



**The Abbey
School**

Knowledge Organiser

Year 8 Term 5

2023 - 2024

CONTENTS

- English **P.3-4**
- Literacy **P.5-6**
- Maths **P.7-11**
- Science **P.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.36-38**
- Food Preparation **P.39-41**





BIG QUESTIONS

What can I remember about Shakespeare's life?

What predictions can be made about plot and theme?

What do I learn about plot and character?

What is the theme of order and disorder?

What comparisons can be made with Shakespeare's choice of language between Act 1 and 2?

What observations can be made about roles?

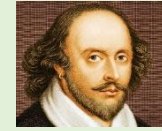
How does language change between characters?

What is the structure and layout of a newspaper?

What makes an effective article?

Context – William Shakespeare

- The most influential writer in all of English literature, William Shakespeare was born in 1564 to a successful middle-class glove-maker in Stratford-upon-Avon, England.
- Shakespeare attended grammar school, but his formal education proceeded no further.
- In 1582 he married an older woman, Anne Hathaway, and had three children with her.
- Around 1590 he left his family behind and travelled to London to work as an actor and playwright.
- Public and critical success quickly followed, and Shakespeare eventually became the most popular playwright in England and part-owner of the Globe Theatre.
- His career bridged the reigns of Elizabeth I (ruled 1558–1603) and James I (ruled 1603–1625), and he was a favourite of both monarchs.
- Indeed, James granted Shakespeare's company the greatest possible compliment by bestowing upon its members the title of King's Men.
- Wealthy and renowned, Shakespeare retired to Stratford and died in 1616 at the age of fifty-two.
- 'A Midsummer Night's Dream' is one of Shakespeare's early "festive comedies," written around 1595 to 1596. The play contains many thematic references to "dreams" and the fantastic setting of the Athenian forest.
- The play's title refers to an English holiday custom: on "Midsummer Eve," or the night of the summer solstice on June 23, English men and women would spend the night outdoors around bonfires, telling supernatural tales of fairies and witchcraft. The play not only suggests this holiday, but also refers to "the rite of May," or "maying" - a similar English tradition that took place on the first night of May, when young men and women would engage in singing, dancing in the woods outside their towns.
- It is thought that Shakespeare wrote this play to be performed first at the country house of a young nobleman, as part of his wedding festivities.



Plot Summary

Act 1

Hermia and Lysander love each other but are not allowed to marry so decide to run away to the forest to get married in secret. Demetrius wants to marry Hermia. Helena loves Demetrius. They follow Hermia and Lysander into the forest.

Act 2

In the forest, Oberon and Titania are arguing. Oberon sees Demetrius and Helena arguing and commands Puck to use the potion on the Athenian man to make him fall in love with Helena. However, the first Athenian man Puck sees is Lysander, so he puts the love potion on him. Lysander falls madly in love with Helena.



Cast of characters



THESEUS
Duke
of Athens



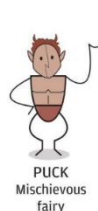
HIPPOLYTA
Amazon
Queen



OBERON
King of
the Fairies



TITANIA
Queen of
the Fairies



PUCK
Mischievous
fairy



NICK
BOTTOM
A weaver



EGEUS
Father
of Hermia



LYSANDER
Loves
Hermia



HERMIA
Loves
Lysander



DEMETRIUS
Suitor
of Hermia



HELENA
Loves
Demetrius

Key Characters

1. **Lysander** - A young man of Athens, in love with Hermia.
2. **Demetrius** - A young man of Athens, initially in love with Hermia and ultimately in love with Helena.
3. **Hermia** - Egeus's daughter, a young woman of Athens. Hermia is in love with Lysander and is a childhood friend of Helena.
4. **Helena** - A young woman of Athens, in love with Demetrius.
5. **Egeus** - Hermia's father, who brings a complaint against his daughter to Theseus.
6. **Oberon** - The king of the fairies.
7. **Titania** - The beautiful queen of the fairies.
8. **Puck** - Also known as Robin Goodfellow, Puck is Oberon's jester, a mischievous fairy who delights in playing pranks on mortals.
9. **Bottom** - The overconfident weaver chosen to play Pyramus in the craftsmen's play for Theseus's marriage celebration.
10. **Theseus** - The heroic duke of Athens, engaged to Hippolyta.
11. **Hippolyta** - The legendary queen of the Amazons, engaged to Theseus.



Key Quotations

1. "With cunning hast thou filched my daughter's heart,/ Turned her obedience, which is due to me,/ to stubborn harshness." Act 1, Sc. 1
2. "She, sweet lady, dotes,/ Devoutly dotes, dotes in idolatry,/ Upon this spotted and inconstant man." Act 1, Sc. 1
3. "The course of true love never did run smooth." Act 1, Sc. 1
4. "The more [Hermia] hate, the more [Demetrius] follows me." Act 1, Sc. 1
5. "The more [Helena] love, the more [Demetrius] hateth me." Act 1, Sc. 1
6. "Through Athens I [Helena] am thought as fair as she [Hermia]." Act 1, Sc. 1
7. "You are that shrewd and knavish sprite/ Called Robin Goodfellow." Act 2, Sc. 1
8. "And sometimes lurk I [Puck] in a gossip's bowl." Act 2, Sc. 1
9. "Not for thy [Oberon's] fairy kingdom" Act 2, Sc. 1
10. "Thou [Titania] shalt not from this grove/ Till I torment thee for this injury." Act 2, Sc. 1
11. "Make [Titania] render up her page to me." Act 2, Sc. 1
12. "We cannot fight for love, as men may do;/ We should be wooed and were not made to woo./ I'll follow thee and make a heaven of hell,/ to die upon the hand I love so well." Act 2, Sc. 1
13. "Thou shalt know the man/ By the Athenian garments he hath on." Act 2, Sc. 1
14. "When thou wakest, it is thy dear:/ Wake when some vile thing is near." Act 2, Sc. 2
15. "Then end life when I [Lysander] end loyalty!" Act 2, Scene 2
16. "When thou [Lysander] wakest, let love forbid." Act 2, Scene 2
17. "Not Hermia but Helena I [Lysander] love." Act 2, Scene 2
18. "Methought [Hermia] a serpent eat my heart away, / And you sat smiling at his cruel prey." Act 2, Scene 2

Themes in 'A Midsummer Night's Dream'

1. **Love** - Shakespeare explores the lighter side of love in this play. Love makes us behave in strange ways – the lovers fight in a most uncivilised way in the woods. It can bring out the best and bravest qualities in a character – Hermia risks her life for love. Lovers often feel invincible against a world that doesn't understand them, just as Hermia and Lysander stand alone against Athens's law. Love can make us ridiculous – Helena asks a boy to treat her like a dog, whilst Titania falls in love with a donkey. Love can be cruel – Helena and Demetrius fall desperately in love with someone who doesn't love them back. Love also has a powerful magical quality: falling in love can be like being under a spell.
2. **Appearance and Reality** - Sometimes things are not quite what they seem. Sometimes we fail to see situations as they really are. People often pretend to be something that they're not, hiding their true selves for one reason or another. Shakespeare was really interested in this idea and explored it in many of his plays.
3. **Order and Disorder** - Much of the comedy comes from the chaos created when the natural order of things is disrupted, but there's a darker side too. There's not one character that isn't relieved when Oberon finally restores the midnight world to a happier one by day.



Key Vocabulary (concepts/themes)

1. **Dramatic Irony**: when the audience are aware of events but the characters are not.
2. **Soliloquy**: - a speech in a play that the character speaks to himself or herself or to the audience, rather than to the other characters.
3. **Monologue**: a long speech by one actor.
4. **Rhyming Couplet**: a rhyming pair of successive lines.
5. **Pun**: a form of word play that exploits multiple meanings of a word.
6. **Imagery**: visually descriptive language.
7. **Metaphor**: a comparison of two things that helps explain an idea.
8. **Personification**: giving human characteristics to something non-human.
9. **Conflict**: a serious disagreement or argument between two sides.
10. **Unrequited love**: when a person loves someone who doesn't love them back.
11. **To mock**: to make fun of someone.
12. **Chaos**: a situation where there is no order and everyone is confused.
13. **Resolve**: to solve a problem or difficulty.





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

2x	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	3x	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	4x	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	5x	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	6x	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	7x	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	8x	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	9x	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	10x	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	11x	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	12x	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
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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	=	πr^2
Speed	=	Distance ÷ time
Prism volume	=	Area of cross section x length

Literacy In Maths	Command Words
Evaluate ...	Work out and write your answer
Work out ...	Working out is required
Calculate ...	Working out is required. A calculator may be needed.
Solve ...	Work out the values
Prove ...	All working must be shown in steps to link reasons and values.
Expand...	Multiply out of the brackets
Draw...	Draw accurately with a pencil and equipment.
Explain ...	Use words to give reasons
Factorise	The reverse process of expanding brackets. Remove the HCF.
Estimate	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	0, 5, 20, -4 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

How can we
calculate angles with
out measuring?

