



Year 9 Knowledge organiser Book 1:

Name	
Form	

Day	Homework 1	Homework 2
Monday week 1	English	
Tuesday week 1	Maths	Option A
Wednesday week 1	Science	
Thursday week 1	RE	Option B
Friday week 1	Option C	
Monday week 2	English	
Tuesday week 2	Maths	Option A
Wednesday week 2	Science	
Thursday week 2	RE	Option B
Friday week 2	Option C	

My option subjects	Subject
Option A	
Option B	
Option C	

Subject: Maths p7-14	
Week beginning	Homework instructions
4th November	Page 1 - 9JMM, 9QME Page 5 - 9JCG, 9JCN, 9QCN, 9QMLD, 9QMM
11th November	Complete the written homework task set by your class teacher to be handed in on you next maths lesson for feedback
18th November	Page 2 - 9JMM, 9QME Page 6 - 9JCG, 9JCN, 9QCN, 9QMLD, 9QMM
25th November	Complete the written homework task set by your class teacher to be handed in on you next maths lesson for feedback
2nd December	Page 3 - 9JMM, 9QME Page 7 - 9JCG, 9JCN, 9QCN, 9QMLD, 9QMM
9th December	Complete the written homework task set by your class teacher to be handed in on you next maths lesson for feedback
16th December	Page 4 - 9JMM, 9QME Page 8 - 9JCG, 9JCN, 9QCN, 9QMLD, 9QMM

Subject: English p15	
Week beginning	Homework instructions
4th November	Using the words from the 'Vocabulary' box and quotations from the 'Key Quotations' box, write at least three PEE paragraphs about the character of Romeo.
11th November	Using the words from the 'Vocabulary' box and quotations from the 'Key Quotations' box, write at least three PEE paragraphs about the character of Juliet.
18th November	Summarise the plot of 'Romeo and Juliet' in 100 words.
25th November	Create a mindmap exploring the theme of 'love' in the play. Include five key quotations.
2nd December	Create a mindmap exploring the theme of 'fate' in the play. Include five key quotations.
9th December	Create a mindmap exploring the theme of 'conflict' in the play. Include five key quotations.
16th December	Answer the following question, giving reasons for your response. 'Who is ultimately responsible for the deaths of Romeo and Juliet?'

Subject: Science p21-23	
Week beginning	Homework instructions
4th November	Use the science knowledge organiser on motion. Use the read, cover, write and check methodology for the sections on: <ul style="list-style-type: none"> • Scalar and vector • Speed, distance and time including distance / time graphs
11th November	Your teacher will assign you 150 questions to complete on Tassomai.
18th November	Use the science knowledge organiser on motion. Use the read, cover, write and check methodology for the sections on: <ul style="list-style-type: none"> • Equations of motion • Velocity time graph • Mass and Weight
25th November	Your teacher will assign you 150 questions to complete on Tassomai.
2nd December	Use the science knowledge organiser on motion and forces. Use the read, cover, write and check methodology for the sections on: <ul style="list-style-type: none"> • Newtons 1st law • Newtons 2nd Law • Newtons 3rd law
9th December	Your teacher will assign you 150 questions to complete on Tassomai.
16th December	Use the science knowledge organiser on stopping distance. Use the read, cover, write and check methodology for the sections on: <ul style="list-style-type: none"> • Reaction times • Stopping distance

Subject: RE p24-27	
Week beginning	Homework instructions
4th November	1.Sacraments. Use the read, cover, write and check methodology to learn the key word, meaning, example, reference why? To be tested in class.
11th November	2.Liturgical worship and 3. Eucharist. Use the read, cover, write and check methodology to learn the key word, meaning, example, reference/ why? To be tested in class.
18th November	4. Funeral rite. Use the read, cover, write and check methodology to learn the key word, meaning, example, reference /why? To be tested in class.
25th November	5. Prayer and 6. Popular piety. Use the read, cover, write and check methodology to learn the key word, meaning, example, reference /why? To be tested in class.
2nd December	7.Pilgrimage. Use the read, cover, write and check methodology to learn the key word, meaning, example, reference /why? To be tested in class.
9th December	8. Catholic social teaching 9. Corporal works of mercy. Use the read, cover, write and check methodology to learn the key word, meaning, example, reference /why? To be tested in class.
16th December	10. Spiritual works of mercy. 11.Catholic Mission 12.Evangelism. 13.New evangelism. 14. Traditional evangelism. Use the read, cover, write and check methodology to learn the key word, meaning, example, reference /why? To be tested in class.

Subject: History p28-31	
Week beginning	Homework instructions
4th November	Look at the first part of the Knowledge Organiser on Peacemaking. Create a mind map on the key terms of the Treaty of Versailles using Section C (13-18). Then, add Germany's objections to each of these terms using Section E (22-28).
11th November	Look at the first part of the Knowledge Organiser on Peacemaking. Use Section D to recap the extent to which the Allies achieved their aims at the Paris Peace Conference. Use the look, cover, write, check, purple pen method on Section D (19-21). You need to do all parts, including evidence of their aims being achieved and not being achieved.
18th November	Look at the new Knowledge Organiser on the League of Nations. Use the look, cover, write, check, purple pen method on Section A: 'Aims of the League of Nations', Section B 'the powers of the League' and Section C 'The structure of the League of Nations'.
25th November	Look at the new Knowledge Organiser on the League of Nations. Use the look, cover, write, check, purple pen method on Section C 'The structure of the League of Nations' and Section D 'Key terminology'.
2nd December	Look at the new Knowledge Organiser on the League of Nations. Create a table using Section E and F: 'The strengths and weaknesses of the League of Nations'. Based on this, explain how likely it was that the League would succeed from the outset in a paragraph.
9th December	Look at the new Knowledge Organiser on the League of Nations. Use the look, cover, write, check, purple pen method on each of the events in Section H 'The League of Nations in the 1920s'. Then, for each event explain the extent to which the League was a success / failure.
16th December	Look at the new Knowledge Organiser on the League of Nations. Use the look, cover, write, check, purple pen method on each of the commissions in Section G: 'Commissions'. You should attempt to complete each part of the table from memory, and mark this yourself as you go along with making corrections/additions.

Subject: Geography p32	
Week beginning	Homework instructions
4th November	Answer the questions set by your teacher, which are stuck in your Homework book, using the Knowledge Organiser. Use pictures to help you remember the answers. Use the Look, Cover, Write, Check to revise for the low stakes test in lesson.
11th November	Answer the questions set by your teacher, which are stuck in your Homework book, using the Knowledge Organiser. Use pictures to help you remember the answers. Use the Look, Cover, Write, Check to revise for the low stakes test in lesson.
18th November	Answer the questions set by your teacher, which are stuck in your Homework book, using the Knowledge Organiser. Use pictures to help you remember the answers. Use the Look, Cover, Write, Check to revise for the low stakes test in lesson.
25th November	Answer the questions set by your teacher, which are stuck in your Homework book, using the Knowledge Organiser. Use pictures to help you remember the answers. Use the Look, Cover, Write, Check to revise for the low stakes test in lesson.
2nd December	Answer the questions set by your teacher, which are stuck in your Homework book, using the Knowledge Organiser. Use pictures to help you remember the answers. Use the Look, Cover, Write, Check to revise for the low stakes test in lesson.
9th December	Answer the questions set by your teacher, which are stuck in your Homework book, using the Knowledge Organiser. Use pictures to help you remember the answers. Use the Look, Cover, Write, Check to revise for the low stakes test in lesson.
16th December	Answer the questions set by your teacher, which are stuck in your Homework book, using the Knowledge Organiser. Use pictures to help you remember the answers. Use the Look, Cover, Write, Check to revise for the low stakes test in lesson.

Subject: Spanish p34-35	
Week beginning	Homework instructions
4th November	Learn vocabulary from booklet. (Details to be provided by the teacher.)
11th November	Learn vocabulary from booklet. (Details to be provided by the teacher.) KO - Practise the present tense of regular verbs and complete the exercises.
18th November	Learn vocabulary from booklet. (Details to be provided by the teacher.)
25th November	Learn vocabulary from booklet. (Details to be provided by the teacher.) KO - Read the notes about subject pronouns and complete the sentences with the correct ones.
2nd December	Learn vocabulary for assessment. (Details to be provided by the teacher.)
9th December	Learn vocabulary from booklet. (Details to be provided by the teacher.) KO - Practise using the verbs Tener and Ser. Fill in the gaps with the correct forms of the verbs.
16th December	Learn vocabulary from booklet. (Details to be provided by the teacher.)

Subject: Computing p16	
Week beginning	Homework instructions
4th November	Key Vocabulary: Create a set of flashcards to help you learn the key vocabulary for Data Representation.
11th November	Teacher set task: You will be given a set of questions by your teacher based on Data Representation.
18th November	Binary Addition: Use the knowledge organiser to understand why an overflow error occurs. Learn the rules for binary addition.
25th November	Teacher set task: You will be given a set of questions by your teacher based on Data Representation.
2nd December	Binary Shift: Use the knowledge organiser to practice binary shift (left and right). Create your own learning resource to help you remember the shift rules.
9th December	Revision: teacher set revision for end of unit test.
16th December	Teacher set task: You will be given a set of tasks by your teacher to complete.

Subject: Creative Media Production p17	
Week beginning	Homework instructions
4th November	What is a mood board? Use look, cover, write, check to understand the difference between digital & physical mood boards and purpose & use of mood boards.
11th November	Teacher set task: This will be based on the filming project we have started. It must be completed to help us continue with the film.
18th November	Mood Board Content: Use the knowledge organiser to help you with your work on the film mood board. You will be given a section to complete by your class teacher.
25th November	Teacher set task: This will be based on the filming project we have started. It must be completed to help us continue with the film.
2nd December	Film Mood Board: You will be given a section of work to complete based on the film task we are working on.
9th December	Film Mood Board: You will be given a section of work to complete based on the film task we are working on.
16th December	Teacher set task: This will be based on the filming project we have started. It must be completed to help us continue with the film.

Subject: Engineering p36-37	
Week beginning	Homework instructions
4th November	Use KO's to embed understanding of Ferrous metal, Non-ferrous metal, Thermoforming polymer, Thermosetting polymer
11th November	Use KO's and further research to understand properties of polymers and how a materials property makes it suitable for a given application.
18th November	Using KO's and further research demonstrate an understanding of the engineering terms cutting, drilling, sawing, filing, shearing and be able to identify engineering tools and equipment associated with each.
25th November	Using KO's and further research demonstrate an understanding of the following engineering shaping techniques: turning, milling and shearing and be able to identify processes associated with each.
2nd December	Using KO's and further research demonstrate an understanding of the of the following engineering forming techniques: forging, casting, extruding, moulding, folding, bending and be able to identify processes associated with each.
9th December	Using KO's and further research embed an understanding of the following engineering joining techniques: fastening, bonding, soldering, brazing.
16th December	Revise all content in preparation for summative assessment.

Subject: Hospitality and Catering p38-39	
Week beginning	Homework instructions
4th November	Create a poster on the kitchen brigade team. This will act as a revision guide for you. You must keep this safe to revise from.
11th November	Copy the The Kitchen Brigade is a system for setting out and explaining the job roles and responsibilities of those who work in the kitchen. Test to follow.
18th November	Learn the role of the staff who work front of house are the first people that customers meet when they arrive at an establishment. They have a variety of roles. Create a spider diagram and revise the different roles.
25th November	Learn the different types of hospitality and catering standards and ratings in preparation for mini test next lesson.
2nd December	Recap hospitality and catering standards. Create spider diagram and revise for next week.
9th December	Revise food hygiene ratings and create spider diagram.
16th December	Revise both knowledge organisers for end of term assessment.

Subject: Business Enterprise p33	
Week beginning	Homework instructions
4th November	Learn keywords, including from last term.
11th November	Revise the risks to a business - this should include being able to explain what is meant by unlimited liability. Give examples of businesses that will have limited liability and unlimited liability.
18th November	Learn the different rewards of starting a business. This should be linked in with the importance of meeting customer wants and needs.
25th November	What is meant by adding value? Give examples of how different businesses have added value to their products. Why is it important for a business to add value to their products? What will happen if they do not continue to add value?
2nd December	Revise the factors of production?
9th December	Practice questions linked to adding value, risk and rewards.
16th December	Topic revision - this should include everything covered this year.

For the following subjects your teacher will provide you with instructions for your homework and the use of their knowledge organiser

Art, Graphic Design, Textiles, Health and social care, Travel and Tourism, Music and Sport



Imperial measurements (weight)

Imperial units of weight include ounce (oz), pound (lb) and stone (st).

The conversions are as follows:

- 1 ounce is worth 28 grams
- 1 pound is worth 453 grams.
- 1 stone is worth 6.3 kilograms

Key Vocabulary

Conversion = The process of changing from one form to another.

