



**The Abbey  
School**

# **Knowledge Organiser**

## **Year 7 Term 5**

2023 - 2024

# CONTENTS

- English **P.3-4**
- Literacy **P.5-6**
- Maths **P.7-10**
- Science **P.11-12**
- History **P.13-15**
- Geography **P.16-17**
- Art **P.18-20**
- P.E **P.21-24**
- R.E **P.25**
- Drama **P.26-27**
- Music **P.28-29**
- MFL **P.30-33**
- Textiles **P.34-35**
- Design Technology **P.36-372**
- Food Preparation **P.38-42**



### BIG QUESTIONS

- What was life like during Shakespeare's time?
- Who was Shakespeare?
- What are the features of a play?
- What is Shakespearean language?
- What is the plot of the play?
- Who are the characters in the play?
- What are stereotypes?
- What different forms of love are presented?
- What are the themes in the play?
- What conflict is introduced to the play?
- Why is dramatic irony introduced to the play?
- How is a change of feelings presented?

### Context

**Philosophy:** Everyone believed that they had his or her place in life. This hierarchy was known as the chain of being. There was a strong social hierarchy and the audience would have understood that Don Pedro would have been a powerful man. Women were seen as inferior and had a lower social status. God – Angels – Monarchs – Nobles – Clergy – Gentlemen – Commoners – Animals, plants, minerals.

**Religion:** People were deeply religious. Belief in God and heaven and hell affected people's choice and the way they behaved.

### **Gender:**

- It was a patriarchal society. Women were ruled by men and were expected to be submissive, sexually pure before marriage and meek. The idea that a woman could challenge a man was unheard of and would have shocked audiences.
- Sexual relationships before marriage were seen as a sin and socially unacceptable, particularly for women. Children conceived out of wedlock were illegitimate and were looked down upon by society.
- Illegitimate children were also known as 'bastards' (Don John is sometimes referred to as 'the Bastard') and were unable to inherit their father's wealth and titles.

### Plot

#### **Act 1:**

- Don Pedro, Claudio and Benedick arrive in Messina
- Claudio and Hero falls in love.
- Benedick and Beatrice tease each other.
- Don John plans revenge on his brother.

#### **Act 2:**

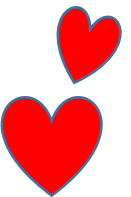
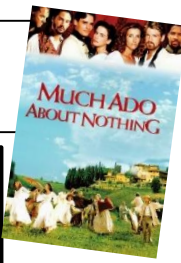
During a masked ball, Claudio and Hero get engaged.

- Don John plots to disgrace Hero.
- Benedick is tricked into thinking that Beatrice is in love with him.

#### **Act 3:**

Beatrice is tricked into thinking that Benedick is in love with her.

- Don John tells Claudio that Hero is unfaithful.
- The Watch arrest Conrad and Borachio.



## Blank Verse v Prose

**Prose** is **verbal** or **written** language that follows the natural flow of speech. It is the most common form of **writing**. **Prose is used for low characters or comedic scenes.**

**Blank verse** is poetry written with regular metrical but unrhymed lines, almost always in **iambic pentameter**. It is used for **noble characters, to express love or serious subject matter**. It can be recognised as it begins with a capital letter on each line.

## Key Quotations

1. "Let me be that I am and seek not to alter me."

*Don John (act 1, scene 3)*

2. "I had rather hear my dog bark at a crow, than a man swear he loves me."

Beatrice ( Act 1 sc1)

3. "When I said I would die a bachelor, I did not think I should live till I were married."

Benedick (Act 2 sc3)

4. "He wears his faith but as the fashion of his hat; it ever changes with the next block."

Beatrice (Act 1 sc1)

5. "Let every eye negotiate for itself  
And trust no agent; for beauty is a witch,  
Against whose charms faith melteth into blood."

Claudio (Act 2 sc1)

6. "Oh she is fallen  
Into a pit of ink, that the wide sea  
Hath drops too few to wash her clean again".

Leonato (Act 4 sc1)

7. "And as I wooed for thee to obtain her, I will join with thee to disgrace her".

Don Pedro ( Act3 sc2)

## Key Vocabulary (concepts/themes)

### **Honour:**

- Don John feels that he is not viewed honourably because of his status as a 'bastard'.
- Hero is publically shamed and her honour is questioned.
- Claudio and Don Pedro take Hero's apparent unfaithfulness as a slur on their honour.
- Leonato is furious when he believes Hero has dishonoured the family – it is the ultimate disgrace.
- Benedick promises Beatrice that he will do anything to help her. He has to honour this promise and has to challenge Claudio.

### **Love:**

- Beatrice and Benedick love each other but need help to realise it.
- Claudio and Hero fall in love at first sight – this a naïve and traditionally romantic view of love. However, Claudio is quick to shame Hero when he believes she is unfaithful.
- Leonato loves Hero but is quick to condemn her when he thinks she has been unfaithful.
- Beatrice's love for Hero is one of the strongest examples of love in the play – she never doubts Hero's innocence and fights to protect her.



### **Deception:**

- Characters 'deceive' each other at the masked ball by pretending to be different people.
- Don Jon deceives Claudio in an attempt to discredit Don Pedro.
- Beatrice and Benedick are deceived by their friends into thinking they have confessed their love for each other.
- Claudio falsely accuses Hero of deceiving him.
- The Friar advises Hero to deceive Claudio and Don Pedro by pretending to be dead.



### **Gender:**

- Society's expectations of men and women are different. Men are allowed to be sexually promiscuous whereas women must be submissive and chaste.
- Hero is portrayed as the ideal stereotypical Elizabethan woman. She is modest, pure and is devastated by the insinuation that she has been unfaithful.
- Beatrice is feisty, opinionated and intelligent so is different to the stereotypical portrayal of an ideal Elizabethan woman. She feels constrained by the expectations of women.

### **Language:**

- Benedick and Beatrice revel in word-play.
- Claudio's harsh words to Hero at their wedding makes her physically ill.
- Dogberry continuously confuses words and phrases and demonstrates the comedic effect of language.



## Sentence Structures

- Independent Clause:** A clause that can stand alone as a sentence. E.g. The cat sat on the mat.  
Contains a subject and a verb.
- Subordinate Clause:** A clause that depends on an independent clause to make sense. E.g. Without turning around, the cat sat on the mat.
- Simple Sentence:** Contains just one clause (subject + verb) E.g. Tom went to the shops.
- Compound Sentence:** Independent Clause + Conjunction (FANBOYS) + Independent Clause (For, And, Nor, But, Yet, So) E.g. Tom went to the shops and he bought some bread.
- Complex Sentence:** Contains one main clause and one or more subordinate clause/s. E.g. Although it looked difficult, they still pushed on with the challenge.
- Exclamatory:** A sentence that shows great emotions. E.g. I am appalled by your behaviour!
- Imperative:** A sentence that gives commands. E.g. Get out!
- Interrogative:** A sentence that asks a question (not rhetorical questions). E.g. How much is that?
- Declarative:** A sentence that makes a declaration. E.g. She sells sea-shells.

## Sentence Openers

**Adverbs** Quickly, Carefully, Bravely, Quietly, Slowly, Suddenly, Happily,

**Connectives** Instead, Unless, Soon, Before, Eventually, While, However

**Adjectives** Happy and cheerful, Sweet and kind, Scared but excited, Tired and weary,

**Relative Pronouns** Which, That (animals and things), Who (people)



## Paragraphs



**Ti**...you move to a new period of time

**P** ... you move to a different place/location

**To** ... you move from one topic to another

**P** ... you bring a new person into your writing, or change from one person to another - including dialogue (speech)

## Homophones: words that sound the same but have different meanings

- Their** - means it belongs to them. E.g. I ate their sweets.
- They're** - short for they are. E.g. They are going to be cross.
- There** - refers to a place. E.g. I'm going to hide over there.
- Your** - refers to something that belongs to you. E.g. Your bag.
- You're** - contraction of 'you are.' E.g. You're going to win.

**Prepositions** Inside, Next to, Above, Hidden in, Behind, Under, Past

**Ing Words** Eating, Crying, Thinking, Laughing, Shouting, Smiling,

**Ed Words** Worried, Defeated, Scared, Flabbergasted, Shocked,



## Punctuation

- **Full stops:** remember to use a full stop at the end of every sentence.
- **Capital Letters :** make sure every name of something has a capital letter. *E.g. California has a capital letter. Also, make sure every new sentence starts with a capital letter.*
- **Apostrophes:** you can use apostrophes to connect certain words together. *E.g. It is = It's OR to express belonging or property = John's phone*
- **Exclamation marks:** used to end a sentence to show a strong feeling of emotion like surprise, anger, or shock. *E.g. I'm so frightened!*
- **Ellipses:** used to show an omission of words, a pause in thought or to create suspense. *E.g. Suddenly, there it was ... his worst nightmare.*
- **Colons:** used to precede lists or explanations. *E.g. I went to the store and bought a lot of fruit: peaches, apples, oranges and pears. Sarah wrote a story: The Hungry Fish.*
- **Semi Colons:** used to join two related independent clauses. *E.g. We made too many mistakes; we lost the game. Also, use a semi-colon instead of a comma, usually in a list. E.g. You will need many backpacking items: a sleeping bag; torch ; tent ; and pillow.*
- **Hyphens:** you can use hyphens for a number of reasons.
  - To separate sentences with added information e.g. *I enjoy English – as well as Maths.*
  - To indicate periods of time. *E.g. 2000-2006.*
  - To form hyphenated words. *E.g. self-respect.*
  - To create emphasis. *E.g. Mum loves seafood – she absolutely adores seafood.*
- **Brackets:** use brackets to indicate added information. The sentence should still make sense when removed. *E.g. I did my homework, (it took me twenty minutes) and brought it in early.*

## The 7 Main Commas Rules

- 1.) Use a comma before a conjunction, (and, but, nor, yet, or, so), to connect two independent clauses.  
*E.g. I had an English test last night, so I revised.*
- 2.) Use a comma to set off an opening phrase.  
*E.g. As such, I feel there is much I can learn.*
- 3.) Use a comma when using quotes to separate the quote from the rest of the sentence.  
*E.g. Like Bob Johnson said, "It's a great day for hockey".*
- 4.) Use a comma to separate adjectives in a descriptive list.  
*E.g. The pizza was hot, delicious and freshly cooked.*
- 5.) Use a comma to separate three or more things in a series.  
*E.g. Of Charles Dickens' novels, I have read "A Christmas Carol", "Oliver Twist", and "Great Expectations".*
- 6.) Use a comma with phrases that present a contrast.  
*E.g. Learning about Hemingway can be highly advantageous for students, not only in their secondary school studies, but also in their future careers.*
- 7.) Use a comma to set off a parenthetical element (added information that can be taken out without changing the meaning of the sentence).  
*E.g. Now, many years after their time, we as a country are faced at the starting ground where these men once were.*





**Subject: Mathematics**  
**Topic: Recall Knowledge**

**Year: 7 and 8**  
**Term: 1-6**

**Look**

Read the specific part of the Knowledge Organiser (KO) that you need to learn.

**Cover**

Cover the KO.

**Write**

Write out everything you can remember from the specific part of the KO in your book.

**Check**

Check that you have all the content needed and it is correct. For any content that is missing or incorrect, use a different colour pen to add in the correct knowledge.

**Repeat**

<b>2x</b>	2x0=0 2x1=2 2x2=4 2x3=6 2x4=8 2x5=10 2x6=12 2x7=14 2x8=16 2x9=18 2x10=20 2x11=22 2x12=24	<b>3x</b>	3x0=0 3x1=3 3x2=6 3x3=9 3x4=12 3x5=15 3x6=18 3x7=21 3x8=24 3x9=27 3x10=30 3x11=33 3x12=36	<b>4x</b>	4x0=0 4x1=4 4x2=8 4x3=12 4x4=16 4x5=20 4x6=24 4x7=28 4x8=32 4x9=36 4x10=40 4x11=44 4x12=48	<b>5x</b>	5x0=0 5x1=5 5x2=10 5x3=15 5x4=20 5x5=25 5x6=30 5x7=35 5x8=40 5x9=45 5x10=50 5x11=55 5x12=60	<b>6x</b>	6x0=0 6x1=6 6x2=12 6x3=18 6x4=24 6x5=30 6x6=36 6x7=42 6x8=48 6x9=54 6x10=60 6x11=66 6x12=72	<b>7x</b>	7x0=0 7x1=7 7x2=14 7x3=21 7x4=28 7x5=35 7x6=42 7x7=49 7x8=56 7x9=63 7x10=70 7x11=77 7x12=84	<b>8x</b>	8x0=0 8x1=8 8x2=16 8x3=24 8x4=32 8x5=40 8x6=48 8x7=56 8x8=64 8x9=72 8x10=80 8x11=88 8x12=96	<b>9x</b>	9x0=0 9x1=9 9x2=18 9x3=27 9x4=36 9x5=45 9x6=54 9x7=63 9x8=72 9x9=81 9x10=90 9x11=99 9x12=108	<b>10x</b>	10x0=0 10x1=10 10x2=20 10x3=30 10x4=40 10x5=50 10x6=60 10x7=70 10x8=80 10x9=90 10x10=100 10x11=110 10x12=120	<b>11x</b>	11x0=0 11x1=11 11x2=22 11x3=33 11x4=44 11x5=55 11x6=66 11x7=77 11x8=88 11x9=99 11x10=110 11x11=121 11x12=132	<b>12x</b>	12x0=0 12x1=12 12x2=24 12x3=36 12x4=48 12x5=60 12x6=72 12x7=84 12x8=96 12x9=108 12x10=120 12x11=132 12x12=144
-----------	--	-----------	---	-----------	--	-----------	---	-----------	---	-----------	---	-----------	---	-----------	--	------------	--	------------	--	------------	---

**Formulae to learn**

Area of a rectangle	=	Base x perpendicular height
Area of a triangle	=	(Base x perpendicular height) ÷ 2
Area of a parallelogram	=	Base x perpendicular height
Area of a trapezium	=	$h(a + b) \div 2$
Area of a circle	=	$\pi r^2$
Speed	=	Distance ÷ time
Prism volume	=	Area of cross section x length

Literacy In Maths	Command Words
<b>Evaluate ...</b>	Work out and write your answer
<b>Work out ...</b>	Working out is required
<b>Calculate ...</b>	Working out is required. A calculator may be needed.
<b>Solve ...</b>	Work out the values
<b>Prove ...</b>	All working must be shown in steps to link reasons and values.
<b>Expand...</b>	Multiply out of the brackets
<b>Draw...</b>	Draw accurately with a pencil and equipment.
<b>Explain ...</b>	Use words to give reasons
<b>Factorise</b>	The reverse process of expanding brackets. Remove the HCF.
<b>Estimate</b>	Work out an approximate answer using rounded values.