How do you
calculate with
fractions?

Sparx Maths

M818, M606,
M319, M939,
M158, M684,
M264, M478

Key Words

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

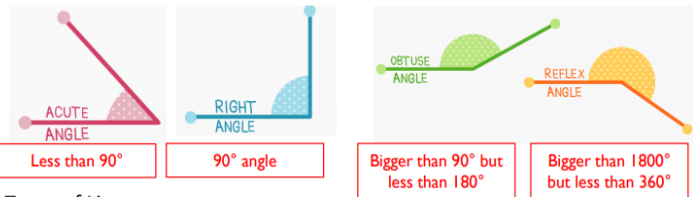
Polygon: Many sided shape.

Quadrilateral: 4 sided shape.

Regular polygon: All sides and angles are the same.

What you need to know:

Types of Angles



Types of Lines

Perpendicular Lines

Intersect
(cross) at
 90°

Parallel Lines

Never meet

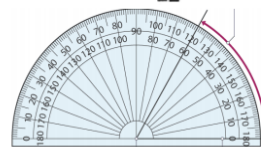
Angle Notation

Angles are measured in degrees ($^\circ$).
An angle can be identified like this
The middle letter is the vertex.

$\angle ABC$

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



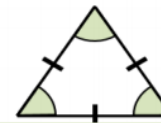
Always read from zero.
In this example use the
inside scale

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

What you need to know:

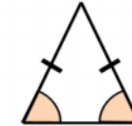
Types of Triangles

Equilateral Triangle



3 equal sides
3 equal angles (60°)
2 sets of parallel sides
3 lines of symmetry

Isosceles Triangle



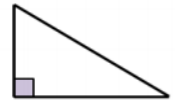
2 equal sides
2 equal angles
1 line of symmetry

Scalene Triangle



0 equal sides
0 equal angles
0 lines of symmetry

Right-angle Triangle

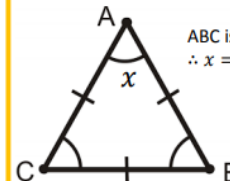


1 right angle

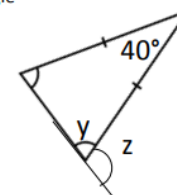
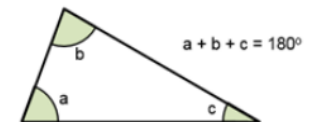
Angles in Triangles

Angles in a triangle add up to 180°

Examples – calculate the missing angles



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

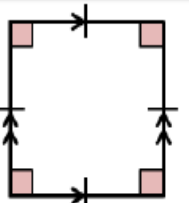
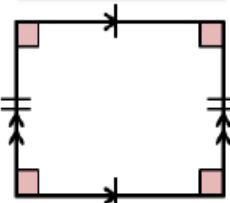
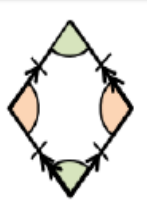
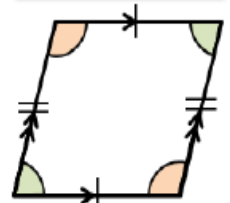
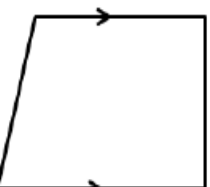

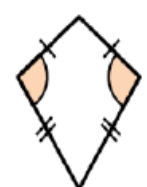



This is an isosceles triangle
 \therefore base angles are equal
 $180 - 40 = 140$
 $140 \div 2 = 70^\circ$ $y = 70^\circ$
 $z = 180 - 70 = 110^\circ$

Tip – work out missing
angles in alphabetical order

What you need to know:

Types of Quadrilaterals

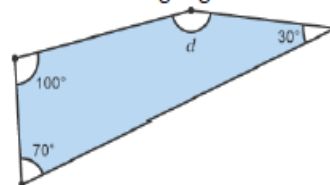
Square  <p>4 equal sides 4 right angles 2 sets of parallel sides 4 lines of symmetry</p>	Rectangle  <p>2 sets of equal sides 4 right angles 2 sets of parallel sides 2 lines of symmetry</p>	Rhombus  <p>4 equal sides 2 sets of parallel sides 2 pairs of equal angles 2 lines of symmetry</p>	Parallelogram  <p>2 sets of equal sides 2 sets of parallel sides 2 pairs of equal angles 0 lines of symmetry</p>
Trapezium  <p>1 set of parallel sides 0 lines of symmetry</p>	Isosceles Trapezium  <p>1 set of equal sides 1 set of parallel sides 2 pairs of equal angles 1 line of symmetry</p>	Kite  <p>2 sets of equal sides 0 parallel sides 1 pair of equal angles 1 line of symmetry</p>	Arrowhead  <p>2 sets of equal sides 0 parallel sides 1 pair of equal angles 1 line of symmetry</p>

Angles in Quadrilaterals

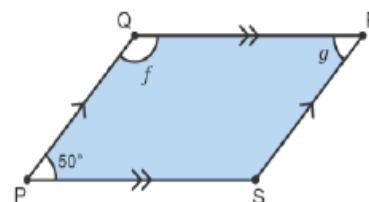
Angles in a quadrilateral add up to 360°



Examples – calculate the missing angles



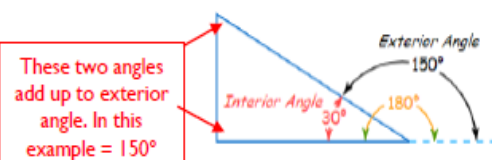
$$\begin{aligned}\text{Angles add up to } 360^\circ \\ 100 + 70 + 30 + d &= 360 \\ 200 + d &= 360 \\ 360 - 200 &= d \\ d &= 160^\circ\end{aligned}$$



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

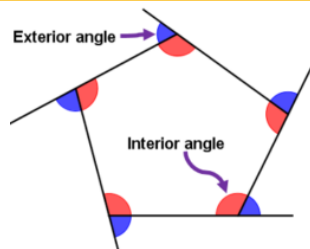
Interior and Exterior angles

Interior + Exterior angle add up to 180°



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

Angles in Polygons



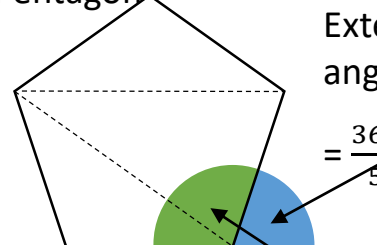
Regular polygons have equal lengths of sides and equal angles.

Angles in polygons

Sum of interior angles = $(\text{number of sides} - 2) \times 180$

Exterior angles of **regular** polygons = $\frac{360}{\text{number of sides}}$

Regular Pentagon



Exterior angles

$$= \frac{360}{5} = 72^\circ$$

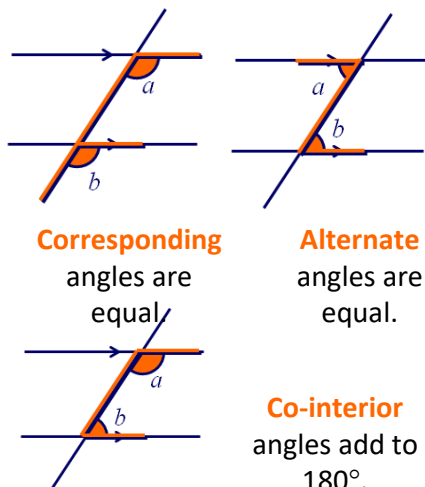
Sum of interior angles

$$= (5 - 2) \times 180$$

$$= 540^\circ$$

Interior angle

$$= \frac{540}{5} = 108^\circ$$



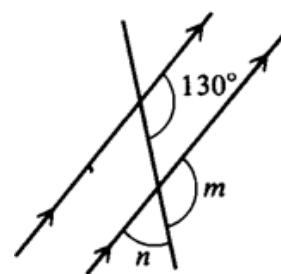
Angles in Parallel Lines

Key Words

Intersect: Two lines which cross.

Parallel: Two lines which never intersect. Marked by an arrow on each line.

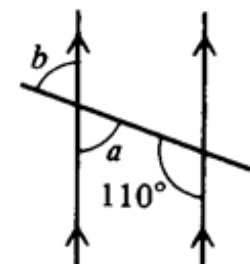
Transversal: A line which intersects two parallel lines.



$m = 130^\circ$ as corresponding angles are equal.