Imperial = relating to or denoting the system of non-metric weights and measures (the ounce, pound, stone, inch, foot, yard, mile, acre, pint, gallon, etc.) formerly used for all measures in the UK, and still used for some

Imperial - metric Conversion (distance)

1 inch = 25 millimetres	1 mile = 1600 metres
2 inches = 50 millimetres	2 miles = 3200 metres
3 inches = 75 millimetres	3 miles = 4800 metres
4 inches = 100 millimetres	4 miles = 6400 metres
5 inches = 125 millimetres	5 miles = 8000 metres
6 inches = 150 millimetres	6 miles = 9600 metres
7 inches = 175 millimetres	7 miles = 11200 metres
8 inches = 200 millimetres	8 miles = 12800 metres
12 inches = 300 millimetres	9 miles = 14400 metres

Imperial measurements (distance)

Metric units of capacity include: inches (in) feet (ft) and mile (mi)

The conversions are as follows:

- 1 inch is worth 25 millimetres
- 12 inches is worth 1 foot
- 1 mile is worth 1600 metres



Algebraic Tables

$4a \times 1a = 4a^2$	$5ab \times 1 = 5ab$
$4a \times 2a = 8a^2$	$5ab \times 2 = 10ab$
$4a \times 3a = 12a^2$	$5ab \times 3a = 15a^2b$
$4a \times 4a = 16a^2$	$5a \times 5ab = 25a^2b$
$4a \times 5 = 20a$	$6ab \times 6ab = 36a^2b^2$
$4a \times 6a = 24a^2$	$7ab \times 7 = 49ab$
$4a \times 7a = 49a^2$	$8ab \times 8ab = 64a^2b^2$
$4a \times 8 = 32a^2$	$9ab \times 9ab = 81a^2b^2$
$4a \times 9 = 36a$	$10ab \times 10ab = 100a^2b^2$
$4a \times 10a = 40a^2$	

Key Vocabulary

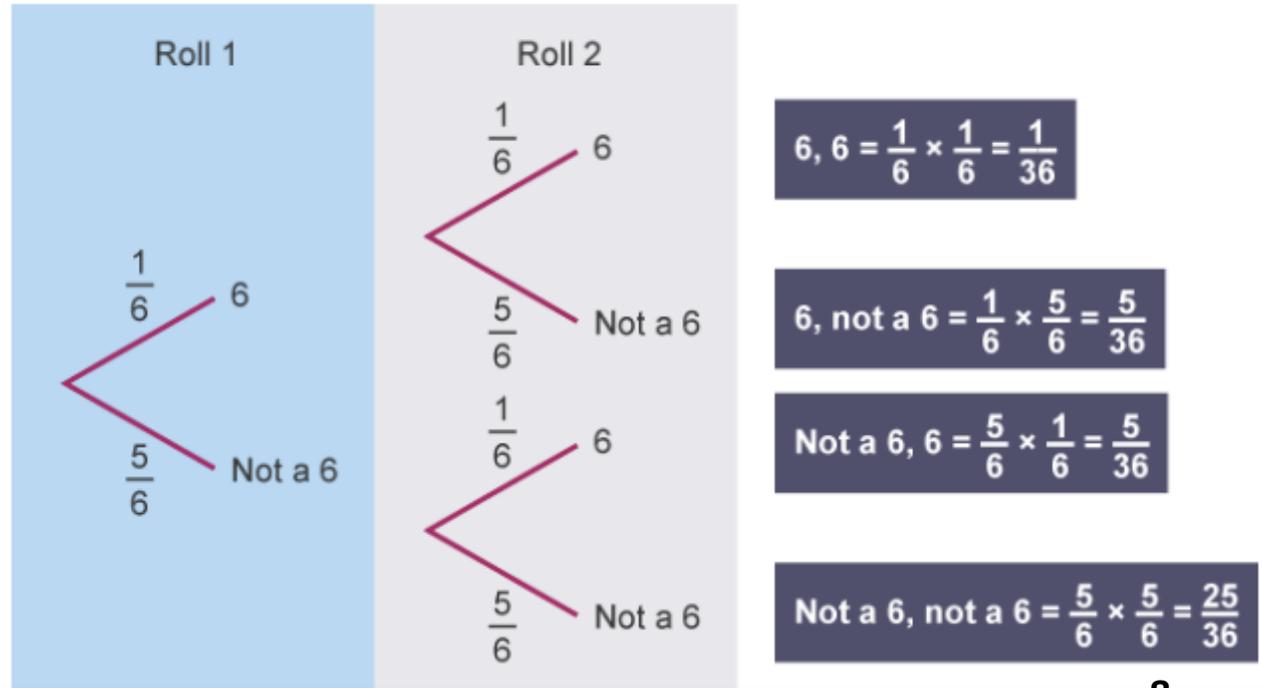
Tree diagrams are a way of showing combinations of two or more events. Each branch is labelled at the end with its outcome and the **probability** is written alongside the line.

Tree Diagrams

Two events are independent if the probability of the first event happening has no impact on the probability of the second event happening.

For example, the probability of rolling a 6 on a die will not affect the probability of rolling a 6 the next time. The scores on each roll are independent.

There are four possible outcomes. To work out the probabilities of each combination, multiply the probabilities together.





KEY
FORMULAE

$$A = \pi r^2$$

$$A = bh$$

$$C = \pi d$$

$$A = \frac{3}{4}(\pi r^2)$$

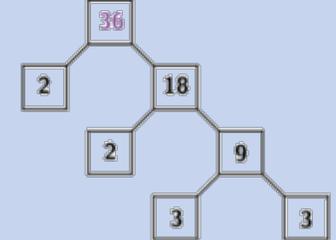
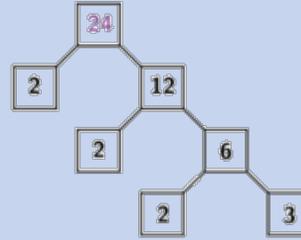
Key Vocabulary

Radius = A straight line from the centre to circumference of a circle

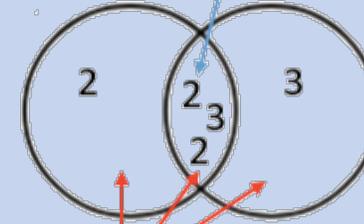
Diameter = A straight line passing from side to side through the centre of a circle

Circumference = Enclosing boundary of a curved shape

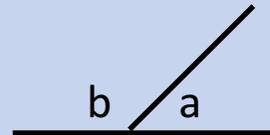
Find the HCF and LCM of 24 and 36



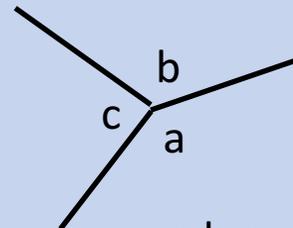
$$\text{HCF: } 2 \times 2 \times 3 = 12$$



$$\text{LCM: } 2 \times 2 \times 2 \times 3 \times 3 = 72$$

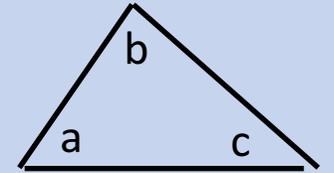


$$a + b = 180^\circ$$

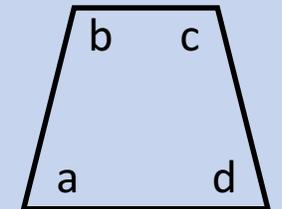


$$a + b + c = 360^\circ$$

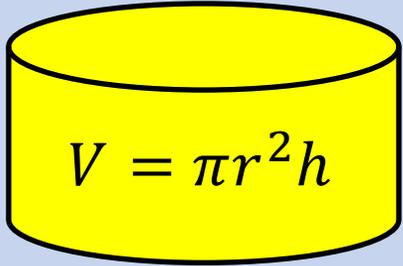
KEY
ANGLE
FACTS



$$a + b + c = 180^\circ$$

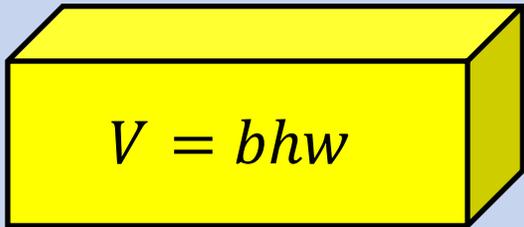


$$a + b + c + d = 360^\circ$$

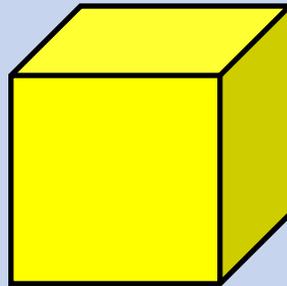


$$V = \pi r^2 h$$

KEY
FORMULAE



$$V = bhw$$



$$V = bhw$$

Key Vocabulary

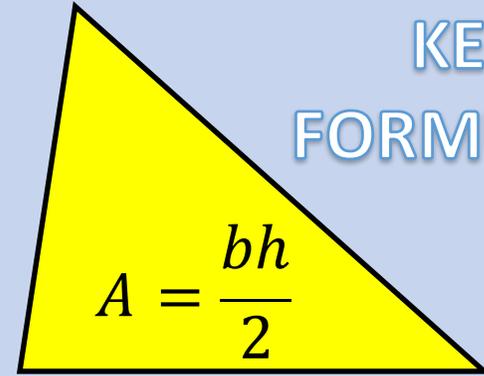
Cross Section = A surface exposed by making a straight cut through a 3D Shape

Surface = The upmost layer of something

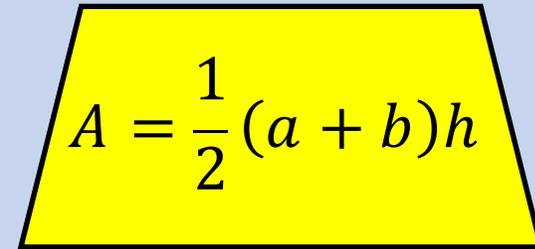
Dimension = A measurable extent of a particular kind

$$A = bh$$

$$A = bh$$

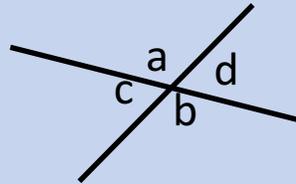


$$A = \frac{bh}{2}$$



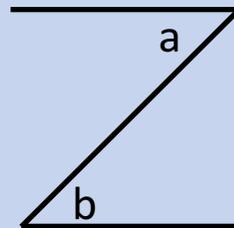
$$A = \frac{1}{2}(a + b)h$$

KEY
FORMULAE

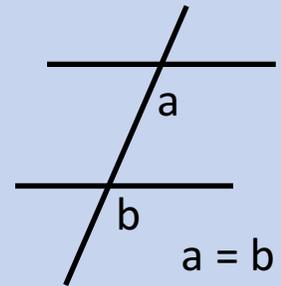


$$a = b$$
$$c = d$$

Because Vertically opposite angles are equal



$a = b$
Because alternate angles are equal



$a = b$
Because corresponding angles are equal

KEY
ANGLE
FACTS



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Imperial - Metric Conversion (Distance)

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2 inches = 50 millimetres

3 inches = 75 millimetres

4 inches = 100 millimetres

5 inches = 125 millimetres

6 inches = 150 millimetres

7 inches = 175 millimetres

8 inches = 200 millimetres

12 inches = 300 millimetres

1 mile = 1600 metres

2 miles = 3200 metres

3 miles = 4800 metres

4 miles = 6400 metres

5 miles = 8000 metres

6 miles = 9600 metres

7 miles = 11200 metres

8 miles = 12800 metres

9 miles = 14400 metres

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1 mile is worth 1600 metres



Relative Frequency

If a coin was flipped a hundred times, the amount of times a head actually did appear would be the relative frequency, so if there were 59 heads and 41 tails the relative frequency of flipping a head would be $\frac{59}{100}$ (or 0.59 or 59%).

Relative frequency is used to estimate probability when theoretical probability cannot be used.

Key Vocabulary

Relative frequency: is an estimate of **probability** and is calculated from repeated trials of an experiment.

Division Tables

$8 \div 8 = 1$	$11 \div 11 = 1$	$12 \div 12 = 1$
$16 \div 8 = 2$	$22 \div 11 = 2$	$24 \div 12 = 2$
$24 \div 8 = 3$	$33 \div 11 = 3$	$36 \div 12 = 3$
$32 \div 8 = 4$	$44 \div 11 = 4$	$48 \div 12 = 4$
$40 \div 8 = 5$	$55 \div 11 = 5$	$60 \div 12 = 5$
$48 \div 8 = 6$	$66 \div 11 = 6$	$72 \div 12 = 6$
$56 \div 8 = 7$	$77 \div 11 = 7$	$84 \div 12 = 7$
$64 \div 8 = 8$	$88 \div 11 = 8$	$96 \div 12 = 8$
$72 \div 8 = 9$	$99 \div 11 = 9$	$108 \div 12 = 9$
$80 \div 8 = 10$	$110 \div 11 = 10$	$120 \div 12 = 10$

Relative Frequency

The theoretical probability of getting a head when you flip a coin is $\frac{1}{2}$, but if a coin was actually flipped 100 times you **may not get exactly** 50 heads, although it should be close to this amount.



$$A = bh$$

$$A = bh$$

$$A = \frac{bh}{2}$$

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

KEY
FORMULAE

Key Vocabulary

Area = Measurement of a surface

Perimeter = The continuous line forming the boundary of a closed shape

Volume = The amount of space that an object occupies

Times Tables Practice

$$\begin{aligned} 1 \times 1 &= 1 \\ 2 \times 1 &= 2 \\ 3 \times 1 &= 3 \\ 4 \times 1 &= 4 \\ 5 \times 1 &= 5 \\ 6 \times 1 &= 6 \\ 7 \times 1 &= 7 \\ 8 \times 1 &= 8 \\ 9 \times 1 &= 9 \\ 10 \times 1 &= 10 \end{aligned}$$

$$\begin{aligned} 1 \times 2 &= 2 \\ 2 \times 2 &= 4 \\ 3 \times 2 &= 6 \\ 4 \times 2 &= 8 \\ 5 \times 2 &= 10 \\ 6 \times 2 &= 12 \\ 7 \times 2 &= 14 \\ 8 \times 2 &= 16 \\ 9 \times 2 &= 18 \\ 10 \times 2 &= 20 \end{aligned}$$

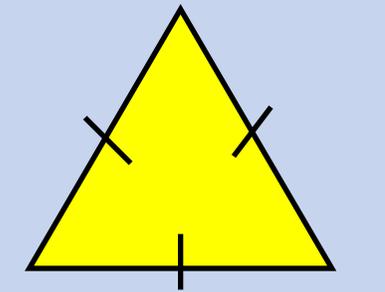
$$\begin{aligned} 1 \times 3 &= 3 \\ 2 \times 3 &= 6 \\ 3 \times 3 &= 9 \\ 4 \times 3 &= 12 \\ 5 \times 3 &= 15 \\ 6 \times 3 &= 18 \\ 7 \times 3 &= 21 \\ 8 \times 3 &= 24 \\ 9 \times 3 &= 27 \\ 10 \times 3 &= 30 \end{aligned}$$

Key Conversions

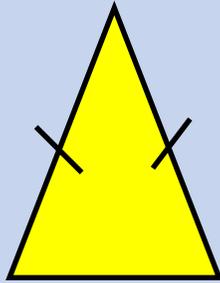
Fraction	Decimal	Percentage
$\frac{1}{2}$	0.5	50%
$\frac{1}{4}$	0.25	25%
$\frac{3}{4}$	0.75	75%



