



St Joseph's College Knowledge Organisers Year 7

Term Two: 2020_2021 - All subjects

Name: _____

House: _____



My timetable:



St Joseph's College Knowledge Organisers

Why do we have knowledge organisers?

Your knowledge organisers help you to be successful in many ways. Firstly, they make clear the key elements needed in a topic to have an excellent understanding of it. If you know these elements, your teacher will help you to understand them.

What are my teachers' expectations of me?

In year 7 and 8 your teachers will give you homework based on your Knowledge Organiser. This means you will be spending time learning information from your Knowledge Organiser at home. Teachers will test you once a week to make sure that you are completing the homework and you are able to recall the information on the Knowledge Organiser. Your Knowledge Organiser exercise book is where you will complete your homework. It should show evidence of you practicing recalling the information on the Knowledge Organiser. Each time you complete your homework in the book, you should put the subject as the title and clearly write the date completed. Once complete put a ruler to show the end of the homework. Teachers and form tutors will be regularly checking that you are completing this homework. For some subjects you may be required to complete online questions such as Spark Maths to demonstrate your recall practicing. Knowledge Organisers must be brought to school everyday.

How will my teachers use them?

Each core subject will set homework once a week that will help you to learn your knowledge organiser. They will also test you once a week on certain parts to see how well you have remembered it. Research tells us that this recall practising is a really good way of helping you make sure that the knowledge stays in your memory. Over time you will build on this knowledge to make sure that you know everything you need to for your subject. Sometimes you may have high stakes quizzes, where teachers will set a certain score that you have to reach to be successful.

How will they help me revise?

When it comes to GCSEs, you have lots of information to remember. Your Knowledge Organisers will gradually build up this knowledge over 5 years to help support you in year 11 so that when you revise, you are just recalling knowledge that you have already stored. Also, you will have practised lots of revision techniques whilst using your knowledge organisers over the past 5 years, which will help prepare you for the final exams.



Using a Knowledge Organiser Guide - for Parents and Carers

What is a knowledge organiser?

A knowledge organiser contains all the important information from a particular topic, summarised in just a few pages. It includes key words, important facts, diagrams, methods and skills relating to the topic.

Why is it useful?

A knowledge organiser helps students to organise the content they need to learn. This makes it easier for them to remember the information and access the facts from their memory when they need to answer an exam question.

How can it be used?

The more memories are used, the stronger the memory becomes and the easier it is to access. For students, this means regular practice at retrieving the facts they have learnt and using them in a variety of ways. They could play games with the information, explain the facts to someone, apply the information to a new situation or organise the knowledge organiser into a different format.

How can I help?

The knowledge organiser contains all the facts needed to test someone on the content from a topic. This is great because it means you can help someone revise content even if you haven't studied it yourself!

- You could ask your child some questions on the content, for example the definition of a few key words, or challenge them to draw a diagram from memory. Testing their knowledge with one or two questions a day can make a big difference to how much information they remember. Perhaps it could become part of the after dinner or breakfast routine.

- You could prompt your child to turn some of the information on the knowledge organiser into a different format; a word list could become flashcards, facts could be transformed into a mind map to show links between ideas, information could become a song, story or comic strip, a diagram could become a poster, a collage or a model.

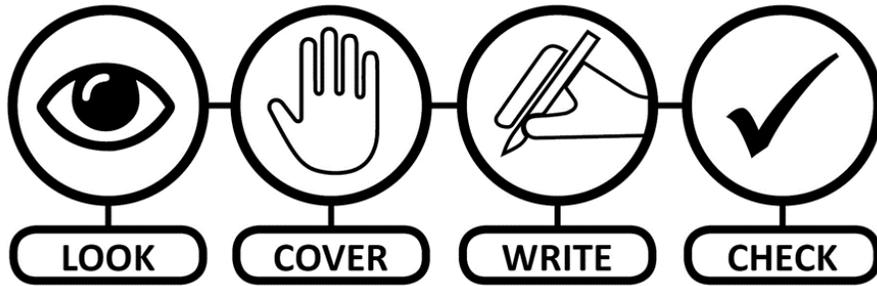
- You could ask your child to teach you about something on the knowledge organiser. Having to explain information to someone else, and answer their questions about it, is a great way to reinforce their knowledge and identify areas they need to go back and revise again.

- You could suggest turning the information into a multiple-choice quiz, either on paper or using a website. This task requires them to process the information to write questions and come up with correct and incorrect answers. You could then use it to test their knowledge or to host a quiz with family or friends, either at home or online.

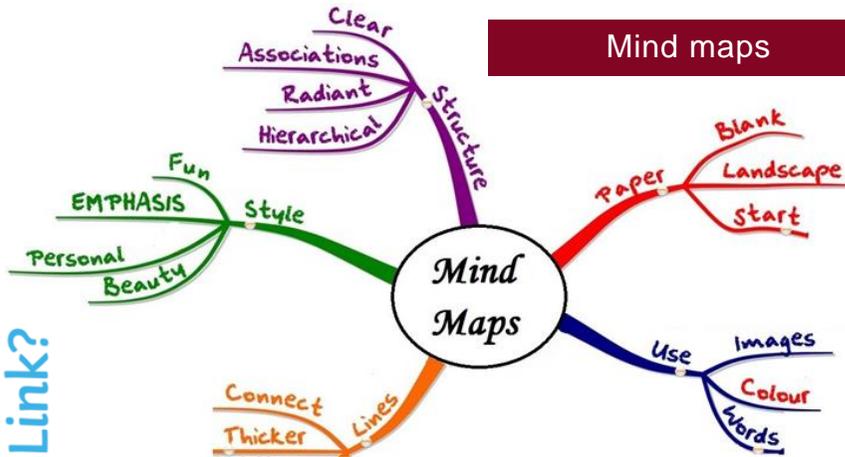


Top tips for learning and revising the information in your knowledge organiser

Check the website for more subject specific revision information



Mind maps



Flashcards

Weight

$$F_g = m \times g$$

The gravitational force (F_g) which acts on an object on/near the surface of a planet/moon.

★ Example

Mnemonics

FOIL

the **first** terms
the **outer** terms
the **inner** terms
the **last** terms

Example 1:

$$(x + 4)(x + 7) = x \cdot x + x \cdot 7 + 4 \cdot x + 4 \cdot 7$$

Order of Operations: Show Your Work!

$$= x^2 + 7x + 4x + 28$$

$$= x^2 + 11x + 28$$

Quotes

Macbeth

VALIANT
"his brandish'd steel [...] smoked with bloody execution"

RESPECTED
"O valiant cousin! worthy gentleman"

CURIOUS
"you imperfect is, tell me more"

NOT NATURALLY RUTHLESS
"... too full o' the milk of human kindness"

LOVING
"My dearest partner of greatness"

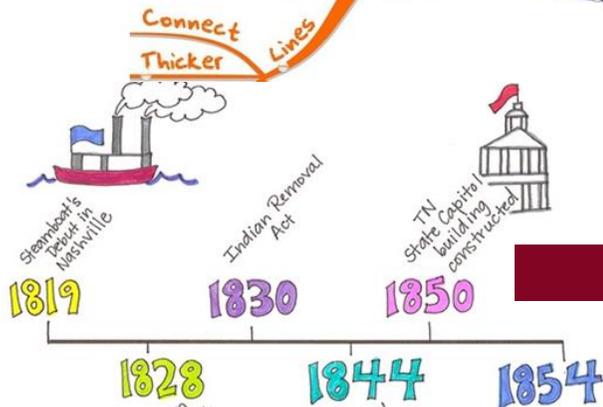
ADMIRED
"(Sergeant:) brave Macbeth-- well he deserves that name"

HONOURED
"(Duncan:) With his former title greet Macbeth"

PENSIVE
"This supernatural soliciting cannot be ill, cannot be good"

OVERWHELMED BY IMAGINATION
"function is smother'd in surmise"

What Is the Link?



Time lines

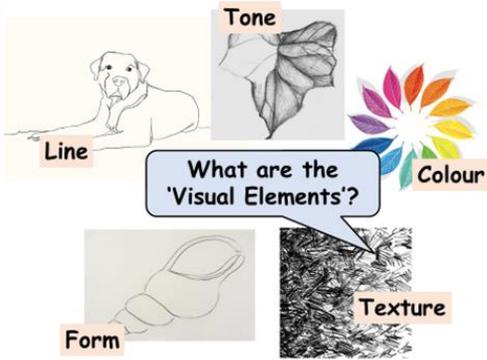
DEFINITION

Online flashcards



This term we will define ART, develop and refine our skills in drawing and use the visual elements line, tone, form, texture and colour.

Keywords: Visual Elements



Quotes:

" I am seeking I am striving
I am in it with all my heart"
Vincent van Gogh

" Creativity takes courage."
Henri Matisse

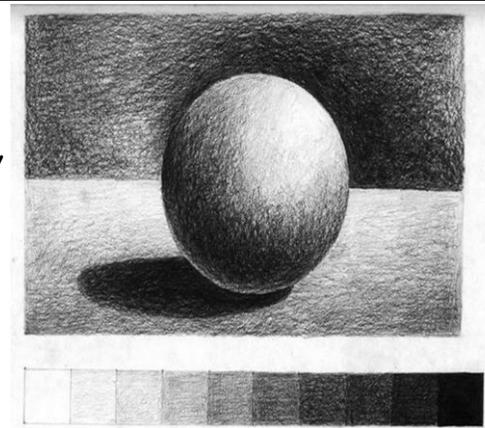
" Art washes away from the
soul the dust of everyday
life ." **Pablo Picasso**

Success Criteria:

- Shading is smooth
- The edges are neat
- The tones are blended gradually

Challenge

- Highlights and shadows are clearly identified.
- The image looks 3 Dimensional showing evidence of form.



Edge to Edge	A drawing that fills the page.	Form	A three dimensional shape or figure.
Shape	A two dimensional space built within line.	Mark-Making	The different qualities of line, pattern and texture we create in artwork using any media.
Proportion	The size relationship between content. Height compared to width.	Symmetry	When one side of an object mirrors the other.
Linear	Using line only.	Pattern	An arrangement of repeated or matching symbols or lines.
Detail	The smaller areas of your Artwork.	Tone	The lightness or darkness of something
Texture	How an object or surface feels to touch.	Accuracy	The extent to which a piece of work looks like another.
Control	How carefully you work with a specific media.	Blending	A seamless transition between two colours or tones.
Composition	Where you place objects on the page.	Negative space	He empty or unfilled areas of a piece of Artwork
Media	The materials you are creating your Artwork with e.g. pencil, paint, pastel.	Balance	The distribution of visual weights.