$n = 50^\circ$ as angles on a line

add to 180°



$a = 70^\circ$ as co-interior angles add to 180°

$b = 70^\circ$ as vertically opposite angles are equal

Homework Links

Sparx Maths

Corbettmaths.co
m/contents

bbc.co.uk/bitesize
/subjects

Key Vocabulary

Angle

Sum

Quadrilateral

Degrees

Polygon

Interior

Exterior

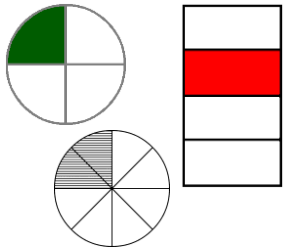
Improper

Numerator

Denominator

Fractions

$$\frac{1}{4} = \frac{2}{8} = \frac{3}{12} = \frac{4}{16}$$



$$= 0.25$$

Key Words

Fraction: A fraction is made up of a numerator (top) and a denominator (bottom).

Equivalence: Two fractions are equivalent if one is a multiple of the other.

Simplify: Cancel a fraction down to give the smallest numbers possible.

Simplify $\frac{3}{24}$

$$\frac{3}{24} \xrightarrow{\div 3} \frac{1}{8}$$

What is $\frac{3}{5}$ of 45

$$45 \div 5 \times 3 = 27$$

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

Make the denominators the same

$$\frac{3}{5} + \frac{2}{7} = \frac{21}{35} + \frac{10}{35} = \frac{31}{35}$$

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

Just multiply the tops and bottoms

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

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

$$\frac{3}{5} - \frac{2}{7} = \frac{21}{35} - \frac{10}{35} = \frac{11}{35}$$

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

Flip the second fraction and change to a times

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

Improper Fractions

An **improper fraction** is when the numerator is larger than the denominator e.g. $\frac{20}{12}$

Converting from a mixed number into an improper fraction:

$$2 \frac{3}{5} = \frac{(2 \times 5) + 3}{5} = \frac{13}{5}$$

$$1 \frac{2}{3} + 2 \frac{1}{4}$$

Convert into an improper fraction

$$= \frac{5}{3} + \frac{9}{4}$$

$$= \frac{20}{12} + \frac{27}{12}$$

Find a common denominator

$$= \frac{47}{12}$$

Convert back into a mixed number

$$= 3 \frac{11}{12}$$

$$2 \frac{2}{3} - 1 \frac{1}{4}$$

$$= \frac{8}{3} - \frac{5}{4}$$

$$= \frac{32}{12} - \frac{15}{12}$$

$$= \frac{17}{12}$$

$$= 1 \frac{5}{12}$$

$$1 \frac{1}{3} \times 2 \frac{3}{4}$$

$$= \frac{4}{3} \times \frac{11}{4}$$

$$= \frac{44}{12}$$

$$= 3 \frac{8}{12}$$

$$2 \frac{1}{3} \div 1 \frac{3}{5}$$

Find the reciprocal of the second fraction....

$$= \frac{7}{3} \div \frac{8}{5}$$

...and multiply

$$= \frac{7}{3} \times \frac{5}{8}$$

$$= \frac{35}{24}$$

$$= 1 \frac{11}{24}$$

A **reciprocal** is the value that when multiplied by another gives the answer of 1.

Eg. $\frac{1}{8}$ is the reciprocal of 8.

$\frac{2}{5}$ is the reciprocal of $\frac{5}{2}$

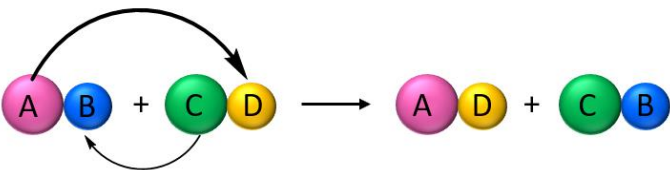
KS3 Chemistry – Obtaining Useful materials knowledge organiser

A) Topic keywords

Keyword	Definition
Displacement	When a more reactive element takes the place of a less reactive element in a compound
Reactivity series	A list of metals from the most reactive to the least reactive
Ore	Rocks from which metals are extracted
Extraction	Removing something – in this context extracting the metal from an ore
Electrolysis	Using electricity to break down a compound
Heating with Carbon	A method used to extract iron from its ore
Phytomining	Use of plants to extract metal
Bioleaching	Use of bacteria to extract metal
Oxidation	Gain of oxygen by a compound
Reduction	Loss of oxygen by a compound

B) A displacement reaction

A Displacement Reaction

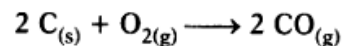


C) Reactivity series

potassium	most reactive	K
sodium		Na
calcium		Ca
magnesium		Mg
aluminium		Al
carbon		C
zinc		Zn
iron		Fe
tin		Sn
lead		Pb
hydrogen		H
copper		Cu
silver		Ag
gold		Au
platinum	least reactive	Pt

D) Blast furnace reactions:

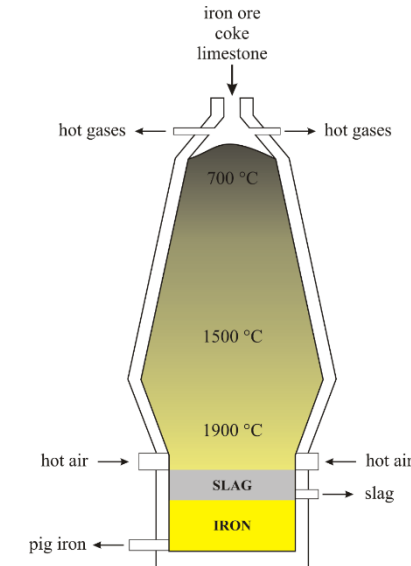
Fuel is burnt to make Carbon monoxide:



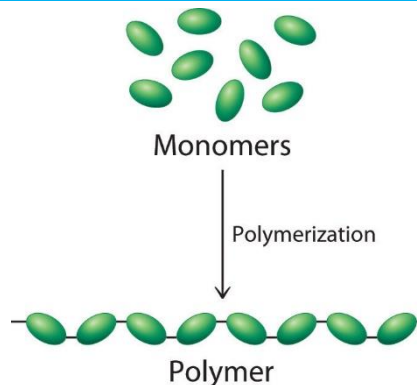
The carbon monoxide reduces the iron oxide to make iron:



E) Blast furnace

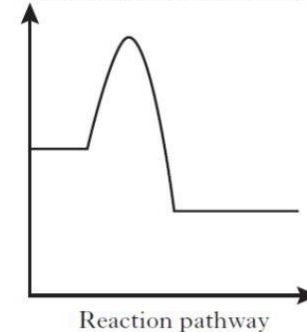


F) Polymerisation

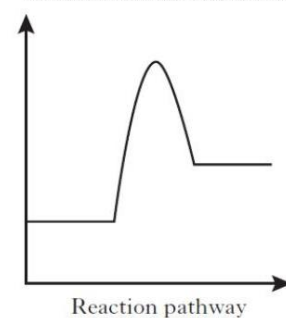


G) Reaction profiles

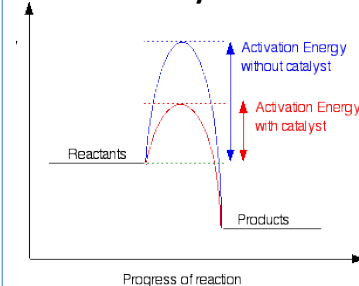
Exothermic Reaction



Endothermic Reaction



With a catalyst:



Nazi Germany and the Holocaust

Term 5

**BIG
QUESTIONS**

Who was Adolf Hitler?

How did Hitler become chancellor?

What did Hitler do to make himself a dictator?

How did the Nazis indoctrinate children?

What role did women have under the Nazis?

What was the holocaust?

Who is responsible for the Holocaust?

Summary of period

Germany was harshly punished after the First World War which brought economic hardships made worse by Hyperinflation and the Great Depression which led to the rise in support for the Nazi's eventually leading to the rise of Hitler as leader. World leaders attempted to stop Hitler going to war through a policy of appeasement. In Nazi Germany there was massive control through terror and propaganda which influenced all aspects of life and harsh treatment and persecution of minority groups, especially the Jews. As the Nazis conquered areas of Europe more Jews came under the control and the Nazis came up with an extreme way of dealing with them, the Holocaust and the Final Solution.