**Top 10 Key Words**

Integer	A whole number	Examples
Factor	A number that divides into another number exactly, without leaving a remainder	Factors of 20: 1 & 20, 2 & 10, 4 & 5
Multiple	The result of multiplying whole numbers. Multiples belong in the number's times table.	Multiples of 5 are 5, 10, 15, 20, 25, ...
Product	The result you get when you multiply	The product of 3 and 4 is 12
Percentage	Number of parts per 100	35% is 35 out of every 100.
Fraction	Part of a whole number. A fraction represents a division.	$\frac{1}{2}$ , $\frac{3}{4}$ , $\frac{7}{8}$
Numerator	The top number in a fraction	
Denominator	The bottom number in a fraction	
Negative	A quantity below zero	-4, -1.5, -34
Estimate	Work out an approximate answer	

**Number Groups**

Prime numbers	2, 3, 5, 7, 11, 13, 17 ...	Prime numbers have exactly two factors, themselves and 1.
Square numbers	1, 4, 9, 16, 25, 36, 49 ...	Square numbers are the product of two identical numbers.
Cube numbers	1, 8, 27, 64, 125, 216, 343 ...	Cube numbers are the product of three identical numbers.
Odd numbers	1, 3, 5, 7, 9, 11, 13, 15, ...	Odd numbers are whole numbers that cannot be divided exactly into two.
Even numbers	2, 4, 6, 8, 10, 12, 14 ...	Even numbers are whole numbers that can be divided exactly into two.
Triangle numbers	1, 3, 6, 10, 15, 21, 28 ...	Triangle numbers can be represented as a triangle of dots.

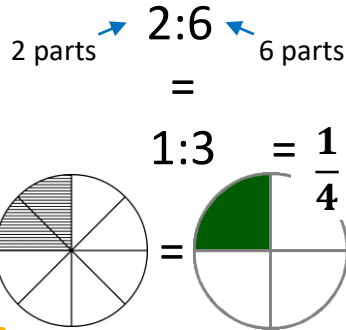
## BIG QUESTIONS

What is a ratio and how are they used?

What is proportion and how is it useful?

What are the basic Geometry facts you need to know?

### Ratio

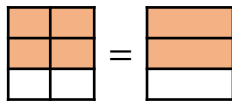


### Proportion

Proportion states that two fractions or ratios are equivalent.

$$\frac{4}{6} = \frac{2}{3}$$

$$4:2 = 2:1$$



### Key Words

**Ratio:** Relationship between two numbers.  
**Part:** This is the numeric value '1' of, would be equivalent to.  
**Simplify:** Divide both parts of a ratio by the same number.  
**Equivalent:** Equal in value.  
**Convert:** Change from one form to another.  
**Scale:** The ratio of the length in a drawing to the length of the real thing.  
**Proportion:** A name we give to a statement that two ratios are equal.  
**Exchange rate:** The value of one currency for the purpose of conversion to another.

Simplify  $60:40:100$

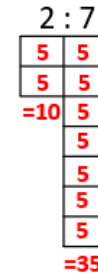
This could have been done in one step by dividing by 20.

$$\begin{array}{l} \div 10 \\ 6:4:10 \\ \div 2 \\ 3:2:5 \end{array}$$

Share £45 in the ratio 2:7

$$45 \div 9 = 5$$

£10 : £35



Write 2:5 in the form 1:n

$$\begin{array}{c} 2:5 \\ \div 2 \quad \quad \div 2 \\ 1:2.5 \end{array}$$

Joy and Martin share money in the ratio 2:5. Martin gets £18 more than Joy. How much do they each get?

2:5

6	6
6	6
6	6
6	6
6	6

$18 \div 3 = 6$   
 $=12$   $=30$

£12 : £30

**Tip** - Its often useful to write the letters above the ratio. This helps you keep the order the correct way round.

Write 2:5 in the form 1:n

$$\begin{array}{c} 2:5 \\ \div 2 \quad \quad \div 2 \\ 1:2.5 \end{array}$$

$a:b = 4:5$  and  $b:c = 6:7$   
Find  $a:b:c$ .

The LCM of 5 and 6 is 30

$$\begin{array}{c} a:b:c \\ \times 6 \quad \quad \times 5 \\ 4:5 \\ 24:30:35 \end{array}$$

Cake recipe for 6 people.

3 eggs  
300g flour  
150g sugar

What would you need for 8 people?

	$\div 3$	$\times 4$	
	6	2	8
eggs	3	1	4
flour	300g	100g	400g
sugar	150g	50g	200g

## Sparx Maths

M252, M885,  
M801, M818,  
M606, M393,  
M448, M478



## Key Words

**Angle:** This is formed by two lines joined by a common endpoint.

**Quadrilateral:** 4 sided shape.

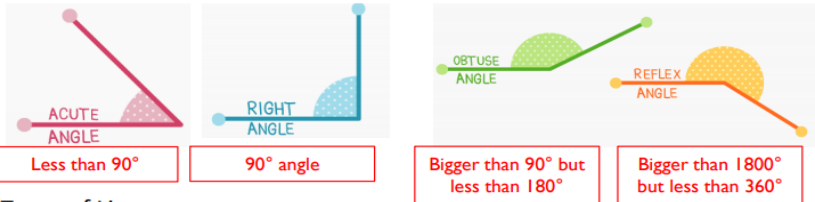
**Polygon:** Many sided shape.

**Regular polygon:** All sides and angles are the same.

**Protractor:** Used to measure the size of an angle.

## What you need to know:

### Types of Angles



### Types of Lines

#### Perpendicular Lines

Intersect (cross) at  $90^\circ$

#### Parallel Lines

Never meet

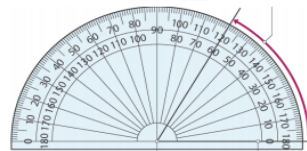
### Angle Notation

Angles are measured in degrees ( $^\circ$ ).

An angle can be identified like this  $\angle ABC$ . The middle letter is the vertex.

### Measuring Angles

When measuring angles, make sure that the centre of the protractor is over the **vertex** (corner) of the angle and that the base line of the protractor is along one of the lines of the angle



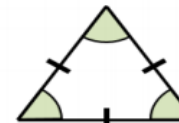
Always read from zero. In this example use the inside scale

Ensure the centre and base line are lined up with the angle lines

## What you need to know:

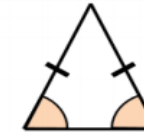
### Types of Triangles

#### Equilateral Triangle



3 equal sides  
3 equal angles ( $60^\circ$ )  
2 sets of parallel sides  
3 lines of symmetry

#### Isosceles Triangle



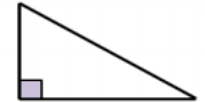
2 equal sides  
2 equal angles  
1 line of symmetry

#### Scalene Triangle



0 equal sides  
0 equal angles  
0 lines of symmetry

#### Right-angle Triangle

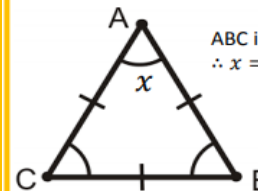


1 right angle

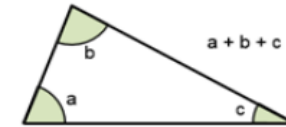
### Angles in Triangles

Angles in a triangle add up to  $180^\circ$

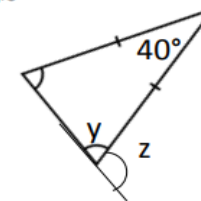
Examples – calculate the missing angles



ABC is an equilateral triangle  
 $\therefore x = 180 \div 3 = 60^\circ$



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

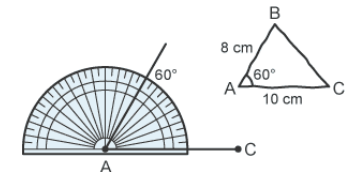


Tip – work out missing angles in alphabetical order

This is an isosceles triangle  
 $\therefore$  base angles are equal  
 $180 - 40 = 140$   
 $140 \div 2 = 70^\circ$   $y = 70^\circ$   
 $Z = 180 - 70 = 110^\circ$

## What do you need to construct (draw) an accurate triangle?

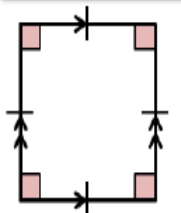
Ruler, Protractor, Compass, Sharp pencil



## What you need to know:

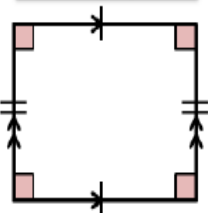
### Types of Quadrilaterals

#### Square



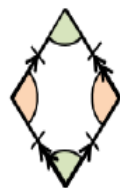
4 equal sides  
4 right angles  
2 sets of parallel sides  
4 lines of symmetry

#### Rectangle



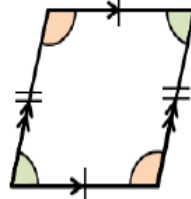
2 sets of equal sides  
4 right angles  
2 sets of parallel sides  
2 lines of symmetry

#### Rhombus



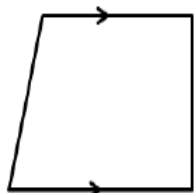
4 equal sides  
2 sets of parallel sides  
2 pairs of equal angles  
2 lines of symmetry

#### Parallelogram



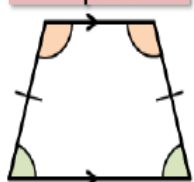
2 sets of equal sides  
2 sets of parallel sides  
2 pairs of equal angles  
0 lines of symmetry

#### Trapezium



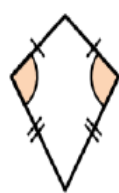
1 set of parallel sides  
0 lines of symmetry

#### Isosceles Trapezium



1 set of equal sides  
1 set of parallel sides  
2 pairs of equal angles  
1 line of symmetry

#### Kite



2 sets of equal sides  
0 parallel sides  
1 pair of equal angles  
1 line of symmetry

#### Arrowhead



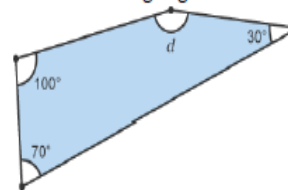
2 sets of equal sides  
0 parallel sides  
1 pair of equal angles  
1 line of symmetry

### Angles in Quadrilaterals

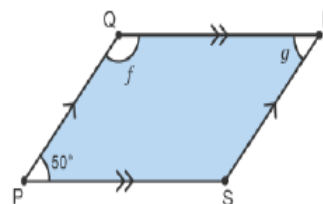
Angles in a quadrilateral add up to  $360^\circ$



Examples – calculate the missing angles



Angles add up to  $360^\circ$   
 $100 + 70 + 30 + d = 360$   
 $200 + d = 360$   
 $360 - 200 = d$   
 $d = 160^\circ$

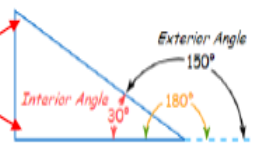


Parallelogram – opposite angles are equal  
 $g = 50^\circ$   
Using angles in parallel lines  $50 + f = 180^\circ$   
(co-interior angles)  
 $f = 180 - 50$   
 $f = 130^\circ$

### Interior and Exterior angles

Interior + Exterior angle add up to  $180^\circ$

These two angles add up to exterior angle. In this example =  $150^\circ$



Tip – the exterior angle of a triangle is equal to the sum of the interior angles at the other two vertices

