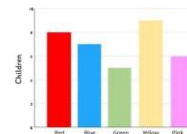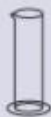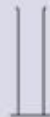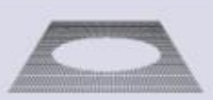
Once points have been plotted for a line graph, draw a **line of best fit**:
✓ Does NOT have to go through 0,0
✓ The line should be drawn through as many points as possible,
✓ Equal numbers of points above and below the line.
✓ Anomalies should be ignored.
✓ It may be straight or curved



111
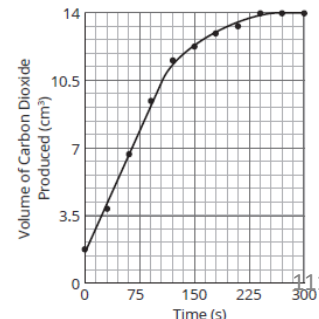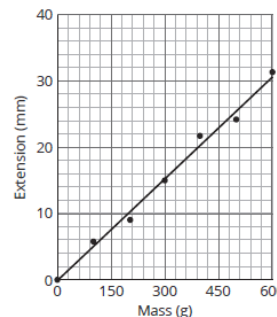
Diagrams are used when drawing practical equipment to make it easier to recognize, and quicker to draw



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

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

**Forces** on an object are either balanced or unbalanced, and this affects the **motion** of the object.

| Forces | Motion |
|--------|--------|
| Balanced | • Stationary (not moving) or<br>• Moving at a constant speed |
| Unbalanced | • Changing speed (accelerating or decelerating) or<br>• Changing direction |

Resultant force = overall force on an object

The unit for force is Newtons (N)

**Slowing down:**

50N thrust    100N drag

**Speeding up:**

140N thrust    30N drag

**Constant speed:**

140N thrust    140N drag

**Keywords**

Balanced forces = forces are equal in opposite directions

Unbalanced forces = forces in opposite directions are not equal in size

Accelerating = speeding up        Decelerating = slowing down

**Speed = distance ÷ time**

The unit we use for speed is usually m/s metres per second – but you should always check the units given for distance and time

## Distance time graphs
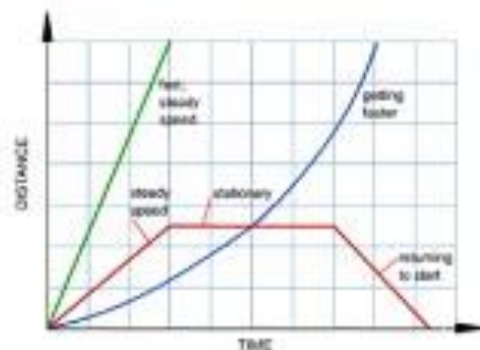


Horizontal line = stationary (not moving)
Diagonal line = moving at a constant speed
Steeper line = a faster constant speed
Downwards diagonal line = going backwards
Curved line = changing speed:
        accelerating                decelerating
The gradient (steepness) of a line tells you the speed of the object

113

**States of matter –** how particles can be arranged in matter - solid, liquid, gas

**Changes of state –** moving from one state of matter to another - evaporation, condensation, freezing, melting

Changes of state that take in energy:
**Melting** – from solid to liquid
**Evaporation** – from liquid to gas

Changes of state that release energy:
**Freezing** – from liquid to solid
**Condensation** – from gas to liquid

**Particle theory**
All matter is made up of particles. Particles are found in three main states of matter. Particles behave differently in the three states.

**Types of substance**
**Pure** – made up of only one type of substance
**Impure** – a mixture of different substances
**Mixture** - the different types of particle in a **mixture** are not chemically combined, and can be separated
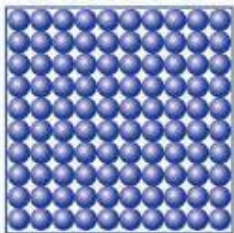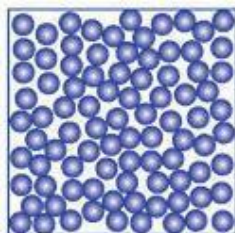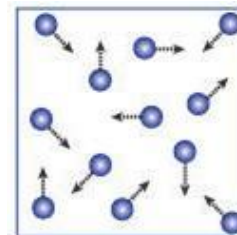
| Solid | Liquid | Gas |
|---|---|---|
| Particles are in a regular, fixed arrangement<br>Particles vibrate in a fixed position (but do not move) | Particles are arranged randomly and can move – they slide past and over each other, | Particles can move in all directions, and show random movement. Particles are far apart. |
| Least amount of energy | More energy | Highest amount of energy |
| Fixed volume and shape | Fixed volume, shape can change | No fixed volume or shape – can be compressed |

114

| Keyword | Meaning |
|---------|---------|
| Soluble | Will dissolve |
| Insoluble | Will not dissolve |
| Solvent | The liquid that dissolves in a substance |
| Solute | The solid that gets dissolves |
| Solution | The mixture of solvent and solute |
| Saturated | When no more solute will dissolve |
| Solubility | A measure of how much of a substance will dissolve. |