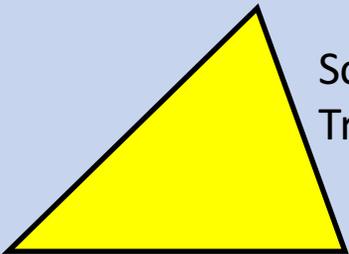
Types of Triangle



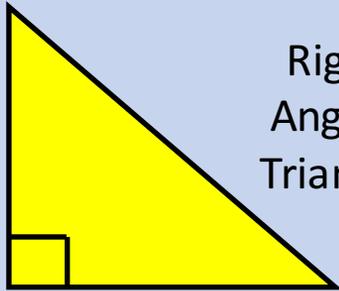
Equilateral Triangle



Isosceles Triangle



Scalene Triangle



Right Angled Triangle

Key Vocabulary

Equilateral Triangle = A triangle with 3 equal sides and 3 equal angles

Isosceles Triangle = A triangle with 2 equal sides and 2 equal angles

Scalene Triangle = A triangle with 3 unequal sides and 3 unequal angles

Times Tables Practice

$1 \times 4 = 4$

$2 \times 4 = 8$

$3 \times 4 = 12$

$4 \times 4 = 16$

$5 \times 4 = 20$

$6 \times 4 = 24$

$7 \times 4 = 28$

$8 \times 4 = 32$

$9 \times 4 = 36$

$10 \times 4 = 40$

$1 \times 7 = 7$

$2 \times 7 = 14$

$3 \times 7 = 21$

$4 \times 7 = 28$

$5 \times 7 = 35$

$6 \times 7 = 42$

$7 \times 7 = 49$

$8 \times 7 = 56$

$9 \times 7 = 63$

$10 \times 7 = 70$

$1 \times 12 = 12$

$2 \times 12 = 24$

$3 \times 12 = 36$

$4 \times 12 = 48$

$5 \times 12 = 60$

$6 \times 12 = 72$

$7 \times 12 = 84$

$8 \times 12 = 96$

$9 \times 12 = 108$

$10 \times 12 = 120$

Key Conversions

$1000\text{g} = 1\text{kg}$

$1000\text{m} = 1\text{km}$

$1000\text{ml} = 1\text{l}$

$5\text{miles} = 8\text{km}$

$10\text{mm} = 1\text{cm}$

$100\text{cm} = 1\text{m}$

$100\text{cl} = 1\text{l}$

Units for Distance

Metres, Miles, Inches, Yards, Feet

Units for Weight

Grams, Ounce, Stone, Pound

Units for Volume

Litres, cm^3 , Gallon, Pint, Fluid Ounce

Romeo and Juliet	
Plot	
Act 1	There is a fight in the streets of Verona between the servants of the Capulets and Montagues. Prince Escalus says that any more violence will result in death. Romeo is in love with Rosaline. Paris asks Capulet to marry Juliet. Romeo and the others in disguise attend a Capulet party. Romeo, Benvolio, and Mercutio arrive at the banquet. Romeo asserts that he will not dance, due to his melancholy, and he is teased by Mercutio, who humorously enlarges on his probable enchantment by Queen Mab. The group proceeds to the party, although Romeo expresses darkly ominous feelings. Romeo and Juliet meet and fall in love. Romeo discovers that Juliet is a Capulet.
Act 2	Romeo separates himself from his friends as they leave the party. Juliet appears at a high window and Romeo admires her beauty. Believing herself to be alone, she soliloquizes about her love for Romeo, regretting that he is a Montague. He reveals himself, and they speak of their love and exchange vows. Juliet is called away by the Nurse, but she returns to say that she will send a messenger to Romeo the next day, to whom he can convey a plan for them to marry. Romeo arrives and tells Friar Laurence of his new love and asks his help in marrying her. The Friar agrees, hoping that their alliance will end their families' feuding.
Act 3	Mercutio begins to pick a fight with Tybalt. Romeo appears and is insulted by Tybalt, who challenges him to a duel. Romeo excuses himself, citing mysterious reasons why he and Tybalt should be friends, but Mercutio cannot tolerate this and draws his sword on Tybalt. Romeo attempts to separate them, and Mercutio is mortally wounded by Tybalt. Mercutio, curses both Montagues and Capulets for their feuding and dies. Tybalt returns, and Romeo fights and kills him. Romeo flees. The Prince appears and interrogates Benvolio. Judging Tybalt to be guiltier than Romeo, he spares the latter the death sentence but banishes him from Verona. The Nurse brings her word of Tybalt's death and Romeo's banishment. Juliet speaks of suicide and the Nurse volunteers to bring Romeo to her.
Act 4	Paris speaks to Friar Laurence. Juliet arrives and coolly deflects Paris' courtesies. Once alone with the Friar, she desperately craves assistance. Her talk of suicide suggests a plan to him: he will provide her with a potion that will make her seem to be dead. She will be placed in the family crypt, where Romeo will meet her so that they can flee together. Juliet, alone in her bedroom, is afraid that the Friar's potion may actually kill her. But she steels herself and drinks the potion. The Nurse, unable to rouse Juliet, raises the alarm that she is dead.
Act 5	Balthasar arrives in Mantua with the news that Juliet has died. Romeo immediately plans to return to Verona and join his beloved in death; he buys a fast-acting poison from an Apothecary. Paris visits Juliet's tomb at night. Romeo appears. Romeo and Paris fight. Romeo kills Paris. Romeo drinks the poison and dies. Friar Laurence arrives and views the carnage just as Juliet awakens. Juliet kisses her dead lover and stabs herself with his dagger. The Prince arrives, followed by Juliet's parents and Romeo's father, all of them drawn by the news of the tragedy. The Friar gives an account of Juliet's feigned death and Romeo's misinformation. The Prince points out that the feud between the two families has led to this moment, and Montague and Capulet forswear their hostility and vow to erect golden statues of the two lovers

Characters	
Romeo	Montague. At the start of the play, he is in love with Rosaline. He could be described as childish and emotional.
Juliet	Capulet. At the start, she is overpowered by her father. She does mature as the play unfolds.
Tybalt	Capulet. Violent and very loyal to his house. His death is a catalyst to Romeo and Juliet's downfall.
Mercutio	Aligned with the Montagues. Offers comedic value to the play. His death is a turning point.
Benvolio	Montague. Romeo's cousin and best friend. Avoids conflict unlike Tybalt.
Lord Capulet	Juliet's father. A nobleman – very concerned with power and loyalty. Tries to control his daughter and wants her to marry Paris.
Lady Capulet	She is not very close with her own daughter (Juliet). She is a typical wife of a nobleman.
Lord Montague	Romeo's father. Involved in ancient feud with the Capulet family.
Lady Montague	Romeo's mother and wife of Lord Montague. Dies of grief after Romeo's exile.
Friar Lawrence	Wise and advises Romeo. Romeo values his opinion. Gives Juliet the sleeping potion but his plan fails.
The Nurse	a motherly figure to Juliet and is very close to her. She offers comedic value to the play. Her jokes often include innuendo.
Prince Escalus	Keeper of peace in Verona. He banishes Romeo as he breaks the law.
Themes	
Love	Hate
Christianity	Youth
Family	Tragedy
Loyalty	Death
Fate	Conflict

Vocabulary	Key Quotations
Romeo: emotional, childish, youthful, fickle, naive, reckless, dedicated.	Romeo "Love is a smoke made with the fume of sighs" "Juliet is the sun" "Villain am I none" "O sweet Juliet, thy beauty hath made me effeminate." "Here lies Juliet, and her beauty makes this vault a feasting presence full of light."
Juliet: impressionable, naive, self-assured, rebellious, dedicated.	Juliet "Madam, I am here." "You kiss by the book" "It is too rash, too unadvised, too sudden, too like... lightning" "If all else fail, myself have power to die." "Henceforward I am ever ruled by you" "O happy dagger."
Tybalt: violent, aggressive, loyal, strong, powerful.	Tybalt "Peace? I hate the word, As I hate hell, all Montagues, and thee." "Uncle, this is a Montague, our foe, A villain that is hither come in spite" "Thou art a villain."
Mercutio: humorous, dark, violent, angry, dual-personality, loyal, reckless.	Mercutio "If love be rough with you, be rough with love." 'O, then, I see Queen Mab hath been with you." 'A plague o' both your houses!"
Benvolio: loyal, mild, thoughtful.	Benvolio "Part fools! Put up your swords, you know not what you do" "Compare her face with some that I shall show, And I will make thee think thy swan a crow." "pray thee, good Mercutio, let's retire... these hot days is the mad blood stirring" "Withdraw to some private place... or reason coldly of your grievances"
Lord Capulet: old, traditional, unwavering, aggressive, devastated, regretful.	
The Nurse: humorous, maternal, nurturing, vulgar, sentimental.	
Friar Lawrence: paternal, trustworthy, wise, compassionate.	
Prince Escalus: powerful, noble.	Lord Capulet "My child is yet a stranger in the world" "Am I the master here, or you?" "Hang thee, young baggage, disobedient wretch!" "Hang, beg, starve, die in the streets" "O brother Montague, give me thy hand"
	

Computer Science - Data Representation

KEY VOCABULARY	
Overflow Error	Where the denary value cannot be represented with the given number of bits.
Binary Shift	The method for multiplying and dividing numbers in binary. Is not necessarily mathematically correct
Most Significant Bit	The left-most bit in a binary number – it has the highest value
Least Significant Bit	The right-most bit in a binary number – it has the lowest possible value = 0 or 1
Check Digits	Bits used to ensure that the value sent digitally is not corrupted on transfer
Lossy Compression	Data is removed from the file to make it smaller. This data is lost and cannot be regained. Suitable where the loss of data is likely not to be noticed. Eg images
Lossless Compression	No data is lost, but rather rearranged to ensure a perfect version of the data can be returned. Used where exact reproduction is vital. Eg text documents
JPEG / JPG	Joint Photographic Experts Group Compression for images – lossy
GIF	Graphics Interchange Format Lossless bitmapped image format for limited colours.
PDF	Printable Document Format Open standard for reproducing text and graphic documents without editing permissions – lossless
MPEG	Moving Pictures Expert Group Audio-Visual encoding for video Lossy
MP3	Moving Pictures Expert Group Audio Layer 3 Digital music files. Lossy compression, but very good and generally only removes sounds that are beyond human hearing range

BINARY ADDITION

0	1	0	1
+0	+0	+1	+1
00	01	01	10

↑
carried bit

When adding 2 large binary numbers, if there is not enough bits to take the *carried bit* then this results in an **OVERFLOW ERROR**

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

↑
This value is not counted, it is *overflow*.

In 8 bits, this sum reads : 203 + 94 = 43!

BINARY SHIFT

Multiplication	Binary shift to the LEFT
Division	Binary shift to the RIGHT

By **moving the bits** to either the left of the right, we can double (x2) or halve (%2) the value with each movement.

8	4	2	1	=11
1	0	1	1	

A 1 place RIGHT SHIFT (divide by 2)

8	4	2	1	=5
0	1	0	1	1

The bits which are moved outside of the available value places are **LOST**. They cannot be returned by reversing the shift. The same is true at the highest place value

8	4	2	1	=11
1	0	1	1	

A single LEFT SHIFT (multiply by 2) would result in an overflow error (when represented with 4 bits.)

8	4	2	1	=10
1	0	1	1	0

Creative Media Production - Mood Boards

What is a mood board? A mood board is a collection of sample materials and products.

What is a physical mood board?	What is a digital mood board?	What is the purpose of a digital mood board?	When could I use a mood board?
This is an example of a notice board or a large piece of paper or card, using pictures and samples that are fixed to it.	This is an example which has been created in any software application that supports multiple images, graphics, text and other content.	<ul style="list-style-type: none"> To assist the generation of ideas by collecting a wide range of material that will give a feel for what is needed. To stimulate creativity and innovative approaches. 	<ul style="list-style-type: none"> For any creative media project as a starting point. To collect samples, materials and a range of relevant content. As a constant reminder of possible styles.

NOTE: The use of a mood board is NOT to show what a product will look like.

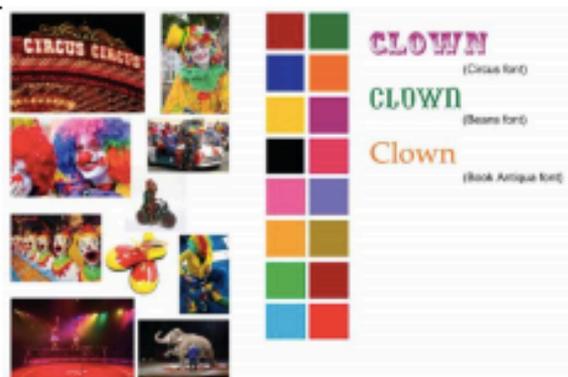
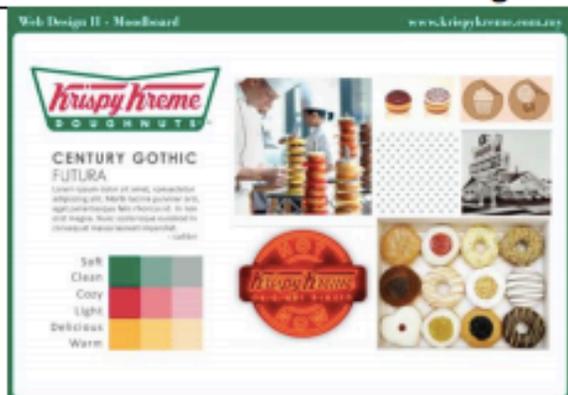
What type of content would I include within a mood board?

- Images – from anything that is relevant or related, such as existing similar products, photographs, logos, screenshots from films, advertisements, posters.
 - Colours – especially those that fit the brief or have been used before in a similar product.
 - Text, keywords, fonts and styles.
 - Textures, fabrics and other materials.

For a digital mood board – potentially sound and video clips.

Examples of how a Mood Board should look:

Digital Mood Board



Physical Mood Board





Year 9 Art & Design - Knowledge Organiser Term 1

A: Key Skills:

- 1: Display knowledge & understanding
- 2: Research, investigate, select, collect & analyse
- 3: Drawing ability
- 4: Recording ideas and insights
- 5: Reflective annotation

B: Reflection:

- What?** Explain what it is
Why? Explain how this will help your investigation
How? How did you create
Quality? WWW EBI
Learning? What have you discovered

Literacy: Key Vocabulary

Composition

The arrangement and layout of artwork/objects

Media

Refers to the materials that are used to create a work of art.

Primary

The most important feature.

Detail

Decorative feature in a piece of art work.

Refine

Something that's refined has gone through a process to improve it.

Observation

the action or process of closely observing or monitoring something or someone.

Tone

Various ranges of lightness and darkness.

Shade

To make colours lighter or darker to make an image look realistic and solid.