## Homework Links

Sparx Maths

Corbettmaths.com/contents

bbc.co.uk/bitesize/subjects

## Key Vocabulary

Ratio

Part

Unit

Proportion

Multiplicative

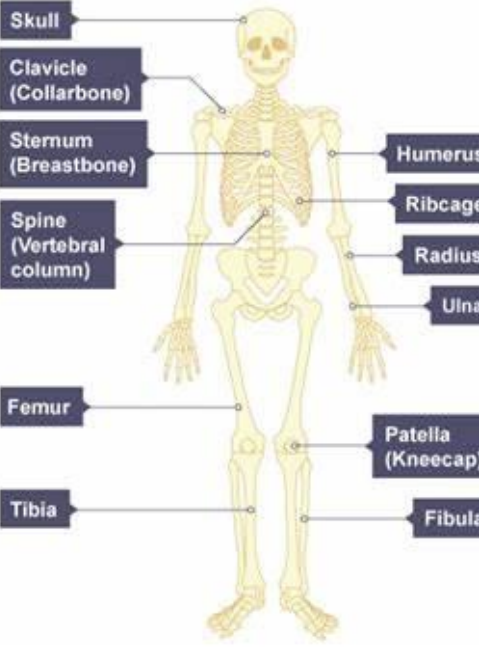
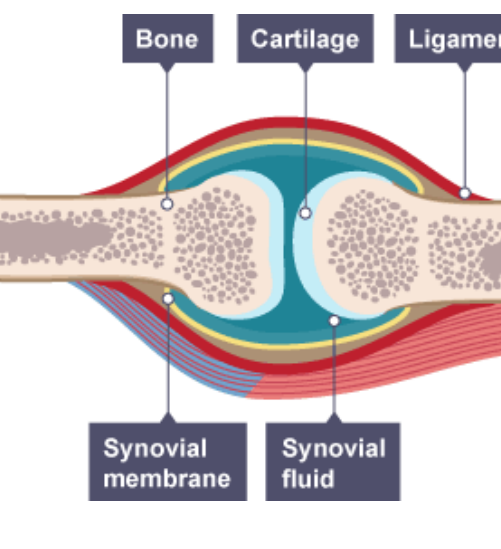
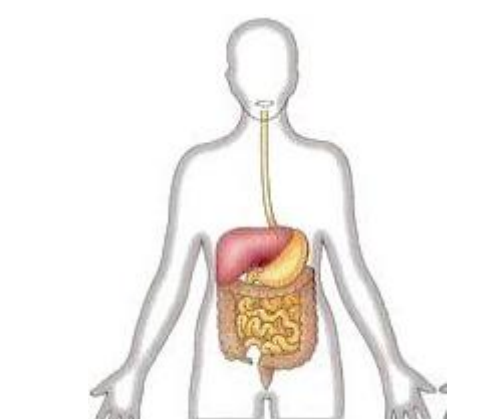
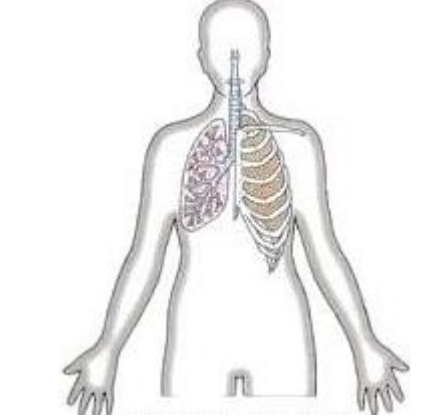
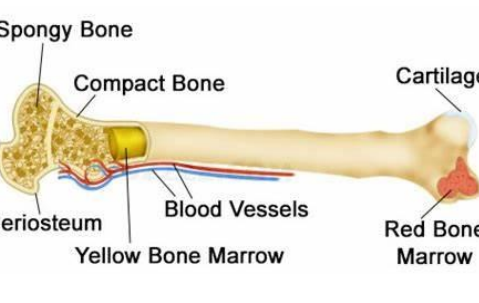
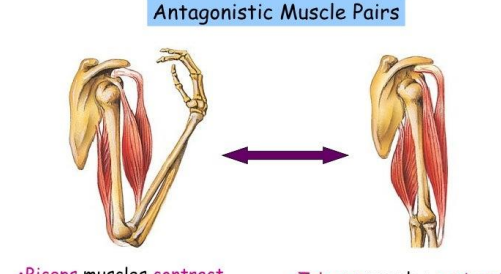
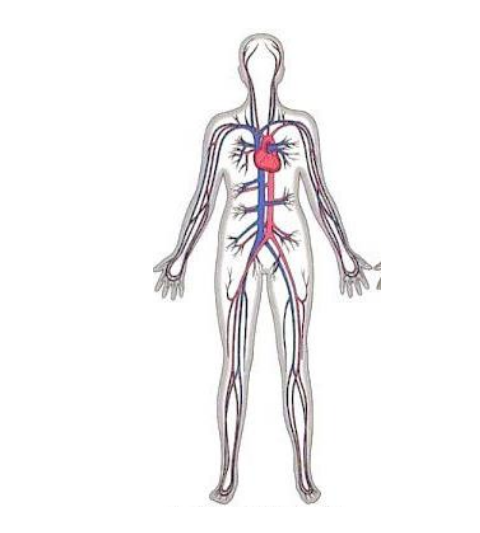
Angle

Sum

Quadrilateral

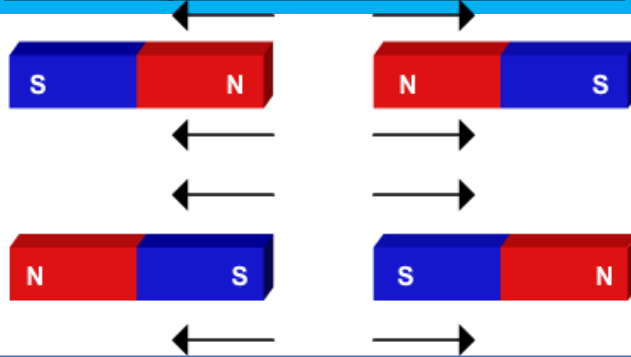
Degrees

## KS3 Biology – Getting the energy your body needs

A) Major bones of the human skeleton	C) Parts of a joint between two bones	D) Digestive system	E) Respiratory system
 <p>Labels for Major bones of the human skeleton:</p> <ul style="list-style-type: none"> <li>Skull</li> <li>Clavicle (Collarbone)</li> <li>Sternum (Breastbone)</li> <li>Spine (Vertebral column)</li> <li>Humerus</li> <li>Ribcage</li> <li>Radius</li> <li>Ulna</li> <li>Femur</li> <li>Patella (Kneecap)</li> <li>Tibia</li> <li>Fibula</li> </ul>	 <p>Labels for Parts of a joint between two bones:</p> <ul style="list-style-type: none"> <li>Bone</li> <li>Cartilage</li> <li>Ligament</li> <li>Synovial membrane</li> <li>Synovial fluid</li> </ul>		
B) Structure of a bone	D) Antagonistic pairs of muscles	E) Circulatory system	F) Equation of aerobic respiration
 <p>Labels for Structure of a bone:</p> <ul style="list-style-type: none"> <li>Spongy Bone</li> <li>Compact Bone</li> <li>Cartilage</li> <li>Periosteum</li> <li>Blood Vessels</li> <li>Yellow Bone Marrow</li> <li>Red Bone Marrow</li> </ul>	<p style="text-align: center;">Antagonistic Muscle Pairs</p>  <ul style="list-style-type: none"> <li>• Biceps muscles <b>contract</b>.</li> <li>• This <b>pulls</b> the forearm up.</li> <li>• Triceps muscles are <b>relaxed</b>.</li> <li>• Triceps muscles <b>contract</b>.</li> <li>• This <b>pulls</b> the forearm down.</li> <li>• Biceps muscles are <b>relaxed</b>.</li> </ul>		<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <math display="block">C_6H_{12}O_6 + O_2 \rightarrow CO_2 + H_2O + \text{energy}</math> </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <math display="block">\text{Glucose} + \text{Oxygen} \rightarrow \text{Carbon dioxide} + \text{Water} + \text{energy}</math> </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p><b>G) Equation of anaerobic respiration (humans)</b></p> <math display="block">\text{Glucose} \rightarrow \text{Lactic acid} + \text{small amount of energy}</math> </div> <div style="border: 1px solid black; padding: 5px;"> <p><b>G) Equation of anaerobic respiration (yeast)</b></p> <math display="block">\text{Glucose} \rightarrow \text{Alcohol} + \text{Carbon Dioxide} + \text{energy}</math> </div>

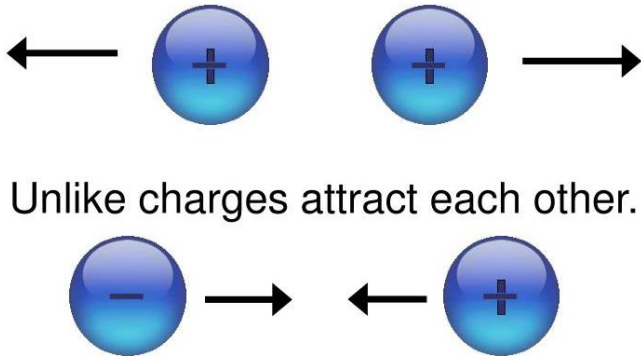
## KS3 Physics – Exploring contact and non-contact forces

### A) How magnets behave next to each other



What would happen if two south poles were pushed together? They would repel – they behave in the same way as the two north poles.

### B) How charges behave next to each other



Unlike charges attract each other.

What would happen if two negative charges were pushed together? They would repel – they behave in the same way as the two positive charges.

### C) Acceleration formula

$$\text{Acceleration} = \frac{\text{Change in speed}}{\text{Time}}$$

$$\text{Acceleration} = \frac{\text{Final speed} - \text{Initial speed}}{\text{Time}}$$

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

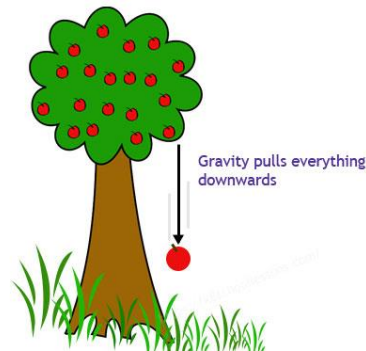
### D) Acceleration worked example

A bat accelerates from 10m/s to 20m/s in 5 seconds. What is its acceleration?

$$\text{Acceleration} = \frac{\text{Final speed} - \text{Initial speed}}{\text{Time}}$$

$$a = \frac{20 - 10}{5} = \frac{10}{5} = 2\text{m/s}^2$$

### E) Direction of the force of gravity



### F) Pressure formula triangle

To find pressure	To find force	To find area
$P = \frac{F}{A}$	$F = P \times A$	$A = \frac{F}{P}$

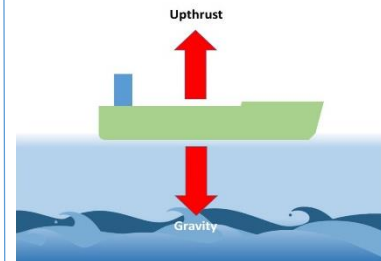
### G) Pressure worked example

An elephant makes a force of 70,000N on the ground. The four feet have a total area of 2m<sup>2</sup>. What is the pressure?

$$\text{Pressure} = \frac{\text{Force}}{\text{Area}}$$

$$P = \frac{70,000}{2} = 35,000 \text{ Pa}$$

### H) Why do objects float?



The boat is floating because the forces are balanced. The force of upthrust is equal to the force of gravity and acting in the opposite direction.

## BIG QUESTIONS

What kind of King was James I?

Was Guy Fawkes to blame for the Gunpowder Plot?

Why did King Charles and Parliament go to war?

Who fought in the Civil War?

What was the significance of Oliver Cromwell's reign as Lord Protector?

How successful was the restoration of the Monarchy?

How glorious was the 'Glorious Revolution'?

**Summary of period** At the start of the 17<sup>th</sup> Century Kings believed they had ultimate power and were responsible only to God, an idea known as the 'Divine Right of Kings'. Religious differences were still causing problems with Catholic Terrorists undertaking a plot to Kill King James 1 by blowing up Parliament with gunpowder. The idea of Kings being all powerful started to be challenged by Parliament who believed they should have a say in how the country was run and that the King needed to have their power kept in check. In England when the King dismissed Parliament and attempted to rule on his own, this led to a Civil War which saw Royalist supporters of the King fighting Parliamentary supporters of Parliament. Parliament won the Civil War and for a brief period England was a republic before the monarchy was restored and ruled alongside Parliament. The restoration of monarchy did not signal a period of peace. Fear of the absolute monarch remained, and by 1688 the Stuart reign had been ended with the arrival of a Dutch Prince named William of Orange. This event marked the beginning of a new democratic constitutional monarchy.