**Filtration** Used for separating an insoluble solid from a liquid. e.g. sand from water
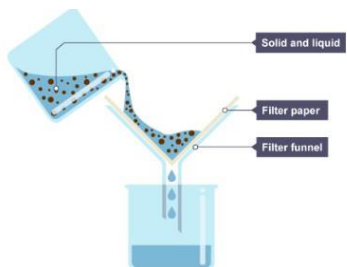
**Evaporation** or crystallisation. Used to get a soluble solid from a solution. e.g. salt from salt water

**Chromatography** This is used to separate out the substances in a liquid. Simple chromatography is done on paper e.g. the individual dyes in ink or paint
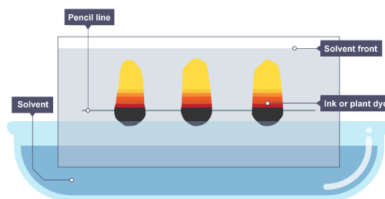
**Distillation** Used for separating a liquid from a solution. It involves evaporating and condensation. e.g. water from salt water

# Term 2 – acids & alkalis

| Keyword | Meaning |
|---|---|
| Acid | A substance with a pH of less than 7 |
| Alkali | A substance with a pH of more than 7 |
| Neutral | A substance with a pH of 7 |
| Indicator | A substance that when added to a chemical will change colour to show the type of chemical |
| Neutralisation | A chemical reaction that occurs when acid and alkali react to form a neutral chemical |

## Litmus paper

•Alkali will turn red litmus paper blue
•Acid will turn blue litmus paper red
•Neutral substances will not affect either litmus paper

Not as useful as universal indicator paper or liquid, as it does not indicate strength of an acid or alkali

## pH scale



The numbers indicate the pH
The colour is achieved using universal indicator liquid or paper
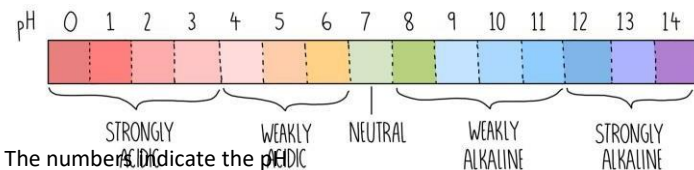
## Neutralisation reactions

Universal indicator will be green to indicate pH 7 after a neutralisation reaction.

To neutralise acid, add alkali. To neutralise alkali, add acid.

Acid + alkali → salt + water

Using a different acids forms different salts e.g.
**hydrochloric** acid + sodium hydroxide → sodium **chloride** + water
**nitric** acid + sodium hydroxide → sodium **nitrate** + water
**sulphuric** acid + sodium hydroxide → sodium **sulphate** + water



corrosive

irritant

**Hazards of working with Acids & Alkalis**
Acids and alkalis can be made less hazardous by diluting them – this means adding water. We only use dilute acids and alkalis in the lab. We must ALWAYS wear goggles when using acids and alkalis, even if they are dilute.
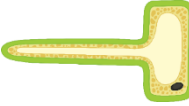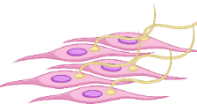
116

Animal Cell — Plant Cell

Plant and Animal Cells share these common features

Plant Cells contain these extra features

Cell Membrane, Cytoplasm, Nucleus, Mitochondria

Rigid Cell Wall, Chloroplasts, Vacuole
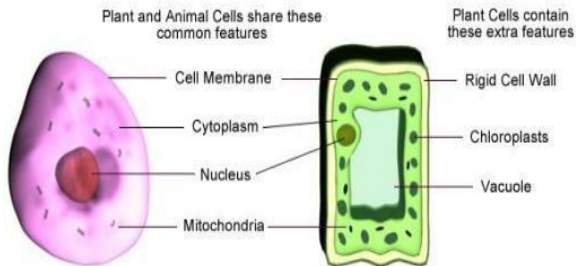
| Cell part | Function |
|---|---|
| Cell Membrane | Controls what things can enter and leave the cell |
| Cytoplasm | The place in the cell where chemical reactions happen |
| Nucleus | The control centre of the cell, where DNA is stored |
| Mitochondria | Release energy by Respiration |
| Cell Wall | Stops the cell from bursting and keeps its shape |
| Chloroplasts | Make food by Photosynthesis |
| Vacuole | Stores cell sap and helps keep the cell's shape |

| | Specialised Cell | Function | Adaptations |
|---|---|---|---|
|  | Sperm Cell | Find and fuse with the egg cell | • Long tail to allow it to move<br>• Lots of mitochondria to provide energy |
|  | Root Hair Cell | Absorb water & minerals for the plant | •Long root hair shape helps get between grains of soil<br>•Large surface area maximises rate of water absorption |
|  | Muscle Cell | To move the body | •Contains special proteins that allow it to change shape<br>•Has lots of mitochondria to provide energy |
|  | Nerve Cell | To carry nerve impulses around the body | •The ends of the cell connect to other nerve or muscle cells<br>•Conducts electricity to carry impulses from one end to the other |
|  | Ciliated Epithelial Cell | To move mucus through the airways | •Has cilia (tiny hairs) to waft mucus through the airway. |
|  | Red Blood Cell | Carry oxygen around the body | • Has no nucleus (more room for haemoglobin)<br>• Concave shape (Large surface area) |