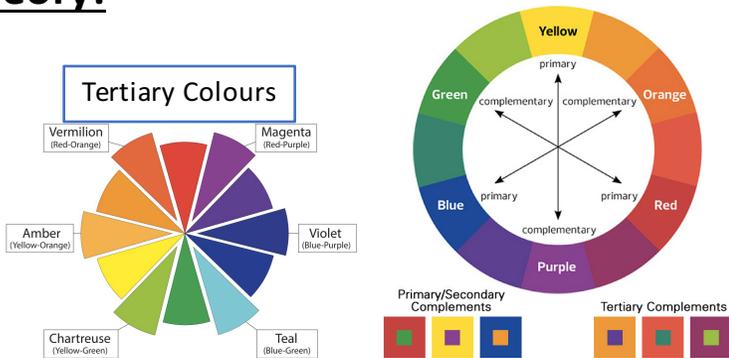
Line

A line is a mark on a surface which describes a shape or outline. It can create texture and can be thick or thin.

Shape

Shape is a 2- dimensional line with no form or thickness, shapes are flat and can be grouped into two categories, geometric and organic

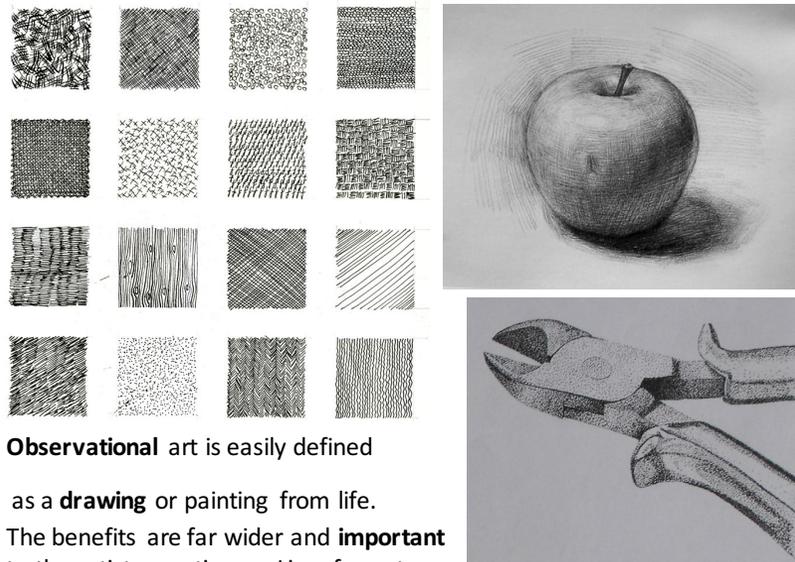
Theory:



Elements of art

The elements of art are the building blocks of all art. Every piece of art ever created includes one or more of these elements. line, colour, shape, form, value, space, and texture.

Drawing from observation:



Observational art is easily defined

as a **drawing** or painting from life. The benefits are far wider and **important** to the artists practice. ... Line, form, tone, colour all improve just by the act of observing and **drawing**



Year 9 Graphic Design- Knowledge Organiser Term 1

A: Key Skills:

- 1: Display knowledge & understanding
- 2: Research, investigate, select, collect & analyse
- 3: Drawing ability
- 4: Recording ideas and insights
- 5: Reflective annotation

B: Expressing an opinion:

Sentence starters

- I feel/believe that
- In my opinion
- It seems to that
- Based on my experience

Literacy: Key Vocabulary

Composition

The arrangement and layout of artwork/objects

Media

Refers to the materials that are used to create a work of art.

Primary

The most important feature.

Detail

Decorative feature in a piece of art work.

Refine

Something that's refined has gone through a process to improve it.

Contrast

The arrangement of opposite elements (light vs dark, rough vs smooth) in a composition so as to create visual interest

Emphasis

Used to make certain parts of an artwork stand out. It creates the center of interest or focal point.

Pattern

The repetition of specific visual elements such as a unit of shape or form.

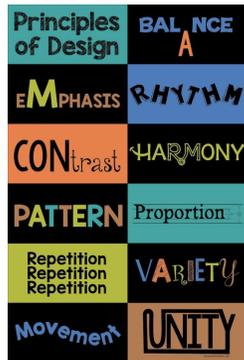
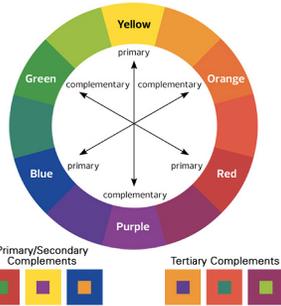
Rhythm

A harmonious sequence or correlation of colours or elements.

Design

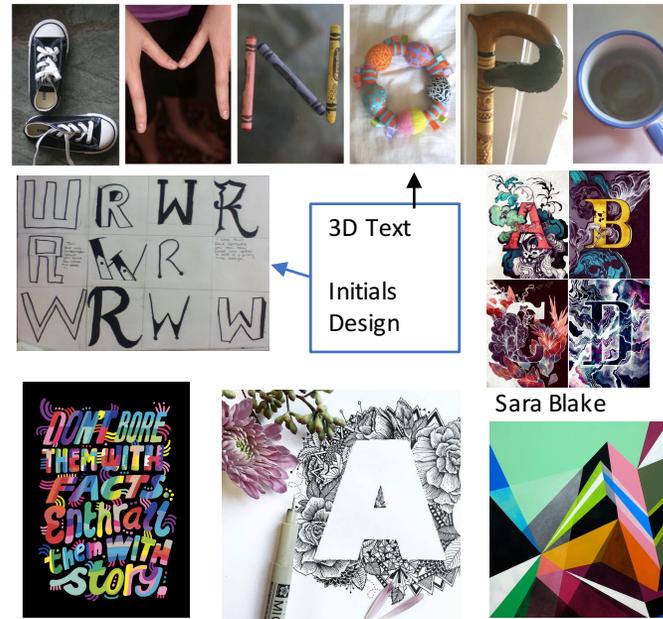
The combination of details or features of a picture

Theory:



The **principles of design** are the rules a designer must follow to create an effective composition that cleanly delivers a message to her audience. The most important, fundamental **principles of design** include emphasis, balance and alignment, contrast, repetition, proportion, movement and white space.

Logo Design:



Kate Moross

Maggie Sitcher

Matt W Moore

3D Text
Initials Design



Sara Blake



Year 9 Textile Design - Knowledge Organiser Term 1

A: Key Skills:

- 1: Display knowledge & understanding
- 2: Research, investigate, select, collect & analyse
- 3: Drawing ability
- 4: Recording ideas and insights
- 5: Reflective annotation

B: Reflection:

- What?** Explain what it is
Why? Explain how this will help your investigation
How? How did you create
Quality? WWW EBI
Learning? What have you discovered

Literacy: Key Vocabulary

Composition

The arrangement and layout of artwork/objects

Media

Refers to the materials that are used to create a work of art.

Primary

The most important feature.

Detail

Decorative feature in a piece of art work.

Refine

Something that's refined has gone through a process to improve it.

Observation

the action or process of closely observing or monitoring something or someone.

Tone

Various ranges of lightness and darkness.

Shade

To make colours lighter or darker to make an image look realistic and solid.

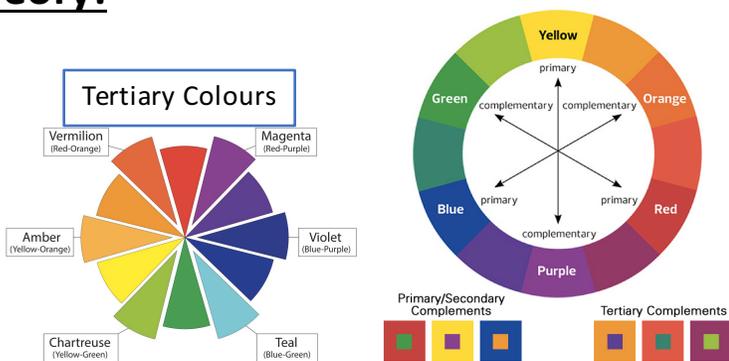
Line

A line is a mark on a surface which describes a shape or outline. It can create texture and can be thick or thin.

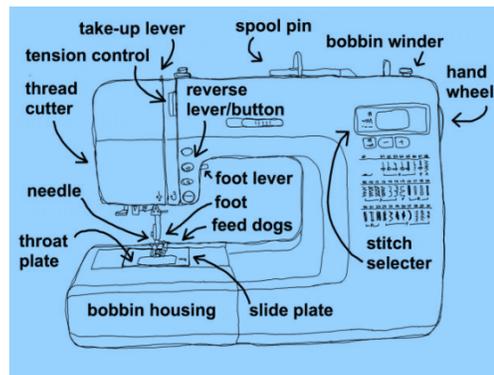
Embroidery

A hand or machine sewing technique used to embellish and decorate fabric.

Theory:



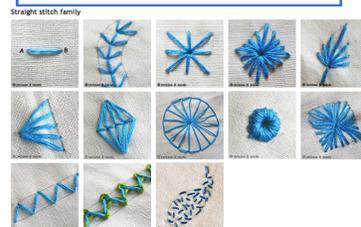
Technique & Processes:



Elements of art

The elements of art are the building blocks of all art. Every piece of art ever created includes one or more of these elements. line, colour, shape, form, value, space, and texture.

Hand Embroidery



Kandinsky



Matt W Moore



Scalars and vectors

All physical quantities can be described as either a scalar or a vector quantity.

Scalar quantities

Scalar quantities have a size or a magnitude but no specific direction.

Examples include:

- mass
- energy
- speed
- temperature.
- distance

Vector quantities

Vector quantities have a size or magnitude and a specific direction.

Examples include:

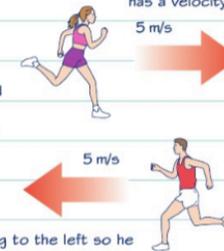
- force or weight
- acceleration
- velocity
- momentum.
- displacement

All vector quantities can be given positive and negative values to show their direction.

Examples include:

- 1 A force of +4N may be balanced by a force acting in the opposite direction of -4N.
- 2 A car that accelerates at a rate of +2 m/s² could decelerate at -2 m/s².
- 3 If a distance walked to the right of 20m is a displacement of +20m, then the same distance walked to the left from the same starting point is a displacement of -20m.

Speed and velocity



The girl is running to the right so she has a velocity of 5 m/s to the right.

Both the girl and the boy are running at 5 m/s. They have the same speed.

If we take 'to the right' as the positive direction, then the girl has a velocity of +5 m/s and the boy has a velocity of -5 m/s.

The boy is running to the left so he has a velocity of 5 m/s to the left.

Speed has a size but velocity has a size AND a direction.

Velocity is speed in a stated direction.

Speed, distance and time

Speed is the distance that a moving object covers each second.

Calculating speed

When a body covers the same distance per second throughout its journey, you can use this equation to calculate its speed:

$$\text{speed (m/s)} = \frac{\text{change in distance (m)}}{\text{time taken (s)}}$$

The greater the change in distance per second, the faster the object is moving.

When the change in distance over a period of time is zero, the speed is zero and the object is stationary.

Average speed

Objects often change speed during a journey, so it is better to use average speed:

$$\text{average speed (m/s)} = \frac{\text{total distance travelled (m)}}{\text{total time taken (s)}}$$

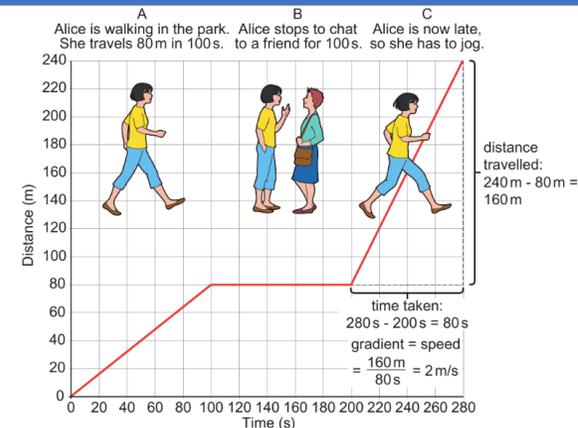
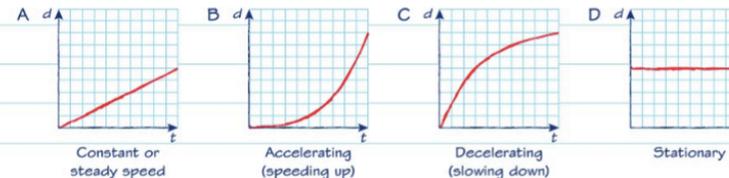
You can also write this as

$$\text{distance travelled (m)} = \text{average speed (m/s)} \times \text{time taken (s)}$$

LEARN IT!
IT'S NOT ON THE EQUATIONS LIST

Distance/time graphs

Distance/time graphs have distance on the y-axis and time on the x-axis. The gradient or slope of the graph tells us about the motion of the vehicle.



D The gradient of a distance/time graph gives the speed.

Acceleration

Acceleration is a change in velocity per second. Acceleration is a vector quantity.

$$\text{acceleration (m/s}^2\text{)} = \frac{\text{change in velocity (m/s)}}{\text{time taken (s)}}$$

$$a = \frac{(v - u)}{t}$$

- a is the acceleration
- v is the final velocity
- u is the initial velocity
- t is the time taken

Velocity

Velocity is the change in distance per second. Velocity is a vector quantity.

Velocity is a vector quantity.

$$(\text{final velocity})^2 - (\text{initial velocity})^2 = 2 \times \text{acceleration} \times \text{distance}$$

$$v^2 - u^2 = 2 \times a \times x$$

x is the distance travelled.

You can also write this as:

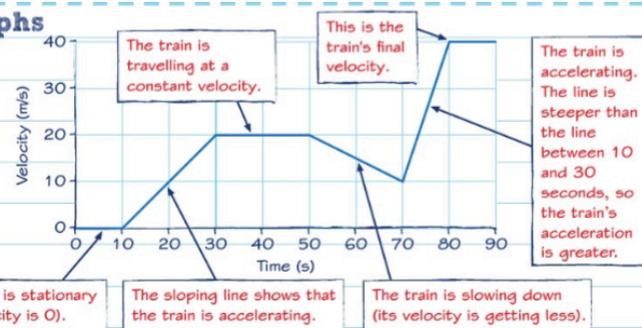
$$v^2 = u^2 + 2ax$$

LEARN IT!
IT'S NOT ON THE EQUATIONS LIST

Equations of motion

Velocity/time graphs

This velocity/time graph shows how the velocity of a train along a straight track changes with time.