Nazi Germany Timeline

1918 – Hitler is injured in a mustard gas attack during WWI
1923 – Hitler becomes leader of the Nazi party
1924 – Hitler is imprisoned for his involvement in the Munich Putsch. He is released early
1925 – Hitler publishes *Mein Kampf* which he wrote during his time in prison outlining his ideas to save Germany
1929 – Wall Street Crash in America cripples the German Economy
1933 – Hitler is elected Chancellor of Germany
1933 – The Reichstag Fire. Hitler uses this as an opportunity to give himself emergency powers
1934 – Hitler has used his emergency powers to turn his democratic position into a dictatorship
1935 – Nuremberg laws are passed providing a legal precedent for antisemitism
1935 – Jewish people are forced into segregated areas called ghettos
1938 – Kristallnacht. A night of violence against Jewish people across Germany
1939 – Invasion of Poland and Eastern Europe sees millions of Jewish people brought under Nazi control. Death squads are sent to ghettos
1941 The first death camp is built at Chelmno to murder the Jews of Lodz and its neighbouring towns. Killing begins in December 1941, using gas vans
1941 – Nazis launch Operation Barbarossa – planned invasion of Soviet Union
1942 – Wannsee Conference. Leading Nazis meet to discuss a 'Final Solution to the Jewish Problem' – the decision is to exterminate all Jewish people
1943 – Germany's former allies Italy surrender and immediately declare war on Germany supporting the Western allied forces.
1945 – As the USSR pushes back Auschwitz is liberated by soldiers from the USSR
1945 – May 7th: Hitler commits suicide and the Nazi regime collapses

Nazi Germany Key Figures

Adolf Hitler Leader of Nazi Germany between 1933 and 1945. He had extreme views on the need for Germany to be full of German people and this led to anti-Semitic policies growing in Germany.

President Hindenburg – The President of Germany from 1925 until his death in 1934. Played a key role in supporting the Nazis rise to power, and placing Hitler in the position of Chancellor.

Joseph Goebbels – Nazi politician chief propagandist for the Nazi Party, and then Reich Minister of Propaganda from 1933 to 1945

Reinhard Heydrich A high-ranking Nazi official and one of the main architects of the Holocaust.

Heinrich Himmler A high-ranking Nazi official who was in charge of the SS and oversaw the Concentration and Death camps under the Nazis.

Hitler's Rise to Power

Putsch – an attempt to overthrow the government or ruling classes of a country through a violent uprising or rebellion

Hyperinflation – where money increasingly decreases in value

Chancellor – the German leader of government

Democracy – political power coming from the people

Dictator – someone with complete control over a country

Constitution – a formal list of rules and regulations deciding how a country should be run

Emergency powers – powers granted to a leader in an emergency or crisis for swift and effective government and to deal with a crisis

25 Point programme – political manifesto of the Nazi party

Reichstag – the German parliament

Enabling Act – an emergency power: a Law passed by the Nazis in March 1933 allowing Hitler to pass laws without the approval of the **Reichstag**

Police State – the use of terror and police/troops to scare population into obedience

Article 48 – an emergency power: a constitutional device allowing the president of Germany to pass laws at times of crisis

The Holocaust

Holocaust – the attempt by the Nazis to murder all Jews in Europe

Anti-Semitism – Discrimination, prejudice or hostility towards Jews

Persecution – The attack, discrimination and prejudice towards people because of their race or religion

Pogrom – an organized attack against a specific religious or ethnic group, primarily Jewish people.

Nuremberg Laws – Laws passed which discriminated against Jews, for example Jews were not allowed to marry non-Jews

Ghetto – Areas of cities where all Jews were forced to live

Concentration Camp – Camps established by the Nazis as a place to hold Jews, political prisoners and other groups who did not fit in with Nazi ideas

Genocide – The deliberate killing of a large group of people, especially those of a particular nation or ethnic group.

Dachau – First concentration camp

Auschwitz-Birkenau – concentration camp that had the largest total prisoner population

Homework Links

<https://www.bbc.co.uk/programmes/b0078c2n/clips>

(Excellent collection of clips from the BBC)

<https://www.bbc.co.uk/teach/class-clips-video/andrew-marr-history-hitler-rise-power/zn3r8xs>

(BBC clip about the rise to power of Hitler)

<https://www.bbc.co.uk/bitesize/topics/zfnp34j>

(Lots of interactive lessons and resources from BBC Bitesize)

Exam Style Question

‘The Nuremberg laws were the most significant event in the persecution of the Jews in Nazi Germany’. How far do you agree, explain your answer.

Source Skills

Homework: Complete the source inference task

Source Analysis Skills:

1. What can you infer from this source about the way children were indoctrinated by the Nazis?

Extension: How useful is this source for an enquiry into the role of children in Nazi Germany?

Source A: “The Youth serves the Fuhrer” “All 10-year olds join the Hitler Youth”. A poster advertising the Hitler youth from around 1936.

In 1933, Hitler Youth (**Hitler Jugend**) took over all youth movements in Germany, except Catholic ones (which were eliminated in 1936).

The Hitler Youth aimed to:

- ☐ control the activities of young people outside the classroom;
- ☐ make them loyal to Hitler;
- ☐ train boys to be soldiers and prepare girls to be wives and mothers.

There were many reasons why young people joined the movements:

Membership was voluntary but was made compulsory in 1936.

Young people also joined because of peer pressure.

They were attracted by the novel activities, such as camping.

It was a chance to reject the authority and values of their parents.

Membership would help them get university places and a better job in the future.

Many joined hoping that by showing loyalty to the Nazis, their families would be safe from the SS.



BIG QUESTIONS

1. What does development mean in geography?
2. What are HICs, LICs and NEEs and how are they different from each other?
3. Where is the UK on the human development index (HDI) and how does that compare to other countries?
4. What are development indicators and how do they help us assess development?
5. What is the development gap and how can we close it?

Homework Links

[Worldometer - real time world statistics \(worldometers.info\)](https://worldometers.info/)

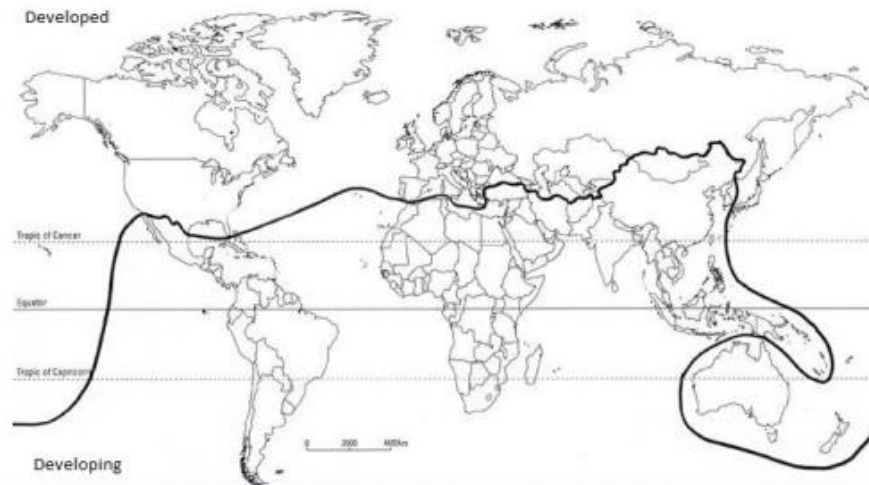
[Latest Human Development Index Ranking | Human Development Reports \(undp.org\)](https://data.un.org/Data.aspx?d=HDI)

1. Development:

- Development in geography is **the continued improvement in quality of life**.
- Quality of life is often defined as **"health, wealth and education"**.
- A country's development often depends on its wealth. Therefore, in geography we refer to countries as **low income countries (LICs)**, **high income countries (HICs)** and **newly industrialised countries (NICs)**.
- A country may be classed as a HIC, a LIC, or a NIC but there can still be **disparity** within a country or even with a town or city.

2. The Brandt Line:

- Generally, countries in the northern hemisphere are considered developed and countries in the southern hemisphere are considered to be developing.
- In the 1980s, this division was shown using the **Brandt Line**, which separated countries into "the rich north" and "the poor south".
- The line briefly dips to include Australia and New Zealand as developed countries.
- Some people argue that the Brandt line is **outdated** and shouldn't be used to determine whether a country is developed or not. This is because:
 - It doesn't include NICs such as China and Mexico.
 - It labels countries as "developed" or "developing", without recognising disparity **within countries**.
 - A lot has changed since the 1980s.



Challenge Homework: What is the quality of life like in the squatter settlement of Makoko in Lagos, Nigeria?

Why is it good that they have floating schools?