### Key Events

- 1603** James I becomes King and unites the Kingdoms of Scotland and England
- 1605** The Gunpowder plot sees Catholics attempt to blow up Parliament and kill King James I
- 1625** Charles married a French Catholic. This angered the English Protestants
- 1629** Charles believed in the Divine Right and chose to rule without Parliament for 11 years
- 1641** MPs made a list of demands towards the king.
- 1642** January – Charles burst into the House of Commons and tried to arrest 5 MPs who had fled
- 1642** August – Charles gathered his army and Parliament gathered theirs – Civil War had begun
- 1645** Parliament created their 'New Model Army' (NMA). Sir Thomas Fairfax was appointed its lord general and Oliver Cromwell his second-in-command.
- 1646** Charles surrenders to the Scots after the royalists were defeated by the NMA at Naseby
- 1647** The Scots hand Charles over to the Parliamentary forces
- 1649** 30th January, Charles was executed at Whitehall Palace
- 1660** The monarchy is restored with Charles II as King
- 1688** William of Orange arrives in the Netherlands and launches the 'Glorious Revolution'
- 1689** James II's Jacobite forces are defeated at the Battle of the Boyne

### Key People

- 1. James I** King of England and Scotland from 1603-1625
- 2. Charles I** Ruled from 1625-1649
- 3. Henrietta Maria** Daughter of Henri IV of France.
- 4. William Laud** Archbishop of Canterbury; Protestant; initiated reforms in the Church which were hated by Puritans
- 5. Thomas Fairfax** Parliamentarian General and creator of the New Model Army.
- 6. Oliver Cromwell** Ruled England as Lord Protector from 1653-1658
- 7. Charles II** Charles I's son. Restored the Monarchy and ruled from 1660-1685
- 8. James II** Charles II's son Catholic King. Forced to abdicate due to fears over his role as an 'absolute King'
- 9. William of Orange** Dutch Prince who leads the 'Glorious Revolution' – transferral of power from absolute King James II to the more democratic constitutional dual monarchy



## Key Vocabulary

- ❑ **Absolutism/Absolute Monarchy** The holding of absolute principles – without negotiation / A monarchy in which the monarch rules in their own right and has no limits on their power
- ❑ **Accession** When a 'monarch in waiting' takes over the throne
- ❑ **Cavaliers** The insulting nickname given to the Royalists, who fought for the King; it literally meant "horsemen" but also suggested arrogance and conceit
- ❑ **Civil War** A war between different groups in the same country
- ❑ **Constitutional Monarchy** A constitutional monarchy is a form of government in which a monarch—typically a king or queen—acts as the head of state within the parameters of a written or unwritten constitution
- ❑ **Divine Rights of Kings** A belief that the Monarch was chosen by God, that their power and authority was derived from God and they had to answer to no one except God
- ❑ **Enlightenment** When people used science & reason to understand the world
- ❑ **The Grand Remonstrance** A list of grievances presented to King Charles I of England by the English Parliament
- ❑ **Impeach** To put a member of the government on trial for crimes; the trial is heard by Parliament
- ❑ **Parliament** Parliament is the legislature, or law-making group, in the government of the United Kingdom
- ❑ **Interregnum** Commonwealth period (1649-60) when England had no King
- ❑ **Lord Protector** Title to given to Oliver Cromwell after King Charles I's death
- ❑ **New Model Army** full-time, highly disciplined, professional army set up by Thomas Fairfax and Oliver Cromwell; Puritan in makeup; vital in defeating Charles
- ❑ **Puritans** Strict Protestants who thought the Church of England had not gone far enough in removing popish elements; they wanted a purified Church
- ❑ **Regicide** The act of killing a Monarch
- ❑ **Republic(an)** A country without a Monarch/someone who supports the idea that there shouldn't be a monarch
- ❑ **Restoration** the return of the monarchy
- ❑ **Roundheads** The insulting nickname given to those who fought for Parliament had the nickname; many Puritans wore their hair very short / closely cropped
- ❑ **Rump Parliament** The Parliament that was left after the MPs who were against Charles I's trial were thrown out by Cromwell and his men. Only 200 MPs were left in this Parliament out of over 500 at first
- ❑ **Ship money** A tax traditionally only be imposed on coastal towns in times of war, to pay for the navy; Charles imposed the tax during peace and across the country
- ❑ **Treason** The crime of going against your country, King or government

## Homework

1. Learn the meanings of the words on the key vocabulary page, they will be tested in a knowledge test
2. Complete the following table about the English Civil War:

Causes of the English Civil War	Main events of the English Civil War (e.g key dates, battles etc)	Results and consequences of the English Civil War

3. Examine the source about the execution of King Charles following the end of the English Civil War.



1. What is happening in the painting?
2. Do you think the artist was a Royalist or Parliamentarian?
3. Why have you reached that judgement?

### BIG QUESTIONS

1. What is the water cycle?
2. How does a river change from its source to its mouth?
3. How does a waterfall form?
4. How are river landforms created by erosion AND deposition?
5. What causes flooding to happen naturally?
6. How do humans make flooding worse?

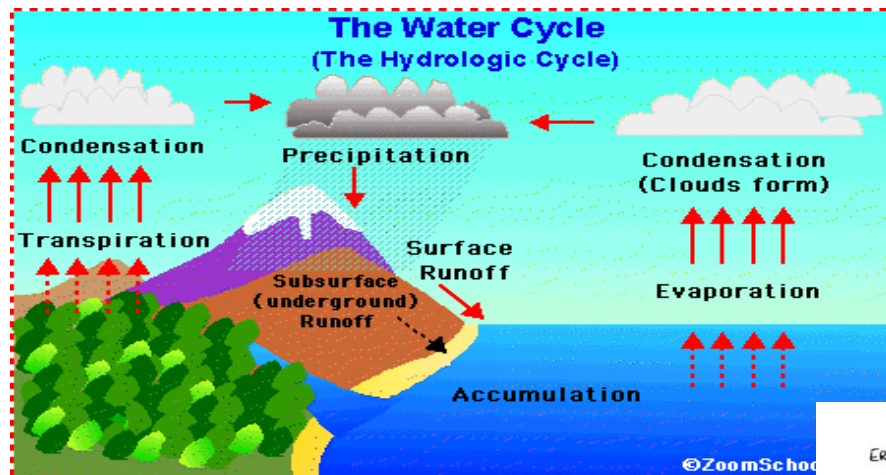
### HOMEWORK LINKS

[Rivers - KS3 Geography - BBC Bitesize](#)

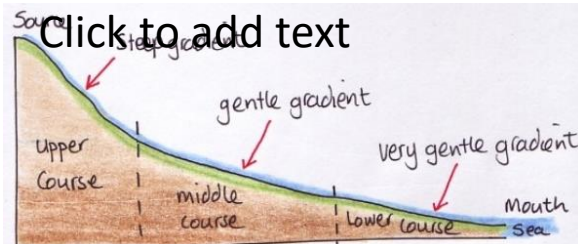
### Revise and Test

- The Water Cycle and River Terminology
- River Landforms

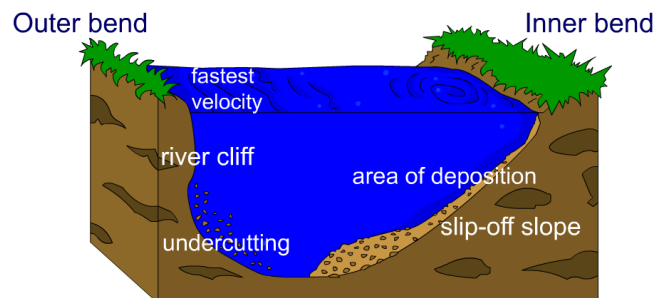
Draw your own step by step formation cartoon of how a waterfall is formed.



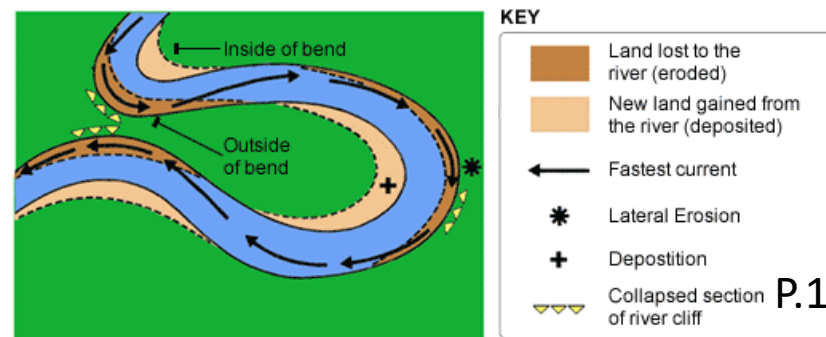
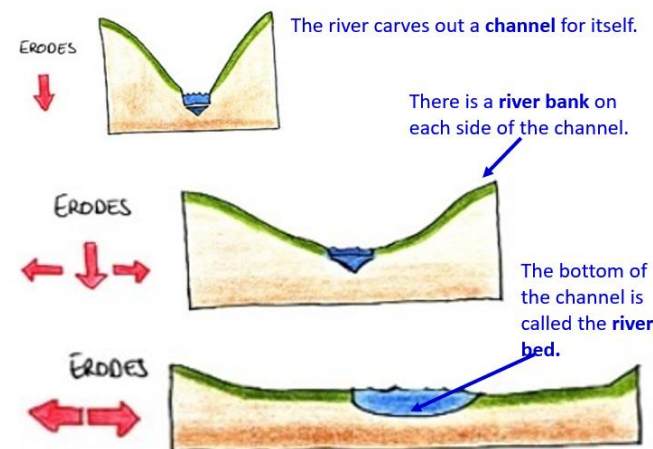
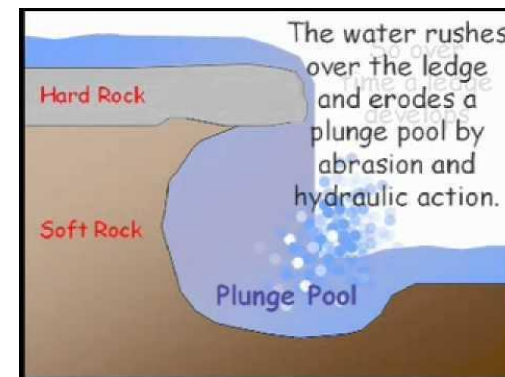
- Upper course
- Middle course
- Lower course



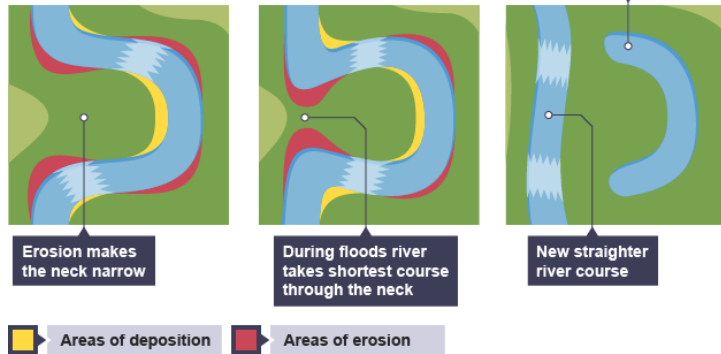
### Cross section of a meander



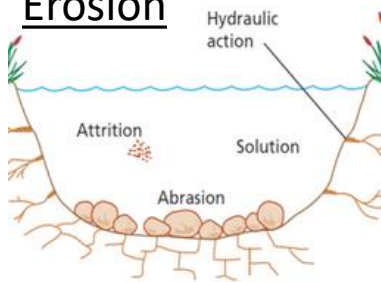
### Waterfall formation



## Ox – bow lake



## Erosion



The water dissolves soluble minerals from the bed and banks. This helps to break them up.

Rocks, stones and sand in the water act like sandpaper. They scrape the river bed and banks and wear them away.

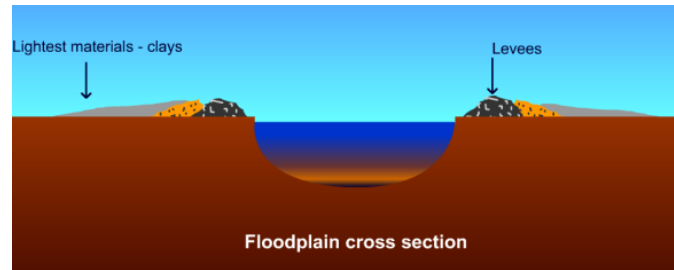
The rocks and stones wear each other away too. They bang together and knock bits off each other.

In a fast-flowing river, water is forced into cracks in the bank. Over time this breaks the bank up.

### Challenge Homework

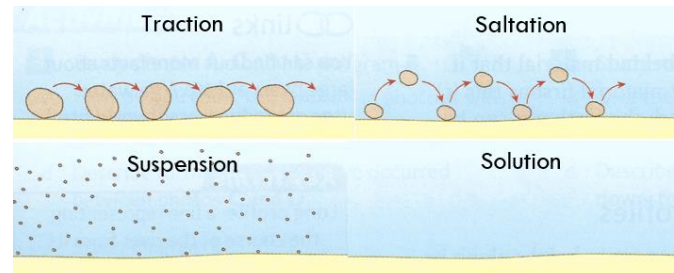
Research the November 2019 flooding event that occurred in the UK, and describe and explain the **impacts and responses**

[UK Floods Case Study November 2019 - Internet Geography](#)



Floodplains and levees are formed by deposition in times of river flood. The river's load is composed of different sized particles. When a river floods it deposits the heaviest of these particles first. The larger particles, often pebble-sized, form the **levees**. The sands, silts and clays are similarly sorted with the sands being deposited next, then the silts and finally the lightest clays. Every time the river floods deposition builds up the **floodplain**.

## Transportation



Small light particles are carried along by the water. They make the water look cloudy or muddy.

Heavier material is carried along the bottom. Sand and small stones bounce along the river bed.

