THE ABBEY SCHOOL
A BUSINESS & ENTERPRISE ACADEMY

Knowledge Organiser

Year 11

Term 1

CONTENTS

English
Language Paper 1 Questions 1-4

BIG QUESTIONS

How can I revise for English Language?

How will I be examined for questions 1-4 of Language Paper 1?

What are the language techniques?

How do I analyse a writer's language?

What are the structural techniques?

How do I analyse a writer's structure?

What is evaluation?

How do I evaluate effectively?

What do the questions look like?

Q1: List 4 things…

[4 marks]

Q2: How does the writer use language here to describe…

[8 marks]

Q3: How has the writer structured the text to interest you as a reader?

[8 marks]

Q4: To what extent do you agree…?

[20 marks]

Analysis sentence starters

This **suggests** that…
This **conveys** that…
It **implies** that….
The word **presents**…
This **portrays** to the reader…
The language **connotes** that…

(The bold words are all synonyms for '**show**')

How do I evaluate in Question 4?

The examiner will give you an opinion about the extract. You should:

Step 1: Decide if you agree with the opinion or not.

Step 2: Find the evidence which supports your opinion.

Step 3: Explain to the examiner how your evidence shows your opinion.

Language Techniques
(for questions 2 and 4)

Technique	Definition
Adjective	A word that describes a noun.
Verb	An action which can be physical, mental or a state of being.
Adverb	A word that describes a verb (action). These usually end with –ly.
Pronoun	These are used in the place of a name.
Connective	Words which show the relationship between ideas such as time or agreement.
Simile	A comparison using 'like' or 'as' to show the similarity between two ideas.
Metaphor	A comparison where you state something is something that it's not, based on a shared characteristic.
Onomatopoeia	Words which make their own sound.
Personification	Giving a non-human thing a human characteristic.
Simple Sentence	A sentence with one piece of information.
Compound sentence	Two simple sentences joined using a connective.
Complex Sentence	A sentence which contains a subordinate clause. A subordinate clause is an extra piece of information which would not make sense on its own.
Semantic Field	Where multiple words in a piece of writing suggest the same idea or theme, such as coldness, fear, isolation or excitement.
Oxymoron	Two words which are the direct opposite next to one another.

Structure Techniques
(for questions 3 and 4)

Technique	Definition
Beginning	The starting point of the extract.
Middle	The pivotal moment in the extract, usually the dilemma or the problem.
End	The way in which the extract finishes.
Setting	Where the extract takes place. There may be multiple settings in the extract.
Tone	An emotion suggested in the extract. This could be negative, positive, happy, worried or any emotion, really. The tone can change during the extract.
Introduced/ Introduction	A first meeting with an idea/person, one added during the course of the extract.
Pace	The speed at which the events of the extract happen. This could vary over the course of the extract to alter the mood.
Narrative perspective/ voice	The viewpoint the story is being told from. Whether it is a character (first person), directed as if the reader is the character (second person) or by a narrator unrelated to the events (third person). My examples:
Focus	Where the writer draws the eye of the reader to a specific event, person, place or even sense.
Paragraphing	How the writer breaks up the events of the extract. The length of paragraphs may alter the pace as well as highlighting significant moments through depth.
Foregrounding	When the writer places a person, setting or story element at the front of the action.
Characterisation	How the writer develops the personality of a character, possibly through their appearance, actions or speech.

Homework Links

- Use GCSEPod Pass4English to keep your terminology knowledge fresh.
- Answer practise questions under exam conditions

Key Vocabulary

Analyse – to examine in detail, typically in order to explain and interpret.

Evaluate – to consider the merit, worth or reliability of something based on evidence.

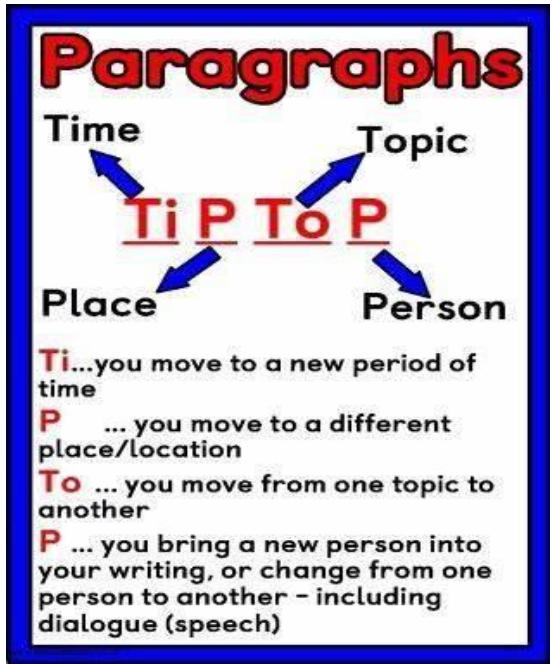
Structure – the way that a text is put together and developed by the writer.