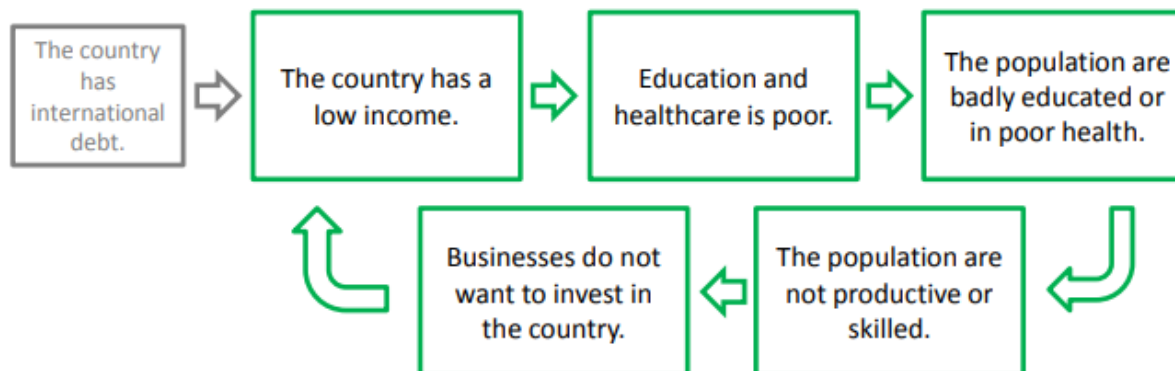
[Lagos squatter settlements - Internet Geography](https://www.internetgeography.com/2014/05/01/2014-05-01-lagos-squatter-settlements/)

3. Measuring Development: Single Indicators:

- **There is no single way to measure development.**
- There are a number of different **social and economic development indicators** which can be used to look at different aspects of the quality of life.

Indicator	S or E?	What is it?
GNI per capita	Economic	The total value of the goods and services produced by a country in a year divided by the population.
Birth rate	Social	The number of babies born per 1000 people per year.
Infant mortality	Social	The number of children under 1 who die per 1000 people per year.
Adult literacy rate	Social	The percentage of people over 15 who can read and write.
Life expectancy	Social	The average age that people are expected to live until.
Doctors per capita	Social	The number of doctors per 1000 people in the country.
Vehicles per capita	Economic	The number of cars per 1000 people in the country.

- This diagram can be helped to use to explain **why** some countries are developed or developing.
- This cycle means that poor countries remain poor, while rich countries get richer.



Key vocabulary

HIC – High Income Country

LIC – Low Income Country

NEE – Newly Emerging Economy

Development indicators – a numerical measure of quality of life.

Human development index – streamline the many different measures to measure development into one single index.

Quality of life – the standard of health, comfort and happiness experienced by an individual.

GDP – Gross Domestic Product: how much money is made by the people of the country.

Birth rate – The number of births per year per 1000 people.

Death rate – The number of deaths per year per 1000 people.

Life expectancy – The average number of years a person can expect to live.

Disparity – a difference in level of treatment, seen as unfair.

Poverty – the state of being extremely poor.

BIG QUESTIONS

What do you notice about viewpoints in artists work?

Why is perspective important in Art?

Why is drawing important in a project?

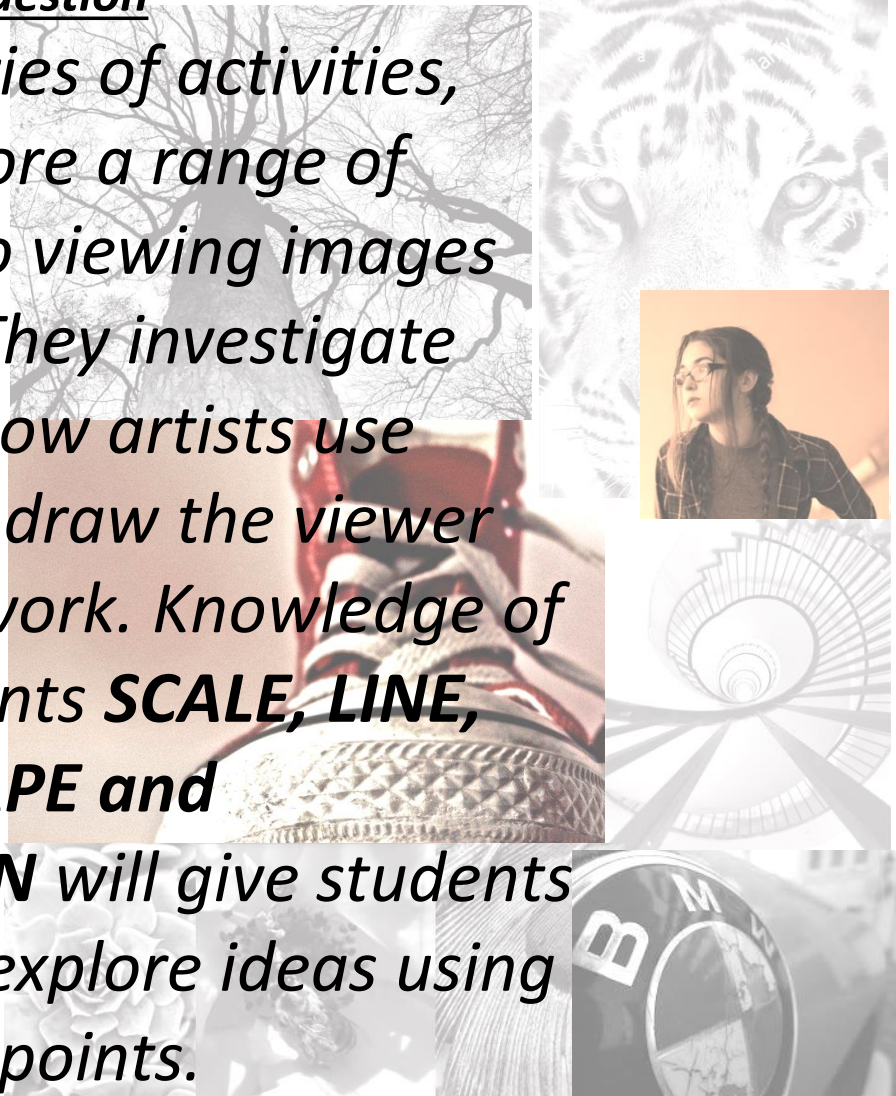
Can you recognise different types of perspective?

Why is it important to plan more than one idea?

Can you show images from unusual viewpoints?

Overarching Big Question

*Through a series of activities, students explore a range of approaches to viewing images and objects. They investigate examples of how artists use viewpoints to draw the viewer into their artwork. Knowledge of Formal Elements **SCALE, LINE, COLOUR, SHAPE and COMPOSITION** will give students the ability to explore ideas using different viewpoints.*



Key Skills

RECORD

I will learn to record...

- images and information appropriate to a given theme
- using wet and dry media
- increasing my knowledge and understanding of how artists use viewpoints to create meaningful work
- ideas for a picture linking to the theme

DEVELOP

I will learn how to develop...

- my knowledge and understanding of perspective
- my drawing skills
- my use of images and information to create interesting compositions exploring viewpoints
- ideas in response to a given theme, linking to artists work
- my higher order thinking skills

REFINE

I will learn how to...

- explore a range of media and techniques to show images e.g. Places, people, objects from different viewpoints.
- select ideas to adapt and improve using colour, shape and abstract composition.
- develop a piece of work using painting techniques and colour in different ways

EVALUATE

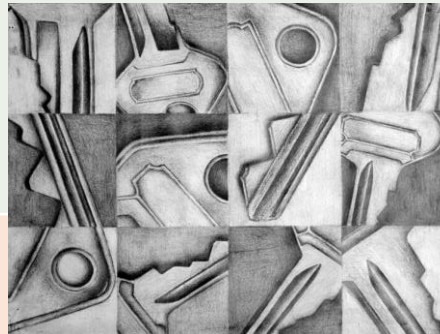
I will learn how to...

- reflect on the development of my own work
- make connections between my own and 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 inspired by the theme includes 1-hour exam.



Homework Links

Homework Booklet 6 'Weeping Woman' by Pablo Picasso (artist links to project through use of unusual viewpoints) **Duration-** 30 Minutes minimum on each of the 7 tasks (approx. 30 minutes per two-week cycle)



Key Vocabulary

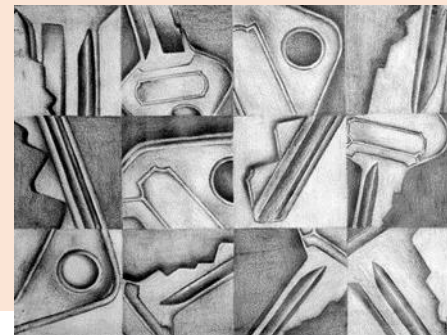
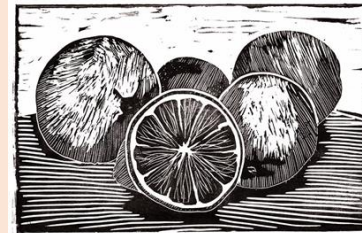
I will learn the meaning of...
*Perspective/Foreground/
 Middle ground/
 Background/Converging/
 Horizon lines etc. Within
 the context of
 'Viewpoints'.*

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

This year has been all about building on the knowledge gained in Year 7 and developing skills in techniques ‘Printmaking, 3D influenced by ‘Other Cultures’ and exploring ‘Viewpoints’ in art.