DRAWING TIPS:

- **Draw lightly** so you can rub out changes.
- Use a **light pencil** (ie. HB or 2H).
- Check **parallel** and **perpendicular** lines are accurate.
- Check your **curved** lines are nicely rounded.
- **Improve** your drawing **before rubbing out** so you can see what you need to change.

Questions:

1. What is Art and how does it make you feel? Create your own quote, look at the quotes above for inspiration.
2. Describe each visual elements, giving examples of art, artists and styles of art where possible?
3. What is composition and how does it effect the image balance?
4. Identify at least six words from the table above and describe how you have used/achieved it in your artwork give examples?
5. Describe an Artist that has inspired you, include; name, the title of one piece of art, their style of art, techniques and/or colours they have used.

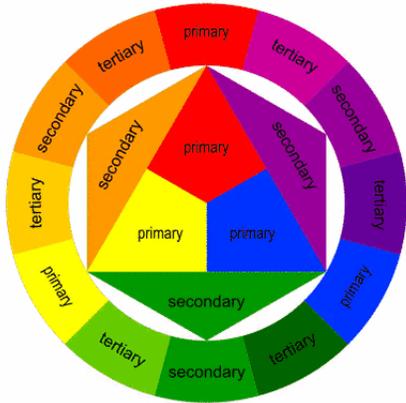


St Joseph's College Art Department

Year 7 Half Term 2 - Everyday Objects - Still Life - Colour



This term we are learning about colour and its visual impact in artwork . Literacy - writing about art.



Still life - a collection of inanimate objects (things that are not living) arranged together in a specific way.

Keywords describing colour:
hot, cold, bright, dull, vivid, sombre, pastel, muted, clashing, smooth, matching, range, variety, flat, realistic, expressive

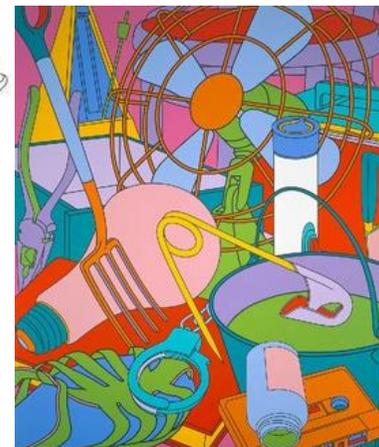
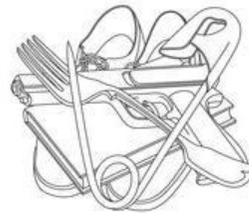


Paul Cezanne



Henri Matisse

Colour Theory - give a definition of each word/section.	
Primary	Complimentary
Secondary	Harmonious
Tertiary	Hue - the colour/pigment
Shades - adding black	Monochromatic
Tint - adding white	Warm and Cold



Writing about Art

Describe each painting on this page. Include;

1. Name of the artist and title/date of the image.
2. Your first impression/what was your eye drawn to first.
3. Describe what is in the image, consider the background, mid-ground and foreground.
4. Describe the colour using the keywords and colour theory.
5. What section of the image do you like the most and why.

Michael Craig-Martin

Michael Craig-Martin was born in Dublin Ireland in 1941. He grew up and was educated in the United States, studying Fine Art at the Yale School of Art and Architecture. He has lived and worked in Britain since 1966. He is best known for his large-scale black and white wall drawings of every day objects; and his intensely coloured paintings, installations, and commissions, including the European Investment Bank in Luxembourg, the Laban Dance Centre in London the DLR station at Woolwich Arsenal, and, most recently, the HDI Gerling Headquarters in Hannover. He uses digital media to create some of his work.



Keywords:

- Values
- Hobbies
- Emotional life
- Harm
- Globalisation
- Language



My Life:

- ✓ What is important to you in your life
- ✓ Appreciating the people who are important to you
- ✓ Your interests and hobbies
- ✓ Nurturing your interests and hobbies
- ✓ Understanding your emotions
- ✓ Regulating your emotions in day to day life

Inspiration...



Living Without Harm:

- ✓ Understanding harmful actions
- ✓ Exploring different kinds of harm
- ✓ Harm in the wider world
- ✓ How your choices affect your community and the world
- ✓ Choosing our language carefully
- ✓ What your language choices say about you

Questions:

- What are my interests? How do I nurture them?
- Who do I value in my life? How do I appreciate these people?
- What emotions do I feel most often? How do I regulate my emotions?
- What is harm? What impact does it have on individuals and the world around me?



In this topic we will be exploring the genre of Comedy.



Theories of Humour

Incongruity Theory- Humour comes from unexpected conclusions.

Relief Theory- Humour comes from tension building up but then releasing in a way that is not too horrific or sad.

Superiority Theory- Humour comes from someone else's misfortune. We laugh because we feel better than someone or something.

Benign Violation Theory- An attempt to put the other three theories together. All humour need three key conditions.

1. A norm violation (something that goes against our expectations)
2. A safe (benign) context in which the violation takes place.
3. A feeling of both the other two at the same time making it funny, not upsetting or annoying.

Old Comedy

Old Comedies were mostly about political issues that were presented in a funny way, often by foolish characters.

The oldest, fully recovered, comedic play "The Acharnians" was produced in 425 BCE.

It was written by Aristophanes in a style known now as "old comedy".

Tasks:

- 1: Create a guide on "how to be funny"
- 2: Turn your guide into a poster
- 3: Try and write one page of a New Comedy.



New Comedy

Historians think that New Comedy took over from Old comedy around 336 BC

The first new Comedies started from around 320 BC

New comedy was about people's day to day lives and featured only fictional characters.

A big factor in the popularity of new comedy was that old comedy started being censored and monitored.

Physical Comedy

Physical Comedies are any form of comedy that creates humour with human bodies.

You can create physical comedy through a number of ways. Often, physical comedy is created through a combination of exaggeration and physical control.

Verbal Comedy

Verbal Comedy is any comedy that makes an audience laugh with words, and the delivery of them.

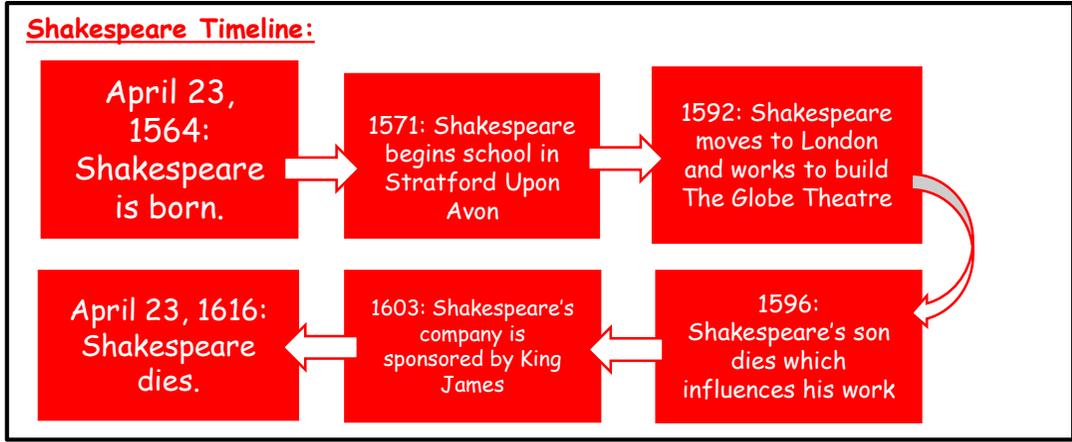
Pauses, emphasis, and changes in pitch and pace can all help make the delivery of your lines funnier.



This unit will explore the ways that Shakespeare presents female characters in a range of different scenes from different plays.

Keywords and vocabulary: see reverse for definitions

Elizabethan	Empathy	Prediction
Monologue	Relationships	Character
Script	Violence	Tyranny
Dialogue	Hamartia	Treachery
Stage direction	Regicide	Resolution
Playwright	Theatre	Climax
Globe Theatre	Responsibility	Audience
Aside	Familial	Bear-baiting



Key Characters

Beatrice (*Much Ado About Nothing*) is a clever woman, with a sharp tongue. She loves Benedick and she seems happy to never get married.

Lady Macbeth (*Macbeth*) is fierce and determined. She hatches a plot to murder the king so her husband can achieve his ambitions.

Juliet (*Romeo and Juliet*) is young and innocent. When she falls passionately in love with Romeo, and she takes decisive and fatal action.

Tamora (*Titus Andronicus*) is a powerful queen, who vows to seek revenge for the death of her son. She manipulates those around her.

Viola (*Twelfth Night*) is a trickster who can deceive people around her. She plays on people's confusion in a clever way.

Desdemona (*Othello*) is the loyal and innocent daughter of the Senator, but someone who many people consider weak and submissive.

Independent Research Resources:

- <https://www.rsc.org.uk/shakespeare-learning-zone>
- <https://www.youtube.com/watch?v=MVZFt2ST0OA>
- <https://www.shakespearesglobe.com/discover/shakespeares-world/>
- <http://shakespeare.mit.edu/> The Complete Works to read online
- <https://www.nosweatshakespeare.com/>

Big Questions:

- What makes women powerful characters in Shakespeare's plays?
- Can you explain why Shakespeare is making these language choices?

Topic Questions:

1. What expectations did Elizabethan society have of women?
2. Why are a diverse range of female characters important?
3. Why were Shakespeare's plays so well-received?
4. What was Southwark like when Shakespeare was alive?
5. Who were other people writing at the same time as Shakespeare?
6. How many words and phrases did Shakespeare invent that we still use today?



Keywords and vocabulary: see reverse for definitions

Elizabethan - the period of history (1558-1603) when Queen Elizabeth I was the ruler of this country

Monologue - a speech given by one character on a stage

Script - the words an actor reads, then memorises, as the dialogue in the play

Dialogue - characters speaking during a play, tv show, or film

Stage direction - instructions for actors in a script about how they should move or where they should stand

Playwright - a person who writes plays

Globe Theatre - a theatre near the South Bank of the River Thames where Shakespeare produced his plays.

Aside - a line in a script that an actor delivers that's meant to be unheard by the other characters on stage

Empathy - your ability to understand or recognise feelings in other people

Relationships - the connections you make with other people

Violence - behavior intended to hurt somebody or something

Hamartia - a fatal flaw that leads to a character's downfall

Regicide - killing the king

Theatre - a building where plays are performed on a stage

Responsibility - being accountable for something

Familial - related to your family

Prediction - an expectation about what could happen

Character - a person in a play, tv show, book, or movie

Tyranny - cruel and oppressive leadership

Treachery - to betray trust

Resolution - the ending of a play

Climax - the most intense, important or exciting part of a play

Audience - the people who attend a theatre to watch the play

Bear-baiting - a popular form of gambling during the Elizabethan era when bears would be tormented and fought by dogs



This term we will learn about direction, how to measure distance on a map, how to use a map's scale, 4- and 6-figure grid references, as well as latitude and longitude.