117

## Skeleton Diagram Labels

skull
jaw bone
pectoral or shoulder girdle
rib cage
humerus
vertebral column
radius
pelvic girdle
carpals
femur
patella
fibula
tibia
tarsals
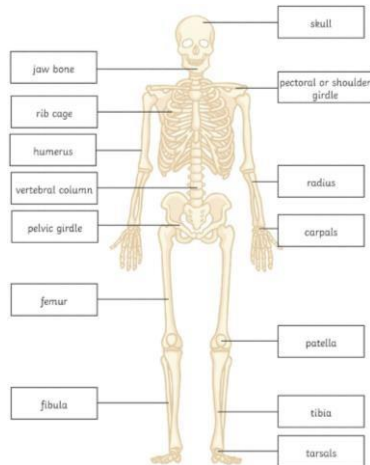
## KEYWORDS

**Joint:** A **Joint** is where two bones meet. Joints have different names, depending on how the bones move round each other.

**Cartilage: Cartilage** is a rubbery substance that covers the ends of bones to stop them wearing away. Cartilage also gives your nose and ears their shape!

**Ligament:** Our skeleton can't stay together by itself. **Ligaments** are stringy tissues that hold the bones together at joints.

**Tendon**: **Tendons** are special fibres (like strings) that connect our bones to our muscles to allow us to move.
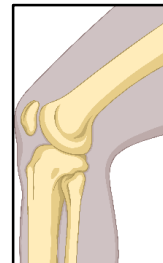
- A hinge joint allows backwards and forwards movements.
- Knees and elbows are hinge joints.

- A ball and socket joint allows movement in all directions.
- Shoulders and hips are ball and socket joints.
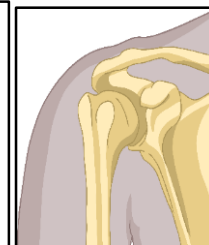
## Functions of the Skeleton

| | |
|---|---|
| Protection | Our bones help to keep our softer organs safe, particularly our **rib cage** (which protects our heart and lungs) and our **skull** (protecting our brain) |
| Moving | Our muscles work together with our bones to help us to move more easily. |
| Support | Without our bones, we would be floppy, just like slugs and snails! |
| Making Red Blood Cells | Inside our bones is a substance called marrow. This tissue makes all the red blood cells in our body that we need to carry oxygen. |

Skeletal muscles always work in **antagonistic pairs.**
Muscles can't push, they can only pull, so when one muscle contracts and pulls, the other relaxes.
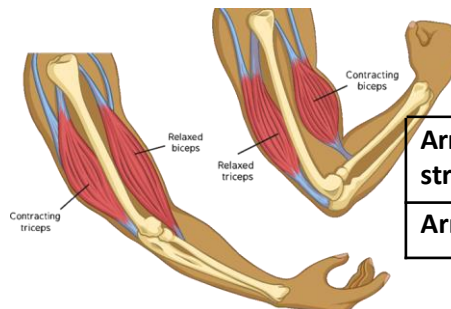
| | Triceps | Bicep |
|---|---|---|
| **Arm straight** | Contracted | Relaxed |
| **Arm bent** | Relaxed | Contracted |

1. What is meant by the independent variable?
2. What are control variables?
3. Which type of variable is measured?
4. What is an anomaly?
5. How do you calculate a mean?
6. What is this the hazard symbol for?

7. When do we use a bar chart?
8. When do we use a line graph?
9. What are the two types of lines of best fit?
10. How do you change a Bunsen burner to be on the roaring flame?

**Acids & alkalis**

1.What colour would a strong acid turn universal indicator?

2.What colour is neutral?

3.What occurs when you add an acid to an alkali?

4. What are the two products made by this reaction?
5. What does a pH value of 0-6 mean?
6. What does a pH value of 7 mean?
7. What does a pH value of 8-14 mean?
8. What does it mean to 'dilute' a chemical?
9. What does this symbol mean?

10. What colour would red litmus paper turn when testing an alkali?

**Organisms**

1. What is the function of the nucleus?
2. What 3 extra parts are found in plant cells but not animal cells?
3. What does the cell membrane do?
4. Which cell part carries out respiration?
5. How is a sperm cell adapted for it's function?

6. How is the root hair cell adapted for it's function?

7. What is a ligament?

8. Which joint tissue attaches muscle to bone?

9. What is meant by antagonistic pairs of muscles?

10. What are the four main functions of the skeleton?

11. Give an example of a ball and socket joint

## Forces

1. What is meant by balanced forces?

2. What unit is used to measure force?

3. If an object is stationary, are the forces balanced or unbalanced?

4. If an object is accelerating, are the forces balanced or unbalanced?

5. How do you calculate speed?

6. What is the most common unit for speed?

7. On a distance time graph, what does a flat line show?

8. What does a diagonal line show?

9. What does a steeper line show?

10. What is meant by resultant force?

## Particles

1. How do particles behave in a solid?

2. In which states of matter can particles move?

3. In which state of matter do particles have the most energy?

4. What is melting?

5. What is freezing?

6. What is evaporating?

7. What is condensation?

8. What is diffusion?

9. What is a mixture?

10. Name four separating techniques

## Phonics Practice



| | | | | | |
|---|---|---|---|---|---|
| **a** alto | **e** elefante | **i** idea | **o** yo | **u** universo | **ll** llamar / **l** libro |
| **ca** casa | **co** comer | **cu** cuerpo | **ce** cerca / MADRID 1KM | **ci** cierto | **z** zona |
| **ga** ganar | **go** gol | **gu** preguntar | **ge** gente | **gi** imaginar | **j** ojo |
| **ñ** español / mano / **n** | **v** ver / celebrar / **b** | **rr** perro / pero / **r** | **h** hablar / Shhhh! | porque **qui** / **que** quiero | guerra **gui** / **gue** guitarra |