Your exam will be based on the ‘Viewpoints’ project, but you will also be able to apply other skills acquired since Year 7...

- **Drawing**
- **Use of colour**
- **Exploring media and techniques**
- **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?

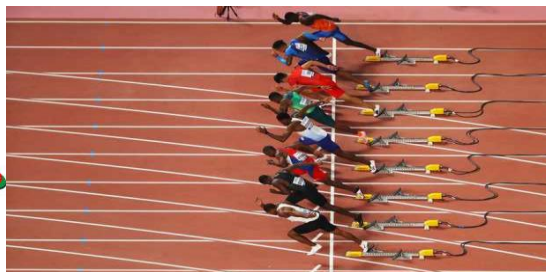


Key Skills:

- 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 stopwatch.



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?

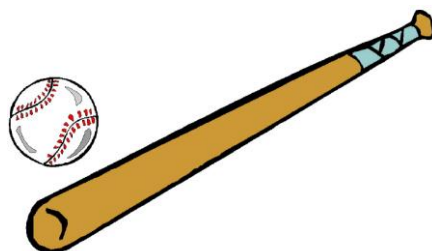


Key Skills:

- 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	Year: 8
Hinduism	Term:
5	

Big Questions

1 Is Hinduism a polytheistic or monotheistic religion?

2 How do Hindu's worship?

What is the Trimurti?

The Trimurti. Three of the most significant forms of Brahman are **Brahma**, **Shiva** and **Vishnu**. These three gods are key aspects of Brahman, the Ultimate Reality. The word 'Trimurti' means 'three forms'. In the Trimurti, Brahma is the creator, Vishnu is the preserver and Shiva is the destroyer.

Is Hinduism Monotheistic or polytheistic?

Hinduism is monotheistic although many people believe it is polytheistic. Hindus believe in one God but that god can be understood in many ways. God is too hard to understand so there are many gods to understand his different qualities. Each Hindu family will worship one main God.

What is rebirth and reincarnation?

Hindus believe that when you die your soul comes back and is born in a new body. This can happen many times. You can be reborn as any living thing. This means you can be reborn as an animal. Once your soul has learnt everything that it needs to learn and you have positive karma you will achieve Moksha and be reunited with God.

What is the Temple and how do Hindus worship?

Puja

Puja is a form of worship Hindus perform each day. This can be done in the mandir or at home. To perform puja Hindus pray facing towards a murti. They will give gifts of food or flowers to please God and show respect.

The Mandir

The mandir is the Hindu place of worship. Hindus will go to the mandir to worship together with others. In the mandir there are different deities you can worship towards. The Arti ceremony helps Hindus get closer to God.

Quick facts!

Holy book – the Vedas
Age of religion- more than 4000 years old
Place of worship – Mandir
Name of followers – Hindu
Number in the UK – 1,021,000

Key words:

Trimurti – Trimurti is the three forms or deities of Brahman (god).

Rebirth/reincarnation - rebirth is when you are reborn into a new form when you die.

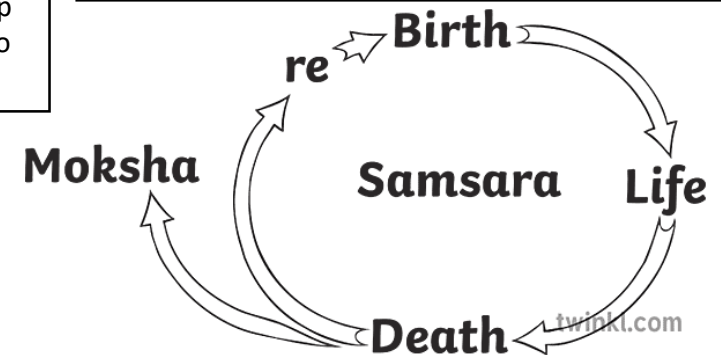
Karma – Karma means action – if you perform a good action you will have a good consequence but if you perform a bad action you will have a bad consequence.

Ahimsa – no hurting any living being. This includes animals as they feel pain like humans.

Puja – A form of worship in Hinduism – praying towards a deity.

Deity – a form of God or Brahman.

Mandir – The Hindu temple where people come together to worship Brahman.



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

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

Pitch	How high or low your voice is.
Pace	How fast or slow you speak.
Pause	A moment of silence.
Projection	How far and clearly you speak enable your voice to travel across the room.
Tone	Using your voice to show mood.
Emphasis	Exaggerating particular words or phrases in a sentence.
Accent	A distinctive pronunciation which shows location. This can be linked to country or area.
Volume	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. **P.29**

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?

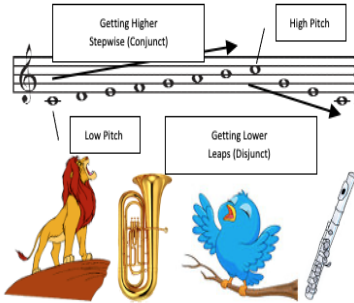





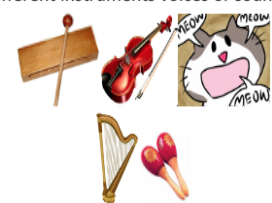


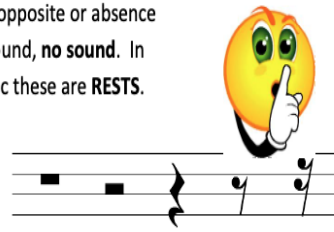

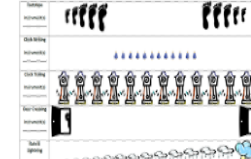
How can we describe the form and structure and texture of different songs?

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 highness or lowness of a sound.</p> 	<p>The speed of a sound or piece of music.</p> <p>FAST: <i>Allegro, Vivace, Presto</i></p> <p>SLOW: <i>Andante, Adagio, Lento</i></p> <p>GETTING FASTER – <i>Accelerando (accel.)</i></p> <p>GETTING SLOWER – <i>Ritardando (rit.) or Rallentando (rall.)</i></p> 	<p>The volume of a sound or piece of music.</p> <p>VERY LOUD: <i>Fortissimo (ff)</i></p> <p>LOUD: <i>Forte (f)</i></p> <p>QUITE LOUD: <i>Mezzo Forte (mf)</i></p> <p>QUITE SOFT: <i>Mezzo Piano (mp)</i></p> <p>SOFT: <i>Piano (p)</i></p> <p>VERY SOFT: <i>Pianissimo (pp)</i></p> <p>GETTING LOUDER: <i>Crescendo (cresc.)</i></p> <p>GETTING SOFTER: <i>Diminuendo (dim.)</i></p> 	<p>The length of a sound.</p> 
E. Texture	F. Timbre or Sonority	G. Articulation	H. Silence
<p>How much sound we hear.</p> <p>THIN TEXTURE: (<i>sparse/solo</i>) – small amount of instruments or melodies.</p>  <p>THICK TEXTURE: (<i>dense/layered</i>) – lots of instruments or melodies.</p> 	<p>Describes the unique sound or tone quality 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 played/techniques.</p> <p>LEGATO – playing notes in a long, smooth way</p>  <p>shown by a SLUR.</p> <p>STACCATO – playing notes in a short, detached, spiky way shown by a DOT.</p> 	<p>The opposite or absence of sound, no sound. In music these are RESTS.</p> 
I. Notation		J. How Music Works	
<p>How music is written down.</p> <p>STAFF NOTATION – music written on a STAVE (5 lines and spaces)</p>  <p>GRAPHIC NOTATION/SCORE – music written down using shapes and symbols to represent sounds.</p> 		<p>Music can create an atmosphere or ambience e.g., <i>supermarkets and restaurants</i>.</p> <p>Music can create an image e.g., <i>in response to art, a story, a poem, a character, a situation</i> – this is called PROGRAMME MUSIC.</p> <p>Music can be calming e.g., <i>end of an evening in clubs and bars</i>.</p> <p>Music can be used for spiritual reasons e.g., <i>worship, meditation, reflection, hymns and chants, yoga, and spiritual reflection</i>.</p> <p>Music can be used for commercial purposes 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) How do I talk about my holidays?
- 2) How do I talk about my free time?
- 3) How do I talk about TV shows?
- 4) How do I talk about what I did yesterday?
- 5) How do I make plans?
- 6) How do I revise languages?