Keywords:

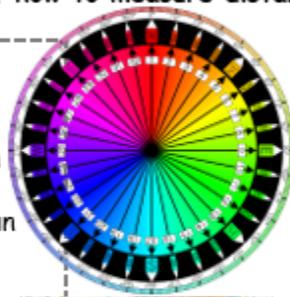
Compass Rose - A circle divided into 32 points or 360° numbered clockwise from true or magnetic north.

Scale - The scale of a map is the ratio of a distance on the map to the corresponding distance on the ground.

Eastings- Eastings are numbered lines on a map that run from top to bottom (or North to South).

Northings- Numbered horizontal lines found on maps.

The equator is a northing line, and additional invisible lines surround the Earth moving away from the equator.



Measuring Distance:

1. Find the two points you want to measure between
2. Use a ruler to measure the distance
3. Convert to a real distance using the scale on the map

Longitude and Latitude:

To find out how far **north** or **south** a place is, lines of **latitude** are used. These lines run parallel to the Equator.

To find out how far **east** or **west** a place is, lines of **longitude** are used. These lines run from the top of the Earth to the bottom.

The **Equator** is at the centre of the lines of latitude and is at 0° latitude. Anything lying south of the Equator is in the **Southern Hemisphere** and is labelled °S. Anything lying north of the Equator is in the **Northern Hemisphere** and is labelled °N. The North Pole is 90° N and the South Pole is 90° S. The line labelled 0° longitude is called the **Prime Meridian** or the **Greenwich Meridian** and runs through London. Anything lying east of the Greenwich Meridian is in the **Eastern Hemisphere** and is labelled °E. Anything lying west of the Greenwich Meridian is in the **Western Hemisphere** and is labelled °W.

Scale:

Scale is the ratio of size of objects on a map compared to their size in the real world. We use three types:



Linear Scales - where the values are plotted uniformly along a line with equal divisions between them - like on a ruler!

1cm on the map represents 0.5km in real life

Statement Scales - For example "1cm the map is equal to 25km on the ground"

1 : 50,000

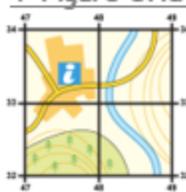
Ratio Scales - For example, if a map scale of "1:50,000", every 1cm of on the map, represents 50,000cm.

Converting Scale:

There are 100,000cm in a km. To convert 1:50,000 into an easier to understand scale, **first** convert cm to m (divide by 100), **second** convert m to km (divide by 1000)

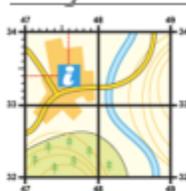
1:50 000 is the equivalent of 1cm:0.5 km or 2 cm:1 km

4-Figure Grid References:

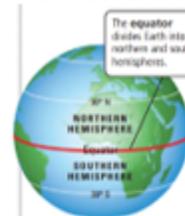


- 1: Go along the bottom of the map until you reach the easting
- 2: Then go up the side of the map until you reach the northing

6-Figure Grid References:



- 1: Find the 4-figure grid reference.
- 2: Imagine this square is divided up into 10 along the bottom and 10 up the side.
- 3: Estimate how far across and then up the square the feature is.



Latitude is a distance in degrees north or south of the equator.



Longitude is a distance in degrees east or west of the prime meridian.



You can find a location by noting where latitude and longitude lines cross.

Questions:

1. Draw a 32-point compass using all the correct labels for the different directions. Using an OS Map, give the direction of your house from SJC using compass directions.
2. Explain the difference between the three types of scales we use in geography. Use diagrams in your answer to help you remember.
3. Using an OS Map, measure both the straight line AND curved line distance from your house to SJC. Give the answer in km.
4. And 5. Choose an OS map, and write a set of 10 questions (with answers) that locate different features (you'll need to remember your OS Map Symbols too!
6. Explain the difference between Longitude and Latitude. Work out the Longitude and Latitude coordinates of THREE of the Seven Wonders of the World.



The six and a half centuries between the end of Roman rule that shaped England as a country.

Keywords:

Crusade: A holy war
'Astrolabe: used to navigate astronomy and astrology
House of Wisdom: A centre of knowledge which was full of scholars and books
Caliph- The leader of the Umma
Scholar- person with a lot of knowledge
Silk Road- trading route
Holy Lands: sacred lands to Christians, Jews and Muslims
Interpretations: A historians opinion
Kaaba - a Sacred stone in Mecca.
the 'Umma' - a community of all Muslim believers and a shared commitment to Islam

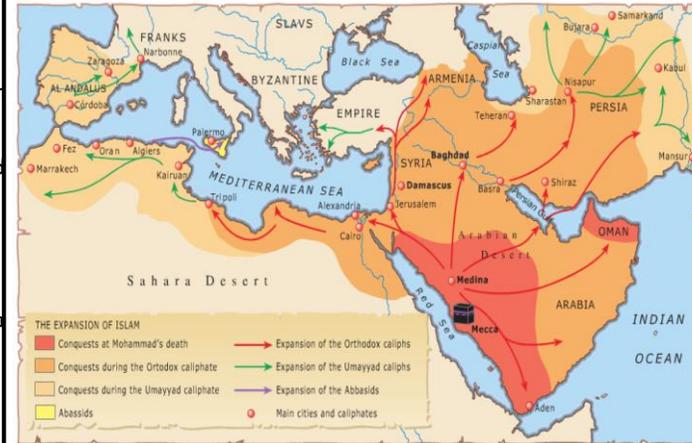
Key

Individuals:

Muhammad,
 Prophet of Islam
 Song Dynasty
 The Mongol Empire
 Ibn Battuta- A famous Muslim traveler
 Pope Urban II
 Richard the Lion Heart
 Saladin the Merciful'
 Ummayad family
 Abbassids

Key knowledge:

The religion of Islam was founded by the Prophet Muhammad and by his death in 632AD Islam was the religion for the whole of Arabia.
 The Islamic Empire existed from around 622AD to 1400 and stretched from Spain, down to parts of North Africa, into parts of Europe and across to India.
 All of the countries in the Islamic World were connected by the 'Umma' - a community of all Muslim believers and a shared commitment to Islam
 Muslims in the Islamic World travelled lots and traded goods such as silk, carpets, ivory and spices



The expansion of Islam in the Middle Ages

Key Dates:

571 AD- birth of Muhammad
 632- death of Muhammad
 762- round city of Baghdad
 1096- first crusade
 1187- Richard vs Saladin
 130 BC- 1453- the silk road

I can:

- Evaluate the impact of the Islamic Empire.
- Evaluate different interpretations on Richard I and Saladin.
- Evaluate different interpretations on the crusades.
- Explain one way in which Baghdad was different to London in 900AD
- Identify causes of the Crusades.

Prove it:

- Decide which cause(s) was/were the most imprint
 80%: *The most important impact of the growth of the Islamic Empire was..... I think this because*
 2) Decide which interpretation on Richard I and Saladin was the most important .
 80%:
 3) *Write at least one reason Historians have different interpretations on the events if the crusaded because*
 40%: *They have different interpretations because.....*
 4) *One reason why the Crusades began because..... for example.... This led to*
Write down facts about how the crusades played out. Use precise facts such as examples, names, dates, figures.
 30%: *One cause of the crusades was.....*
 40%: *For example.....*
 30%: *Another cause of the crusades was*
 40%: *For example....*
 5) 30%: *One way in which Baghdad was different to London in 900 AD was... for example... this demonstrated that Baghdad was..... where as London was....*

Questions:

- What were the early Islamic Civilisations?
- Why were the Early Islamic Civilisations important?
- Why was Baghdad known as the City of Peace?
- Why was Baghdad an important part of the Islamic Empire?
- What was in the House of Wisdom?
- Why was education important in Islamic civilisations?
- Why did people travel around the Medieval world?
- Was Ibn Battuta the greatest traveller in History?
- What were the effects of the Crusades?
- Why did people join the Crusades?
- How successful was the First Crusade?
- How different was Baghdad to London in 900AD?



This unit will enable learners to understand the different elements that make up a computer

Keywords:

Hardware = Physical parts of the computer

Input device = Provides data from the user to the computer

Output device = Provides data from the computer to the user

Input devices:

- Mouse
- Keyboard
- Microphone
- Scanner

Output devices:

- Monitor
- Printer
- Speaker
- Headphones

Parts of a computer:



Computer components:

- ❑ Motherboard = printed circuit board that allows the all other computer hardware components to communicate with each other
- ❑ Hard drive = Long term memory
- ❑ RAM = Short term memory
- ❑ Fan = Prevents the computer from over heating
- ❑ CPU = Brain of the computer. Carries out instructions

Input

Output



Storage devices:

- RAM = short term, used to run applications. Wiped when the pc turns off
- Hard drive = long term, can be internal and external
- SD card = high capacity, found in phones
- USB = portable, cheap
- Cloud = Online e.g. one drive, google drive



Questions:

1. Name 4 input devices
2. Compare RAM and hard drive
3. What is the role of the motherboard?
4. What are the benefits of cloud storage?



Introducing your family and discussing your birthday in Mandarin Chinese.

How do you say 'a' in Mandarin?

Unfortunately, there are many ways to say 'a' in Mandarin. These are called 'measure words' and are important to be able to communicate effectively. Here are 4 of the most common measure words (m.w.):

- 个 **gè** the universal m.w. - the fallback option if you can't remember
- 口 **kǒu** m.w. for family members
- 只 **zhǐ** m.w. for most animals and birds (with legs)
- 条 **tiáo** m.w. for long, thin things

Dates:

To remember which month is which is easy. You just need to remember 1-12 and the character for 'month' (月):

- 一月 **yī yuè** First month: January
- 二月 **èr yuè** Second month: February
- 十二月 **shí èr yuè** Twelfth month: December

With the date, you just need to remember 1-31 and 'day' (日)

- 一日 **yī rì** First day
- 十五日 **shí wǔ rì** Fifteenth day
- 三十一日 **sān shí yī rì** Thirty first day

When saying a date in Mandarin, you must remember:

	YEAR	MONTH	DAY
29th June, 2020	2020年	六月	二十九日

Family Members:

- 爸爸 **bà bà** father
- 妈妈 **mā mā** mother
- 哥哥 **gē ge** big bro
- 姐姐 **jiě-jie** big sis
- 弟弟 **dì dì** little bro
- 妹妹 **mèi mei** little sis
- 家 **jiā** family
- 人 **rén** person

Pets:

- 宠物 **chǒng wù** pet
- 狗 **gǒu** dog
- 猫 **māo** cat
- 鸟 **niǎo** bird
- 鱼 **yú** fish
- 蛇 **shé** snake
- 兔子 **tù zi** rabbit

Possessive Pronouns:

- 我的 **wǒ de** I
 - 你的 **nǐ de** you
 - 他的 **tā de** he
 - 她的 **tā de** she
-
- 大 **dà** big
 - 小 **xiǎo** small

Key Time Vocab:

- 年 **nián** year
- 月 **yuè** month
- 日 **rì** day
- 今天 **jīn tiān** today
- 明天 **míng tiān** tomorrow
- 昨天 **zuó tiān** yesterday
- 生日 **shēng rì** birthday

Asking yes/no questions:

We have looked at two ways of asking a question that would be answered with a simple 'yes' or 'no'

- 1) Add a 吗? To the end of the statement.
你是三岁。You are 13 years old.
你十三岁吗? Are you 13 years old?
- 2) Positive / negative
他忙。He is busy.
他忙不忙? He is busy not busy = Is he busy or not?