| Sentence builder - Greetings | | | |
|---|---|---|---|
| **Greeting** | **Present tense question** | **Present tense answer** | **Adjective** |
| **¡Hola!** <br> *Hello!* <br><br> **¡Buenos días!** <br> *Hello (good day)!* <br><br> **¡Buenas tardes!** <br> *Hello (good afternoon)!* <br><br> **¡Buenas noches!** <br> *Good night!* <br><br> **¡Adiós!** <br> *Goodbye!* <br><br> **¡Hasta luego!** <br> *See you later!* | **¿Cómo estás?** <br> *How are you?* <br><br> **¿Qué tal?** <br> *How are you?* | **Estoy** <br> *I am* | **bien**      **así así** <br> *well*      *so-so* <br><br> **fatal**      **mal** <br> *terrible*      *bad* <br><br> **regular**      **fenomenal** <br> *OK*      *fantastic* |
| | **¿Cómo te llamas?** - *What is your name?* | **Me llamo** - *My name is* | .... |
| | **¿Cómo se escribe?** <br> *How is it spelt?* | **Se escribe** <br> *It is spelt...* | **El alfabeto** – *the alphabet* <br><br> A - *ah*     N - *enneh* <br> B - *beh*     Ñ - *enyeh* <br> C - *theh*     O - *oh* <br> D - *deh*     P - *peh* <br> E - *eh*     Q - *koo* <br> F – *effeh*     R - *erreh* <br> G - *heh*     S - *esseh* <br> H - *atcheh*     T – *teh* <br> I - *ee*     U - *oo* <br> J - *hotah*     V – *ooveh* <br> K - *kah*     W - *ooveh dobleh* <br> L – *elleh*     X - *ekees* <br> LL - *ellyeh*     Y – *ee gree-eh-gah* <br> M - *emmeh*     Z – *t hetah* |

# MIS DATOS PERSONALES 🇪🇸

**Spanish: Autumn Term**

## Key verbs and vocab

| | | |
|---|---|---|
| **Tengo** – I have | _____ **años** – _____ years old | **un caballo** – a horse |
| **Tienes** – you have | | **una cobaya** – a guinea pig |
| **Tiene** – he/she/it has | | **un conejo** – a rabbit |
| | | **un gato** – a cat |
| **No tengo** – I don't have | | **un perro** – a dog |
| | | **un pez** – a fish |
| | | **un ratón** – a mouse |
| | | **una serpiente** – a snake |

**una tortuga** – a tortoise
**un pájaro** – a bird
**un hámster** – a hamster

**mascotas** – pets

**una hermana** – a sister
**un hermano** – a brother
**una hermanastra** – a stepsister / half-sister
**un hermanastro** – a stepbrother / half-brother

**hermanos** – siblings

| | |
|---|---|
| **Soy** – I am | **simpático/a** - nice |
| **Eres** – you are | **antipático/a** - mean |
| **Es** – he/she/it is | **aburrido/a** - boring |
| **Son** – they are | **divertido/a** - fun |
| | **tranquilo/a** - quiet/calm |
| **No soy** – I'm not | **guay** – cool |
| | **listo/a** - clever |

**estupendo/a** - brilliant
**fenomenal** - fantastic
**generoso/a** - generous
**genial** - great
**serio/a** - serious
**tonto/a** - silly
**sincero/a** - sincere

**tímido/a** - shy
**perezoso/a** - lazy
**inteligente** - clever
**sincero/a** - sincere

**hijo único** – an only child (boy)
**hija única** – an only child (girl)

**Mi cumpleaños es el...** – my birthday is the...

| | | | | |
|---|---|---|---|---|
| 1 uno | 10 diez | 19 diecinueve | **de** - **of** | **enero** - January |
| 2 dos | 11 once | 20 veinte | | **febrero** - February |
| 3 tres | 12 doce | 21 veintiuno | | **marzo** - March |
| 4 cuatro | 13 trece | 22 veintidós | | **abril** - April |
| 5 cinco | 14 catorce | 23 veintitrés, etc. | | **mayo** – May |
| 6 seis | 15 quince | 30 treinta | | **junio** - June |
| 7 siete | 16 dieciséis | 31 treinta y uno | | **julio** - July |
| 8 ocho | 17 diecisiete | | | **agosto** – August |
| 9 nueve | 18 dieciocho | | | **septiembre** - September |
| | | | | **octubre** - October |

**noviembre** - November
**diciembre** - December

**NO capital letters for months in Spanish!**

## My passion

**Mi pasión es...** - My passion is
**Mi héroe es...** - My hero is...

**el deporte** - sport
**el fútbol** - football
**la tele** - TV
**la música** - music
**el tenis** - tennis
**los videojuegos** – videogames