Dissolved material is carried along by the water, and it cannot be seen.

Heavier material is carried along the bottom. Larger stones and rocks roll along the river bed.

## Homework links

1. Look, cover, write, check and remember the keywords listed below
2. Research the definitions of the keywords below and remember them

## KEYWORDS

1. **Precipitation** – moisture that falls from the sky (as rain, sleet, snow, hail)
2. **Evaporation** – when water droplets turn to water vapour)
3. **Condensation** – when water vapour turns back to droplets (and hang in the sky as clouds)
4. **Infiltration** – the flow of water from above to below ground.
5. **Surface runoff** – the movement of water over ground.
6. **Permeable** – allows water through.
7. **Impermeable** – does not allow water through.
8. **Plunge Pool** – a deep basin eroded at the foot of a waterfall.
9. **Gorge** – a narrow valley formed, cut either side of a river channel.
10. **Meander** – a bend / curve in the river.
11. **Floodplain** – an area of low-lying ground subject to flooding.
12. **Levee** – a natural or artificial wall on the banks of a river.



## BIG QUESTIONS

How do artists use 3D materials, techniques and processes?

Why is drawing important in a project?

What is scale?

What is texture?

List 2 types of media used in sculpture.

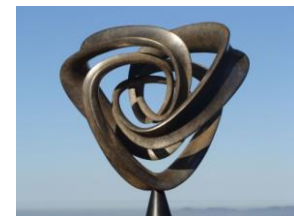
Why is it important to plan more than one idea?

Does a sculpture have to be realistic?

Can you create an imaginative sculpture?

### Overarching Big Question

*Through a series of activities, students develop skills in drawing and 3D design, using a range of materials, techniques and processes. They investigate how artists show message and meaning in sculpture. They will use their knowledge of Formal Elements **FORM, SHAPE, SCALE and TEXTURE** to show how specific media can be used to create their own 3D work.*





## Key Skills

### RECORD

#### I will learn to record...

- images and information appropriate to a given theme
- using 2D and 3D media
- increasing my knowledge and understanding of how artists use 3D techniques to create meaningful work
- ideas for 3D work

### DEVELOP

#### I will learn how to develop...

- my knowledge and understanding of 3D
- my drawing and 3D skills
- my ability to use images and information to create 3D ideas
- ideas in response to a given theme, linking to artists work.
- my higher order thinking skills

### REFINE

#### I will learn how to...

- work from observation, imagination and other sources to plan ideas for a 3D piece of work.
- explore 3D techniques and media e.g. Modelling clay, constructing with card or wire etc.
- select ideas to adapt and improve in different ways

### EVALUATE

#### I will learn how to...

- reflect on the development of my work
- make connections between my own and abstract artists' work
- suggest ways I could improve
- evaluate artists using analytical writing skills and forming opinions

### PRESENT OUTCOMES

#### I will learn how to...

produce a finished outcome in 3D including 1-hour exam



## Homework Links

**Homework Booklet 3 'Mother and Child' by British artist Henri Moore** (artist links to project through sculpture) **Duration-** 30 minutes minimum on each of the 7 tasks (approx. 30 minutes per two-week cycle)



## Key Vocabulary

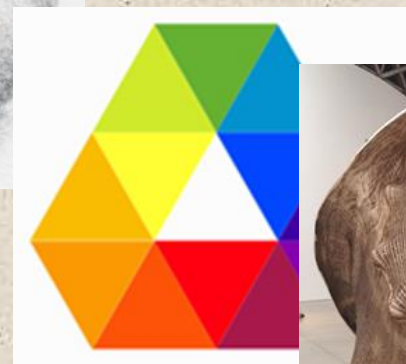
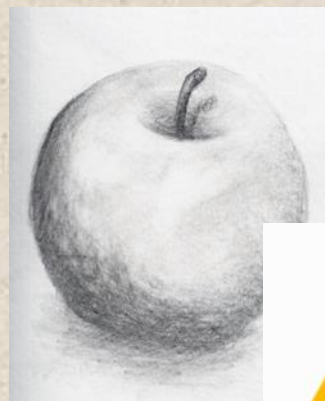
I will learn the meaning of...  
*Shape/Form/Scale/  
Proportion/Texture within  
the context of 3D.*

**How to be ready for your end of year art exam...**

**This year has been all about learning skills in drawing 'Observation and Tone', using colour 'Abstract and Colour' and working in 3D 'Imagination and 3D'.**

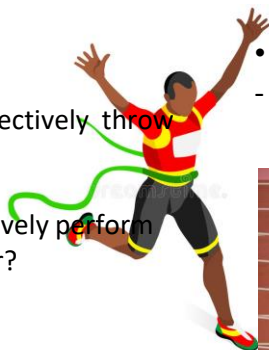
Your exam will be based on the work you are doing for the 3D project, but you will also be able to use the knowledge gained from the earlier projects...

- **Drawing skills**
- **Use of colour**
- **Exploring media**
- **Showing an artist influence**
- **Developing an idea**
- **Evaluating your work**



### Big Questions:

- § Sprinting - Can you successfully complete a sprint start?
- § Middle Distance - Can you effectively pace myself to complete the race?
- § Long/Triple Jump - Can you take off effectively in long jump? Can you successfully complete the triple jump (hop, skip, jump)?
- § High Jump - Can you effectively take off and land safely?
- § Shot Putt – Can you safely and effectively throw a shot putt?
- § Javelin – Can you safely and effectively throw a javelin?
- § Discuss – Can you safely and effectively throw a discus?
- § Relay - Can you effectively perform the baton change over?

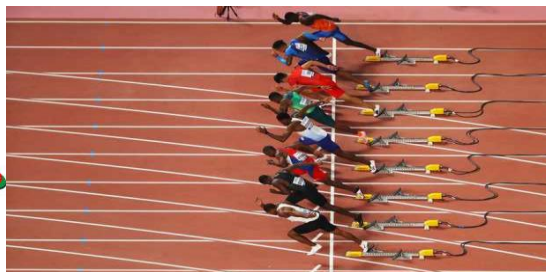


### Key Skills:

- Running: An action to move quickly, with the correct technique, using arms and legs as effectively as possible.
- Jumping: The technique to propel the body into the air to either cover distance, height or both.
- Throwing: The technique used to propel an object through the air as far as possible.

### Roles of an Official:

- **Starter:**
  - Ensures that runners are positioned correctly and are in the correct lane.
  - Using a starting gun, s/he will signal when the runners are to begin their race.
- **Measurer:**
  - Ensures that a legal throw or jump is measured correctly and that the distance or height is noted in the scorebook.
- **Timer:**
  - Records the finishing times for competitors in track events using a stop watch.



### Key events that we cover in Athletics:

- 100m: The quickest to cover 100m; measured in seconds and tenths of seconds. A key Component of Fitness: **SPEED**
- 800m: The fastest to cover 800m; measured in minutes and seconds. A key component of Fitness: **AEROBIC ENDURANCE**
- Long Jump: Furthest distance covered, using a one foot take-off; measured in metres and centimetres. A key Component of Fitness: **POWER**
- High Jump: Highest distance completed, using a one foot take-off; measured in metres and centimetres. A key Component of Fitness: **FLEXIBILITY**
- Javelin: The furthest a javelin can be thrown; measured in metres and centimetres. A key component of Fitness: **BALANCE**
- Shot Putt: The furthest a shot can be thrown; measured in metres and centimetres. A key Component of Fitness: **MUSCULAR STRENGTH**
- Relay: A team sprinting event where 4 runners pass a baton between them; measured in minutes and seconds. A key Component of Fitness: **COORDINATION**

### Teamwork and Respect:

- Sets an example for others to follow.
- Very fair in competition.
- Always gracious in defeat and humble in victory.
- Works well in a team and supports their peers.
- Never argues with an official.

### **Big Questions:**

- § Can you throw, catch and perform a long barrier?
- § Can you bat with accuracy and power?
- § Can you consistently perform a pitch into the strike zone?
- § Can you use key tactics and strategies in order to be successful?



### **Key Skills:**

- Batting: Hitting the ball into space, short hits (bunting) into the diamond, long hits into the outfield (possible home run).
- Pitching (Bowling): Underarm pitch from the pitcher's circle. Must pass over the batting mat, must be between the batter's knees and shoulders to be counted.
- Catching: Can use a softball glove to aid catching. All players can wear gloves. Vital catching positions are on all 4 bases due to fielders throwing the ball into them for attempted run outs.

### **Leadership and Coaching:**

- Can run a three part warm up.
- Devise and run a small skill practice
- Encourages others
- Good organisation skills
- Good communication skills
- Confident in different roles: Coach, Referee, Scorer.

### **Teamwork and Respect:**

- Sets an example for others to follow.
- Very fair in competition.
- Always gracious in defeat and humble in victory.
- Works well in a team and supports their peers.
- Never argues with the referee.

### **Key Rules in Softball:**

- Strike: Complete swing and miss when batting. Failing to swing at a "good" ball. Three strikes and you are out.
- Foul Ball: Hitting the ball but not within the playing area (base 1 to base 3). You get unlimited foul balls but each foul ball will be counted as strike until the second foul ball. You can be caught out on a foul ball. Runners cannot run on a foul ball.
- Double Play: Batter is caught out but another runner is also run out. Can even get triple plays with exceptional fielding.
- Run Outs: Fielders get the ball to the base you are running to before you, you are now out. If you leave the base you can be out anytime if the fielders get the ball to the base, but you can overrun first base.
- Tagging: When running between bases, fielders in possession of the ball can tag you, you are now out.
- Miss-Fields: If the fielding team drop the ball/over throw the ball, bases are now open and runners can run.
- Diamond Area: Only the pitcher is allowed inside the diamond. Fielders can wait on the edge of the diamond, and enter as the pitcher pitches the ball.





## **Big Questions:**

- Can you successfully throw and catch a ball?
- Can you use the long barrier fielding technique?
- Can you accurately bowl a rounder's ball?
- Can you hit a rounder's ball with accuracy and power?

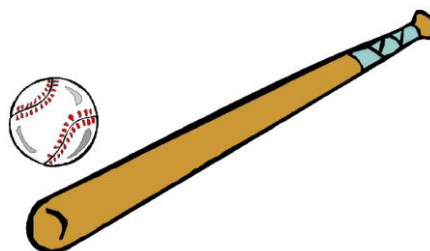


## **Key Skills:**

- Develop an understanding of the principles of striking and fielding
- Increase their range of skills needed to participate effectively
- Develop an understanding of the rules
- Develop an understanding of the tactics required
- To understand and apply the principles of scoring
- Observe others and apply self check techniques in order to improve their own and others' games

## **Leadership and Coaching:**

- Knowledge of rules and regulations
- Knowledge of warm up and cool down
- Organisational skills
- Creativity and tactical vision
- Opportunity to take on different roles e.g. player, coach, scorer, umpire



## **Key Rules in Rounders:**

- The bowler bowls the ball to the batter, who hits the ball anywhere on the Rounders pitch. The batter then runs to as many posts as possible before the fielders return the ball to touch the post the batter is heading for.
- If the batter reaches the 2nd or 3rd post in one hit, the batting team scores  $\frac{1}{2}$  Rounder.
- If the batter reaches 4th post in one hit, the batting team scores a Rounder.
- A batter is out if the fielding team catch the ball hit by a batter before it touches the ground **or** by touching the post the batter is running to with the ball before the batter reaches it.
- If the batter incurs 2 no balls in a row then a penalty  $\frac{1}{2}$  rounder is given to the batting team.
- There is a penalty  $\frac{1}{2}$  rounder given to the batting team if the batter is obstructed by a fielder.
- Batters must always keep contact with the post, either with their hand or bat. If you don't, the fielders can stump you out at the following post.
- You don't have to move to the next post every time a ball is bowled.

## **Teamwork and Respect:**

- Honest/Fair
- Demonstrates good sportsmanship
- Speaks to peers/teacher with respect
- Motivates others
- Compassionate



### **Big Questions:**

- § Can I consistently rally with a partner (overhead clear)?
- § Can I serve accurately (backhand, underarm)?
- § Can I effectively play an attacking shot (drop, smash)?
- § Can apply rules and tactics effectively to score points?



### **Key Skills:**

**Overhead Clear:** Force opponent to rear of court, hit at highest point, follow through and stand side on.

**Smash:** Aim to skim net, hit at highest point in downwards direction and transfer body weight.

**Drop Shot:** Stand side on, skim net and land just beyond, light tap.

**Backhand Shot:** Backhand grip, aim for back of court, strong follow through and stand side on

**Long Serve:** Drop and swing at same time, aim for back of court, stand side on and start with racket at waist height.

**Short Serve:** Short back swing, aim to skim net, racket in front with backhand grip.

### **Leadership and Coaching:**

- Can compare performance using key terminology and teaching points for a variety of sports and skills
- Can use ICT to compare performance
- Know how to gain others attention



### **Key Rules in Badminton:**

- Singles: Court long and narrow
- Doubles: Court short and wide for serving, whole court thereafter
- You can't touch or cross the net
- Can only hit the shuttle once when returning
- Games are played to 21 points
- Points are scored on every serve



### **Teamwork and Respect:**

- Set examples to others in lessons and competitive games
- Show fair in competition
- Respect officials' decisions
- Be gracious in defeat e.g. shake hands with each other

Religion  
Islam

Year: 7  
Term: 5

### Big Questions

- 1 What is Islam?
- 2 Who was Mohammed?
- 3 Why is Mohammed important to Muslims?