Asking 'when?':

In Mandarin you literally say:

- 'How many' + the time scale you expect
- 几年? **jǐ nián** 'What year?' = when?
- 几月? **jǐ yuè** 'What month?' = when?
- 几日? **jǐ rì** 'What day?' = when?

Key Verbs:

- 有 **yǒu** to have
- 没有 **méi yǒu** to not have
- 是 **shì** to be
- 不是 **bú shì** to not be

Questions:

- 1) 你家有几口人? **nǐ jiā yǒu jǐ kǒu rén?** How many people in your family?
- 2) 你有宠物吗? **nǐ yǒu chǒng wù ma?** Do you have any pets?
- 3) 你的生日是几月几日? **nǐ de shēng rì shì jǐ yuè jǐ rì?** When is your birthday?



China - A family tree

爷爷 yé ye
grandfather
(paternal)

奶奶 nǎi nǎi
grandmother
(paternal)

姥爷 lǎo ye
grandfather
(maternal)

姥姥 lǎo lǎo
grandmother
(maternal)

爸爸 bà bà
father

妈妈 mā mā
mother

我 wǒ
I / me

哥哥 gē ge
older brother

弟弟 dì di
younger brother

姐姐 jiě jie
older sister

妹妹 mèi mei
younger sister



Key Words

Unknown: A letter which represents a number we do not know the value of.

Terms: The numbers and letters in the expression or equation.

Inverse: The operation which will do the opposite.

A **formula** involves two or more letters, where one letter equals an **expression** of other letters.

An **expression** is a sentence in algebra that does NOT have an equals sign.

An **identity** is where one side is the equivalent to the other side.

When **substituting** a number into an expression, replace the letter with the given value.

Tip

When expanding brackets be careful with negatives.

Key Concepts

Formula

$$v = u + at$$

Expression

$$f^2 + f^2 + f^2$$

Equation

$$34 = 12 + 6t$$

Identity

$$c \times c = c^2$$

Operation	Inverse
+	-
-	+
x	÷
÷	x
x^2	\sqrt{x}

Examples

Simplify:

$$4a + 3b - a + 2b = 3a + 5b$$

Expand and simplify:

$$9a - 2(3a - 4) = 9a - 6a + 8 = 3a + 8$$

Factorise:

$$9x^2 + 6x$$

Factorising is the opposite of expanding brackets

$$3x \text{ is common to both terms}$$

$$3x(3x + 2)$$

Expand and simplify:

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

$$8a + 4b - 2a - 6b = 6a - 2b$$

Questions

1) Identify the equation, expression, identity, formula from the list (a) $v = u + at$

(b) $u^2 - 2as$

(c) $4x(x - 2) = x^2 - 8x$ (d)

$5b - 2 = 13$

2) Find the value of $5x - 7$ when $x = 3$

3) Where $A = d^2 + e$, find A when $d = 5$ and $e = 2$

A) Expand:

1) $5(m - 2) + 6$ 2) $(5g - 4)(2g + 1)$ 3) $(v + 1)(v - 2)(v + 3)$

B) Factorise:

1) $5b^2c - 10bc$ 2) $x^2 - 8x + 15$ 3) $3x^2 + 8x + 4$ 4) $9x^2 - 25$



Unit 4 uses real life graphs, graphs of functions, coordinates in all four quadrants

Key Words

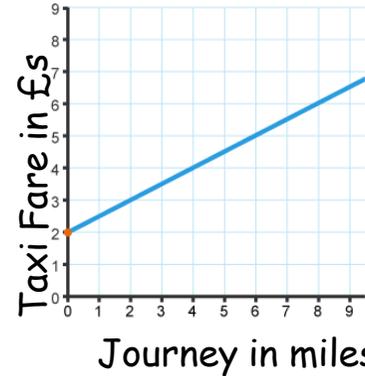
- Quadrant:** four quarters of the coordinate plane.
- Coordinate:** a set of values that show an exact position.
- Horizontal:** a straight line from left to right (parallel to the x axis)
- Vertical:** a straight line from top to bottom (parallel to the y axis)
- Origin:** (0,0) on a graph. The point the two axes cross
- Parallel:** Lines that never meet
- Gradient:** The steepness of a line
- Intercept:** Where lines cross

Tip
When expanding brackets be careful with negatives.

What do I need to be able to do?

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

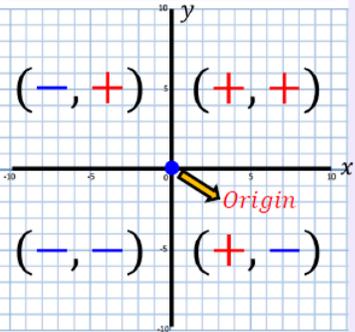
Examples



- What is the minimum taxi fair?
£2, this is the y-intercept.
- What is the charge per mile?
50p, every extra mile adds on 50p.

How much would a journey of 5 miles cost?
£4.50, See line drawn up from 5 miles to the graph, then drawn across to find the cost.

Four Quadrants



A set of values that indicate the position of a point.

They normally occur in pairs in the form (x, y)

(x, y)

Direction along the x-axis

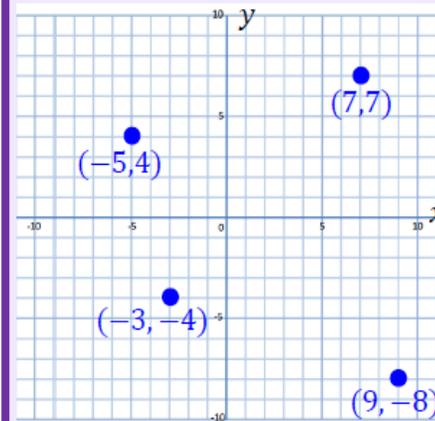
Direction up/down the y-axis

Along the corridor

Up, Down the stairs

Start from a central point $(0,0)$ - Origin

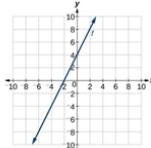
Plotting coordinates



Reading the coordinates will lead you to the exact position.

- $(7, -4)$ \Rightarrow Seven units **right**, Four units **down**
- $(-2, 6)$ \Rightarrow Two units **left**, Six units **up**
- $(-5, -2)$ \Rightarrow Five units **left**, Two units **Down**

- Plot the line $y = 3x - 2$
- Find the equation of the line for the attached graph.



ANSWERS: 2) $y = 2x + 4$



Unit 4 includes simplifying fractions, ordering decimals and metric unit conversions. You will also use the four operations when using fractions

Key Words

- Fraction:** how many parts of a whole we have
- Decimal:** a number with a decimal point used to separate ones, tenths, hundredths etc.
- Percentage:** a proportion of a whole represented as a number between 0 and 100
- Place value:** the numerical value that a digit has decided by its position in the number
- Placeholder:** a number that occupies a position to give value
- Interval:** a range between two numbers
- Tenth:** one whole split into 10 equal parts
- Hundredth:** one whole split into 100 equal parts
- Recurring:** a decimal that repeats in a given pattern

Key Concepts

Metric units of **length:** mm, cm, m, km

Metric units of **weight:** g, kg

Metric units of **capacity:** ml, l

All of these units are **metric** units. They will always use conversions of multiples of 10, eg. 10, 100, 1000 etc.

Examples

Ordering Decimals

0.3, 0.21, 0.305, 0.38, 0.209

Add zero's so that they all have the same number of decimal places.

0.300, 0.210, 0.305, 0.380, 0.209

Then they can be placed in order:

0.209, 0.21, 0.3, 0.305, 0.38

Multiplying/Dividing by powers of 10

3.4×100

100	10	1	$\frac{1}{10}$
		3	4
3	4	0	

Tip

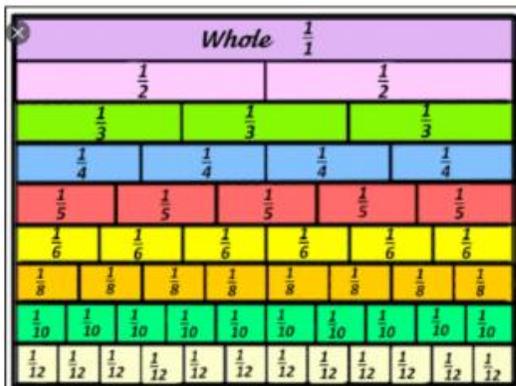
Add digits when ordering decimals.

- The number of zero's tells you the number of places to move the digits.
- A larger denominator **does not** mean a larger fraction.
- To find equivalent fractions multiply/divide the numerator and denominator by the same number.