**porque es...** - because it is...

## Colours

**blanco/a** – white
**amarillo/a** – yellow
**negro/a** – black
**rojo/a** – red
**verde** – green
**gris** – grey
**marrón** – brown
**azul** – blue
**rosa** – pink
**naranja** - orange

## Key questions

**¿Qué tal?** – How are you
**¿Cómo te llamas?** – What's your name?
**¿Dónde vives?** – Where do you live?
**¿Y tú?** – And you?
**¿Cuántos años tienes?** – How old are you?
**¿Cuándo es tu cumpleaños?** – When's your birthday?
**¿Qué tipo de persona eres?** – What kind of person are you?
**¿Cómo eres?** - What are you like?
**¿Tienes hermanos?** – Do you have brothers and sisters?
**¿Tienes mascotas?** – Do you have any pets?
**¿Cómo es?** – What's it like?
**¿Cómo son?** – What are they like?

## Let's show off!

**Me encanta** – I love

**Odio** – I hate

**Ojalá tuviera...** – if only I had...

## Model text

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

| | |
|---|---|
| Buenos días. Me llamo **José** | Hello. My name is **José** |
| y tengo **once** años. | and I am **11** years old. |
| También, mi cumpleaños es el **cuatro** de **junio**. | Also, my birthday is the **4th** of **June**. |
| Soy muy **simpático** | I am very **nice** |
| y bastante **listo** | and quite **clever** |
| pero no soy **perezoso**. | but I'm not **lazy**. |
| Tengo **una hermana** | I have a **sister** |
| pero es **tonta**. | but she is **silly**. |
| ¡Ojalá tuviera **un hermano**! | If only I had a **brother**! |
| Tengo **un perro marron** | I have a **brown dog** |
| y **un pájaro azul**. | and a **blue bird**. |
| ¿Tienes mascotas? | Do you have any pets? |
| Mi pasión es **el fútbol** | My passion is **football** |
| porque es **divertido** | because it's **fun** |
| y mi héroe es **Mo Salah** | and my hero is **Mo Salah** |
| porque es **genial**. | because he's **great**. |
| ¿Te gusta **el fútbol**? | Do you like **football**? |



WE WISH YOU A HAPPY BIRTHDAY

THEY TOLD US THE DRESS CODE WAS FORMAL

# En mi instituto

## School subjects

**Estudio –** I study
**Me encanta(n) –** I love
**Me chifla(n) –** I'm crazy about
**Me mola(n) –** I fint it cool
**Me gusta(n) –** I like
**Prefiero –** I prefer
**Odio –** I hate
**No me gusta(n) –** I don't like
**No soporto –** I can't stand

| | |
|---|---|
| **el inglés** – english | **el alemán** – german |
| **la educación física** – pe | **la biología** – biology |
| **la historia** – history | **la química** – chemistry |
| **la geografía** – geography | **el dibujo** – art |
| **la música** – music | **el teatro** - drama |
| **la religión** – respect | **la física** - physics |
| **el español** – spanish | **la tecnología** – technology |
| **el francés** – french | **la informática** – computing |

**las matemáticas** - maths
**las ciencias** - science

2 subjects e.g. **el inglés y el dibujo** – English and art



OH "YOU DIDN'T HAVE TIME TO DO YOUR HOMEWORK"

TELL ME AGAIN ABOUT THE 3 HOURS YOU SPENT ON YOUR PHONE.

**porque es –** because it is…

**porque no es –** because it isn't

**porque (no) son –** because they are(n't)

**interesante –** interesting
**aburrido** - boring
**importante** – important
**bueno** - good
**divertido** – fun
**activo** - active
**fácil** – easy
**relajante** - relaxing
**difícil** – hard
**entretenido** - entertaining
**útil** – useful
**creativo** - creative
**inútil** – useless
**práctico** – practical

## Teachers

**Mi profe de _____ -** My _____ teacher

**es** - is

| | | |
|---|---|---|
| **paciente** – patient | **raro** – weird | **severo** – strict |
| **antipático** – mean/unpleasant | **aburrido** – boring | **divertido** – fun |
| **gracioso** – funny | **simpático** – nice/pleasant | |

**nos da muchos deberes** – he/she gives us lots of homework
**grita mucho** – he/she shouts a lot
**explica bien** – he/she explains things well
**tiene buen sentido del humor** – he/she has a good sense of humour

## My school

**(En) Mi insti –** (in) my school

**es** - (is)
**no es** - (it's not)

| | | |
|---|---|---|
| **antiguo** – old | **moderno** – modern | **bonito** – nice |
| **pequeño** – small | **horrible** – horrible | **grande** – big **feo** - ugly |

**hay** - (there is)
**no hay** - (there isn't)
**tiene** - (it has)
**no tiene** - (it doesn't have)

| | |
|---|---|
| **un laboratorio** – a science lab | **una aula** – a classroom |
| **un campo de fútbol** – a football pitch | **una piscina** – a pool |
| **un salon de actos** – a theatre | **un gimnasio** – a gym |
| **una pista de tenis** – a tennis court | **una biblioteca** – a library |
| **un patio** – a yard/playground | **una cafetería** – a canteen |
| **una clase de informática** – an IT room | **un comedor** – a dining room |

## Let's show off

**En el futuro voy a estudiar…** - in the future I'm going to study…

**Es pan comido** – It's a piece of cake

**Siempre me ha gustado** – I've always liked

## Key questions

**¿Qué estudias?** - What do you study?
**¿Cuál es tu día favorita?** – What is your favourite day?
**¿Por qué?** – Why?
**¿Te gusta(n)…?** – Do you like…?
**¿Qué hay en tu insti?** – what is there in your school?
**¿Cómo es tu insti?** – What is your school like?
**¿Qué haces durante el recreo?** – What do you do during breaktime?