All of the language and structure techniques as well as the key words for analysis.

Literacy

Sentence Structures

1. 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.
2. Subordinate Clause: A clause that depends on an independent clause to make sense. E.g. Without turning around, the cat sat on the mat.
3. Simple Sentence: Contains just one clause (subject + verb) E.g. Tom went to the shops.
4. 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.
5. 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.
6. Exclamatory: A sentence that shows great emotions. E.g. I am appalled by your behaviour!
7. Imperative: A sentence that gives commands. E.g. Get out!
8. Interrogative: A sentence that asks a question (not rhetorical questions). E.g. How much is that dress in the window?
9. Declarative: A sentence that makes a declaration. E.g. She sells sea-shells.



Sentence Openers

Opener	Definition	Examples
Prepositional Phrase	describes relationship between nouns	under beside
Words Ending in -ly	adverbs that modify nouns	happily angrily
Action Words Ending in -ed -ing	verbs with an -ed or an -ing at the end	played playing
Words Describing 'What Happened'	words that add meaning to sentence	when as if
Very Short Sentences	sentences with only 2-5 words	We jumped! It was scary.
Transitional Words	tell time, sequence, cause/effect, closing	immediately since

Homophones: words that sound the same but have different meanings

1. Their - means it belongs to them.

E.g. I ate their sweets.

2. They're - short for they are.

E.g. They are going to be cross.

3. There - refers to a place.

E. g. I'm going to hide over there.

4. Your – refers to something that belongs to you.

E.g. Your bag.

5. You're – contraction of 'you are.'

E.g. You're going to win.

Punctuation

- **Full stop:** 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 mark:** 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.*
- **Colon:** 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 Colon:** 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 subordinate adjectives. If an *and* or a *but* can be put between the adjectives, a comma probably belongs there.
E.g. *As such, I feel there is much I can learn.*

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".*

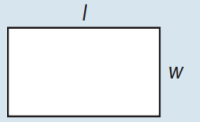
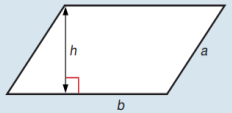
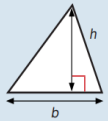
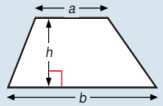
6.) Use a comma with phrases that present a contrast.
E.g. *Learning about Hemmingway can be highly advantageous for students, not only in their secondary school studies, but also in their future careers.*

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.*

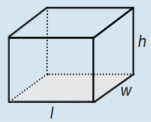
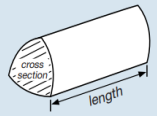
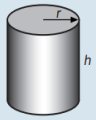
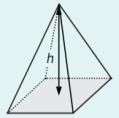
Subject: Mathematics
Topic: Recall Knowledge

Year / Group: GCSE F/H
Term: 1-6

Areas

Rectangle = $l \times w$	
Parallelogram = $b \times h$	
Triangle = $\frac{1}{2} b \times h$	
Trapezium = $\frac{1}{2}(a + b)h$	

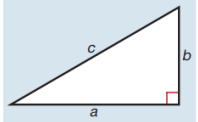
Volumes

Cuboid = $l \times w \times h$	
Prism = area of cross section × length	
Cylinder = $\pi r^2 h$	
Volume of pyramid = $\frac{1}{3}$ × area of base × h	

Pythagoras

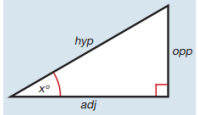
Pythagoras' Theorem

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



Trigonometric ratios (*new to F*)

$\sin x^o = \frac{\text{opp}}{\text{hyp}}$, $\cos x^o = \frac{\text{adj}}{\text{hyp}}$, $\tan x^o = \frac{\text{opp}}{\text{adj}}$