ANSWERS A 1) $4\frac{12}{5}$ 2) $2\frac{12}{5}$ 3) $5\frac{3}{1}$ 4) $\frac{27}{16}$

Equivalent fractions

Represent equivalence with fraction walls



Examples



$$\frac{3}{5} + \frac{2}{7}$$

Make the denominators the same

$$\begin{array}{r} \frac{3}{5} + \frac{2}{7} \\ \times 7 \quad \times 5 \\ \hline \frac{21}{35} + \frac{10}{35} = \frac{31}{35} \end{array}$$



$$\frac{3}{5} - \frac{2}{7}$$

$$\begin{array}{r} \frac{3}{5} - \frac{2}{7} \\ \times 7 \quad \times 5 \\ \hline \frac{21}{35} - \frac{10}{35} = \frac{11}{35} \end{array}$$

4 Rules
Fractions



$$\frac{3}{5} \times \frac{2}{7}$$

Just multiply the tops and bottoms

$$= \frac{3 \times 2}{5 \times 7} = \frac{6}{35}$$



$$\frac{3}{5} \div \frac{2}{7}$$

Flip the second fraction and change to a times

$$\frac{3}{5} \times \frac{7}{2} = \frac{21}{10}$$

Calculate:

1) $1\frac{2}{3} + 2\frac{3}{4}$ 3) $3\frac{1}{5} \times 1\frac{2}{3}$

2) $3\frac{3}{4} - 1\frac{1}{3}$ 4) $1\frac{3}{5} \div 2\frac{7}{10}$



St Joseph's College Music Department

Half Term 2: The Holiday Suite/ Green Sleeves



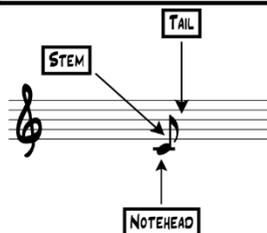
This term we will expand our knowledge on staff notation, note values and perform pieces from the Holiday Suite and Greensleeves

Keywords:

- Music Suite**- short pieces of music played one after the other
- Semibreve**- a music note that's worth 4 beats
- Minim**- a music note that's worth 2 beats
- Crotchet**- a music note that's worth 1 beats
- Quaver**- a music note that's worth 1/2 beat
- 4/4**- time signature that means 4 beats per music bar
- Ternary Form**- a music structure A B A
- Sequence**- a pattern of notes that repeats higher or lower
- F#(sharp)**- the black key on the keyboard to the right of F
- G#(sharp)**- the black key on the keyboard to the right of G

What are the basic note values in Music?

In music notation, a **note value** indicates the relative duration of a **note**. Each note value has different characteristics, such as different colour head (black or white), the presence or absence of a **stem**, and the presence or absence of a **tail**.



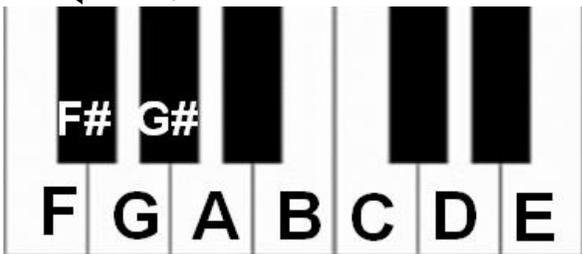
Notes	Name		Value
	Semibreve	Whole note	4 beats
	Minim	Half note	2 beats
	Crotchet	Quarter note	1 beat
	Quaver	Eighth note	1/2 beat

Greensleeves

Use your **right hand** to play the melody of Greensleeves. In the piece there are two notes that are played on the **black keys** of the keyboard. Look on the keyboard diagram below to find the position of *F# (F sharp) and *G# (G sharp).

F# = Black key to the right of F

G# = Black key to the right of G



Notes on the lines

Every Good Boy Deserves Football

Notes in the spaces

FACE

Performance of The Holiday Suite:

The Holiday Suite consists of two short pieces which will be performed as a classroom performance. All pieces have Ternary Form structure A B A where the first section (A) is repeated at the end.

Ternary Form music structure A B A

The notation shows two musical staves. The first staff has a sequence of notes: C D E D C D C D E D C D E F G. The second staff has notes: G F E D G F E D G F E D C. The first section (A) is circled in red and repeated at the end of the piece.

Questions:

1. What is a music Suite? And name the 3 characteristics of a music note.
2. What is the note value of a semibreve? 3. What is the note value of a crotchet? 4. What is the note value of a minim?
5. What is the note value of a quaver? 6. What does 4/4 mean in music? 7. What is Ternary Form?
8. What is a sequence?



St Joseph's College PE Department

Half Term 2: Rugby

Key concepts and skills required for Rugby



Keywords:

- Forward pass**- A forward pass occurs when the ball fails to travel backwards in a pass
- Advantage line**- is an imaginary line drawn across the centre of the pitch when there is a breakdown in open play
- Advantage**- is the period of time after an infringement, in which the non-offending side has the opportunity to gain
- Breakdown**- The breakdown is a colloquial term for the period immediately after a tackle and the ensuing ruck.
- Tackle**- Takes place when one or more opposition players grasp onto the ball carrier and succeed in bringing him to ground
- Knock-on**- A knock-on is when a player loses possession of the ball and goes forward off the hands or arms
- Try**- It is scored when a player places the ball on the ground with downward pressure in the in-goal area.

Key skills/abilities required:

- Pop Passing** - Bring the hand across the body and pop the ball to a teammate
- Spin passing** - as the ball comes across the body bring the bottom hand over the top and spin the ball.
- Scoring a try**- use downward pressure on the ball and place it within the try area.
- Tackle**- stopping the opposition by taking them down to the ground.
- Side step**- passing off one foot quickly to change direction and get past the opposition
- Teamwork** - working together in attack and defence to support each other
- Aerobic fitness** - Maintain personal fitness to be able to run around for a full game

Famous players:



Kyle Sinckler



Manu Tuilagi



Owen Farrell

How can you improve?

Passing drills

- Pass with a partner** - Stand a short distance apart working on short passing, increase the distance to work on long passing always passing backwards
- Work on weak hand**- Stand in front of a wall which has a target on pass the kicking the ball repeatedly against the wall with your weaker hand.
- Tackling**- the partner will walk in a straight line the tackler will also walk until they meet and make a tackle
- Small sided touch games** - Play small sided games with your friends 5v5. Focus on attacking and defensive realignment

Questions:

- How many players are on each team in a game of rugby?
- How long does a professional rugby match last for?
- Which 3 skills are the most important for a rugby to become one of the best players in the world?
- How many times have England won the rugby world cup? Name the year(s) for a bonus point..





We will be studying why Christians believe that Jesus is the Messiah as described in the Old Testament.

Keywords:

- Covenant** - An agreement between God and his people
- Justice** - people behaving in a way that is fair, equal and balanced for everyone.
- Exile** - being expelled and barred from your native country.
- Judgement** - the ability to make a considered decision.
- Messiah** - a leader regarded as a saviour.
- Miracle** - an exceptional event; inexplicable by science.
- Parable** - a simple story to illustrate a moral or spiritual lesson.

The importance of justice

There are many passages in the Bible which support justice for all, there are many things in the Bible that Christians still learn from today, e.g. the words of the Prophet Amos (Old Testament)

Woe to you! You trample on the poor and force them to give you grain.
 Woe to you! You take bribes and deprive the poor of justice in the courts.
 Woe to you! You oppress women and crush the needy.
 Woe to you! You drink wine by the bowlful but do not grieve the ruin of Israel.
 Woe to you! God says "I hate your religious feasts; I cannot stand your worship assemblies. Even though you bring me burnt offerings I cannot accept them"

The need to have a home - living in exile:

God made a covenant with the Israelites. The deal was that he would be their Lord and they would follow him. God gave them the Ten Commandments, they had to follow this. God had given the Israelites the Promised Land, but because they disobeyed God, they were sent to exile. Psalm 137 shows:

By the rivers of Babylon, where we sat down
 there we wept, as we remembered Zion.
 We hung our harps nearby, there on the willow trees.
 There in Babylon, those who captured us told us to sing.
 Our enemies told us to entertain them.
 They said, "Sing us one of your songs about Zion."
 But we cannot sing the LORD's songs
 in a foreign country!
 Jerusalem, if I ever forget you,
 may I never play a song again.
 If I fail to remember you,
 may I never sing again.
 I will always remember Jerusalem
 as my greatest joy!

Jesus' Miracles and Parables

In the Bible, Jesus explained many complicated ideas with parables and showed his power through miracles. Some of the more important ones include:

Parables:

- Wise and foolish builder
- Mustard Seed
- The Good Samaritan

Miracle:

- Forgiving and healing the paralyzed man.
- The healing of a woman with internal bleeding
- The healing of Jairus' daughter
- Raising Lazarus from the Dead
- Rising from the Dead



Questions:

1. In what ways could we learn from the Prophet Amos in the modern world? Give three examples.
2. Explain the meaning behind Psalm 137.
3. Explain two of Jesus' **parables** and explain why they're important
4. Explain two of Jesus' **miracles** and explain why they're important.



Explain how males and females go through adolescence, mensuration and how foetus gain nutrients in the womb

Keywords:

- Gametes:** Sex cells
- Testis:** Produce male gametes (sex cells) called sperm to make male sex hormones
- Penis:** Pass urine and semen
- Sperm ducts:** Where the sperm pass through to get to the glands
- Scrotum:** Bag of skin containing the testis
- Uterus:** Where a baby develops until its birth
- Oviduct:** Egg is released from the ovary and moved along inside the oviduct and into the uterus.
- Ovary:** Contain hundreds of undeveloped female gametes
- Cervix:** Keeps the baby in place while the woman is pregnant
- Vagina:** Receives sperm during intercourse
- Embryo:** The fertilised egg divides to form a ball of cells
- Fetus:** Unborn baby
- Implantation:** When embryo buries itself into the lining of the uterus
- Gestation:** Pregnancy

Difference and similarities in the development of adolescence

Girls	Boys	Both
<ul style="list-style-type: none"> • Breasts develop • Menstruation • Egg released • Hips widen • Produce oestrogen and progesterone hormone 	<ul style="list-style-type: none"> • Start aged 9-14 • Larynx enlarges • Genitals Enlarge • Sperm produced • Face and body hair • Become more muscular • Produce testosterone 	<ul style="list-style-type: none"> • Pubic hair • Emotional Changes • Underarm hair • Growth spurt

Mensuration:

The female reproductive system includes a cycle of events called the menstrual cycle. It lasts around 28 days. The cycle stops while a woman is pregnant. These are the main features of the menstrual cycle:

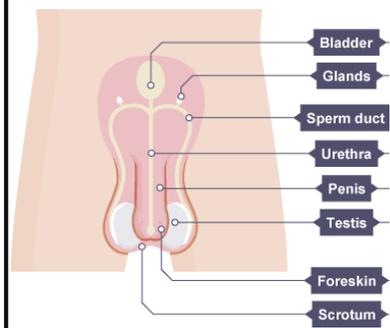
The start of the cycle, day 1, is when bleeding from the vagina begins. This is caused by the loss of the lining of the uterus, with a little blood (period). By the end of about day 5, the bleeding usually stops. The lining of the uterus begins to re-grow and an egg cell starts to mature in one of the ovaries. At about day 14, the mature egg cell is released from the ovary. This is called ovulation.

Placenta

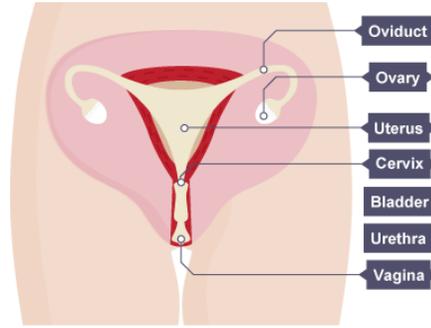
The placenta is an organ responsible for providing oxygen and nutrients, and removing waste substances. It grows into the wall of the uterus and is joined to the fetus by the umbilical cord.