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### Connectives and important words

**CONNECTIVES:**
y = and
pero = but
también = also
sin embargo = however
no obstante = however
además = moreover
por eso = therefore
como = like/since
ya que = because/since
aunque = although
por ejemplo = for example
o = or
porque = because
con = with

**LITTLE WORDS:**
muy = very
un poco = a bit
más = more
mucho = a lot
demasiado = too much/many
donde = where
bastante = quite
menos = less

**QUESTION WORDS:**
¿cuándo? = when
¿cómo? = how/what
¿quién? = who?
¿dónde? = where
¿cuál(es)? = which
¿qué? = what
¿cuánto(s)? = how many

### Time phrases

**PRESENT TENSE**
Luego = then
Después = after
A menudo = often
A veces = sometimes
Ahora = now
Siempre = always
Todos los días = every day

**FUTURE TENSE**
Mañana = tomorrow
Más tarde = later
El año próximo = next year
En el futuro = in the future
Cuando sea mayor = when I'm older
La semana que viene = next week

### Present tense verbs

Soy = I am
Tengo = I have
Puedo = I can
Como = I eat
Bebo = I drink
Juego = I play
Escucho = I listen
Estudio = I study
Veo = I watch
Salgo = I go out
Quiero = I want
Escribo = I write
Leo = I read
Uso = I use
Compro = I buy
Hago = I do

| | |
|---|---|
| es | It is |
| son | They are |
| hay | There is/are |

**¿Cuál es tu día favorito?**   *What is your favourite day?*

| Mi día favorito es *My favourite day is* | el lunes *Monday*  el martes *Tuesday*  el miércoles *Wednesday*  el jueves *Thursday*  el viernes *Friday* | porque *because* | por la mañana *in the morning*  por la tarde *in the afternoon*  no estudio *I don't study*  no estudiamos *we don't study* | estudio *I study*  estudiamos *we study* | ciencias. *science.*  dibujo. *art.*  educación física. *PE.*  español. *Spanish.*  francés. *French.*  geografía. *geography.*  historia. *history.*  informática. *ICT.*  inglés. *English.*  matemáticas. *maths.*  música. *music.*  religión. *RE.*  teatro. *drama.*  tecnología. *technology.* |

## ¿Qué hay en tu insti? *What is there in your school?*

| En mi instituto hay<br>*In my school, there is*<br>*In my school, there are* | un comedor. *a dining hall.*<br>un gimnasio. *a gymnasium.*<br>un patio. *a playground.*<br>una biblioteca. *a library.*<br>una clase de informática. *an ICT room.*<br>unas clases. *some classrooms.* |
|---|---|
| En mi instituto no hay<br>*In my school, there isn't*<br>*In my school, there aren't* | campo de fútbol. *a football field.*<br>piscina. *a swimming pool.*<br>laboratorios. *any laboratories.* |

| El campo de fútbol *The football field*<br><br>El comedor *The dining hall*<br><br>La clase de informática *The ICT room*<br><br>La piscina *The swimming pool* | es<br>*is* | antiguo/a *old*<br>bonito/a *nice*<br>bueno/a *good*<br>feo/a *ugly* | y *and*<br><br>pero *but*<br><br>y también *and also* | grande. *big.*<br>horrible. *horrible.*<br>moderno/a. *modern.*<br>pequeño/a. *small.* |
|---|---|---|---|---|
| Los laboratorios *The laboratories*<br><br>Las clases *The classrooms* | son<br>*are* | grandes *big*<br>horribles *horrible*<br>modernos/as *modern*<br>pequeños/as *small* | pero no *but not* | antiguos/as. *old.*<br>bonitos/as. *nice.*<br>buenos/as. *good.*<br>feos/as. *ugly.* |

| Key opinion phrase | colour | detail | Connect | Key opinion phrase | colour | detail |
|---|---|---|---|---|---|---|
| Me gusta (mucho) (I like (a lot)) | el amarillo (yellow) el azul (blue) | | y (and) | me gusta mucho (I like a lot) | el amarillo (yellow) el azul (blue) | |
| Me encanta (I love) | el blanco (white) el gris (grey) | | también (also) | me encanta (I love) | el blanco (white) el gris (grey) | |
| Me mola (I love) | el marrón (brown) el morado (purple) | oscuro (dark) | (also) | me mola (I love) | el marrón (brown) el morado (purple) | oscuro (dark) |
| Me chifla (I love) | el naranja (orange) el negro (black) el rojo (red) | | sin embargo (however) | me chifla (I love) | el naranja (orange) el negro (black) el rojo (red) | |
| No me gusta (nada) (I don't like (at all)) | el verde (green) | claro (light) | además (furthermore) | no me gusta (nada) (I don't like (at all)) | el verde (green) | claro (light) |
| Detesto/Odio (I hate) | | | | detesto/odio (I hate) | | |
| Prefiero (I prefer) | | | pero (but) | prefiero (I prefer) | | |
| Mi color favorito es... (My fave colour is...) | o = or | | | mi color favorito es... (My fave colour is...) | | |