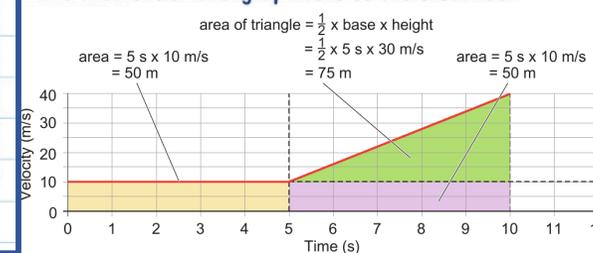
Velocity/time graphs

Velocity/time graphs show how the velocity of a vehicle changes with time. You can also work out acceleration and distance travelled from the graph.

Interpreting velocity/time graphs

Velocity/time graphs have velocity plotted on the y-axis and time plotted on the x-axis. The graph shows you how the velocity changes with time.

- The slope or gradient of the graph tells us the acceleration of the vehicle.
- The area under the graph tells us the distance



Maths skills Acceleration (gradient) = change in velocity/change in time. For distance travelled (area) use the formulae for the area of a rectangle (base \times height, $b \times h$) and area of a triangle ($\frac{1}{2} \times b \times h$). The area will have units of metres, as $\text{m/s} \times \text{s} = \text{m}$.

- (a) Acceleration is zero, distance travelled is 60 m.
- (b) Acceleration is 0.4 m/s², distance travelled is 45 m.
- (c) Acceleration is -0.27 m/s², distance travelled is 30 m.

high speed train	90 m/s
commuter train	55 m/s
motorway speed limit	31 m/s
ferry	18 m/s
speed limit in towns	10.5 m/s
cycling	6 m/s
walking	1.4 m/s

some typical speeds

CP1 Motion

The learning journey

Previously you will have learnt at KS3:

- what forces are and the effects of balanced and unbalanced forces
- how average speed, distance and time are related
- how to represent a journey on a distance-time graph.

In this unit you will learn:

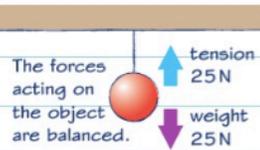
- the difference between vector and scalar quantities
- how to calculate speed and acceleration
- how to represent journeys on distance/time and velocity/time graphs
- how to use graphs to calculate speed, acceleration and distance travelled.

Newton's first law

A body will remain at rest or continue in a straight line at a constant speed as long as the forces acting on it are balanced.

Stationary bodies

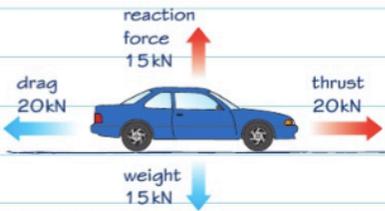
The forces acting on a stationary body are balanced.



A common mistake is to think that when the resultant force on an object is zero, the object is stationary. The object may also be travelling at a constant speed.

Bodies moving at a constant speed

The forces acting on a body moving at a constant speed, and in a straight line, are balanced.



The forces on the car are balanced. The car will continue to move at a constant speed in a straight line until another external force is applied.

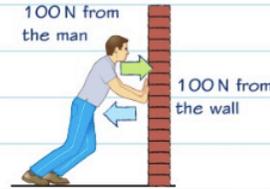
Newton's third law

Newton's third law relates to bodies in equilibrium and can be applied to collisions when considering the conservation of momentum.

Action and reaction

Newton's third law states that for every action there is an equal and opposite reaction.

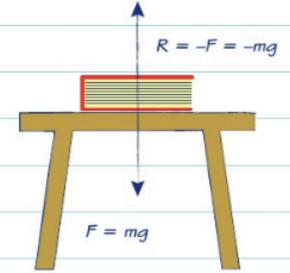
The action force and the reaction force **act on different bodies.**



Newton's third law examples

Watch out! Just because two forces are equal and opposite it does not always mean that they are an example of Newton's third law.

The reaction force of the table pushing up on the book, and the force of gravity acting downwards, are both acting on the same object - the book - so this is **not** an example of Newton's third law.

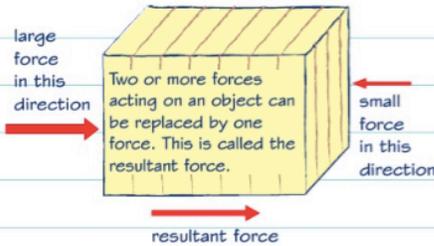


Newton's second law

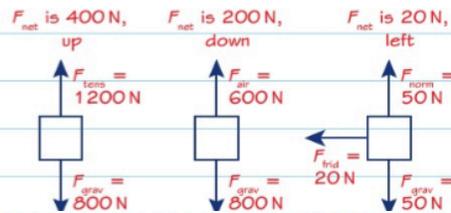
Forces and Motion

Weight and mass

When a resultant force acts on a mass then there will be a change in its velocity. The resultant force determines the size and direction of the subsequent acceleration of the mass.



When two or more forces act on the same straight line or are parallel, they can be added together to find the **resultant force.**



Forces have direction, so a force of -1N is in the opposite direction to a force of 1N.

Force, mass and acceleration

You can calculate the acceleration of an object when you know its mass and the resultant force acting on it using the equation:

$$\text{acceleration (m/s}^2\text{)} = \frac{\text{force (N)}}{\text{mass (kg)}}$$

$$a = \frac{F}{m}$$

Rearrange the equation to give the force:

$$F = m \times a$$

LEARN IT!
IT'S NOT ON THE EQUATIONS LIST

- The acceleration is in the same direction as the force.
- When the resultant force is zero, the acceleration is zero.
- A negative force means that the object is accelerating backwards or is slowing down.

Inertial mass is a measure of how difficult it is to change the velocity of a moving object and is defined as the ratio 'force over acceleration'.

Weight

Weight is the **force** that a body experiences due to its mass and the size of the gravitational field that it is in.

Weight is a **vector** quantity and is measured in **newtons (N)**.

The weight of a body on the surface of the Earth acts inwards towards the Earth's centre.

Connection between mass and weight

To find the weight of an object, use the equation:

$$\text{weight (N)} = \text{mass (kg)} \times \text{gravitational field strength (N/kg)}$$

$$W = m \times g$$

LEARN IT!
IT'S NOT ON THE EQUATIONS LIST

The weight of an object is directly proportional to the value of g , so a mass will weigh more on Earth than it does on the Moon.

Mass

Mass is a measure of the **amount of matter** that is contained within a three-dimensional space.

Mass is a **scalar** quantity and is measured in **kilograms (kg)**.

The mass of a body is not affected by the size of the gravitational field that it is in.

Measuring weight

Weight is measured using a newtonmeter.

The greater the mass attached, the more weight it will experience due to gravity and the more the spring will stretch.



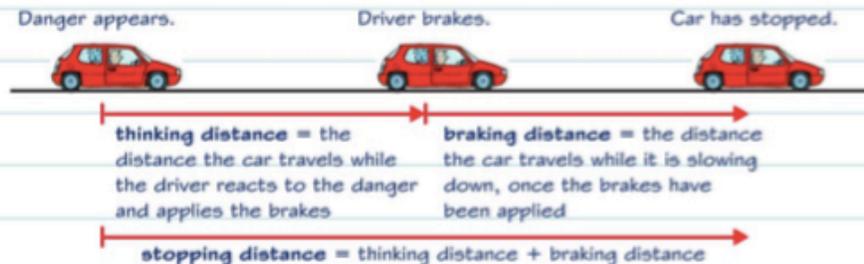
Reading the scale tells you the weight of the mass in newtons.

A 2 kg mass has twice the weight on Earth as a 1 kg mass, so the extension of the spring will be twice as big.

Stopping distances

Stopping distance is the **total distance** over which a vehicle comes to rest.

It takes time for a moving car to come to a stop, and the car is still moving during this time. Understanding the factors that affect stopping distance is important for road safety.



Factors affecting thinking distance

Thinking distance increases when the driver's reaction time increases. This can be due to:

- the driver being **tired**
- the driver being **distracted**
- the driver having taken **alcohol or drugs**.

Thinking distance also increases if the car's speed increases. If the thinking distance at 20mph is 6 m, at 40 mph it will double to 12 m.

Factors affecting braking distance

Braking distance is the distance the car travels once the brakes have been applied. It increases when:

- the amount of **friction** between the **tyres** and the **road** decreases, such as when the road is **icy or wet**
- the **brakes** are worn
- the **tyres** are worn
- the **mass** of the car is bigger.

Braking distance also increases as the speed of the car increases. If at 20mph it is 6 m, at 40 mph it will be 24 m.

Cars can experience large decelerations when they slow down, and this means that typical forces, of around 10,000 N, can be exerted on the vehicles.

The learning journey

Previously you will have learnt at KS3:

- what forces are and the effects of balanced and unbalanced forces
- what a resultant force is
- about gravity as a non-contact force.

Human reaction time

Human reaction time is the time between a **stimulus** occurring and a **response**. It is related to how quickly the human brain can process information and react to it.

Human reaction time

It takes a typical person between 0.20s and 0.25s to react to a stimulus. Some people, such as international cricketers, 100m sprinters and fighter pilots, train themselves to have improved reaction times.

For example, a top cricketer has a total time of 0.5s to play a batting stroke. The first 0.2s of this is the reaction time, the next 0.2s is the batsman's preparation to play the shot and the final 0.1s involves hitting the ball.

Reaction times and driving

Drivers have to react to changes in the traffic when driving. This may involve reacting to traffic lights changing colour, traffic slowing on a motorway or avoiding people or animals that may have walked in front of the vehicle.

The reaction time of humans may be affected by:

- ✓ tiredness
- ✓ alcohol and drugs
- ✓ distractions
- ✓ age.

Measuring reaction time

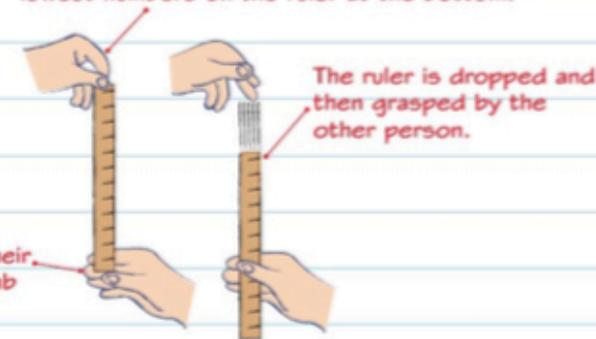
You can determine human reaction time by using the ruler drop test.

The reaction time is determined from the equation:

$$\text{reaction time} = \sqrt{\frac{2 \times \text{distance ruler falls}}{\text{gravitational field strength}}}$$

Repeats can be used to get a mean value for the reaction time.

A metre ruler is held, by a partner, so that it is vertical and exactly level with the person's finger and thumb, with the lowest numbers on the ruler at the bottom.



In this unit you will learn:

- about Newton's Laws of Motion
- how to calculate the weight of an object from its mass
- about the factors that affect the stopping distance of a vehicle
- about the dangers of large decelerations

Key Words	Example	Reference. Why?								
<p>1. Sacrament, an outward sign of the inward graces given by God.</p> 	<p>7 sacraments of the Catholic church</p> <ul style="list-style-type: none"> Confirmation Holy Communion Anointing of the sick Marriage Baptism Eucharist Reconciliation <p>Other Christian groups such as Church of England only have 2 sacraments Baptism and Eucharist. </p> <p>Some Christians don't have any sacraments as they see them as merely a way of expressing faith.</p>	<p>Catechism Catholic Church (CCC)</p> <p>The seven sacraments touch all the stages and all the important moments of Christian life.</p> <p>The Eucharist occupies a unique place as the “sacrament of sacraments.”</p> <p>These are the 2 sacraments in the Bible that Jesus started.</p>								
<p>2. Liturgical Worship, the public formal service of worship in the Catholic church.</p> 	<p>The Catholic Mass is structured ,direct link to Apostolic tradition and transubstantiation takes place.</p> <table border="1" data-bbox="616 763 1847 1220"> <tbody> <tr> <td data-bbox="616 763 955 896">Introductory Rites</td> <td data-bbox="955 763 1847 896">Gather, welcomed by the Priest, ask for forgiveness (penitential Rite) Praise God (Gloria)</td> </tr> <tr> <td data-bbox="616 896 955 992">Liturgy of the Word</td> <td data-bbox="955 896 1847 992">Readings, psalms, Gospel , Homily , nicene creed, bidding prayers</td> </tr> <tr> <td data-bbox="616 992 955 1088">Liturgy of the Eucharist</td> <td data-bbox="955 992 1847 1088">Offertory procession, Transubstantiation, receive communion.</td> </tr> <tr> <td data-bbox="616 1088 955 1220">Concluding Rites</td> <td data-bbox="955 1088 1847 1220">Priest blesses and sends out the congregation to do God's work on earth.</td> </tr> </tbody> </table> <p>Some Protestants - Church of England have a similar structured Eucharistic service but it is NOT mass Other Protestants - Evangelical less structured service to allow more of a personal and spontaneous connection with God through prayer or music .</p> <p>All Christians believe in the importance of the community sharing God's Word in the Bible.</p>	Introductory Rites	Gather, welcomed by the Priest, ask for forgiveness (penitential Rite) Praise God (Gloria)	Liturgy of the Word	Readings, psalms, Gospel , Homily , nicene creed, bidding prayers	Liturgy of the Eucharist	Offertory procession, Transubstantiation, receive communion.	Concluding Rites	Priest blesses and sends out the congregation to do God's work on earth.	<p>CCC 1068</p> <p>In the liturgy, especially in the Eucharist redemption is achieved.</p>
Introductory Rites	Gather, welcomed by the Priest, ask for forgiveness (penitential Rite) Praise God (Gloria)									
Liturgy of the Word	Readings, psalms, Gospel , Homily , nicene creed, bidding prayers									
Liturgy of the Eucharist	Offertory procession, Transubstantiation, receive communion.									
Concluding Rites	Priest blesses and sends out the congregation to do God's work on earth.									

3. Eucharist, the body and blood of Jesus.



Catholics believe in **transubstantiation**. The bread and wine actually changes through the power of the Holy Spirit into the Body and Blood of Jesus.

Lumen Gentium considers that the Eucharist makes
 . a person part of Jesus' body, the Church the Body of Christ, Catholics part of one another

Other Cristian views

- **Quakers** do not celebrate the Eucharist , **Church of England** celebrate the Eucharist but believe it to be symbolic only.

Jesus said at the Last Supper
 "Do this in remembrance of me." 1 corinthians 11

CCC 1324, 1211
 The Eucharist is the 'source and summit and Sacrament of sacraments.'