The mother's blood does not mix with the blood of the fetus, but the placenta lets substances pass between the two blood supplies: oxygen and nutrients diffuse across the placenta from the mother to the fetus carbon dioxide and other waste substances diffuse across the placenta from the fetus to the mother

Male reproductive organs



Female reproductive organs





Explain flower reproduction and the difference between flower and insect pollen

Keywords:

Sepals - Protect the unopened flower

Petals - Brightly coloured to attract insects

Stamens - The male parts of the flower (each consists of an anther held up on a filament)

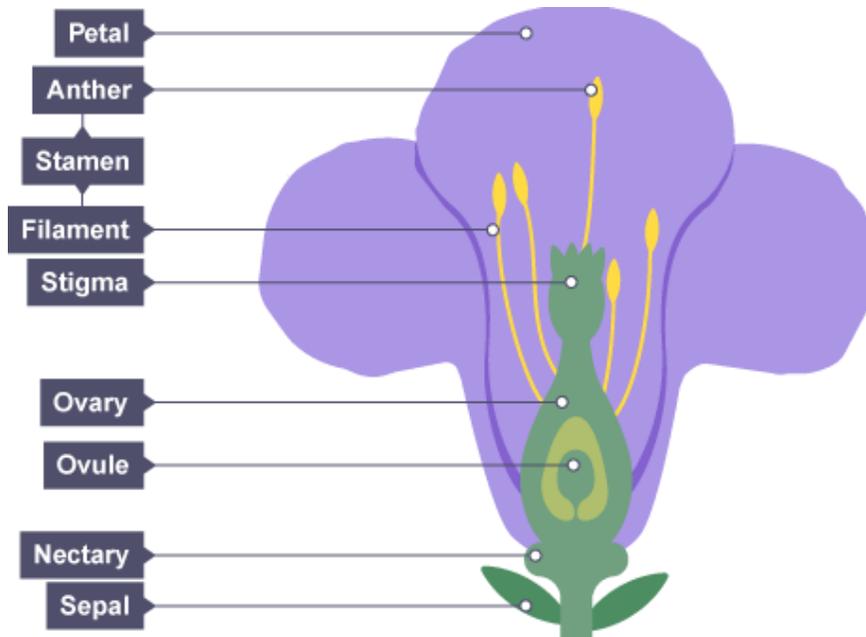
Anthers - Produce male sex cells (pollen grains)

Stigma - The female part of the flower which collects pollen grains

Ovary - Produces the female sex cells (contained in the ovules)

Nectar - Produce a sugary solution called nectar, which attracts insects

Flower Structure



Pollination:



Feature	Insect-pollinated	Wind-pollinated
Petals	Large and brightly-coloured – to attract insects	Small, often dull green or brown – no need to attract insects
Scent and nectar	Usually scented and with nectar – to attract insects	No scent or nectar – no need to attract insects
Number of pollen grains	Moderate - insects transfer pollen grains efficiently	Large amounts – most pollen grains are not transferred to another flower
Pollen grains	Sticky or spiky - sticks to insects well	Smooth and light – easily carried by the wind without clumping together
Anthers	Inside flower, stiff and firmly attached - to brush against insects	Outside flower, loose on long filaments – to release pollen grains easily
Stigma	Inside flower, sticky - pollen grains stick to it when an insect brushes past	Outside flower, feathery – form a network to catch drifting pollen grains

Pollen and fertilisation

Pollenated: pollen moves from the anthers to another flower's stigma

Fertilisation:

1. A pollen grain lands on the stigma
2. A pollen tube grows from the stigma to the ovary.
3. The nucleus of the pollen grain then joins with the nucleus of the ovule.
4. The fertilised egg develops to an embryo



Define balanced and unbalanced forces and be able to calculate the resultant force of an object

Keywords:

Mass: The amount of matter.

Weight: Mass x the gravitational field strength. Weight is a force exerted on the Earth's surface.

Newton: Measurement of force

Newton meter: an instrument measuring force.

Friction: A force between two objects that are sliding or trying to slide across each other.

Friction always opposes motion.

Pressure (Nm^2): Force (N) / Area (m^2)



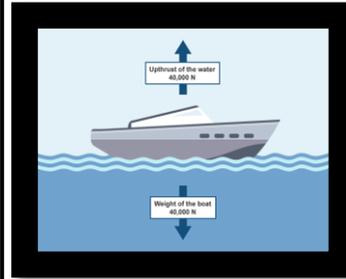
Balanced force:

When two forces acting on an object are equal in size but act in opposite directions, we say that they are balanced forces.

If the forces on an object are balanced (or if there are no forces acting on it), this is what happens:

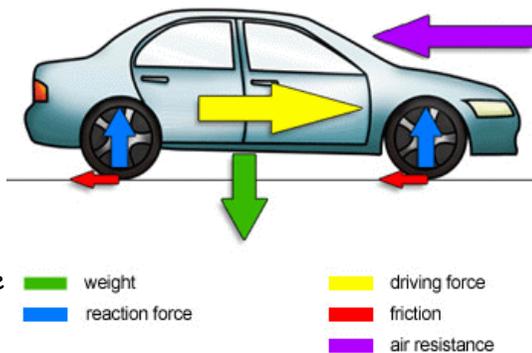
a stationary object stays still

a moving object continues to move at the same speed and in the same direction



Forces:

Force is measured in newtons (N). The greater the force, the bigger the number, so 100 N is a greater force than 5 N. We also represent forces with arrows. The bigger the force we draw the longer the arrows. The smallest force acting on the car is the friction from the wheels as it has the smallest arrow. The largest force is the driving force as it has the largest arrow..



- █ weight
- █ reaction force
- █ driving force
- █ friction
- █ air resistance

Unbalanced

When two forces acting on an object are not equal in size, we say that they are unbalanced forces. The overall force acting on the object is called the resultant force:

If the forces on an object are unbalanced, this is what happens:

A stationary object starts to move in the direction of the resultant force a moving object changes speed and/or direction in the direction of the resultant force. Below we can see the forces on the car is unbalanced. The air resistance (300N) is much less than the driving force (1000N). We can calculate the resultant force and work out the direction. $1000\text{N} - 300\text{N} = 700\text{N}$.



In this example the Scooby doo van is speeding up with 700N to the right.



Explain how gas exchange happens in plants and animals



Keywords:

Cell: Building block of life

Tissue: A group of cells with a similar structure and function, which all work together to do a particular job

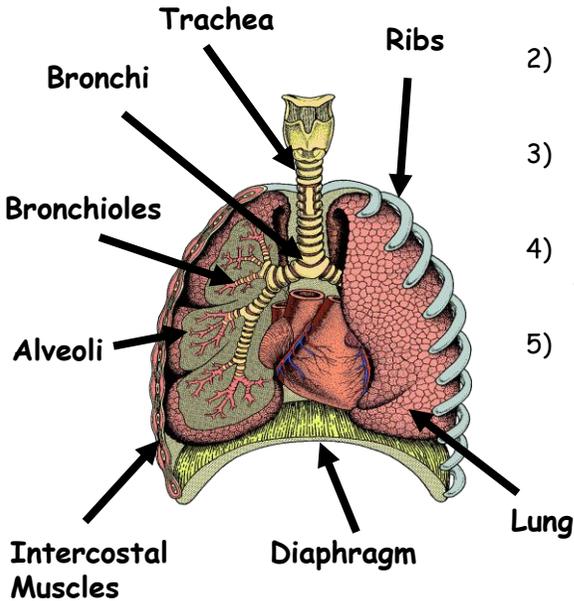
Organ: A group of tissues with the same function

Organ system: A group of different organs working together

Photosynthesis: A chemical reaction that takes Carbon dioxide, water and light and produce glucose, and oxygen

Diffusion: The movement of liquid or gas from a high to low concentration

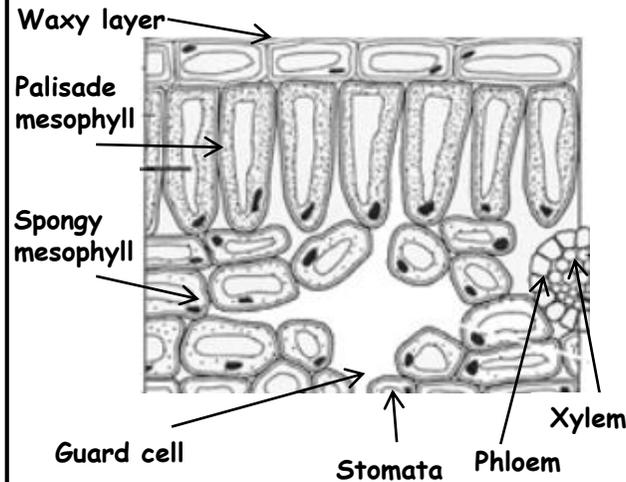
Structure of the lungs:



Movement of air through the lungs:

- 1) Air enters through the nose and mouth
- 2) The air moves through the trachea
- 3) Air moves down the bronchiole
- 4) Air moved through the alveoli / alveolus
- 5) Oxygen diffuses into the red blood cells via the capillaries that surrounds the alveoli

Structure of the leaf:



Function of the leaf tissue:

Waxy layer: Covers the surface with waterproof wax to protect the leaf from water loss.

Palisade mesophyll: Contains chloroplasts which carry out photosynthesis.

Spongy Mesophyll: Have a large surface and spaces between each cell to allow gas to move around easily.

Phloem: Carries glucose

Xylem: Carries water, minerals and ions from the root to the leaf

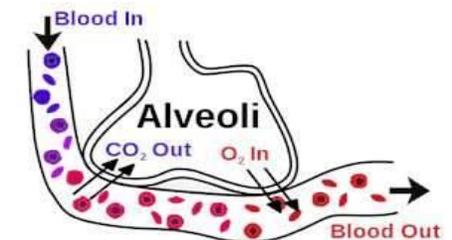
Gas exchange in the lungs:

The alveoli are specialised structures in the lungs.

- They have an increased surface area for gas exchange.
- They are surrounded by lots of capillaries so gases can be carried away quickly to the body via red blood cells.
- The alveoli are thin so the gases only have a short distance to diffuse.
- The alveoli are also moist so gases can diffuse easily.

Oxygen diffuses into the lungs because there is a higher concentration of oxygen in the lungs compared to the capillaries (higher concentration gradient).

Carbon dioxide diffuses out of the lungs because there is a greater concentration of carbon dioxide in the capillaries compared to the lungs





State the structure and the function of joints. State the function of skeleton and antagonistic muscles

Keywords:

Joints: Bones are linked together by joints. Allow different parts of the skeleton to move.