Talking about holidays

¿Adónde fuiste de vacaciones? (Where did you go on holiday?)									
¿Con quién fuiste de vacaciones? (Who did you go on holiday with?)									
El año pasado (Last year)	fui a (I went to) viajé a (I travelled to)	Escocia (Scotland)	Grecia (Greece)	con mis amigos. (with my friends.)	con mi familia. (with my family.)	Fuimos (We went)	en avión. (by plane.)	en coche. (by car.)	¡Qué bien! (How great!)
El verano pasado (Last summer)		España (Spain)	Irlanda (Ireland)						¡Qué guay! (How cool!)
Hace dos años (Two years ago)		Francia (France)	Italia (Italy)						¡Qué suerte! (How lucky!)
		Gales (Wales)	los Estados Unidos (the United States)	con mi clase. (with my class.)	con mis padres. (with my parents.)	Viajamos (We travelled)	en autocar. (by coach.)	en tren. (by train.)	¡Qué divertido! (How fun!)
							en barco. (by boat.)	en un crucero. (on a cruise ship.)	¡Qué aburrido! (How boring!)
									¡Qué horror! (How dreadful!)
									¡Qué lástima! (What a shame!)
									¡Qué mal! (How bad!)
									¡Qué rollo! (How annoying!)

Talking about TV shows

Me gustan (I like)	los programas de música (music programmes)	los concursos (gameshows)	divertidos (funny)	informativos (informative)	que (than)	los concursos (gameshows)
Me gustan mucho (I really like)						
Me encantan (I love)						
No me gustan (I don't like)	los programas de deportes (sports programmes)	los documentales (documentaries)	interesantes (interesting)	emocionantes (exciting)		los documentales (documentaries)
No me gustan (I really don't like)						
Odio (I hate)						
	las comedias (comedies)	las telenovelas (soap operas)	porque son más (because they are more)	aburridos (boring)	tontos (silly)	las comedias (comedies)
	las series policíacas (police series)			divertidas (funny)	informativas (informative)	las series policíacas (police series)
				interesantes (interesting)	emocionantes (exciting)	las telenovelas (soap operas)
				aburridas (boring)	tontas (silly)	

Talking about what I did yesterday

Ayer (yesterday)	Por la noche (in the evening)	bailé en mi cuarto (I danced in my room)	hice gimnasia (I did gymnastics)	pero (but)	no jugué en línea con mis amigos (I didn't play online with my friends)	no salí con mis amigos (I didn't go out with my friends)
Luego (later)	A las dos y media (at 2.30)	fui al cine (I went to the cinema)	hice kárate (I did karate)		no monté en bici (I didn't ride my bike)	no hice los deberes (I didn't do my homework)
Por la mañana (in the morning)	Un poco más tarde (a bit later)	hablé por Skype (I talked on Skype)	jugué tres horas (I didn't play for three hours)		no vi una película (I didn't watch a film)	
Por la tarde (in the afternoon)						

Inviting people out

¿Te gustaría ir (Would you like to go)	a la bolera? (to the bowling alley?)		al parque? (to the park?)	De acuerdo. (All right.) ¡Genial! (Great) Vale. (OK.) Me gustaría mucho. (I would like that a lot.) Muy bien. (Very good.)
	a la cafetería? (to the café?)		a la pista de hielo? (to the ice rink?)	
	al centro comercial? (to the shopping centre?)		al polideportivo? (to the sports centre?)	
	al museo? (to the museum?)			
Me gustaría ir (I would like to go)	a la bolera (to the bowling alley)		al parque (to the park)	¡Ni hablar! (No way!) No tengo ganas. (I don't feel like it.) ¡Ni en sueños! (In your dreams!) ¡Qué aburrido! (How boring!)
	a la cafetería (to the café)		a la pista de hielo (to the ice rink)	
	al centro comercial (to the shopping centre)		al polideportivo (to the sports centre)	
	al museo (to the museum)			

Talking about clothes

Normalmente (Normally) Los fines de semana (At weekends)	llevo (I wear)	una camisa (a shirt) una sudadera (a sweatshirt) una gorra (a hat)			amarilla (yellow) negra (black) gris (grey) rosa (pink)
		una camiseta (a T-shirt) una falda (a skirt)			blanca (white) roja (red) marrón (brown) verde (green)
		un jersey (a jumper) un vestido (a dress)			morada (purple) azul (blue) naranja (orange)
					amarillo (yellow) negro (black) gris (grey) rosa (pink)
		unas botas (some boots) unas zapatillas de deporte (some trainers)			blanco (white) rojo (red) marrón (brown) verde (green)
					morado (purple) azul (blue) naranja (orange)
Este fin de semana (This weekend) El fin de semana próximo (Next weekend)	voy a llevar (I am going to wear)	unos vaqueros (some jeans) unos pantalones (some trousers) unos zapatos (some shoes)			amarillos (yellow) negros (black) grises (grey) rosas (pink)
					blancos (white) rojos (red) marrones (brown) verdes (green)
					morados (purple) azules (blue) naranjas (orange)
					de muchos colores (multi-coloured)

HOMEWORK

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

The website is:

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

1) How do I talk about my holidays?

2) How do I talk about my free time?

3) How do I talk about TV?

4) How do I talk about music?

5) How do I talk about my region?

6) How do I revise languages?

Saying where you went

Tu es allé où en vacances? (Where did you go on holiday?)

Avec qui? (Who with?)

Tu as voyagé comment? (How did you travel?)

L'année dernière, (Last year,)	je suis allé (I went)	en Espagne (to Spain)	avec (with)	mon frère. (my brother.)	J'ai voyagé (I travelled)	en avion. (by plane.)
Lété dernier, (Last summer,)		en France (to France)		mes parents. (my parents.)		en bateau. (by boat.)
Il y a deux ans, (Two years ago,)		en Grèce (to Greece)		ma famille. (my family.)		en car. (by coach.)
Il y a cinq ans, (Five years ago,)		au Maroc (to Morocco)		mes amis. (my friends.)		en train. (by train.)
		au Portugal (to Portugal)			Nous avons voyagé (We travelled)	en voiture. (by car.)
		aux États-Unis (to the USA)				

Talking about what you do in your free time.

Pendant mon temps libre, (During my free time,)	Tous les jours (Everyday)	je surfe en ligne (I surf the net)	je joue au foot (I play football)	mais (but)	je ne fais pas de sport (I don't do any sport)	je ne lis rien (I don't read anything)
Quand j'ai le temps, (When I have the time,)	Quelquefois (Sometimes)	je tchatte avec mes amis (I chat with my friends)	je fais du vélo (I go cycling)		je ne regarde jamais la télé (I never watch the TV)	je ne joue jamais à des jeux vidéo (I never play video games)
Souvent (Often)	De temps en temps (From time to time)	je blogue (I blog)	je lis les BD (I read comics)			
		je fais des achats en ligne (I buy clothes online)				

Saying what you think about music

J'adore (I love)	J'aime beaucoup (I like a lot)	le rock (rock music)	le rap (rap)	parce que (because)	c'est vif (it's lively)	c'est original (it's original)	et (and)	ça me fait danser (it makes me dance)
J'aime (I like)	Je préfère (I prefer)	le reggae (reggae)	la pop (pop music)		c'est moderne (it's modern)	c'est rapide (it's fast)		ça me calme (it calms me)
J'aime bien (I like)		le hip hop (hip hop)	la musique classique (classical music)		c'est déprimant (it's depressing)			ça me fait dormir (it makes me sleep)
Je n'aime pas (I don't like)		le jazz (jazz)	la musique de Justin Bieber (Justin Bieber's music)		c'est ennuyeux (it's boring)			ça me rend triste (it makes me sad)
Je n'aime pas du tout (I don't like at all)		le heavy metal (heavy metal music)	la musique française (french music)					
Je déteste (I hate)								

Talking about TV and film

Je vais aller au cinéma (I am going to go to the cinema)	et (and)	je vais voir (I am going to see)	une comédie (a comedy) un film d'animation (an animation film)	un film d'action (an action film) un film d'horreur (a horror film)	un film de science-fiction (a science-fiction film) un film de super-héros (a superhero film)
J'adore (I love) J'aime (I like) Je préfère (I prefer)	les comédies (comedies) les émissions de musique (music programmes) les émissions de science-fiction (science-fiction programmes)	les émissions de cuisine (cooking programmes) les séries (series) les émissions de sport (sports programmes) les émissions de télé-réalité (reality TV programmes)	car elles sont plus (because they are more)	amusantes (funny) intéressantes (interesting) divertissantes (entertaining)	les comédies (comedies) les émissions de musique (music programmes) les émissions de science-fiction (science-fiction programmes) les émissions de cuisine (cooking programmes) les émissions de sport (sports programmes) les émissions de télé-réalité (reality TV programmes)
Je n'aime pas (I don't like) Je déteste (I hate)	les documentaires (documentaries) les jeux télévisés (game shows)	les dessins animés (cartoons) les feuilletons (soap operas)	car ils sont plus (because they are more)	ennuyeuses (boring) nulles (rubbish)	les séries (series) les infos (the news) les documentaires (documentaries) les jeux télévisés (game shows) les dessins animés (cartoons) les feuilletons (soap operas)