### Three key beliefs of Islam

1. **Tawhid** (Oneness of God) = Only One god; God is all-knowing, all-powerful, merciful...
2. **Risalah** (guidance from Allah) = angels – messengers from Allah, brought guidance; books – guidance written down, taken from Allah to humans by angels; Prophets – people who warn/advise others how to live others, e.g. Muhammad.
3. **Akhirah** (life after death) – there will be a Judgement Day, when our behaviour in life is judged; the judgement will send us to Paradise (if good) or hell (if bad).

### Who was Muhammed? –Night of power.

One night Muhammed (pbuh) was praying in the cave Hira just outside of mecca. Angel Jibril came and visited Muhammad (pbuh) and asked him to read. But Muhammed (pbuh) could not read. He was asked again, and again, suddenly he could read. He was told to spread the word of Allah. Muhammed became the most important prophet and the words were written down and became the Quran.

### Who was Muhammed ?– hijra

Some powerful families didn't want to listen to Muhammed and didn't like that he only believed in one god. They threatened him and all those who followed him. They even tried to kill him. Muhammed was told by angel Jibril to leave and go to Medina. So Muhammed and his followers left and went to Medina where he set up the first Muslim community. This journey is known as the Hijra.

### The Quran

The Quran is the Muslim holy book. It was given to Muhammed on the night of power. Muslim believe it to be the word of Allah and therefore it does not change. It is written in Arabic and because of this Muslim believe Arabic to be a sacred language.



### Quick facts!

Holy book – The Quran (630CE)  
Age of religion- 1400 years old  
Place of worship – Mosque  
Name of followers – Muslims  
Number in the UK – 2,660,116

### Key words:

**Prophet** - messenger of God  
**Quran** – the holy book of Islam  
**Allah** – the name given to god in Islam.

**Tawhid** – The belief that there is only one God.

**Risalah** - the belief that we get guidance from Allah to live a good life.

**Akhirah** – the belief in the afterlife, paradise and hell.

**Salat** – Prayer

**Zakat** – Charity

**Sawm** – Fasting

**Hajj** – Pilgrimage

**Shahadah** – Faith

## BIG QUESTIONS

What is characterisation?

How can physical performance skills and vocal skills be incorporated into a performance?

How can drama techniques be incorporated into a performance?

Why is discipline important in a performance?

What are the differences between the two styles – Naturalism and Abstract Theatre?

What is the difference between devising and a scripted performance?

## Performance Skills

<b>Planned Movement</b>	Physical actions that are organised prior to the performance and then rehearsed.
<b>Positioning</b>	Arranging an actor in a place/way. Where the actor is facing.
<b>Posture</b>	How the body is held.
<b>Body Language</b>	Movements with the body, that communicate feeling.
<b>Eye Contact</b>	Where the actor is looking.
<b>Space</b>	How the environment is used.
<b>Levels</b>	How high or low an actor is positioned on stage.
<b>Vocal Skills</b>	How the voice is used to communicate emotion and character.
<b>Gestures</b>	Using your hands to further express meaning or emotion.
<b>Facial Expressions</b>	Showing mood through the movement of your face.

## 3PBEDSLVGF

Physical performance skills are the ways the use body can be used to communicate character or meaning.

**Always remember to remain disciplined when performing.**

## Vocal Skills

<b>Pitch</b>	How high or low your voice is.
<b>Pace</b>	How fast or slow you speak.
<b>Pause</b>	A moment of silence.
<b>Projection</b>	How far and clearly you speak enable your voice to travel across the room.
<b>Tone</b>	Using your voice to show mood.
<b>Emphasis</b>	Exaggerating particular words or phrases in a sentence.
<b>Accent</b>	A distinctive pronunciation which shows location. This can be linked to country or area.
<b>Volume</b>	How loud or quiet you are speaking.

## 4P'STEAV

The way in which the voice is used to communicate. Vocal skills can be used to communicate character. The more the audience can understand about a character, the greater the understanding of the narrative of the performance.

Drama Techniques	What would it look like on stage?
Thought Track	Character telling their thoughts to the audience
Monologue	A speech spoken by one character
Choral Speaking	A group of actors speaking at the same time
Slow motion	Slowing movement down
Flashback	A scene from the past
Cross Cutting	Mixing up the order of scenes
Narration	A spoken commentary for the audience about the action on stage
Organic Sound	A sound made by the actors (not recorded)
Synchronisation	Actors moving at the same time
Canon	Moving one after the other
Multi-role	One actor playing more than one role
Hot Seating	Questioning an actor in role
Still Image	A frozen moment in a scene
Physical Theatre	Using your body to create objects
Mime	Performing an action with no props
Mirroring	2 actors facing each other moving at the same time
Split Role	One role that is played by more than one actor
Flash forward	A scene from the future
Tableau	A still image that captures the whole scene/story
Repetition	A sound/movement that is repeated
Marking the Moment	When a moment in a scene is emphasised

### Style: Naturalism

Naturalism uses realistic acting and in-depth characterisation.

- Subtext
- Relationships
- Personality
- Situation
- Motivation

Movement is planned carefully, making sure every action has a meaning behind it.

Set/costume/props/sound are used as part of a Naturalistic performance however drama techniques are NOT used!

### Style: Abstract Theatre

Theatre that is non-naturalistic.

Drama techniques are included in performances to present a narrative or theme in an alternative or unconventional way.

Drama techniques are used to enhance an abstract performance, making it more engaging for the audience.





## BIG QUESTIONS

What is call and response?

What are the Elements of Music?

What is a melody?

What is harmony?

What is a chord?

What is a musical ensemble?

How is music created?

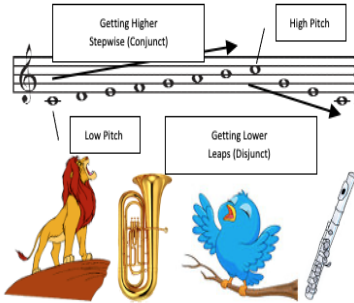





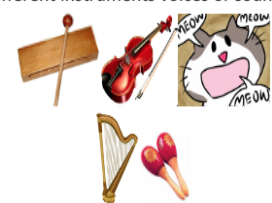


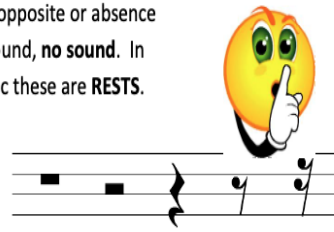

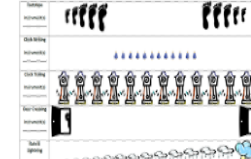
How can we describe the form and structure and texture of different songs?

In what ways can the Elements of Music be refined or manipulated to create new arrangements of an existing song or piece of music?

## Building Bricks

## Exploring the Elements of Music



A. Pitch	B. Tempo	C. Dynamics	D. Duration
<p>The <b>highness or lowness</b> of a sound.</p> 	<p>The <b>speed</b> of a sound or piece of music.</p> <p><b>FAST:</b> <i>Allegro, Vivace, Presto</i> <b>SLOW:</b> <i>Andante, Adagio, Lento</i></p> <p><b>GETTING FASTER –</b> <i>Accelerando (accel.)</i> <b>GETTING SLOWER –</b> <i>Ritardando (rit.) or Rallentando (rall.)</i></p> 	<p>The <b>volume</b> of a sound or piece of music.</p> <p><b>VERY LOUD:</b> <i>Fortissimo (ff)</i> <b>LOUD:</b> <i>Forte (f)</i> <b>QUITE LOUD:</b> <i>Mezzo Forte (mf)</i> <b>QUITE SOFT:</b> <i>Mezzo Piano (mp)</i> <b>SOFT:</b> <i>Piano (p)</i> <b>VERY SOFT:</b> <i>Pianissimo (pp)</i> <b>GETTING LOUDER:</b> <i>Crescendo (cresc.)</i> <b>GETTING SOFTER:</b> <i>Diminuendo (dim.)</i></p> 	<p>The <b>length</b> of a sound.</p> 
E. Texture	F. Timbre or Sonority	G. Articulation	H. Silence
<p>How much sound we hear.</p> <p><b>THIN TEXTURE:</b> (<i>sparse/solo</i>) – small amount of instruments or melodies.</p>  <p><b>THICK TEXTURE:</b> (<i>dense/layered</i>) – lots of instruments or melodies.</p> 	<p>Describes the <b>unique sound or tone quality</b> of different instruments voices or sounds.</p>  <p><i>Velvety, Screechy, Throaty, Rattling, Mellow, Chirpy, Brassy, Sharp, Heavy, Buzzy, Crisp, Metallic, Wooden etc.</i></p>	<p>How individual notes or sounds are <b>played/techniques</b>.</p> <p><b>LEGATO</b> – playing notes in a long, smooth way</p>  <p>shown by a <b>SLUR</b>.</p> <p><b>STACCATO</b> – playing notes in a short, detached, spiky way shown by a <b>DOT</b>.</p> 	<p>The opposite or absence of sound, <b>no sound</b>. In music these are <b>RESTS</b>.</p> 
I. Notation		J. How Music Works	
<p>How music is <b>written</b> down.</p> <p><b>STAFF NOTATION</b> – music written on a <b>STAVE</b> (5 lines and spaces)</p>  <p><b>GRAPHIC NOTATION/SCORE</b> – music written down using shapes and symbols to represent sounds.</p> 		<p>Music can create an <b>atmosphere or ambience</b> e.g., <i>supermarkets and restaurants</i>.</p> <p>Music can create an <b>image</b> e.g., <i>in response to art, a story, a poem, a character, a situation</i> – this is called <b>PROGRAMME MUSIC</b>.</p> <p>Music can be <b>calming</b> e.g., <i>end of an evening in clubs and bars</i>.</p> <p>Music can be used for <b>spiritual reasons</b> e.g., <i>worship, meditation, reflection, hymns and chants, yoga, and spiritual reflection</i>.</p> <p>Music can be used for <b>commercial purposes</b> e.g., <i>advertising, TV themes</i>.</p>	



## A. Popular Song Structure

**SONG STRUCTURE** – How a song is made up of or divided into different sections (see below) and the order in which these sections occur. To work out the structure of a song, it's helpful to analyse the **LYRICS** and listen to a recording for the song (for instrumental sections).

**INTRO** – often shortened to 'intro', the first section of a song which sets the mood of the song and is sometimes, but not always, an instrumental section using the song's chord pattern.

**VERSES** – songs normally have several verses. Verses introduce the song's theme and have the same melody but different lyrics for each verse which helps develop the song's narrative and story. Songs made up entirely of verses are called **STROPHIC**.

**LINK** – a optional short section often used to join different parts of a song together, often instrumental, and sometimes joins verses together or appears at other points within a song.

**PRE-CHORUS** – an optional section of music that occurs before the **CHORUS** which helps the music move forward and "prepare" for what is to come.

**CHORUS** – occurs several times within a song and contains the most memorable **HOOK/RIFF**. The chorus relays the message of the song and is repeated with the same melody and lyrics each time it is heard. In popular songs, the chorus is often repeated several times towards the end of the song.

**MIDDLE 8/BRIDGE** – a section (often 8 bars in length) that provides contrasting musical material often featuring an instrumental or vocal solo using new musical material allowing the performer to display their technical skill on their instrument or voice.

**CODA/OUTRO** – The final section of a popular song which brings it to an end (Coda is Italian for "tail"!).

## B. Key Words

**LYRICS** – The words of a song, usually consisting of **VERSES** and a **CHORUS**.

**HOOK** – A 'musical hook' is usually the 'catchy bit' of the song that you will remember. It is often short and used and repeated in different places throughout the piece. Hooks can be either **MELODIC**, **RHYTHMIC** or **VERBAL/LYRICAL**.

**RIFF** – A repeated musical pattern often used in the introduction and instrumental breaks in a song or piece of music. Riffs can be rhythmic, melodic or lyrical, short and repeated.

**MELODY** – The main tune of the song often sung by the **LEAD SINGER**.

**COUNTER-MELODY** – An 'extra' melody often performed 'on top of' the main melody that 'fits' with it a **DESCANT** or **INSTRUMENTAL SOLO**.

**TEXTURE** – The layers that make up a song e.g., *Melody, Counter-Melody, Hooks/Riffs, Chords, Accompaniment, Bass Line*.

## C. Lead Sheet Notation and Arrangements

A **LEAD SHEET** is a form of musical **NOTATION** that contains only the essential elements of a popular song such as the **MELODY**, **LYRICS**, **RIFFS**, **CHORDS**

(often as guitar chord symbols) and **BASS LINE**; it is not as developed as a **FULL SCORE ARRANGEMENT** and is open to interpretation by

performers who need to use and adapt the given elements to create their own musical **ARRANGEMENT**: their "version" of an existing song.

**COVER (VERSION)** – A new performance, remake or recording by someone other than the original artist or composer of the song.