Cartilage: A strong smooth tissue. Keeps the joint slippery by fluids in the joint

Ligament: Hold two bones together

Antagonistic muscles: Muscles in pairs that work opposite each other

Hinge joint: A joint that can move back and forth

Ball and socket joint: A joint that can move back and forth in all directions, and rotation

Fixed joint: A joint that has no movement

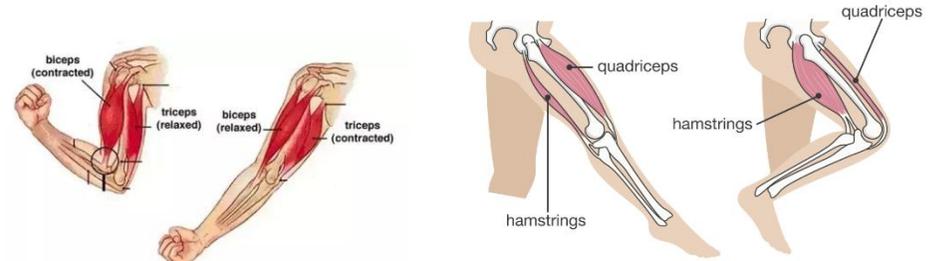
Antagonistic muscles:

Muscles can only pull and cannot push.

Muscles in pairs are called antagonistic muscles.

When one muscle contracts it becomes short and thick. It will therefore pull on the bone making it move.

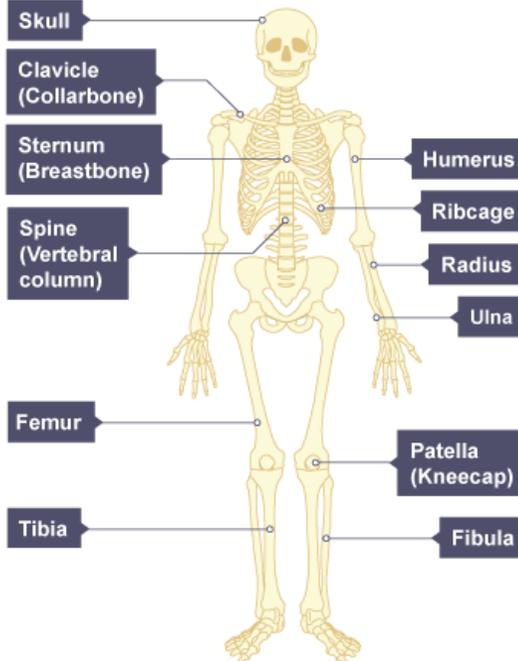
The opposite muscles relax and become long and thin. The opposite muscle will contract the other muscle relax



Skeleton:

The role of the skeleton (skeletal system) is:

- Produce red and white blood cells
- Support for your body and hold organs in place
- Protect vital organs
- Movement - bones attach to muscles so when the muscle contract it will move the bone



Joints:

A joint is where two bones join together.

They allow for movement.

This is a knee joint

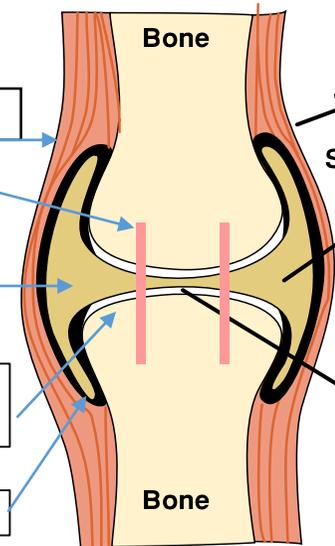
Muscle - pull on the tendon

Ligaments - hold the joint together

Synovial fluid - an oily substance that reduces friction

Cartilage - stops the bones from rubbing against each other

Tendons - connect bones to muscles





St Joseph's College Spanish Department

Y7 Half Term 2: Me presento (How to introduce yourself)



Objective: To give more detail when introducing yourself using link words and negatives. You will be able to say when your birthday is, give opinions about colours, say if you have pets as well as using names of some famous Hispanic monuments.

¿Cuándo es tu cumpleaños?

¿Cuándo es tu cumpleaños?	When is your birthday?
Mi cumpleaños es el..	My birthday is on...
La fecha	The date
El mes	The month
El primero de	The first of..
La semana	The week
El uno de	The first of

Basic Opinions

Me encanta	I love ...
Me gusta mucho	I like ... a lot
Me gusta	I like...
No me gusta	I do not like ...
No me gusta nada	I do not like ... at all
Odio	I hate ...
Detesto	I detest ...

Conjunctions

Además	Furthermore
O	Or
Pero	But
Sin embargo	However
También	Also
y	and

AMARILLO 	NARANJA 	ROJO 	MORADO
AZUL 	VERDE 	ROSA 	GRIS CLARO
GRIS OSCURO 	MARRÓN 	BLANCO 	NEGRO

Questions:

Hola, ¿Cómo te llamas?
¿Cuándo es tu cumpleaños?
Y, ¿Cuántos años tienes?
¿Cuál es tu color favorito?

Answers:

Me llamo Pablo.
Mi cumpleaños es el tres de enero.
Tengo cuarenta y dos años.
Me gusta mucho el rojo y el verde, pero no me gusta el azul o el gris oscuro.



Enero January	Febrero February	Marzo March	Abril April	Mayo May	Junio June	Julio July	Agosto August	Septiembre September	Octubre October	Noviembre November	Diciembre December
-----------------------------	--------------------------------	---------------------------	---------------------------	------------------------	--------------------------	--------------------------	-----------------------------	------------------------------------	-------------------------------	----------------------------------	----------------------------------

- 30 Treinta
- 33 Treinta y tres
- 40 Cuarenta
- 44 Cuarenta y cuatro
- 50 Cincuenta
- 55 Cincuenta y cinco
- 60 Sesenta
- 66 Sesenta y seis
- 70 Setenta
- 80 Ochenta
- 90 Noventa
- 100 Cien



St Joseph's College Spanish Department

Y7 Half Term 2: Me presento (How to introduce yourself)



If the adjective ends in **-e** or a **consonant**, it stays the same

Una serpiente verde	A green snake
Un pez naranja	An orange fish

Adjectives can be masculine or feminine, singular or plural. If an adjective ends in **-o**, it changes to an **-a** to describe a feminine noun

Un perro negro	A black dog
Una tortuga amarilla	A yellow turtle

Las Mascotas

Tengo... I have...

Un perro	Un gato	Un conejo
Un caballo	Un pez	Un ratón
Una serpiente	Una cobaya	No tengo mascotas

Christmas and New Year in Spain

Papá Noel (Father Christmas) brings presents on "Nochebuena" which is the day before Christmas.

Do you know how to say "Fools day" in Spanish? It is celebrated on December the 28.

DICIEMBRE

LUNES	MARTES	MIÉRCOLES	JUEVES	VIERNES	SÁBADO	DOMINGO
30	1	2	3	4	5	6
7	8 Día de la Tomacada	9	10	11	12	13
14	15	16	17	18	19	20
21	22 Inocentes	23	24 Nochebuena	25 Navidad	26	27
28	29	30	31 Nochevieja	1	2	3

¡Feliz Navidad!

Spanish people eat grapes on "Nochevieja" (the last day of the year)

Cathedral of Santiago (Galicia)



Aqueduct (Segovia)

Alhambra (Granada)



El mundo hispanohablante

Monuments in Spain



Park Güell (Barcelona)

Mosque (Sevilla)



Real Madrid Stadium (Madrid)

¡Feliz Año Nuevo!

ENERO

MARTES	MIÉRCOLES	JUEVES	VIERNES	SÁBADO	DOMINGO
1 Año Nuevo	2	3	4	5	6 Día de Reyes
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24

On the day of "Año Nuevo" Spanish people eat hot chocolate with Churros.

On day of "Los Reyes Magos" (the three wisemen) families exchange presents and eat "el roscón".

¡Feliz Año Nuevo!

Dibujos.net

Respect for FAITH

Respect for LEARNING

Respect for OTHERS

Respect for COMMUNITY

Respect for SELF



The Periodic Table of Elements

1	2											3	4	5	6	7	0		
		Key relative atomic mass atomic symbol name atomic (proton) number										1 H hydrogen 1							4 He helium 2
7 Li lithium 3	9 Be beryllium 4											11 B boron 5	12 C carbon 6	14 N nitrogen 7	16 O oxygen 8	19 F fluorine 9	20 Ne neon 10		
23 Na sodium 11	24 Mg magnesium 12											27 Al aluminium 13	28 Si silicon 14	31 P phosphorus 15	32 S sulfur 16	35.5 Cl chlorine 17	40 Ar argon 18		
39 K potassium 19	40 Ca calcium 20	45 Sc scandium 21	48 Ti titanium 22	51 V vanadium 23	52 Cr chromium 24	55 Mn manganese 25	56 Fe iron 26	59 Co cobalt 27	59 Ni nickel 28	63.5 Cu copper 29	65 Zn zinc 30	70 Ga gallium 31	73 Ge germanium 32	75 As arsenic 33	79 Se selenium 34	80 Br bromine 35	84 Kr krypton 36		
85 Rb rubidium 37	88 Sr strontium 38	89 Y yttrium 39	91 Zr zirconium 40	93 Nb niobium 41	96 Mo molybdenum 42	[98] Tc technetium 43	101 Ru ruthenium 44	103 Rh rhodium 45	106 Pd palladium 46	108 Ag silver 47	112 Cd cadmium 48	115 In indium 49	119 Sn tin 50	122 Sb antimony 51	128 Te tellurium 52	127 I iodine 53	131 Xe xenon 54		
133 Cs caesium 55	137 Ba barium 56	139 La* lanthanum 57	178 Hf hafnium 72	181 Ta tantalum 73	184 W tungsten 74	186 Re rhenium 75	190 Os osmium 76	192 Ir iridium 77	195 Pt platinum 78	197 Au gold 79	201 Hg mercury 80	204 Tl thallium 81	207 Pb lead 82	209 Bi bismuth 83	[209] Po polonium 84	[210] At astatine 85	[222] Rn radon 86		
[223] Fr francium 87	[226] Ra radium 88	[227] Ac* actinium 89	[261] Rf rutherfordium 104	[262] Db dubnium 105	[266] Sg seaborgium 106	[264] Bh bohrium 107	[277] Hs hassium 108	[268] Mt meitnerium 109	[271] Ds darmstadtium 110	[272] Rg roentgenium 111	[285] Cn copernicium 112	[286] Nh nihonium 113	[289] Fl flerovium 114	[289] Mc moscovium 115	[293] Lv livermorium 116	[294] Ts tennessine 117	[294] Og oganesson 118		

* The Lanthanides (atomic numbers 58 – 71) and the Actinides (atomic numbers 90 – 103) have been omitted.