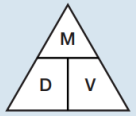
Compound measures

Speed

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

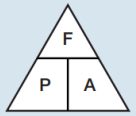
Density

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



Pressure

$\text{pressure} = \frac{\text{force}}{\text{area}}$

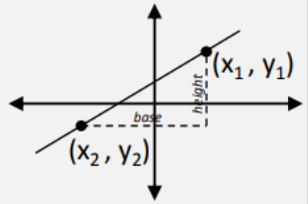


Gradient of a Line

$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

or

$$m = \frac{\text{height}}{\text{base}}$$



Midpoint of two points

between (x_1 , y_1) and (x_2 , y_2)

$$\left(\frac{x_1 + x_2}{2}, \frac{x_1 + y_2}{2}\right)$$

Compound Growth & Decay

The amount after *n* years (or days, etc.) is:

$$\text{starting amount} \times \left(1 \pm \frac{r}{100}\right)^n$$

where *r* is the rate of change.
The ± means + for growth and – for decay

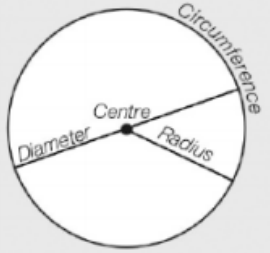
Literacy In Maths	Command Words
Evaluate …	Work out and write your answer
Work out …	Working out is required
Calculate …	Working out is required. A calculator may be needed.
Solve …	Work out the values
Prove …	All working must be shown in steps to link reasons and values.
Expand…	Multiply out of the 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.

Circles

Circumference = $\pi \times$ diameter, $C = \pi d$

Circumference = $2 \times \pi \times$ radius, $C = 2\pi r$

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



Area of a Sector

$$A = \frac{\theta}{360°} \times \pi r^2$$

Length of an Arc

$$A = \frac{\theta}{360°} \times \pi d$$

Set Notation

$A \cup B$

Union: in A or B (or both)

$A \cap B$

Intersection: in both A and B

$P(A \text{ or } B) = P(A) + P(B)$

$P(A \text{ and } B) = P(A) \times P(B)$

Subject: Mathematics
Topic: Ch18 – Fractions, Indices and Standard Form / Ch12 Revision

Year / Group: 11F
Term: 1

BIG QUESTIONS

How can we apply fraction knowledge to mixed numbers?

What is standard form and how does it relate to index notation?

Revision: How do we calculate sides and angles from right angled triangles

Sparx Maths

U679, U689, U746, U163, U103, U874, U385, U541

Fractions

Equivalent fractions have the same value as one another.
Eg. $\frac{1}{4} = \frac{2}{8} = \frac{3}{12}$

A number multiplied by it's **reciprocal** gives the answer of 1. Or the reciprocal of a number is 1 over the number.
Eg. $\frac{1}{8}$ is the reciprocal of 8.
$\frac{2}{5}$ is the reciprocal of $\frac{5}{2}$

Examples

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

$= \frac{5}{3} + \frac{9}{4}$ — Convert into an improper fraction

$= \frac{20}{12} + \frac{27}{12}$ — Find a common denominator

$= \frac{47}{12}$

$= 3\frac{11}{12}$ — Convert back into a mixed number

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

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

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

$= \frac{17}{12}$

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

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

$= \frac{4}{3} \times \frac{11}{4}$ (× and × cross)

$= \frac{44}{12}$

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

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

$= \frac{7}{3} \div \frac{8}{5}$ — Find the reciprocal of the second fraction....

$= \frac{7}{3} \times \frac{5}{8}$ — ...and multiply

$= \frac{35}{24}$

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

Indices

$a^m \times a^n = a^{m+n}$

$a^m \div a^n = a^{m-n}$

$(a^m)^n = a^{mn}$

$a^{\frac{1}{n}} = \sqrt[n]{a}$ $\quad a^{\frac{1}{2}} = \sqrt[2]{a^1} = \sqrt{a}$

$a^{-m} = \frac{1}{a^m}$ $\quad a^{-3} = \frac{1}{a^3}$

Standard Form

We use standard form to write a very large or a very small number in scientific form.

Must be $1 \leq a < 10$; b is an integer

$a \times 10^b$

1) 4580000 = 4.58×10^6
2) 0.0006 = 6×10^{-4}

Multiplying standard form

Multiply standard form: We multiply the numbers and add the indices.

$(5 \times 10^4) \times (7 \times 10^6)$

$= 35 \times 10^{10}$ — This is not in standard form because 35 is not less than 10.

$= 3.5 \times 10^{11}$

$(3.2 \times 10^3) \times (4 \times 10^4)$

$= 12.8 \times 10^7$ — Remember to add the powers together.