## D. Conjunct and Disjunct Melodic Motion

**CONJUNCT MELODIC MOTION** – Melodies which move mainly by step or use notes which are next to or close to one another.

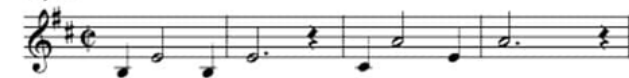
**DISJUNCT MELODIC MOTION** – Melodies which move mainly by leap or use notes which are not next to or close to one another.

**MELODIC RANGE** – The distance between the lowest and highest pitched notes in a melody.

Conjunct



Disjunct



## E. Song Timbre and Sonority (Instruments that are used to Accompany Songs)



Pop Bands often feature a **DRUM KIT** and **PERCUSSION** to provide the rhythm along with **ELECTRIC GUITARS (LEAD GUITAR, RHYTHM GUITAR and BASS GUITAR)** and **KEYBOARDS**. Sometimes **ACOUSTIC INSTRUMENTS** are used such as the **PIANO** or **ACOUSTIC GUITAR**. **ORCHESTRAL INSTRUMENTS** are often found in pop songs such as the **STRINGS**, **SAXOPHONE**, **TROMBONE** and **TRUMPET**.



Singers are essential to a pop song - **LEAD SINGER** – Often the "frontline" member of the band (most famous) who sings most of the melody line to the song. **BACKING SINGERS** support the lead singer providing **HARMONY** or a **COUNTER-MELODY** (a melody that is often higher in pitch and different, but still 'fits with' the main melody) and do not sing all the time but just at certain points within a pop song e.g. in the chorus.

BIG QUESTIONS

- 1) What am I like?
- 2) How do I introduce myself?
- 3) How do I talk about my free time?
- 4) How do I plan for writing?
- 5) How do I talk about school?
- 6) How do I talk about home?
- 7) How do I revise languages?

Describing personality

Me llamo (My name is)	Jorge (Jorge)	Enrique (Enrique)	y pienso que soy (and I think that I am)	demasiado (too)	bastante (quite)	divertido (funny)	listo (clever)	sincero (sincere)	tonto (silly)
	Pablo (Pablo)	Esteban (Esteban)		muy (very)	un poco (a bit)	estupendo (brilliant)	serio (serious)	tímido (shy)	tranquilo (quiet)
	Maria (Maria)	Carmen (Carmen)				divertida (funny)	lista (clever)	sincera (sincere)	tonta (silly)
	Alba (Alba)	Marisol (Marisol)				estupenda (brilliant)	seria (serious)	tímida (shy)	tranquila (quiet)
						generoso (generous)	simpático (nice)		
						generosa (generous)	simpática (nice)		
						genial (great)	guay (cool)	fenomenal (fantastic)	

Mi madre (My mum)	es (is)	un poco (a little)	alta (tall)	guapa (attractive)	y (and)	delgada (slim)
Mi hermana (My sister)			baja (short)	fea (ugly)		gorda (fat)
Mi padre (My dad)			alto (tall)	guapo (attractive)		delgado (slim)
Mi hermano (My brother)			bajo (short)	feo (ugly)		gordo (fat)

Me llevo bien con (I get on well with)		mi madre (my mum)	mi hermana (my sister)	porque es (because she is)		graciosa (funny)	optimista (optimistic)	fiel (loyal)
No me llevo bien con (I don't get on well with)		mi padre (my dad)	mi hermano (my brother)	porque es (because he is)		severa (strict)	irritante (annoying)	perezosa (lazy)
						gracioso (funny)	optimista (optimistic)	fiel (loyal)
						severo (strict)	irritante (annoying)	perezoso (lazy)

Talking about where you live

	un piso (a flat)	antiguo (old) bonito (pretty) cómodo (comfortable)	moderno (modern) pequeño (small) grande (big)	en Inglaterra. (in England.) en Escocia. (in Scotland.)	Vivo aquí (I have lived here) Vivimos aquí (We have lived here)	desde hace (for)	dos (two) tres (three)	años (years)
Vivo en (I live in)	una casa (a house)	antigua (old) bonita (pretty) cómoda (comfortable)	moderna (modern) pequeña (small) grande (big)	en Gales. (In Wales.) en Irlanda del Norte. (in Northern Ireland.)			cuatro (four) cinco (five)	
Vivimos en (We live in)								P.30

Saying what I usually do

Bailo (I dance)	Hablo con mis amigos (I talk with my friends)	Saco fotos (I take photos)	Escucho música (I listen to music)	a veces. (sometimes.) de vez en cuando. (from time to time.) todos los días. (everyday.) a menudo. (often.)
Canto (I sing)	Monto en bici (I ride my bike)	Toco la guitarra (I play the guitar)	Mando SMS (I send text messages)	
Mi hermano (my brother)	baila (dances)	habla con sus amigos (talks with their friends)	saca fotos (takes photos)	
Mi hermana (My sister)	canta (sings)	monta en bici (rides their bike)	toca la guitarra (plays the guitar)	
Mis hermanos (My brothers)	bailan (dance)	hablan con mis amigos (talk with my friends)	sacan fotos (take photos)	
Mis hermanas (My sisters)	cantan (sing)	montan en bici (ride my bike)	tocan la guitarra (play the guitar)	
Mis amigos (My friends)				

Saying what subjects I like and dislike

Mi asignatura favorita es (My favourite subject is)		Me gusta (I like)	el dibujo (art)			el inglés (English)	porque es (because it is)	muy (very)	divertido (fun)	y también (and also)	fácil (easy)
			el español (Spanish)						el teatro (drama)		práctico (practical)
Prefiero (I prefer)		Me encanta (I love)	el francés (French)			la religión (RE)	bastante (quite)	un poco (a litte)	divertida (fun)		interesante (interesting)
			la geografía (geography)	la informática (ICT)	la tecnología (technology)				práctica (practical)		útil (useful)
			la historia (history)	la música (music)							
Sin embargo (However)		Por otro lado (On the other hand)	el dibujo (art)			el inglés (English)	porque es (because it is)	muy (very)	aburrido (boring)		difícil (difficult)
			el español (Spanish)						el teatro (drama)	difícil (difficult)	
		no me gusta (I don't like)	el francés (French)			la religión (RE)	bastante (quite)	un poco (a litte)	aburrida (boring)		difícil (difficult)
			no me gusta nada (I really don't like)						la tecnología (technology)		
		odio (I hate)	la geografía (geography)	la informática (ICT)	la música (music)						
			la historia (history)								
		no me gustan (I don't like)	no me gustan nada (I really don't like)	las ciencias (science)	las matemáticas (maths)	porque son (because they are)			aburridas (boring)	difíciles (difficult)	

HOMEWORK

Every week you will be set an assignment on sentence builders.

The website is:

[www.sentencebuilders.com](http://www.sentencebuilders.com)

You should have your log-in details stuck in your planner. If you forget these, you must email your teacher or ask in lesson time for these details.

Your knowledge organiser has every answer that you will need to complete your homework. Have it open when you do your homework!

Aim for 65% correct. Remember, if you're unhappy with your score you can re-do each section as you go!







## Saying what subjects I like and dislike

J'adore (I love)	le français (French)	l'histoire (history)				facile (easy)
J'aime (I like)	le théâtre (drama)	l'EPS (PE)			très (very)	intéressant (interesting)
Jaime assez (I quite like)	la géographie (geography)	l'informatique (ICT)			vraiment (really)	amusant (fun)
Ma matière préférée c'est (My favourite subject is)	la musique (music)	les arts plastiques (art)	parce que (because)	c'est (it is)	assez (quite)	créatif (creative)
Je n'aime pas (I don't like)	la technologie (DT)	les maths (maths)			un peu (a little)	le prof est sympa (the teacher is nice)
Je déteste (I hate)	l'anglais (English)	les sciences (science)				difficile (difficult)
						ennuyeux (boring)
						nul (rubbish)
						le prof est trop sévère (the teacher is too strict)
						j'ai trop de devoirs (I have too much homework)

## Describing where you live

J'habite dans (I live in)	un appartement (a flat)	en Écosse. (in Scotland.)	J'habite ici depuis (I have lived here for)	deux (two)	quatre (four)	mois (months)
Nous habitons dans (We live in)	une maison (a house)	en Angleterre. (in England.)		trois (three)	cinq (five)	ans (years)
J'aime (I like)			c'est tranquille (it's quiet)	c'est grand (it's big)	c'est confortable (it's comfortable)	
J'adore (I love)						
Je n'aime pas (I don't like)	habiter ici (living here)	car (because)	c'est trop petit (it's too small)	c'est trop bruyant (it's too noisy)	il n'y a pas de place (there's no space)	
Je déteste (I hate)						

Dans (In)	ma maison (my house)	il y a (there are)	quatre (four)	six (six)	huit (eight)	pièces. (rooms.)
	mon appartement (my flat)		cinq (five)	sept (seven)	neuf (nine)	
Il y a (There is)	une salle de bains (a bathroom)	et aussi (and also)	un salon (a living room)			où je regarde la télé (where I watch TV)
	une chambre (a bedroom)		une cuisine (a kitchen)			où je me détend (where I relax)
	une salle à manger (a dining room)					où je prépare le dîner (where I prepare dinner)
						où je mange (where I eat)
			le jardin (the garden)			où je joue au foot (where I play football)
						où je joue avec mon frère cadet (where I play with my younger brother)

## HOMEWORK

Every week you will be set an assignment on sentence builders.

The website is:

[www.sentencebuilders.com](http://www.sentencebuilders.com)

You should have your log-in details stuck in your planner. If you forget these, you must email your teacher or ask in lesson time for these details.

Your knowledge organiser has every answer that you will need to complete your homework. Have it open when you do your homework!

Aim for 65% correct. Remember, if you're unhappy with your score you can re-do each section as you go!





# BIG QUESTIONS

Understanding of health and safety in the workshop, why is this important?

What is a shadow box light?

What is the iterative design process and why do we use it?

How do designers draw and present their own unique ideas?

How does our research influence our outcomes?

## Design a shadow box for Valentines Day

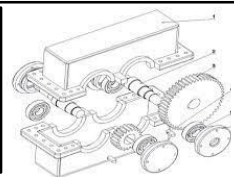
### Health and Safety Rules

#### Five Golden Rules:

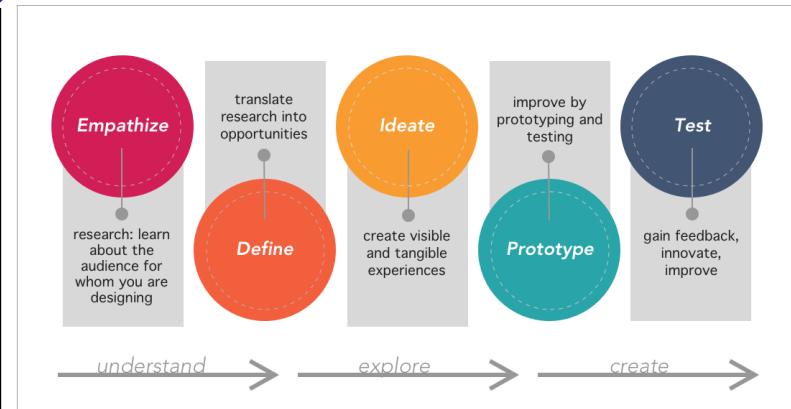
1. Dress Right
  - Always wear appropriate PPE in the workshop.
    - Apron at all times
    - Goggles, gloves and mask where appropriate
    - Long hair tied up at all times
2. Know the Environment
  - Single person zones
  - First aid kits
  - Teacher/Technician only zones
3. Follow Instructions
  - Always keep talking levels low
  - Never use equipment unless you are told you may
  - Always use equipment as you have been shown
4. Behave Right
  - No running
  - Always follow the rules
  - Carry equipment appropriately/safely
  - Be careful when using sharp blades and hot equipment
5. Be Considerate
  - Have an organised workspace
  - Clean up after yourself
  - Don't damage tools, equipment or others work
  - Don't distract others while they are busy

#### Technical Drawing Styles:

Isometric, Orthogonal  
Exploded-view, CAD  
(computer aided design)

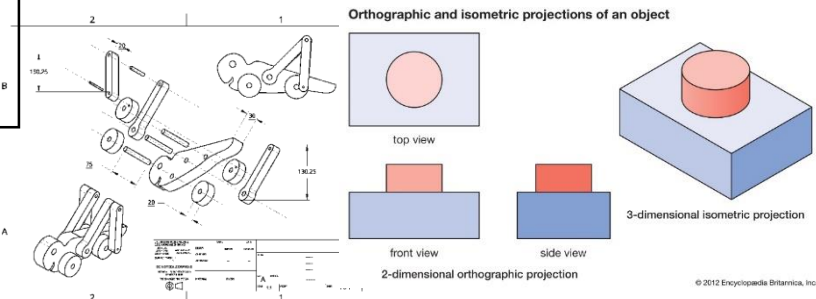


### The Iterative Design Process



**Remember:** The iterative design process is non linear which means you will often revisit different stages of the process throughout making in order to improve your design.

### Examples of technical drawing:



# BIG QUESTIONS

What are the purpose of different technical drawing styles?

How can we draw images on 2D design ready for laser cutting?

What is the purpose of evaluating a product or design?

Is wood manufacturing sustainable for the planet?

What are light emitting diodes (LED)?