4. Funeral Rite- ceremonies carried out when a Catholic dies.

Funeral rite is a liturgy, a formal practice set out by the Church.

Home	Vigil of prayer,
Church	Requiem Mass where the Eucharist is also celebrated as part of the funeral Or Liturgy of the word service
Cemetery	Rite of Committal and Commendation . Prayers are said at the graveside or crematorium in the hope of meeting again in the next life.

The funeral rite gives **communion with the deceased** by praying for their soul on the journey to eternal life with Go. **Communion with the community**, that we are all connected even after death as the Church is the One Body of Christ. Reminds Catholics of **eternal life with God**.

Nicene creed (the Christian statement of belief.)states
 'I look forward to the ressurection of the dead and the life of the world to come.'

'Preparing my funeral.'
 By Cardinal Vincent Nichols
 'Our great hope is that we will be redeemed from death by Christ's great victory.'

5. Prayer, communication with God



Prayer	Meaning / Example
Repentance	Knowing you have sinned/ asking for forgiveness.I confess
Thanksgiving	Showing love,being grateful to God.Grace before meals
Adoration	Stating how good God is.The Glory be
Intercession	Praying for others.Bidding prayers at Mass
Petition	Praying for your own needs.Prayer before an exam

Formal prayer , set prayers said by Catholics , the Our Father, Hail Mary and Nicene creed

Our Father is a formal prayer given to us by Jesus. Reminds us to worship God, ask for our needs , repent and forgive others

Extempore / informal prayer using one's own words developing a relationship with God. Use different prayers for different stages of life and needs.

CCC 2559 - Prayer is
 'The raising of one's mind and heart to God.'

St Paul says "pray constantly."

CCC 2763 ' The Lord's prayer (the Our Father prayer) is the most perfect of prayers.'

Matthew 6 states that prayer
 Is not for show
 It should be heart felt
 Seek a deeper relationship with God.

6. Popular piety, worship which is not part of the formal liturgy of the Church.

Mainly carried out by Catholics.

The Rosary, Prayers to Our Lady
Prayers focus on the 'Mystery of the Rosary' the key events of Jesus' life.

Stations of the Cross, 14 picture/ stations around Catholic church remember the suffering of Jesus' passion, death and the salvation from sin that this brought mankind.

Eucharistic adoration, Blessed Sacrament placed in a monstrance, a decorative frame. Jesus told his disciples in the Garden of Gethsemane to watch and pray.



CCC 1675
expressions of piety extend liturgical life but don't replace it.

CCC 1674
The religious sense of Christian people has always found expression in various forms of piety.....

7. **Pilgrimage**, is a journey to a special place of religious significance.



Jerusalem (Holy Land)	Rome	Lourdes	Walsingham
Place of Jesus' death and resurrection	Centre of Catholic church. Home of Pope Links to Apostles and first Pope St Peter's	Vision of Mary to Bernadette in 1858. Healings have taken place here.	1061 noblewoman had a vision of the house where angel Gabriel visited Mary
All Christians visit.	More important for Catholics as the Pope is their religious leader.	Mainly Catholics visit here as other Christians don't elevate Mary as Catholics do.	Eucumenical both Catholic and Church of England shrines here.

Some Protestants don't consider pilgrimage as central part of Christian life

Throughout Christian history people have visited religious places such as Bethlehem, Jerusalem and Rome.

Why?
.Reflection, connection with Christian events
.Develop a personal relationship with God.

CCC2691-2696
Pilgrimages remind us of our earthly journey toward heaven and are very special occasions for renewal in prayer.

<p>8.Catholic Social Teaching, promotes justice,peace and reconciliation</p> <p>CAFOD Catholic Agency for Overseas Development</p>	<p>7 themes to Social Teaching</p> <ol style="list-style-type: none"> 1.Dignity of the human person 2.Call to family 3.Human rights 4. Help for the poor 5.Rights /dignity of workers 6. Solidarity as one family 7. Stewardship/ care of God's creation <p>Short term and long term aid to fight injustice and poverty world wide . Helping in emergencies but also educating and training people to be able to help themselves in the future.</p>	<p>Evangelii Gaudium The fact that people are born in places with less resources or less development doesn't justify the fact that they live with less dignity.</p>
<p>9.Corporal works of mercy, giving physical to others.</p>	<p>Physically helping the poor , homeless and visiting the sick.</p> <div style="display: flex; justify-content: space-around;">   </div>	<p>Matthew 25 ' What you do for the least of my people you do for me.'</p>
<p>10.Spiritual works of mercy, praying for and comforting others.</p>	<p>Praying for others , forgiving others comforting the sad.</p>	<p>Matthew 25 , Feed the hungry, visit the prisoner.....</p>
<p>11. Catholic mission, being sent out to help others in God's name</p>	<p>Sent out to help others in God's name as the Apostles were</p>	<p>Following the Apostles who Jesus sent out to carry on His work.</p>
<p>12.Evangelism ,proclaim and live out the Gospel.</p>	<p>Living a good Christian life of service to God and others. Telling people about Jesus' word.</p> <div style="display: flex; justify-content: space-around;">   </div>	<p>Evangelii Gaudium Jesus wants evangelizers who proclaim the good news not only with words but by a life changed by God's presence.</p>
<p>13.New Evangelism, sharing God's message</p>	<p>Is not about converting people to Catholicism but it is now about sharing and living out a message here in the Western world. It is a personal choice to find out more.</p>	<p>This can be individually and through the Church , locally, Nationally and Globally,</p>
<p>14.Traditional Evangelism, converting people to Christianity.</p>	<p>People sent by the Church to be Missionaries in various parts of the world such as Africa, South America. .</p>	<p>Sometimes to convert them to Catholicism.</p>

Conflict and Tension Knowledge Organiser 2: The League of Nations Part 1. Structure and 1920s.

A. Aims of the League of Nations	C. The structure of the League of Nations		D. Key Terminology			
The aims of the League were set out in the Covenant . This also included a set of 26 Articles, or rules, which all members of the League agreed to follow.	The Assembly	<ul style="list-style-type: none"> The League's Parliament Every country in the LON sent a representative to the Assembly Voted and recommended action to the Council, and could vote on: admitting new members to the LON, appointing temporary members of the council, and the budget of the LON. Met once a year. Decisions made by it had to be unanimous (had to be agreed by all members of the Assembly). 	League of Nations	Peacekeeping organisation established by the Treaty of Versailles.		
To prevent future wars from breaking out, and maintain peace.			Covenant	Set up what the LON was, and what its members could expect to happen under it.		
To discourage aggression from any nation.			Collective security	Members of the LON would work together in order to maintain peace.		
To encourage nations to co-operate, especially in business and trade.			Fountainebleau Memorandum	Issued on 25 March 1919 by David Lloyd-George. He stated that he completely supported the LON.		
To encourage all nations to work towards disarmament.			LON Commissions	The League attempted to tackle other major problems, on top of dealing with disputes between members. This work was done through commissions/committees, such as: Mandates Commission, Refugees Commission, Slavery Commission.		
To improve the living and working conditions of people in all parts of the world.	The Council	<ul style="list-style-type: none"> Met around 5 times a year, and in the case of emergency. It included (a) Permanent members (in 1920, these were Britain, France, Italy, and Japan) and (b) Temporary members (elected by the Assembly for 3-year periods) Each of the permanent members had a veto, meaning each country could stop the LON acting even if all other members agreed. The Council would use the powers outlined on the bottom left-hand side to manage problems (arbitration, moral condemnation, economic sanctions, military force) 	E. Strengths of the LON		F. Weaknesses of the LON	
B. The Covenant also set out the powers of the League of Nations (how it would deal with aggression)...			It was written into all of the peace treaties at the end of WWI, so all nations involved had signed an agreements that recognised the organisation.		Many important countries did not, or would not, join. E.g. USA. This undermined the LON as a 'global' organisation and meant that countries faced with economic sanctions could still trade with some of the most powerful and richest countries.	
1. Arbitration – the League would attempt to get countries together to try and resolve any problems through discussion			It had a vast membership		The League had no army, which meant that it could not force people to obey it	
2. Moral condemnation – publicly condemn the aggressor's actions, and tell it to stop what it was doing.			As there were so many members, economic sanctions and moral condemnation were daunting punishments for many countries.		The structure was very complicated. It confused people and slowed action.	
3. Economic sanctions – Members of the League would not trade with the warring countries.			The League did have 'means of influence', and a clear structure of how it would deal with disputes: (1) moral condemnation, (2) arbitration, (3) economic sanctions, (4) military force.		Decisions had to be unanimous, which meant that decision-making was slow.	
4. Military force – as the League did not have its own army, it relied upon its members providing troops from their armed forces.	Permanent Court of International Justice	<ul style="list-style-type: none"> Made up of judges from the member countries Would give decisions on border disputes between countries Also, gave legal advice to the Assembly/Council However, the Court had no way of making sure that countries followed its rulings. 	28			
	The Secretariat	<ul style="list-style-type: none"> Civil Service of the League. Kept records of meetings and prepared reports for the different agencies of the LON. 				

G. Commission			H. The League of Nations in the 1920s	
Aims	Successes (+) /Failures (-)			
International Labour Organisation	To bring workers, employers and governments together to improve the conditions that people worked in.	+ 1928 – 77 countries agreed to set a minimum wage. - 1919 – tried to stop children under the age of 14 from working. This was not adopted by many members as they thought it would cost too much money.	Vilna, 1920 = FAILURE	<ul style="list-style-type: none"> Poland and Lithuania (both created after the break-up of the Austro-Hungarian Empire) Vilna was to be the capital of Lithuania, but the majority of people living there wanted to be Polish. A Polish Army took control of Vilna, and Lithuania asked the LON for help. The LON told Poland to remove the army, but Poland said NO. Britain and France did not get involved as it was not in their own best interests. Poland took Vilna; the LON had failed the first time it was asked to settle a dispute.
The commission for Refugees	To return prisoners of war home and support refugees by improving camp conditions, finding new homes, or returning them to their own countries once the threat of conflict had passed.	+ 1921 – LON helped free around 427,000 out of 500,000 prisoners of war still imprisoned from WWI. + LON set up refugee camps and sent doctors to treat diseases in these camps to help with the impact of violence between Greece and Turkey in 1922.	Upper Silesia, 1921 = SUCCESS	<ul style="list-style-type: none"> Upper Silesia was on the border between Poland and Germany. Both Germans and Poles were living there, and wanted to claim the area. The LON organised a plebiscite for the people to vote on which country to join. The League divided the region according to how different areas had voted, which both sides (and most citizens) accepted.
			Aaland Islands, 1921 = SUCCESS	<ul style="list-style-type: none"> Both Sweden and Finland claimed the Aaland Islands, and threatened war. The LON investigated both of their claims, and decided the Islands should go to Finland Finland were told they could not build forts on the islands, so they could not use it as a base from which to attack Sweden. Sweden agreed to these terms. The League had successfully avoided war.
The Slavery Commission	To end slavery around the world. Even though it was already illegal, it was still practiced in a number of countries.	+ organised raids on the camps of slave traders in Sierra Leone, setting 200,000 people free. In 1927 Sierra Leone announced that slavery was to be abolished altogether. - couldn't end all slavery everywhere.	Corfu, 1923 = FAILURE	<ul style="list-style-type: none"> Whilst supervising the border between Greece and Albania, an Italian General (Tellini) was killed. Mussolini blamed the Greek government and demanded compensation and the execution of the murderers. But Greece had no idea who the murderers were. Mussolini bombarded and occupied Corfu, killing 15 people. Greece appealed to the LON, who condemned Mussolini's actions. It also suggested Greece pay compensation, which the LON would keep and pay to Italy if, and when, Tellini's killers were found. Officially, Mussolini accepted the decision, but behind the scenes he persuaded the Conference of Ambassadors to change the League's decision. The Greeks had to apologise and pay compensation directly to Italy. Mussolini withdrew from Corfu boasting of his triumph. A permanent member of the council had undermined the LON.
			Bulgaria, 1925 = SUCCESS	<ul style="list-style-type: none"> Greece invaded Bulgaria when Greek soldiers were killed on the border. Bulgaria appealed to the LON for help, and the League condemned Greece's actions and ordered them to withdraw troops and pay compensation. Greece thought the LON was being hypocritical, as Mussolini had gotten away with similar actions in Corfu in 1923. Greece was a small country, and did not want to risk poor relations with powerful members of the League, like Britain or France, and so they obeyed the League's decision.
Organisation for Communications and Transport	Keep people safe through the regulation of transport that was developed during the war.	+ introduced shipping lanes, which meant that fewer collisions occurred + Produced an international highway code so that car drivers followed the same traffic rules wherever they travelled.		
The Health Committee	Improve health conditions around the world.	+ Started an international campaign to kill mosquitoes, which spread diseases such as malaria and yellow fever + The Health Committee was later renamed the World Health Organisation (WHO), which still exists today. + They gave out lots of vaccinations and medical information. + Helped to improve living conditions in refugee camps in the 1920s.		

SECTION A: Key Definitions

1. Armistice	11/11/1918. Cease-fire that ended WWI. Germany surrendered to the Allies.
2. Big Three	The leaders of the victorious powers at the end of WWI. Woodrow Wilson (USA), David Lloyd-George (Britain), Georges Clemenceau (France).
3. Fourteen Points	Designed by Woodrow Wilson. His vision for the post-war settlement, including key aspects such as universal disarmament, self-determination for all nations, and to create a League of Nations.
4. Treaty of Versailles	Peace settlement that punished Germany. Signed on the 28 th June 1919.
5. Plebiscite	A vote of all members of the electorate on an important Constitutional decision (eg: Saar 1935)
6. LON Mandate	A country placed under the control of the LON by the Treaty of Versailles (eg: Germany's colonies in Africa).
7. Settlement	Name given to the treaties signed at the end of WWI which dealt with the defeated countries.
8. Self-determination	Idea that countries should govern themselves and not be ruled by an empire.
9. Demilitarise	Remove all weapons and troops from an area.