$= 1.28 \times 10^8$

Dividing standard form

Divide standard form: We divide the numbers and subtract the indices.

$(8 \times 10^9) \div (2 \times 10^6)$

$= 4 \times 10^3$ — This is already in standard form because 4 is less than 10.

$(1.2 \times 10^5) \div (2 \times 10^2)$

$= 0.6 \times 10^3$ — This is not in standard form because 0.6 is less than 1.

$= 6 \times 10^2$

Homework Links

Sparx Maths

MathsGenie.co.uk/GCSE

Corbettmaths.com/contents

bbc.co.uk/bitesize/subjects

Key Vocabulary

Hypotenuse
Square
Adjacent,
Opposite,
Tangent
Sin, Cosine
Inverse
Depression,
Elevation

Formulae

Pythagoras' theorem and basic trigonometry both only work with **right angled triangles**.

Pythagoras' Theorem – used to find a missing length when two sides are known

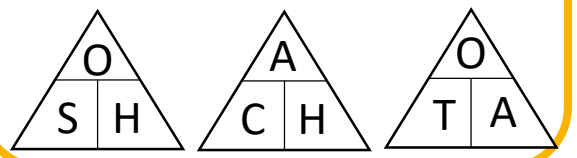
$$a^2 + b^2 = c^2$$
$$c^2 - b^2 = a^2$$

c is always the hypotenuse (longest side)

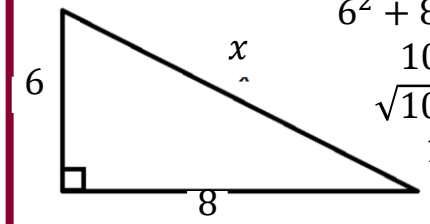
Basic trigonometry SOHCAHTOA

-

used to find a missing side when you have one side and an angle or to find an angle when you have two sides.

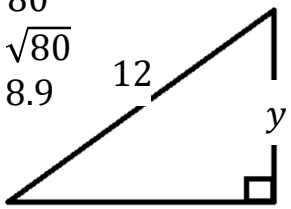


Pythagoras' Theorem

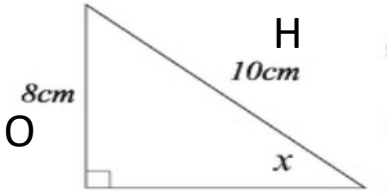


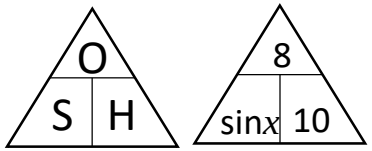
$$a^2 + b^2 = c^2$$
$$6^2 + 8^2 = x^2$$
$$100 = x^2$$
$$\sqrt{100} = x$$
$$10 = x$$

$$a^2 + b^2 = c^2$$
$$y^2 + 8^2 = 12^2$$
$$y^2 = 12^2 - 8^2$$
$$y^2 = 80$$
$$y = \sqrt{80}$$
$$y = 8.9$$

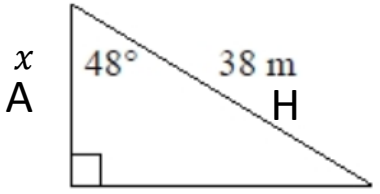


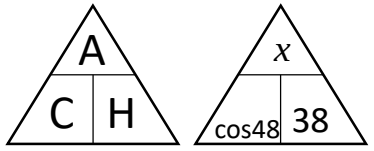
Using Trigonometry





$$\sin x = \frac{8}{10}$$
$$x = \sin^{-1}\left(\frac{8}{10}\right) = 53.1^o$$





$$\cos 48 = \frac{x}{38}$$
$$x = 38 \times \cos 48 = 25.4m$$

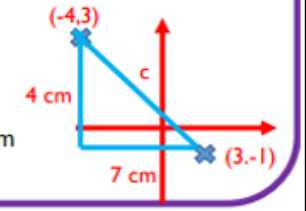
Key Terms:

Hypotenuse: The longest side in a right angled triangle.
Opposite: The side facing the angle in a right angled triangle.
Adjacent: The side next to the angle given in a right angled triangle.
Square number: The result when you multiply a number by itself.
Inverse operation: The operation that reverses the effect of another operation.
Sine, Cosine, Tangent: Trigonometric ratios, relating to buttons on the calculator.

The distance between two points

Find the distance between (3,-1) and (-4,3)
1)Sketch coordinates on an axis.
2)Join as a right-angled triangle.
3)Find the lengths of the straight sides.
4)Use Pythagoras to find the hypotenuse.