Talking about my region

Dans ma région, (In my region,) Dans ma ville, (In my town,)	il y a (there are)		des (some) beaucoup de (lots of)	bâtiments (buildings) champs (fields) lacs (lakes) touristes (tourists)	forêts (forests) montagnes (mountains) plages (beaches) voitures (cars)
	il n'y a pas (there aren't)		de (any)		
	quand (when)	il fait chaud, (it's hot,)	it fait mauvais, (it's bad weather,)	on peut (you can)	des grottes (some caves) le marché (the market)
		il fait un soleil de plomb, (it's scorching,)	il y a du soleil, (it's sunny,)		des monuments historiques (historic monuments)
		il fait beau, (it's nice weather,)	il y a du vent, (it's windy,)		des crêpes (pancakes) du fastfood (fast food)
		il fait froid, (it's cold,)	il pleut, (it rains,)		du canoë-kayak (canoeing) du ski (skiing)
		il fait un froid de canard, (it's freezing,)	il neige, (it snows,)		des randonnées (walks) les magasins (shopping)
				aller (go)	au cinéma (to the cinema) à la plage (to the beach)

HOMEWORK

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

The website is:

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!



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 1315"></div> <div data-bbox="1417 1058 1616 1308"></div>
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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

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

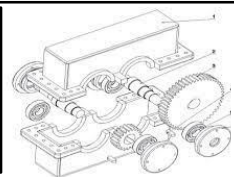
Health and Safety Rules

Five Golden Rules:

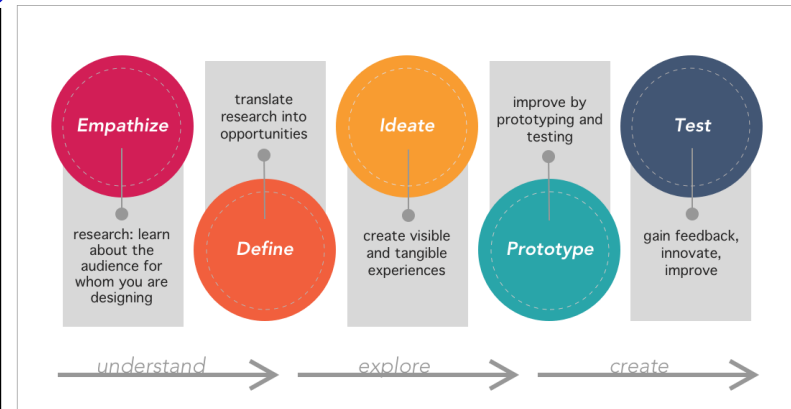
1. Dress Right
 - Always wear appropriate PPE in the workshop.
 - Apron at all times
 - Goggles, gloves and mask where appropriate
 - Long hair tied up at all times
2. Know the Environment
 - Single person zones
 - First aid kits
 - Teacher/Technician only zones
3. Follow Instructions
 - Always keep 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)

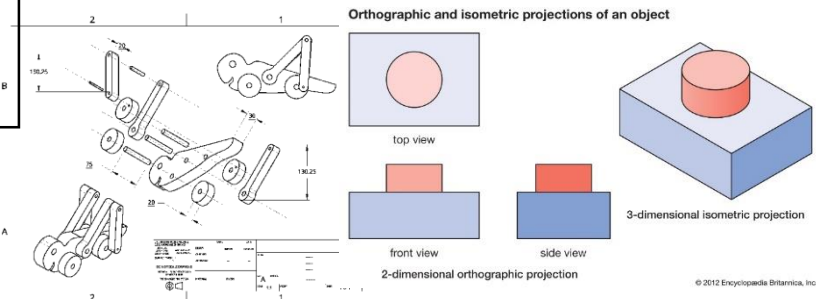


The Iterative Design Process



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 vaneers, 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

BIG QUESTIONS

**What is the
difference
between dietary
need and
choice?**

**What are food
allergies and
intolerances?**

**What factors
affect food
choice?**

**What reasons
are there for
following a
special diet?**

Through a range of investigations students will gain knowledge into the many reasons for special dietary needs and choices.

Personal dietary needs and preferences will be investigated.

Food ethics including environmental issues will be considered.

Food Choices.

Deciding on what to cook or eat, whether for yourself or someone else, requires making a number of decisions:

- beliefs and values;
- food preferences;
- food provenance;
- health and wellbeing;
- social and economic considerations;
- who, what, when and where.



Beliefs and values

Personal beliefs and values include:

- culture, tradition and heritage;
- food ethics, e.g. environment, fair trading, organic, free-range, local and seasonal food;
- lifestyle choices, e.g. vegetarian, vegan;
- religion.

Religion	Pork	Beef	Lamb	Chicken	Fish
Islam	x	Halal only	Halal only	Halal only	✓
Hinduism	x	x	✓	✓	✓
Judaism	x	Kosher only	Kosher only	Kosher only	✓
Sikhism	x	x	✓	✓	✓
Buddhism (strict)	x	x	x	X	x
Seventh-day Adventist Church	x	x	x	✓	✓
Rastafari Movement	x	x	x	X	x

Food provenance

Food provenance is about where food is grown, caught or reared, and how it was produced. Food certification and assurance schemes guarantee defined standards of food safety or animal welfare. There are many in the UK, including:



TRACEABLE, SAFE
&
FARMED WITH CARE

Red Tractor



Marine
Stewardship
Council



British Lion

Allergy and intolerance

There are 14 ingredients (allergens) that are the main reasons for adverse reactions to food. People who are allergic, or intolerant, to these ingredients should take care to avoid eating them. The 14 allergens are:

Celery (and celeriac)
Cereals containing
gluten
Crustaceans
Eggs
Fish
Lupin

Milk
Molluscs
Mustard
Nuts
Peanuts
Sesame
Soybeans
Sulphur dioxide

WHAT IS FAIRTRADE?

Fairtrade is about better prices, decent working conditions, local sustainability, and fair terms of trade for farmers and workers in the developing world

Homework links:

<https://www.foodafactoflife.org.uk>

BBC Bitesize

<https://www.fairtrade.org.uk>



Key words

- **Allergens:** Substances that can cause an adverse reaction to food.
- **Ethical:** Relating to personal beliefs about what is morally right and wrong.
- **Food certification and assurance schemes:** Defined standards of food safety, quality or animal welfare.
- **Food provenance:** Where food is grown, caught or reared, and how it was produced.
- **Religion:** a particular system of faith and worship.
- **Seasonal food:** Food grown at a particular time of year.
- **Seasonality:** The times of year when a given type food is at its peak, either in terms of harvest or its flavour.
- **Fairtrade:** Fairness for farmers in developing countries

Eating the Seasons

Most foods are grown in a particular season of the year e.g. strawberries are harvested in summer in the U.K as the climate best suits the fruit, these are called 'seasonal foods'. Buying foods in season will have many benefits including: flavour, lower price, lower food miles, helping the farmer. Technology and the importation of food has allowed food to be available all year round. Frozen foods, such as vegetables, are a great alternative to fresh when these are unavailable.



Free range refers to food from animals, for example, meat or eggs, that are produced from animals that have access to outdoor spaces. Usually, free range also stands for animals who have free access to graze or forage for food.

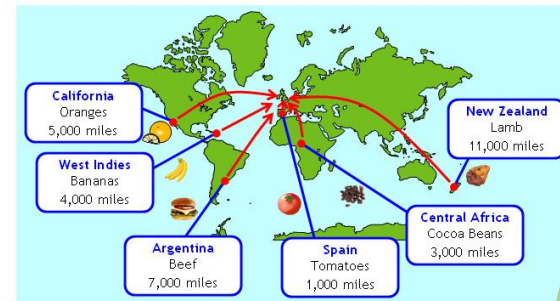


Who, what, when and where

The time of day, location and who is eating can impact food choice:

- eating alone, with family or friends;
- celebration;
- day of the week,
- location, e.g. at home, school or work, at a restaurant, on the go;
- meal or snack;
- occasion and time of day.

Try to eat a rainbow of food colours every day to help you gain the most vitamins and minerals



Food miles is the distance food is transported from the time of its production until it reaches the consumer.