**Project Brief:** Design a Shadow Box light for Valentine's Day.

## Mind Map List:

- Symbols
- Movies
- Poems
- Stories

**Task:** Practice layouts and templates for your Front and background layers



**CAD: Computer Aided Design** - 2D Design Tools is a computer software programme used for drawing accurately. Black lines are used for cutting through materials, red lines are used to engrave into the material and blue is used to engrave a single line.

## **Advantages of using CAD**

- Can be more accurate than hand-drawn designs - it reduces human error.
- You can save and edit ideas, which makes it easier and cheaper to modify your design as you go along.
- You can modify existing ideas, which saves time.

## **Disadvantages of using CAD**

- The software itself can be expensive so initial costs are high. There are free software packages though.
- Staff need to be trained how to use the software, which also adds to costs.
- Requires a PC.

**CAM: Computer Aided Manufacture** - The laser machine, vinyl cutter and the 3D printer are all examples of CAM. A CAD drawing is needed to instruct the CAM and it cannot work without it.

## **Advantages of using CAD**

- In large-scale production, the results are consistent (always the same).
- Enables very high accuracy levels in large-scale production.
- Usually speeds up production of low-volume products.

## **Disadvantages of using CAD**

- The software itself is expensive so initial costs are high.
- Can be slower than traditional methods for one-off or low-volume production.
- Staff need to be trained how to use the software and machinery, which adds to costs.

## **Task: Answer these questions:**

1. What are the advantages of using CAD/CAM?
2. What are the disadvantages of using CAD/CAM?
3. What difficulties do you think you will find? Explain how will you overcome them?

## **Task:**

*Research and evaluate other Shadow Boxes*  
Research imagery to inspire your Shadow Box design- explain how they connect to the theme.

## **Year 8 skills to learn on 2D:**

Page size, Freehand drawing, Attach lines, Drawing a circle and arch.



# Material properties and sources of wood.

## Manufactured boards:

These are **man-made** boards, which are made by **gluing** wood **layers** or wood **fibres** together

Name	Composition	Properties/ Characteristics	Uses
Plywood	Thin veneers, cross laminated using odd numbers of layers	Stable, strong, and easy to machine	Furniture, joinery, construction work

**Wood is a sustainable and eco-friendly material.**  
The fact is wood is not only sustainable but also recyclable.



## Differences between hard and soft wood:

	Hardwood	Softwood
Originates from	Deciduous trees	Evergreen trees
Examples	Oak, Teak, Cherry	Pine, Fir, Spruce
Price	More Expensive	Less Expensive
Density	Typically harder (not always)	Usually softer (not always)
Colour	Generally dark	Almost always light
Grain	Close	Loose
Fire resistance	Good	Poor
Weight	Heavy	Light

## Specialist D&T Tools

TECHSOFT 2D Design, Laser- cutter,



## Homework Links

Research and collect 10 images to inspire Valentine Shadow Box- create a power point of findings.

Finish 2 layer storyboard planning if not completed in lesson

Practice evaluating a product at home using ACCESSFM






## Key Vocabulary

Orthogonal, Isometric, Exploded-view, CAD/CAM, Iterative, Brief, Layout, Vector, Stencil, Material Properties, Hard and soft Wood, Manufactured, Produced, Origin/Source

# Subject: KS3 Product Design Textiles Technology

## Terms 5 & 6

### Topics: Health and safety when using a sewing machine. Design and make a cloth bag with embellishment

<p><u>Big Questions:</u></p> <p>Do I know the parts of a sewing machine?</p> <p>Do I know how to be safe when using a sewing machine?</p> <p>Can I pass my Sewing Machine Licence?</p> <p>Can I design 4 simple ideas for a bag?</p> <p>Can I draw up my final design for a bag?</p> <p>Can I make a paper pattern for my bag?</p> <p>Can I pin the paper to the fabric and cut out the fabric for my bag?</p> <p>Can I design and successfully embellish the front of my bag?</p> <p>Can I make handles for my bag?</p> <p>Can I pin, tack and sew my bag?</p> <p>Can I evaluate my bag?</p>	<p><u>What will I learn?</u></p> <p>In these two terms, KS3 will build on previous knowledge gained about textiles to design and make a simple cotton bag, which is embellished with a design of their own creation. This enables the students to use their creativity in the mediums associated with textiles, thus gaining insight into how this skill can be developed further into clothing and other textiles.</p> <p>The students will learn about the functioning parts of a sewing machine, they will learn how to identify these parts and use these machines safely. They will also be developing their independent skills of operating these machines at the correct speeds, threading the needles, and feeding the fabric through the machines. They will gain their Sewing Machine Licence to enable them to work safely in the sewing workroom.</p> <div data-bbox="644 786 944 1011"></div> <div data-bbox="1147 786 1531 996"></div> <p><u>Images of cloth bags</u></p> <div data-bbox="830 1086 1033 1320"></div> <div data-bbox="1114 1093 1313 1316"></div> <div data-bbox="1417 1058 1616 1308"></div>
---	---



Other Useful information:



The Wool  
Mark



The Kite  
Mark



The EU Safe  
Toy Symbol

Cross Curricular

Maths when measuring, using a ruler or tape measure, gauging size of fabric needed, and pattern matching.  
English when writing and reading plans and patterns.

Art when creating their own designs and rendering.

PSHE Altruism if you are designing for someone else.

The importance of Health and Safety.

It is REALLY important that you consider Health and Safety when you are working in the textiles room. There are sharp items and electric cords to think about, along with the bags and coats that students bring to the class room. Remember to be sensible at all times.



Useful Vocabulary

Pin, Tack, Sew, Needle, Press, Thread, Seam, Iron, Sewing machine, Cotton reel, Scissors, Embroidery, Embellishment, Applique, Hand wheel, Bobbin winder, Spool pin, Thread guides, Tension control dial, Feed dogs, Presser foot, Bobbin cover plate, Thread cutter, Speed controller, Stitch length and width guide, Foot controller, Ink, Stencil, Sponge, Stipple, Printing, Roller.



**BIG  
QUESTIONS**

- How does heat transfer differ?
- What is Baking?
- What are the uses of different pastry types?
- How does a fatless sponge differ from one containing fat?
- What has gone wrong?
- How do different sugars affect the sensory outcome of baked goods?

**Subject: Food Preparation and Nutrition**

**Year 7 - Term 5**

**Topic: Practical - basic baking**

*Overarching Big Q- What is baking as a cooking method?*

*Students will investigate the various types of pastry and their uses. Basic cake baking and the various methods of combining ingredients will be practiced and developed.*

# Cake Making

## Cake making methods

There are five main methods of cake making:

- Rubbing-in
- Melting
- Creaming
- Whisking
- 'All in one' same proportions as creaming method

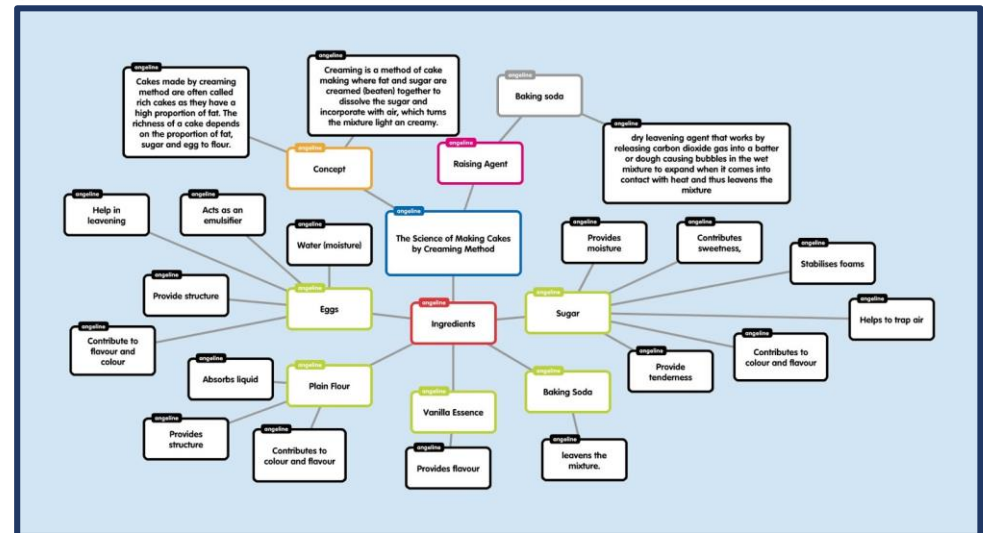


Each method produces products that have a different texture. The different proportion of ingredients used will determine the texture and taste of the cake product. The amount of fat in the cake product will determine how long the cake will stay fresh – without drying out. Cakes cannot be made successfully with low fat spreads; this is because they contain a higher proportion of water.



## Methods of making (Processes)

Cake	Proportion of ingredients	Ratio	Raising Agent	Method	Outcome
<b>Rubbed in Cake</b> -Rock buns -Raspberry buns -Scones	200g SR Flour 100g marg 100g caster sugar 2 eggs 30ml milk	1:2 in cakes 1:4 in scones, contains baking powder	<b>Chemical</b> Baking Powder or Self Raising flour <b>Mechanical</b> Sieving Rubbing In	Fat is <b>rubbed</b> into the flour using fingertips. Additional ingredients are added. Liquid added to <b>bind</b> together dry ingredients.	Well risen product Rougher surface Dry, open crumb texture Short shelf life
<b>Melted Cake</b> -Flapjack -Gingerbread -Brownies	Mixtures vary in ingredients Usually a high sugar content	Varies depending on product.	<b>Chemical</b> Bicarbonate of soda	Fat is <b>melted</b> with the sugars and syrups. Dry ingredients added. Liquids <b>bind</b> all ingredients together.	Moist and sticky Soft even texture Flavour develops during keeping Long shelf life
<b>Creamed Cake</b> -Victoria Sponge -Small buns -Madeira Cake	100g SR Flour 100g caster sugar 100g soft marg 2 eggs	Equal quantities 1:1	<b>Chemical</b> Baking Powder or Self Raising flour <b>Mechanical</b> Creaming Sieving	Fat and sugar are <b>creamed</b> together. Eggs are slowly added a bit at a time. Flour is <b>folded</b> in.	Light brown sponge with fine even texture Longer shelf life
<b>Whisked Sponge</b> -Swiss Roll -Gateaux -Flan case	50g caster sugar 50g plain flour 2 eggs	No added fat	Steam <b>Mechanical</b> Whisking Sieving	Eggs and sugar are <b>whisked</b> until mixture has doubled in volume. Flour is gently <b>folded</b> in.	Very light sponge with even, soft moist texture Short shelf life



# Pastry

## Ingredients in pastry

Ingredients have different functions depending on the type of pastry that is made. The ratio of each ingredient determines the end result in terms of texture, taste and finish. The three ingredients in all pastries are:



**Flour**- Flour forms the structure of the pastry.

Soft plain flour (low gluten content) used in shortcrust to give a short crumb.

Strong plain flour (high gluten content) used in flaky/rough puff pastry to give the pastry its structure.



**Fat**—In shortcrust pastry the fat coats the flour granules resulting in a crumbly texture.

Fat traps air between the layers in flaky/rough puff pastry.

Adds colour and flavour.

**Water**- Binds the dry ingredients together.



When making tarts, quiches and flans you often bake the pastry 'blind'. Line the tart pastry base with baking parchment and fill with ceramic baking beans or dried pulses. Bake for about 15 minutes or until the pastry is firm, then remove the beans and cook for about 5 minutes more, until golden brown and biscuity. This will help keep a crisp and stable base.



## Top tips when making shortcrust pastry

When rolling the pastry out dust the surface and rolling pin with flour.

Add the cold water slowly so the dough is not too wet.

Do not over work the dough.

Make sure the butter is cold, your hands are cold, and water is cold.



Fault in short crust pastry	Cause
Hard and tough	Over kneading and heavy handling, developing of gluten. Incorrect proportion of ingredients (too much water/ not enough fat) Incorrect oven temp. (too cool)
Blistered pastry	Oven too hot. Fats not mixed with flour well Uneven addition of water
Pastry is fragile and crumbly	Too much fat not enough water Overmixing the fat into the flour
Pastry shrunk during cooking	Overworked during kneading and rolling

Fault in puff/flaky pastry	
Pastry has not flaked well	Oven too cool Not enough liquid added Uneven folding/rolling Not rested enough Folding is too thin

Type of pastry	Dish examples	Characteristics
<b>Shortcrust</b>	Bakewell tart, quiche, pie.	Crumbly (short), pale. Ratio fat to flour 1:2
<b>Choux</b>	Profiteroles, eclairs	Darker in colour. Steam produces rise. Can be filled. Ratio fat to flour 2:3
<b>Filo</b>	Spring rolls, apple strudels, samosa.	Very thin and delicate Ratio fat to flour: 3:4
<b>Rough puff</b>	Sausage rolls, savoury tarts, pies.	Flaky texture, lamination of butter producing layers. Ratio fat to flour 3:4
<b>Hot water crust</b>	Pork pie.	Dark in colour, hard texture. Boiled fat, flour and water.

### Homework Links

**Food a Fact of Life**

**BBC Bitesize**

### Key Vocabulary

**Ratio**

**Lamination**

**Resting**

**Rolling**

**Crumb**

**Short**

**Flake**

**Steam**