$42 + 72 = c^2$
$65 = c^2$
$\sqrt{65} = c$
c = 8.062257748 cm



Subject: Mathematics
Topic: Ch13 Advanced Trigonometry

Year / Group: 11H
Term: 1

BIG QUESTIONS

How do we apply trigonometry knowledge to any triangle?

How can our knowledge of trigonometry help solve 3D problems?

How does your knowledge of exact values support representing trigonometric functions graphically?

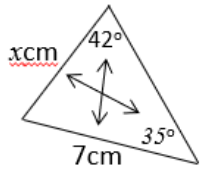
Sparx Maths

U593, U808 U434, U168, U904, U107, U525, U164, U904

Sine rule

To calculate a missing side:

$$\frac{a}{sinA} = \frac{b}{sinB} = \frac{c}{sinC}$$



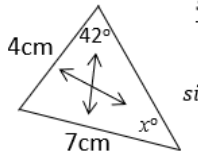
$$\frac{x}{sin35} = \frac{7}{sin42}$$

$$x = \frac{sin35 \times 7}{sin42}$$

$$x = 6.0cm$$

To calculate a missing angle:

$$\frac{sinA}{a} = \frac{sinB}{b} = \frac{sinC}{c}$$



$$\frac{sinx}{4} = \frac{sin42}{7}$$

$$sinx = \frac{sin42 \times 4}{7}$$

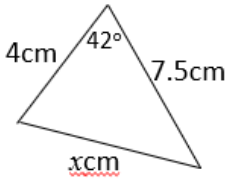
$$x = sin^{-1}\left(\frac{sin42 \times 4}{7}\right)$$

$$x = 22.5^o$$

Cosine rule

To calculate a missing side:

$$a^2 = b^2 + c^2 - 2bccosA$$



$$a^2 = b^2 + c^2 - 2bccosA$$

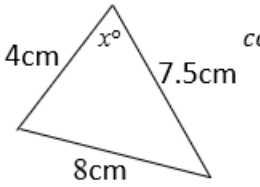
$$x^2 = 4^2 + 7.5^2 - 2 \times 4 \times 7.5 \times cos42$$

$$x^2 = 27.66$$

$$x = \sqrt{27.66} = 5.26cm$$

To calculate a missing angle:

$$cosA = \frac{b^2 + c^2 - a^2}{2bc}$$



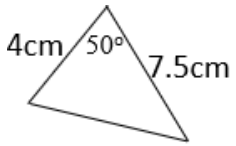
$$cosA = \frac{4^2 + 7.5^2 - 8^2}{2 \times 4 \times 7.5}$$

$$A = cos^{-1}\left(\frac{4^2 + 7.5^2 - 8^2}{2 \times 4 \times 7.5}\right)$$

$$A = 82.1^o$$

Area of a Triangle

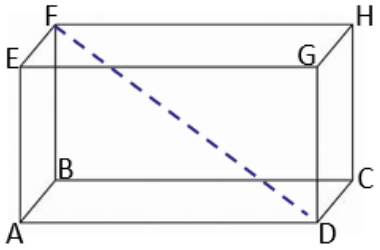
$$area = \frac{1}{2}absinC$$



$$area = \frac{1}{2} \times 4 \times 7.5 \times sin50$$

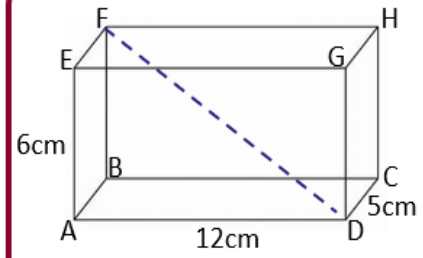
$$area = 11.49cm^2$$

3D Solids

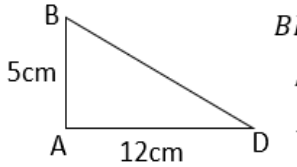


The **plane** of a cuboid is a flat 2 dimensional surface.
An example of a plane is ABCD.
An example of a **diagonal** in a cuboid is FD.