Conflict and Tension. Part One: Peacemaking

SECTION B: Aims of the Big Three	
10. Georges Clemenceau (France)	<ul style="list-style-type: none"> • Punishment and revenge. France had suffered enormously during the war, both in terms of casualties and damage to the country itself. • Protection – reduction of Germany's armed forces and power. He had seen Germany attack France twice (in 1870 and in 1914). • Recover losses and reparations.
11. David Lloyd-George (Britain)	<ul style="list-style-type: none"> • Revenge and reparations for the people of Britain (huge public pressure upon him to deal severely with Germany). • Reduce the size of Germany's navy and empire • Re-develop Britain's trade with Germany. Therefore, he didn't want reparations to be too high. (Germany had been Britain's second largest trading partner before WWI.) • Reduce the risk of a future war.
12. Woodrow Wilson (The USA)	<ul style="list-style-type: none"> • Peace settlement based upon his Fourteen Points • Self-determination for all nations. • Establishment of the League of Nations • Did want to punish Germany, but not too harshly. (The USA had only entered the war in 1917, and had not suffered any damage to the country itself, meaning that Wilson was much less interested in punishing Germany severely.)

SECTION C: Terms of the Treaty of Versailles

13. Article 231	'War Guilt' Clause. Germany had to accept full responsibility for the cause of WWI.
14. Reparations	Meant that Germany would have to pay the victorious powers for damages caused during the war. the figure was set in 1921 at £6.6 billion.
15. Military terms	<ul style="list-style-type: none"> • The German Army was limited to 100,000 men • Conscription was banned • Not allowed any tanks, submarines, or air force • Rhineland became a demilitarised zone
16. Territorial terms	<ul style="list-style-type: none"> • The Saar was put under LON control for 15 years • Germany's overseas empire was taken away • Danzig was taken and made a free city under LON control • Germany was split in two by the Polish corridor, which gave Poland access to the sea • North Schleswig was given to Denmark • Alsace-Lorraine was returned to France • Germany lost around 10% of its land in total
17. League of Nations	<ul style="list-style-type: none"> • The League of Nations was formed as a peacekeeping organisation. Germany was not allowed to join.
18. Other terms	<ul style="list-style-type: none"> • <i>Anschluss</i> (union) between Germany and Austria was forbidden

SECTION D: How satisfied were the Allies?

SECTION E: German objections to the TOV

SECTION F: The other treaties

Who ?	Aims achieved:	Aims not achieved:	22. War Guilt	Germany did not think that they were solely responsible for the war.	29. Treaty of St Germain, 1919	<ul style="list-style-type: none"> Austria lost land; new states of Czechoslovakia and Yugoslavia were created as part of this. New states contained a mix of nationalities which often led to clashes. Austria faced military restrictions and had to pay reparations. 	
19. GC	<ul style="list-style-type: none"> Germany and its allies had to accept responsibility for starting the war, which damaged German pride. Huge restrictions were placed upon the German armed forces. Germany were ordered to pay huge reparations France regained Alsace-Lorraine France gained the profits from the Saar for 15yrs. 	<ul style="list-style-type: none"> Some in France felt the TOV was not harsh enough – Clemenceau was voted out in the next election. Many people wanted Germany to be destroyed, not just weakened. 	23. Reparations	The German economy was in ruins. the government claimed that 763,000 civilians had died of starvation.	(Dealt with Austria)	<ul style="list-style-type: none"> Bulgaria lost land to Yugoslavia, Greece, and Romania. Reparations of £100 million. Military restrictions. 	
			24. Territory	<ul style="list-style-type: none"> Germany's loss of her empire was a huge blow to national pride The loss of key industrial areas, such as the Saar, was also very damaging for Germany. Germany lost 16% of its coal and 48% of its steel. Around 10% of Germany's land was lost in total. 	30. Treaty of Neuilly, 1919 (Dealt with Bulgaria)		<ul style="list-style-type: none"> Hungary lost land to Romania, Czechoslovakia, Yugoslavia and Austria. Reparations (but never actually paid any due to collapse of their economy) Military restrictions.
			25. Military	The army had been a huge source of national pride for Germany. The limiting of this to just 100,000 men was humiliating, and also left Germany vulnerable to attack.	31. Treaty of Trianon, 1920 (Dealt with Hungary)		
26. League of Nations	Germany was annoyed at not being permitted to join.	32. Treaty of Sevres, 1920 (Dealt with Turkey)					
20. DLG	<ul style="list-style-type: none"> War Guilt pleased British people. German navy was heavily reduced. Britain also gained territory from the German Empire. 	<ul style="list-style-type: none"> DLG was worried the TOV was much too harsh and would lead to Germany seeking revenge. The German economy was crippled, which meant Germany was not in a strong position to trade with GB. 	27. <i>Diktat</i>	Germans felt that they had been forced to sign the TOV. Germany was not invited to the peace conference.	33. Treaty of Lausanne, 1923 (Changed Treaty of Sevres)	<ul style="list-style-type: none"> Changed Sevres Treaty, as Allies did not want to fight Turkey. Re-gained some land, control of key waterways, and reparations were cancelled. Proved other treaties were unenforceable, and undermined them. Showed Hitler and Mussolini that they could get away with breaking international law. 	
							21. WW

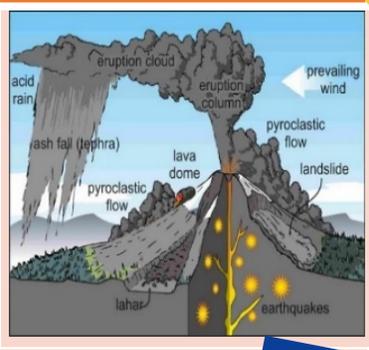


The structure of the Earth

The Crust	Varies in thickness (5-10km) beneath the ocean. Made up of several large plates.
The Mantle	Widest layer (2900km thick). The heat and pressure means the rock is in a liquid state that is in a state of convection.
The Inner and outer Core	Hottest section (5000 degrees). Mostly made of iron and nickel and is 4x denser than the crust. Inner section is solid whereas outer layer is liquid.

Volcanic Hazards

Ash cloud	Small pieces of pulverised rock and glass which are thrown into the atmosphere.
Gas	Sulphur dioxide, water vapour and carbon dioxide come out of the volcano.
Lahar	A volcanic mudflow which usually runs down a valley side on the volcano.
Pyroclastic flow	A fast moving current of super-heated gas and ash (1000°C). They travel at 450mph.
Volcanic bomb	A thick (viscous) lava fragment that is ejected from the volcano.



Managing Volcanic Eruptions

Warning signs	Monitoring techniques
Small earthquakes are caused as magma rises up.	Seismometers are used to detect earthquakes.
Temperatures around the volcano rise as activity increases.	Thermal imaging and satellite cameras can be used to detect heat around a volcano.
When a volcano is close to erupting it starts to release gases.	Gas samples may be taken and chemical sensors used to measure sulphur levels.
Preparation	
Creating an exclusion zone around the volcano.	Being ready and able to evacuate residents.
Having an emergency supply of basic provisions, such as food	Trained emergency services and a good communication system.

Convection Currents

The crust is divided into tectonic plates which are moving due to convection currents in the mantle.

- Radioactive decay of some of the elements in the core and mantle generate a lot of heat.
- When lower parts of the mantle molten rock (Magma) heat up they become **less dense** and **slowly rise**.
- As they move towards the top they cool down, become **more dense** and **slowly sink**.
- These **circular movements** of semi-molten rock are **convection currents**
- Convection currents create **drag** on the base of the tectonic plates and this causes them to move.

LIC -CS: Haiti Earthquake 2010



Causes On a conservative plate margin, involving the Caribbean & North American plates. The magnitude 7.0 earthquake was only 15 miles from the capital Port au Prince. With a very shallow focus of 13km deep .	Effects 230,000 people died and 3 million affected. Many emotionally affected . 250,000 homes collapsed or were damaged. All 8 hospitals in capital city were destroyed.	Management Individuals tried to recover people. Many countries responded with appeals or rescue teams . Heavily relied on international aid , e.g. \$330 million from the EU. 98% of rubble remained after 6 months .
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Earthquake Management



PREDICTING

Methods include:

- Satellite surveying (tracks changes in the earth's surface)
- Laser reflector (surveys movement across fault lines)
- Radon gas sensor (radon gas is released when plates move so this finds that)
- Seismometer
- Water table level (water levels fluctuate before an earthquake).
- Scientists also use seismic records to predict when the next event will occur.

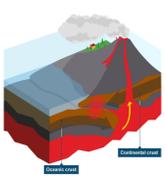
Unit 1a

The Challenges of Natural Hazards



Types of Plate Margins

Destructive Plate Margin
When the denser plate subducts beneath the other, friction causes it to melt and become molten magma . The magma forces its way up to the surface to form a volcano. This margin is also responsible for devastating earthquakes .
Constructive Plate Margin
Here two plates are moving apart causing new magma to reach the surface through the gap. Volcanoes formed along this crack cause a submarine mountain range such as those in the Mid Atlantic Ridge .
Conservative Plate Margin
A conservative plate boundary occurs where plates slide past each other in opposite directions, or in the same direction but at different speeds. This is responsible for earthquakes such as the ones happening along the San Andreas Fault, USA.



What is a Natural Hazard

A natural hazard is a natural process which could cause death, injury or disruption to humans, property and possessions.

Geological Hazard	Meteorological Hazard
These are hazards caused by land and tectonic processes.	These are hazards caused by weather and climate.

Causes of Earthquakes

Earthquakes are caused when two plates become **locked** causing **friction** to build up. From this **stress**, the **pressure** will eventually be released, triggering the plates to move into a new position. This movement causes energy in the form of **seismic waves**, to travel from the **focus** towards the **epicentre**. As a result, the crust vibrates triggering an earthquake.

The point directly above the focus, where the seismic waves reach first, is called the EPICENTRE .	
SEISMIC WAVES (energy waves) travel out from the focus.	
The point at which pressure is released is called the FOCUS .	

HIC -CS: New Zealand Earthquake 2011



Causes New Zealand is located on the plate boundary between the Australian and Pacific plates. The epicentre was 10km away from Christchurch ; the second highest populated city in New Zealand . The earthquake was magnitude 6.3 on the Richter scale	Effects •Economic cost = NZ\$ 3.5billion •181 people were killed in total •Liquefaction produced 400,000 tonnes of silt •Land that was damaged by liquefaction cannot be built on again	Management A full emergency response plan was in place within 2 hours. Hospitals survived the earthquake and treated those who were injured. 27,000 toilets were distributed. Bottled water was provided.
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All Saints Catholic High School – Business Studies Department

Topic 1.1 (Enterprise and Entrepreneurship) Knowledge Organiser



1.1.2 – Risk and Reward

1.1.3 – The Role of a Business Entrepreneur

Key words:

Risks - The chance of damage or loss occurring as a result of making a decision.

Market Research - The process of gathering information about customer, competitors and market trends through collecting primary and secondary data.

Rewards - The advantage of a course of action, including benefits to the owner.

Profit - The revenue of a business is greater than the cost of a business over a period of time

Goods – A physical/ tangible product (Example: Car)

Services – non-physical, intangible product (example: taxi journey)

Add Value – The increased worth that a business creates for a product. This is the difference between what a business pays its suppliers and what it charged.

Unique Selling Point – Characteristics of a product that make it different from other similar products being sold on the market.

Factors of Production – The resources required by an entrepreneur to produce goods and services.

Enterprise – The characteristics and skills needed to start a business and take risks.

Risk

- Risks are the things that can go wrong when setting up a new business
- Risk can occur a lot when a business is started up, but there is risk associated with each stage of the business.
- Businesses can fail because:
 - An entrepreneur does not know the market well
 - There is not sufficient money to start the business
 - Poor decision making
 - Competition
 - Business does not meet the needs of customers
- **Risks include business failure, financial loss, lack of a secure income.**

Risk (Sole Traders/ Partnerships)

Entrepreneurs who operate as sole traders and partnerships are at the most risk as they have **unlimited liability** – These are the riskiest start-ups because their own personal possessions/money is at risk.

The purpose of a Business

It is essential to provide consumers with what they want. If this does not happen they will shop elsewhere.

Rewards

Rewards for starting up a new business can include:

- Business success
- Profit
- Personal independence
- Some rewards are connected to money – financial rewards. Examples:
 - Profit
 - Market Share
 - Sales levels
- Some are non-financial rewards
 - Achievement

Adding Value

Methods of adding value

- Branding
- Quality
- Convenience
- Design
- Unique Selling Point

A successful business will likely use more than one of these methods to add value. If a business can add value and keep costs low, the amount of profit will be increased



Adding value

The role of an entrepreneur

The 4 things an entrepreneur needs to provide goods and services are:

- Capital – Man made resources. Goods used to produce other goods
- Land – All natural resources e.g. wheat or solar power.
- Labour – human input (e.g. skills/ qualifications)
- Enterprise – skills and characteristics to manage the other 3 factors (capital, land, labour) and take risks.

These are known as **factors of production**

It is the entrepreneur's responsibility to organise the four factors of production in order to make products that customers want.

Organising these factors is risky and the entrepreneur must take careful before making decisions

Practise the present tense of regular verbs. Complete the exercises.

1 Write the Spanish for the following verbs in the present tense.

- 1 He invites (*invitar*)
- 2 We shout (*gritar*)
- 3 They listen (*escuchar*)
- 4 You live (informal plural) (*vivir*)
- 5 I argue / discuss (*discutir*)
- 6 You forgive (informal singular) (*perdonar*)
- 7 I kiss (*besar*)
- 8 They break (*romper*)
- 9 She goes for a walk (*pasear*)
- 10 We look after (*cuidar*)

2 Choose the correct word to complete the sentences.

- 1 Mi hermanastra no **escuchas** / **escucha** / **escucho** la música.
- 2 Y tú, ¿**conoces** / **conocemos** / **conocen** a Mariluz?
- 3 Yo **echamos** / **echáis** / **echo** de menos a mi familia.
- 4 Nosotros **salen** / **sales** / **salimos** cada viernes.
- 5 ¿Vosotras **discutes** / **discuto** / **discutís** mucho?
- 6 Todas las tardes mis tíos **pasean** / **paseáis** / **paseas** por el parque.

Regular verbs (present tense)

The present tense is the tense you are likely to use most often and so it is important to learn the endings very well. It is used to say what someone does or is doing. These are the endings (you remove the *-ar*, *-er* or *-ir* from the infinitive first):

<i>-ar</i> verbs	<i>-er</i> verbs	<i>-ir</i> verbs
<i>-o</i>	<i>-o</i>	<i>-o</i>
<i>-as</i>	<i>-es</i>	<i>-es</i>
<i>-a</i>	<i>-e</i>	<i>-e</i>
<i>-amos</i>	<i>-emos</i>	<i>-imos</i>
<i>-áis</i>	<i>-éis</i>	<i>-ís</i>
<i>-an</i>	<i>-en</i>	<i>-en</i>

Como a la una – I eat at one o'clock.