Llevar- to wear

| | | |
|---|---|---|
| yo | ························➤ | llev o |
| Tu | ························➤ | llev as |
| El/Ella | ························➤ | llev a |
| Nosotros | ························➤ | llev amos |
| Vosotros | ························➤ | llev áis |
| Elles/Ellas | ························➤ | llev an |

| ¿Qué haces durante el recreo? *What do you do during break time?* | Primero *First* A veces *Sometimes* Normalmente *Normally* | bebo algo *I drink something* como un bocadillo *I eat a sandwich* | y *and* o *or* y luego *and then* | juego al fútbol. *I play football.* leo mis SMS. *I read my text messages* |
|---|---|---|---|---|

## Mi tiempo libre 🇪🇸

### Key verbs and vocab

**Me gusta** – I like
**Me gusta mucho** – I really like
**Me encanta** – I love

**No me gusta** – I don't like
**No me gusta nada** – I really don't like
**Odio** – I hate

**A veces** - sometimes
**De vez en cuando** - From time to time
**Nunca** - never
**Todos los días** - everyday
**Siempre** - always

**Cuando…** - when

**hace calor** - it's hot
**hace frío** - it's cold
**hace sol** - it's sunny
**hace buen tiempo** - it's nice weather
**llueve** - it's raining
**nieva** - it's snowing

**chatear en línea** - to chat online
**escribir correos** - to write emails
**escuchar música** - to listen to music
**jugar a los videojuegos** - to play videogames
**leer** - to read
**mandar sms** - to send text messages
**navegar por internet** - to surf the net
**salir con mis amigos** - to go out with my friends
**ver la televisión** - to watch t.v

**bailo** - I dance
**canto karaoke** - I sing karaoke
**hablo con mis amigos** - I talk with my friends
**monto en bici** - I ride my bike
**saco fotos** - I take photos
**salgo con mis amigos** - I go out with my friends
**toco la guitarra** - I play the guitar
**hago artes marciales** - I do martial arts
**hago atletismo** - I do athletics
**hago equitación** - I do/go horse riding
**hago natación** - I go swimming
**juego al baloncesto** - I play basketball
**juego al fútbol** - I play football
**juego al tenis** - I play tennis
**juego al voleibol** - I play volleyball

**porque es** – because it is…

**porque no es** – because it isn't

**interesante** – interesting

**guay** – cool

**divertido/a** – funny

**estúpido** – stupid

**aburrido/a** – boring

**entretendido/a** – entertaining

**activo** – active

**sano** - healthy

### Days of the week

**lunes** - Monday

**martes** - Tuesday

**miércoles** - Wednesday

**jueves** - Thursday

**viernes** - Friday

**sábado** - Saturday

**domingo** - Sunday

**Los lunes** – On Mondays, every Monday
**Los martes** – On Tuesdays, every Tuesday
**Los miércoles** – On Wednesdays, every Wednesday
etc…

### Seasons

**En…** - in…

**primavera** – spring

**verano** – summer

**otoño** – autumn

**invierno** - winter

### Key questions

**¿Qué haces en tu tiempo libre?** – What do you do in your free time?

**¿Qué te gusta hacer?** – What do you like to do?

**¿Te gusta…?** – Do you like…?

**¿Qué haces cuando llueve/hace calor/nieva etc?** – What do you do when it rains/it's sunny/it snows?

**¿Qué haces en primavera/verano/otoño/invierno?** – What do you do in spring/summer/autumn/winter?

### Let's show off

**Mañana voy a…** - tomorrow I'm going…

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

**Siempre me ha gustado…** I've always liked…

**Me chifla** – I'm crazy about

**Quiero** – I want

**No quiero** – I don't want

---

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

| | |
|---|---|
| En mi tiempo libre | In my free time |
| me encanta leer | I love reading |
| porque es interesante | because it's interesting |
| pero nunca hago equitación | but I never go horseriding |
| porque ¡cuesta un ojo de la cara! | because it costs an arm and a leg! |
| Cuando hace sol juego al fútbol. | When it's sunny I play football. |
| Siempre me ha gustado el fútbol. | I've always liked football |
| porque es sano y | because it's healthy and |
| cuando llueve veo la televisión. | when it rains I watch TV. |
| ¿Qué haces cuando llueve? | What do you do when it rains? |
| Los sábados salgo con mis amigos | On Saturdays I go out with my friends |
| pero mañana voy a jugar a los videojuegos. | but tomorrow I'm going to play videogames. |

"What kind of hobbies do you have?"