Examples



Calculate the length BD:

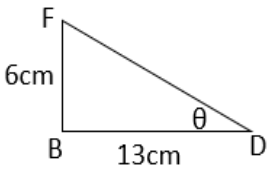


$$BD^2 = 12^2 + 5^2$$

$$BD = \sqrt{169}$$

$$BD = 13cm$$

Calculate the angle between FD and the plane ABCD:

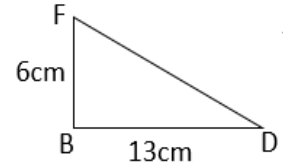


$$tan\theta = \frac{6}{13}$$

$$\theta = tan^{-1}\left(\frac{6}{13}\right)$$

$$\theta = 24.78^o$$

Calculate the length FD:



$$FD^2 = 13^2 + 6^2$$

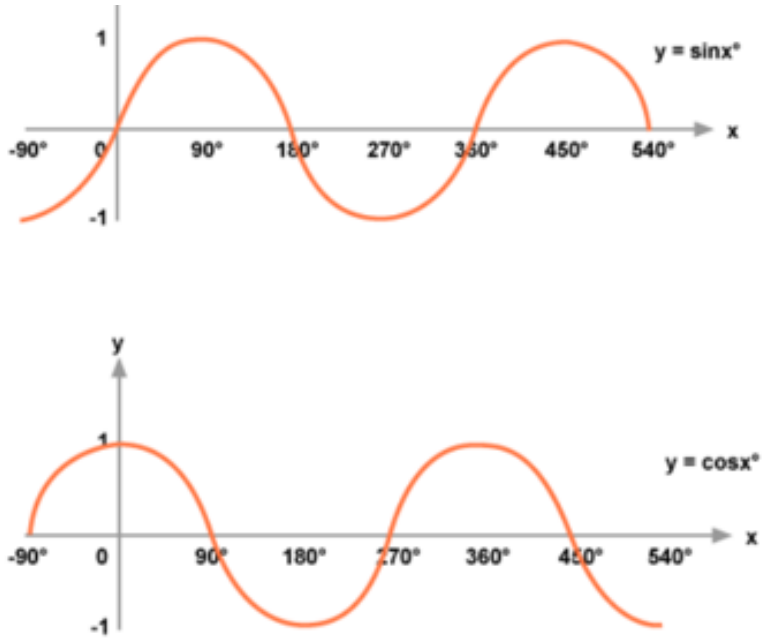
$$FD = \sqrt{205}$$

$$FD = 14.32cm$$

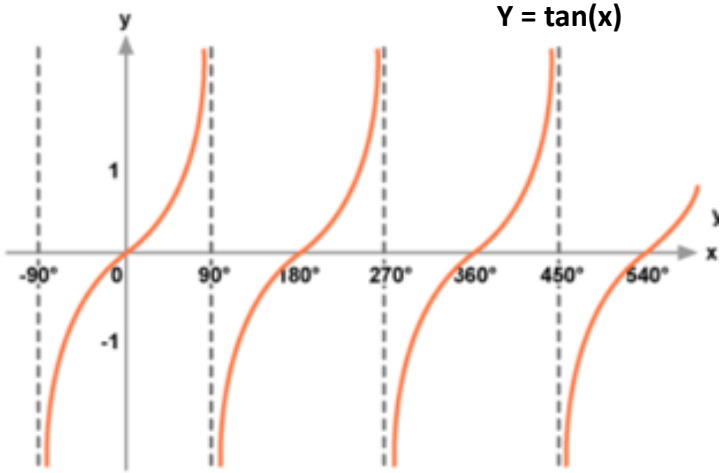
Exact Trig Values

For some angles in a right angled triangle, there is an exact trigonometric value. These are shown in the table below.

	Sine	Cosine	Tangent
0°	0	1	0
30°	$\frac{1}{2}$	$\frac{\sqrt{3}}{2}$	$\frac{1}{\sqrt{3}}$
45°	$\frac{1}{\sqrt{2}}$	$\frac{1}{\sqrt{2}}$	1
60°	$\frac{\sqrt{3}}{2}$	$\frac{1}{2}$	$\sqrt{3}$
90°	1	0	Undefined



Trigonometric graphs



Functions – Ch17

All graphs can be transformed by applying different rules to their original function $y = f(x)$

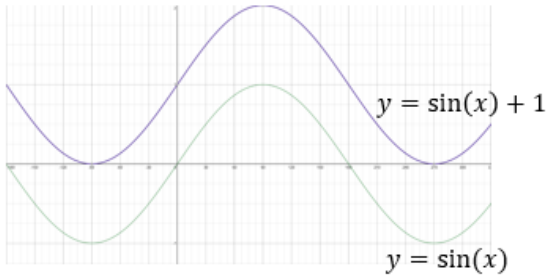
$\boldsymbol{y = -f(x)}$ This will reflect a function in the x axis.