Cuida a su hermana cuando sus padres salen – He looks after his sister when his parents go out.

Complete the sentences with the correct subject pronoun.

- _____ no discuto con mi madre.
- _____ salimos los sábados, pero ¡_____ salen cada noche!
- Me gusta salir con David, pero no me gusta salir con sus hermanas porque _____ son muy antipáticas.
- ¿_____ paseas con tus amigos muy a menudo?
- ¿_____ os lleváis bien con el resto de la familia?
- Su hermana y su hermano son muy diferentes. _____ es graciosa y sociable, mientras que _____ es callado y serio.

Subject pronouns

In English, to show the person who is doing something, we have a word before the verb: I, you, he, she, it, we, they. For example, 'I play', 'we eat'. These words are called subject pronouns. In Spanish, because the ending of the verb shows the person, subject pronouns are not normally used. However, they do exist and are often used for emphasis in sentences such as 'He's not going but I am'. The Spanish subject pronouns are: *yo* (I), *tú* (you informal singular), *él* (he, it), *ella* (she, it), *usted* (you formal singular), *nosotros* (we), *vosotros* (you informal plural), *ellos* (they, masculine), *ellas* (they, feminine), *ustedes* (you formal plural).

Complete the gaps with the correct form of *ser* or *tener*. See pages 194–198 for the full verbs.

tengo	es	tiene	tiene
son	tienen	es	tengo

- Me llamo Susana y (1) _____ quince años. (2) _____ dos hermanas y un hermano. Mis hermanas (3) _____ altas y cariñosas. Las dos (4) _____ el pelo rubio y los ojos azules. Mi hermano (5) _____ bastante alegre y (6) _____ los ojos verdes. (7) _____ pelirrojo y (8) _____ muchas pecas.

Work with a partner. Take it in turns to describe one of the people in activity 2. Use the language

Using the verbs *tener* and *ser*

The verbs *tener* (to have) and *ser* (to be) are irregular verbs and very important when you want to describe someone or say who someone is. You have seen and heard them being used in activities 1 and 2. Here are some further examples:

Es mi prima – She is my cousin.

Soy alto y delgado – I'm tall and thin.

Tengo el pelo negro – I have black hair.

Tiene los ojos verdes – He/She has green eyes.

Also learn about the present tense of regular verbs on page 26.

Practise using the verbs *Tener* and *Ser*.

Fill in the gaps with the correct forms of the verbs.

FERROUS

Ferrous metals contain iron and are magnetic. They will rust easily.

NON-FERROUS

Non-ferrous metals do not contain iron, they are not magnetic and are more resistant to corrosion.

Tools used for metal



Engineers Square



Junior Hacksaw



Scriber



Centre Punch



Ball Pein Hammer



Tin Snips

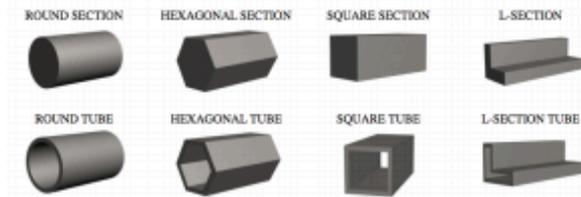
Joining metals - temporary

Adhesives such as Epoxy Resin can be used to join metals but the joint will not be as strong as a permanent fixing technique.

Mining of Iron Ore

In order to **produce steel**, iron ore is required, in large quantities. **Iron ore is dug out of the ground from open cast mines or mined deep underground.** The ore is crushed into a fine powder, mixed with water, making a **slurry**. Clay is added to the slurry and the mixture shaped into pellets and baked, forming a hard shell. The pellets are sent to a steel mill in order to **extract the iron** which is normally **converted into steel**.

How metals are supplied



Metals can come in solid bars of different shapes or tubes. Most metals are also available as sheet metals.

Alloys are often stronger than the metals they contain.

ALLOYS

Alloys are a mixture of two or more metals. When a metal with certain properties is needed, metals can be combined.



Joining metals - permanent

Brazing



Welding

Soldering



Rivets & Screws



Brazing - melting a filler metal or alloy between the components you want to join.

Soldering - is a type of brazing which works at lower temperatures.

Welding - is different from soldering in that the two pieces of metal are themselves melted along the joints, fusing together as they cool.

Rivets & Machine Screws - with a rivet, a hole is drilled through both pieces of work, the rivet is placed through it, and its end beaten into a dome. With machine screws, the screw needs to be fitted in to a predrilled hole.

FERROUS METALS

cast iron, mild steel, high carbon steel and stainless steel.

NON-FERROUS METALS

aluminium, brass, copper, lead, zinc, titanium and tin.

THERMOPLASTICS

Thermoplastics can be heated and shaped many times.

THERMOSET

Thermosets, once shaped can not be reheated and reshaped. Instead they will just burn.

Tools used for plastic



Coping Saw
(narrow blade)



Scroll Saw



Wet & dry sandpaper



Polisher/buffing machine

Joining plastics

The most effective way to join plastics together is to use a liquid cement called 'Tensol'. This works by using a capillary action, this means the liquid flows between the pieces and fuses them together.



How is plastic made?

Plastic is made from a combination of natural materials. The main one being **crude oil**. To extract crude oil, drilling needs to be done deep underground. This can have a **damaging effect on the environment**. It also uses a lot of energy and creates fumes and gases that are released in to the environment during **refining and production**.

Plastic Categories

1	2	3	4	5	6	7
PETE	HDPE	PVC	LDPE	PP	PS	OTHER
Polyethylene Terephthalate	High-Density Polyethylene	Polyvinyl Chloride	Low-Density Polyethylene	Polypropylene	Polystyrene	Other
Common products: soda & water bottles; caps, jars, trays, clear bottles	Common products: milk jugs, detergent & shampoo bottles, flower pots, grocery bags	Common products: cleaning supply jugs, pool liners, hoses, shovels, auto/auto product bottles, shovels	Common products: bread bags, paper towels & tissue covers, newspaper bottles, trash bags, six pack rings	Common products: yogurt tubs, caps, juice bottles, straws, hangers, seed & shipping bags	Common products: to-go containers & bottles, hot cups, rulers, CD cases, shipping containers, cartons, trays	Common types & products: polycarbonate, acrylic, ABS, acrylic, PLA, bottles, safety glasses, CDs, highlighters
Recycled products: clothing, carpets, blankets, auto & water bottles	Recycled products: detergent bottles, flower pots, crates, pipes, shingles	Recycled products: pipes, wall coverings, linoleum, carpet backing, flooring	Recycled products: trash bags, plastic handles, handbags, shipping envelopes, newspaper bins	Recycled products: paint cans, sport boulers, auto parts, food containers, hangers, steel parts, razor handles	Recycled products: picture frames, crown molding, rulers, flower pots, hangers, bags, tape dispensers	Recycled products: electronic housings, auto parts

Plastics are put into different categories depending on their properties. This makes it easier to identify them when they need to be recycled or disposed of. Look out for the different symbols on different bottles/containers/packaging.

Plastic used in school

Acrylic



Advantages -

- Can be easily cut
- Supplied in large sheets
- Comes in a wide range of colours
- Can be heated to bend and curve
- Can be polished

Disadvantages -

- Can get scratched and damaged
- They are not strong and can break if dropped
- They can discolour with age
- Difficult to recycle

THERMOPLASTICS

casings for power tools, curtain rail fittings, kitchen equipment, packaging & toys.

THERMOSET

light switches, work surfaces, electrical insulation & door handles.

Year 9- Hospitality and Catering Knowledge Organiser

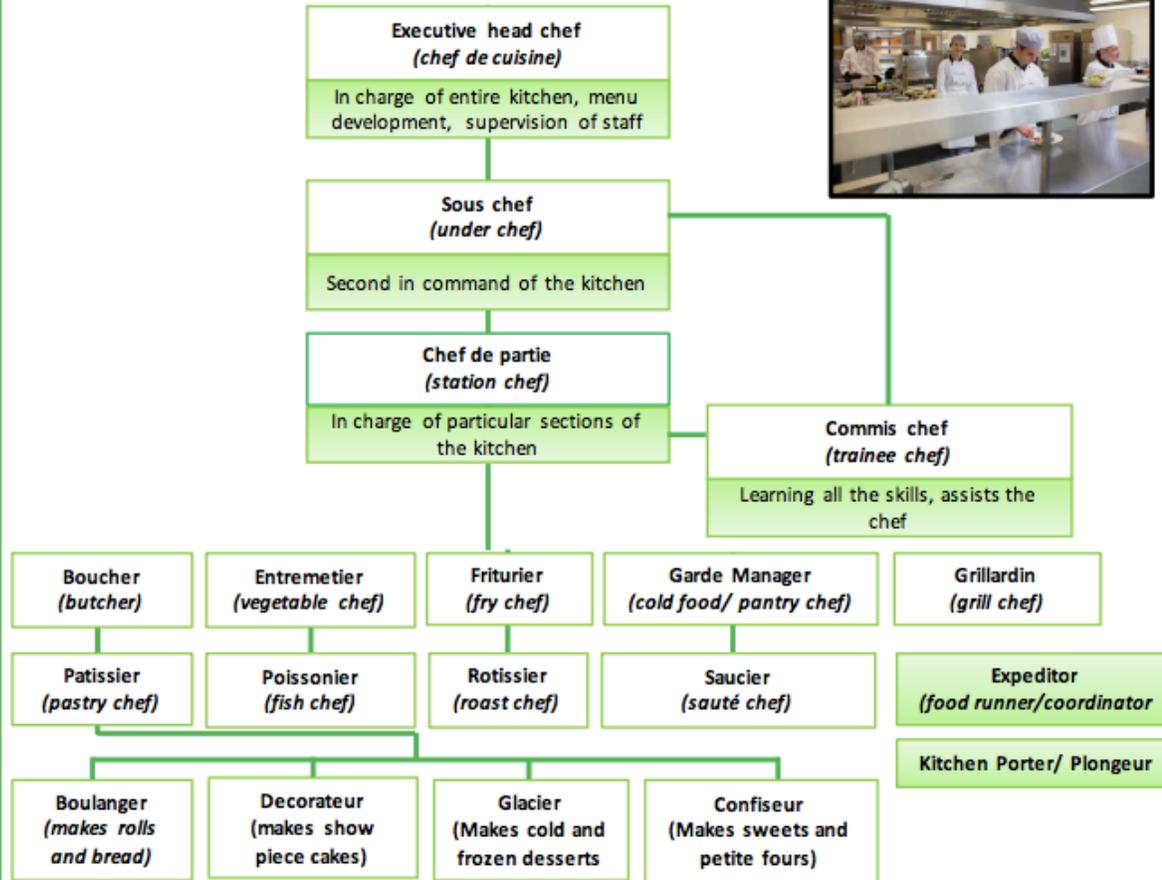
Focus: Unit 1: The Hospitality and Catering Industry

AC
1.1

1. The Kitchen Brigade

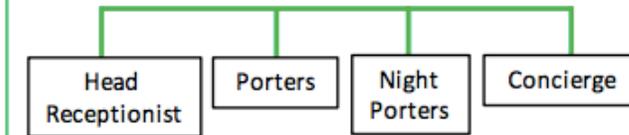
The Kitchen Brigade is a system for setting out and explaining the **job roles and responsibilities** of those who work in the kitchen.

The chart below shows what a full kitchen brigade looks like. You would only find a large brigade like this in a very big and busy kitchen, such as those in big hotels and restaurants.



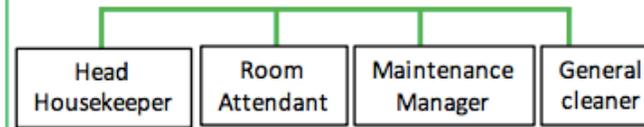
2. Front of house

The staff who work front of house are the first people that customers meet when they arrive at an establishment. They have a variety of roles.



House Keeping

The house keeping staff are the people who work behind the scenes to make sure your rooms, communal areas, dining rooms are comfortable and well maintained.



Year 9- Hospitality and Catering Knowledge Organiser

Focus: Unit 1: The Hospitality and Catering Industry

AC
1.1

1. Hospitality and catering standards and ratings

Hotels, restaurants, guest houses are often advertised as having one, two, three, four or five star status. If an establishment achieves a high star rating, it is likely to be very popular with customers, many of whom will pay more to be assured a high standard of service.

These are various categories in the hospitality and catering industry for which standards and ratings are used, including:

- Hotel and guest house rating
- Restaurant rating
- Food Hygiene rating
- Environmental rating



The following table describes how such ratings are awarded:

Hotel and guest house standards	
What is being inspected?	How are the ratings awarded?
<ul style="list-style-type: none"> • Open all year round? • Number of guest rooms • Number of types of rooms available e.g. lounge, bar, • Environment- noisy/quiet? • Reception facilities • Level of customer care • Access to facilities • Disabled access • Number of staff available • Meal facilities/ availability • Licensed to sell alcohol? • Public liability insurance? • Meets all H&S requirements? • Standard and maintenance of facilities? • Extra facilities e.g. pool, spa, ballroom, gym? • Clean and tidy? 	<p>Star rating:</p> <p>Who inspects?</p> <ul style="list-style-type: none"> • Organisations such as the AA, Visit Britain, Tourist Boards visit hotels and guest houses and can award stars as well as advise proprietors about how they can improve their services. • Increasingly social media is used to rate establishments e.g. Facebook, Trip Advisor, Twitter

Restaurant standards	
What is being inspected?	How are the ratings awarded?
<ul style="list-style-type: none"> • Type/range of food being offered • Quality of food and ingredients being used • Consistency of the cooking, flavour, appearance and quality • The level of culinary skill, creativity and excellence of the chefs 	<p>Michelin Star rating 1-3:</p> <p>The AA awards rosettes 1-5</p> <p>Who inspects?</p> <ul style="list-style-type: none"> • Organisations such as the AA, The Good Food Guide, Michelin Guide, Facebook with public reviews,

Food Hygiene Rating scheme	
What is being inspected?	How are the ratings awarded?
<p>The environmental health officer inspecting a business is meeting the law on food hygiene by looking at:</p> <ul style="list-style-type: none"> • How hygienically the food is handled/prepared • Cleanliness and condition of facilities • How food safety is managed with the business • He/she explains the standards expected to the owner 	<p>FOOD HYGIENE RATING</p> <p>Who inspects?</p> <ul style="list-style-type: none"> • The Food Standards Agency (FSA)