IS SLEEPING A HOBBY

| Time frame | Verb | Activity | Opinion | Connective | Verb | Adjective |
|---|---|---|---|---|---|---|
| A veces *(Sometimes)*<br><br>Los sábados *(On Saturdays)*<br><br>Normalmente *(Normally)*<br><br>Nunca *(Never)*<br><br>Por la tarde *(In the afternoon)*<br><br>Siempre *(Always)* | juego *(I play)* | al bádminton<br>al baloncesto *(basketball)*<br>al fútbol *(football)*<br>al golf<br>al hockey al rugby al tenis<br>al voleibol *(volleyball)*<br><br>con mi hermano *(with my brother)*<br>con mis amigos *(with my friends)* | me apasiona *(I am passionate about it)*<br><br>me encanta *(I love it)*<br><br>me mola *(I like it)*<br><br>me gusta *(I like it)* | me parece *(I find it)*<br><br>pero *(but)*<br><br>porque *(because)*<br><br>ya que *(since)* | es *(it is)*<br><br>no es *(it is not)* | aburrido/a *(boring)*<br>agotador/a *(tiring)* bueno/a para la salud *(good for your health)*<br>competitivo/a*(competitive)* difícil *(difficult)*<br>divertido/a *(fun)* emocionante *(exciting)* fácil *(easy)*<br>interesante *(interesting)*<br>genial *(great)*<br>relajante *(relaxing)*<br>peligroso/a *(dangerous)* |
| Todos los días *(Every Day)*<br><br>Una vez a la semana *(Once a week)* | practico *(I practise)*<br><br>hago *(I do)* | equitación *(horse riding)* natación *(swimming)* gimnasia *(gymnastic)*<br><br>atletismo *(athletics)*<br>ballet<br>ciclismo *(cycling)*<br>judo<br>patinaje *(skating)*<br>senderismo *(hiking)* | no me gusta *(I don't like)*<br><br>odio / detesto *(I hate it)* | puesto que *(because)* | | |

| Opinion verb | infinitive | noun | connective | present tense verb | adjective |
|---|---|---|---|---|---|
| **Me gusta** *I like* <br> **Me gusta bastante** *I quite like* <br> **No me gusta** *I don't like* <br> **Me encanta** *I love* <br> **Odio** *I hate* <br> **Detesto** *I hate* <br> **No me gusta nada** *I don't like at all* <br> **Me chifla** *I really like* <br> **Prefiero** *I prefer* | **jugar al** *playing/ to play* | **fútbol** *football* <br> **voleíbol** *volleyball* <br> **baloncesto** *basketball* <br> **tenis** *tennis* | **porque** *because* <br><br> **dado que** *given that* <br><br> **pero** *but* <br><br> **y** *and* <br><br> **sin embargo** *however* | **es** *it is* <br><br> **no es** *it isn't* | **divertido** *fun* <br> **sano** *healthy* <br> **aburrido** *boring* <br> **emocionante** *exciting* <br> **fascinante** *fascinating* <br> **fácil** *easy* <br> **difícil** *difficult* <br> **práctico** *practical* <br> **buen ejercicio** *good exercise* <br> **útil** *useful* |
| | **practicar** *practising/ to practise* <br><br> **hacer** *doing/ to do* | **vela** *sailing* <br> **natación** *swimming* <br> **ciclismo** *cycling* <br> **equitación** *horse riding* <br> **atletismo** *athletics* | | | |
| | **ir** *going/ to go* | **al cine** *to the cinema* <br> **al polideportivo** *to the sports centre* <br> **a la piscina** *to the swimming pool* <br> **de compras** *shopping* | | | |
| | **tocar** *playing/ to play (an instrument)* | **el piano** *the piano* <br> **la guitarra** *the guitar* <br> **la flauta** *the flute* <br> **la batería** *the drums* | | | |
| **Present tense of 'ir' to make near future tense** <br><br> **Voy a** *I am going* <br> **Vas a** *You are going* <br> **Va a** *He/ she is going* <br> **Vamos a** *We are going* <br> **Van a** *They are going* | **bailar** *dancing/ to dance* <br> **escuchar música** *listening/ to listen to music* <br> **jugar a los videojuegos** *playing/ to play computer games* <br> **ver la television** *watching the TV/ to watch* <br> **hablar con mis amigos** *talking/ to talk to my friends* <br> **leer** *reading/ to read* <br> **salir con mis amigos** *going/ to go out with my friends* | | | | **estupendo** *great* <br> **genial** *great* <br> **terrible** *terrible* <br> **relajante** *relaxing* |

# Mis datos personales

| | |
|---|---|
| **¿Cómo te llamas?** <br> *What's your name?* | |
| **¿Cómo estás? / ¿Qué tal?** <br> *How are you?* | |
| **¿Cuántos anos tienes?** <br> *How old are you?* | |
| **¿Cuándo es tu cumpleanos?** <br> When is your birthday? | |
| **¿Qué tipo de persona eres? / Cómo eres?** <br> *What type of person are you? / What are you like?* | |
| **¿Dónde vives?** <br> Where do you live? | |

# En mi instituto

| | |
|---|---|
| **¿Qué estudias?**<br>What do you study? | |
| **¿Cuál es tu día favorite? Por qué?**<br>What is your favourite day? Why? | |
| **¿Que asignaturas te gusta(n)?**<br>What subjects do you like?o you like? | |
| **¿Qué hay en tu instituto / colegio?**<br>What is there in your school? | |
| **¿Cómo es tu insti / cole?**<br>What is your school like? | |
| **¿Cómo es tu uniforme?**<br>What is your uniform like? | |