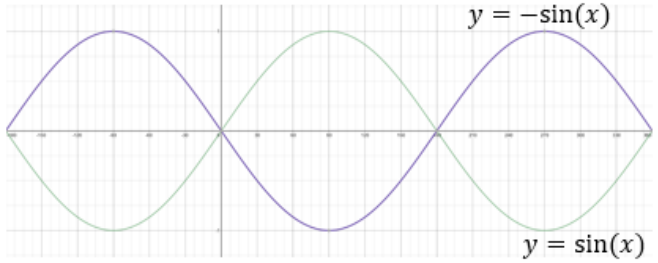
$\boldsymbol{y = f(-x)}$ This will reflect a function in the y axis.

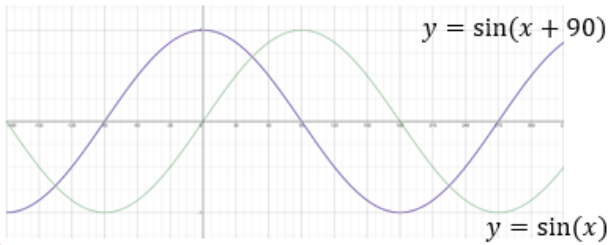
$\boldsymbol{y = f(x) \pm a}$ This will translate a function parallel to the y axis by $\begin{pmatrix} 0 \\ \pm a \end{pmatrix}$.

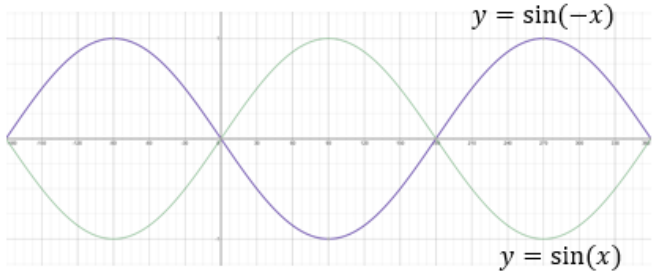
$\boldsymbol{y = f(x \pm a)}$ This will translate a function parallel to the x axis by $\begin{pmatrix} \mp a \\ 0 \end{pmatrix}$.

Examples









Homework Links

Sparx Maths

MathsGenie.co.uk/GCSE

Corbettmaths.com/contents

bbc.co.uk/bitesize/subjects

Key Vocabulary

Axis, coordinates, sine, cosine, tan, angle, graph, transformations, side, angle, inverse, square root, 2D, 3D, diagonal, plane, cuboid

Biology 6: Inheritance, Variation and Evolution Knowledge Organiser

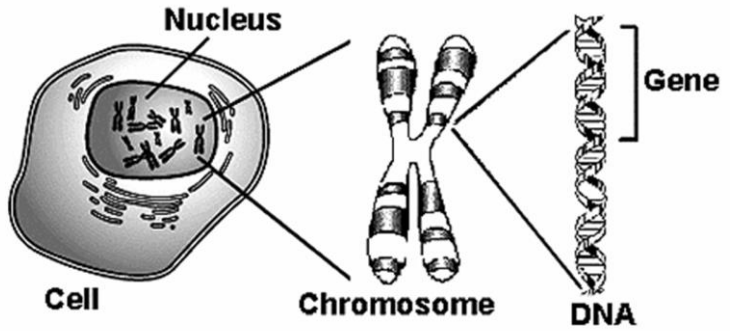
1. INHERITANCE KEY FACTS

Key term/question	Definition/answer
1. What is DNA?	A **polymer** made of two strands forming a **double helix**
2. What is a Chromosome?	A long molecule of coiled DNA
3. What is a gene?	Short sections of DNA coding for a sequence of amino acids
4. Genome	The entire set of genetic material in an organism
5. Importance of genome research (3)	**1.** Search for genes linked to different types of disease **2.** Understanding and treatment of inherited disorders **3.** Tracing human migration patterns from the past
6. What are sex cells called?	Gametes
7. Male human gamete	Sperm cell
8. Female human gamete	Egg cell (ovum)
9. Fertilisation	The fusing of the male and female gametes
10. Sexual reproduction	Producing offspring which are **genetically different** to parents
11. Asexual reproduction	Producing offspring which are **genetically identical** to the one parent
12. Meiosis	Cell divides twice to produce **4 genetically different gametes**
13. Number of chromosomes in human body cells	46 individual (23 pairs)
16. Number of chromosomes in gametes	23 individual
17. Male sex chromosomes	XY
18.Female sex chromosomes	XX