Relative atomic masses for **Cu** and **Cl** have not been rounded to the nearest whole number.



Multiplication Grid & Formulae



My Multiplication Chart 1-12

x	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	55	60
6	6	12	18	24	30	36	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
8	8	16	24	32	40	48	56	64	72	80	88	96
9	9	18	27	36	45	54	63	72	81	90	99	108
10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
12	12	24	36	48	60	72	84	96	108	120	132	144

Areas

Rectangle = $l \times w$

Parallelogram = $b \times h$

Triangle = $\frac{1}{2} b \times h$

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

Circles

Circumference = $\pi \times \text{diameter}$, $C = \pi d$

Circumference = $2 \times \pi \times \text{radius}$, $C = 2\pi r$

Area of a circle = $\pi \times \text{radius squared}$, $A = \pi r^2$

Pythagoras

Pythagoras' Theorem
For a right-angled triangle,
 $a^2 + b^2 = c^2$

Trigonometric ratios (new to F)
 $\sin x^\circ = \frac{\text{opp}}{\text{hyp}}$, $\cos x^\circ = \frac{\text{adj}}{\text{hyp}}$, $\tan x^\circ = \frac{\text{opp}}{\text{adj}}$

Quadratic equations

The Quadratic Equation
The solutions of $ax^2 + bx + c = 0$, _____
where $a \neq 0$, are given by $x = \frac{-b \pm \sqrt{(b^2 - 4ac)}}{2a}$

Volumes

Cuboid = $l \times w \times h$

Prism = area of cross section \times length

Cylinder = $\pi r^2 h$

Volume of pyramid = $\frac{1}{3} \times \text{area of base} \times h$

Compound measures

Speed
 $\text{speed} = \frac{\text{distance}}{\text{time}}$

Density
 $\text{density} = \frac{\text{mass}}{\text{volume}}$

Pressure
The formula for pressure does not need to be learnt, and will be given within the relevant examination questions.

Trigonometric formulae

Sine Rule $\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$

Cosine Rule $a^2 = b^2 + c^2 - 2bc \cos A$

Area of triangle = $\frac{1}{2} ab \sin C$

Foundation tier formulae

Higher tier formulae



Equipment

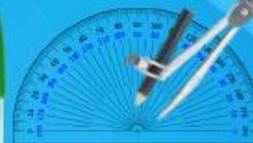


SJC: The Basics

Every lesson!
Every day!



ESSENTIALS



- Essentials
- Pencil case
- Blue/Black pens
- Green pens
- Pencils
- Sharpener
- Rubber
- Ruler
- Calculator
- Compass
- Protractor
- Exercise Books
- Textbooks
- Coloured pencils
- Highlighters

IDEAL



- Ideal
- Document wallet
- Glue stick
- Scissors



Respect for Faith

We believe that we are a school community rooted in the Catholic Christian faith with respect for all faiths, religions and views. All students and staff have the right to express their faith in God and be treated with dignity.

Respect for Self

We believe we are all children of God and encourage each other to see this within themselves. We believe that our social, emotional and spiritual development, being healthy and happy are central to our wellbeing. We believe that we must protect these rights for all.

Respect for Others

We believe that everyone deserves respect and we will treat others as we would like to be treated.

Respect for Learning

We believe that students and staff must be prepared in order to make the best of every learning opportunity. We believe that everyone can improve, make progress and achieve success. We believe that developing independence and determination is key to life's journey.

Respect for the College and Wider Community

We seek to care for our College and serve our local community. We believe that the college environment should be respected and safe.

STUDENTS WILL:

1. Be proud of their faith and treat all faiths with respect.
2. Show respect, and courtesy to all, treating all members of the school and visitors as they would like to be treated themselves. They will make sure the school is a safe place for all to express their views and opinions.
3. Value the whole school treating every area with respect making sure that every part of the school is clean, tidy and litter free.
4. Move around the school calmly, sensibly and safely.
5. Have a 'positive can do' attitude to learning, take pride in their appearance by wearing a smart uniform, arriving on time to lessons with the right equipment.
6. Work to the best of their ability. They will not give up even when work is difficult and challenging. They will take responsibility for their actions and for achieving their potential.
7. Participate in at least one extra-curricular activity to support their social and emotional development.
8. Respect all school expectations and follow the rewards/sanctions procedures.

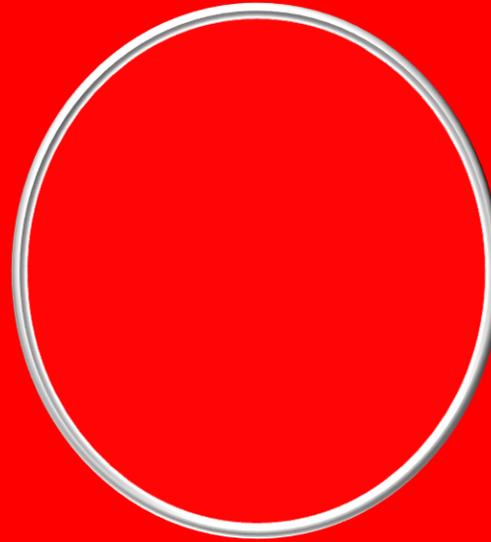
STAFF WILL:

1. Respect the views and opinions of all students, parents and colleagues. They will act as role models to students by demonstrating patience, respect and fairness.
2. Demonstrate their belief in a growth mindset: that all learners can improve, progress and achieve success.
3. Dress smartly for lessons, arrive on time, greet students at the door and ensure that learning can begin immediately.
4. Prepare for learning by knowing their students, having excellent subject knowledge and ensuring every student is challenged and stretched.
5. Create a positive and engaging learning environment and ensure that class displays are supportive, relevant, encourage resilience and are presentable.
6. Assess learning regularly, create different opportunities for students to access learning content and help students achieve their personal goals.
7. Promote the health, happiness and well-being of all students.
8. Apply the school expectations fairly to all students.





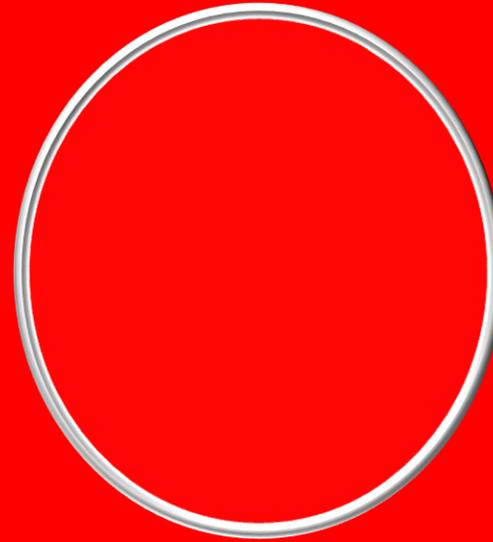
Traffic light:



Red



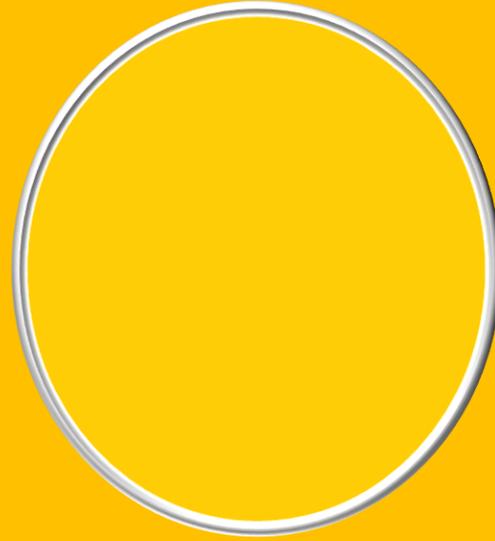
Traffic light:



Red



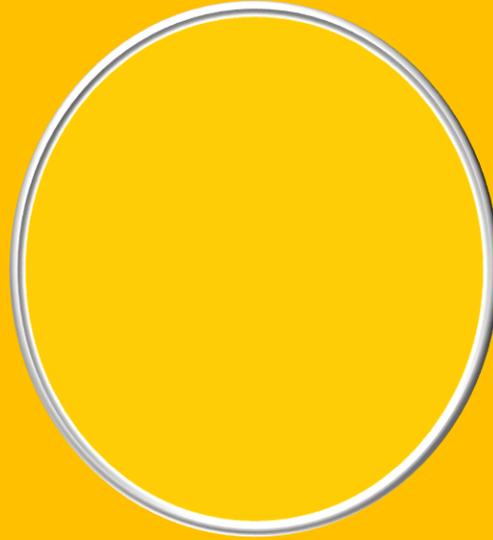
Traffic light:



Amber



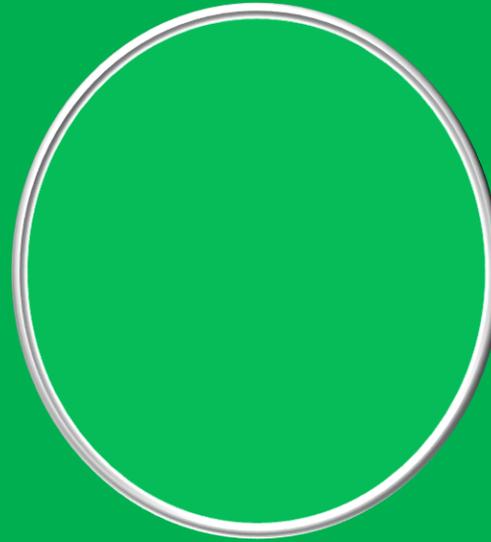
Traffic light:



Amber



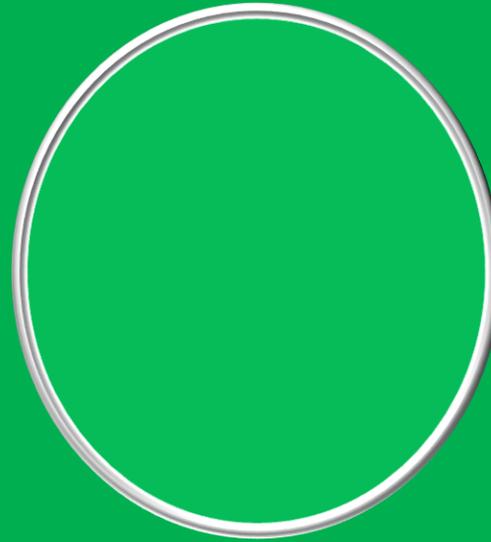
Traffic light:



Green



Traffic light:



Green



A, B, C, D Cards

A



A, B, C, D Cards

B



A, B, C, D Cards

C



A, B, C, D Cards

D