Key term/question	Definition/answer
19. Alleles	An alternative version of a gene
20. What is a dominant gene?	Characteristics show if **1 copy** of the **dominant allele** is present
21. What is a recessive gene?	Characteristics only show if **2 copies** of the **recessive allele** are present
22. **Homo**zygous	**Both** alleles for a gene are the **same**
23. **Hetero**zygous	**Both** alleles for a gene are **different**
24. Genotype	Combination of alleles (e.g. Bb)
25. Phenotype	Characterises (e.g. brown eyes)

2. The organisation of genetic material in a cell

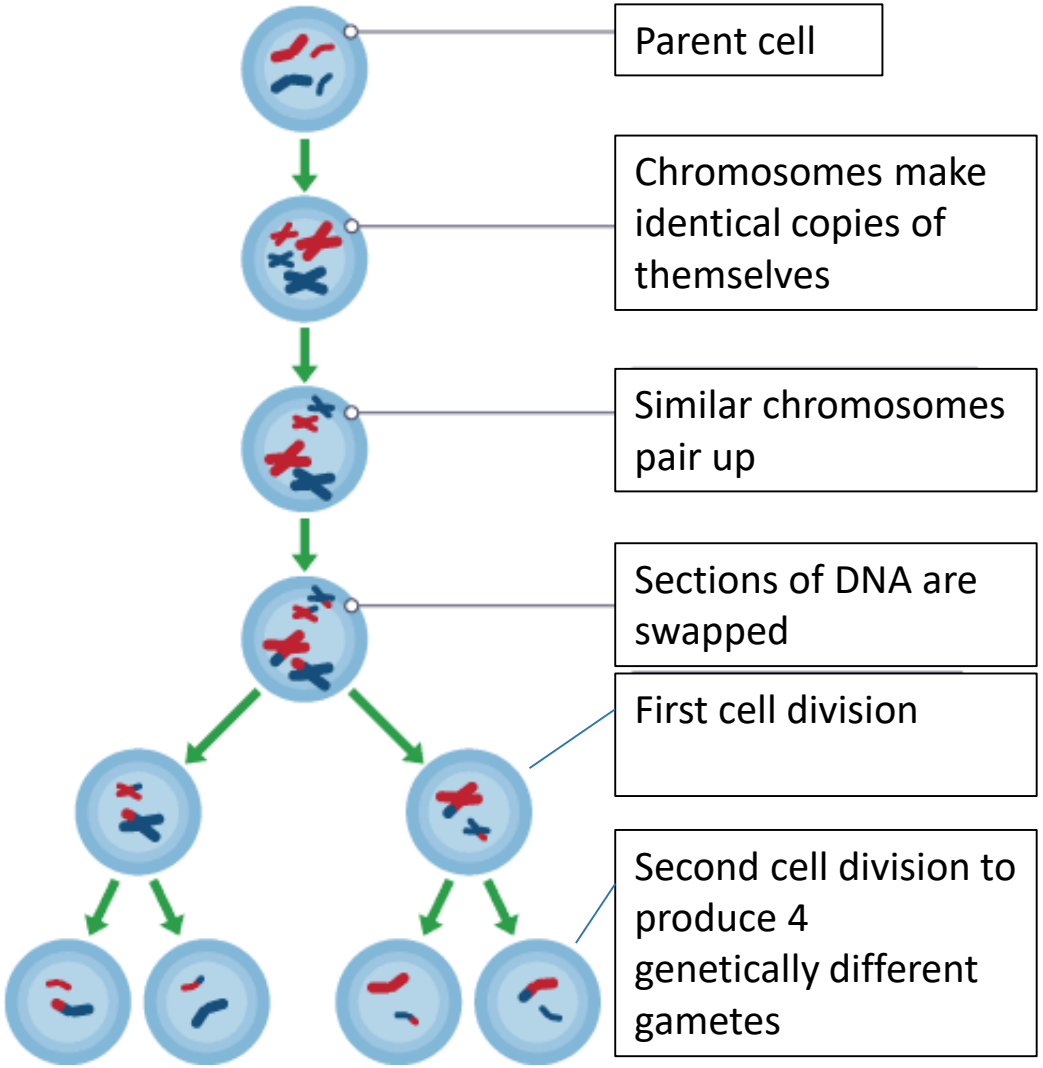
DNA is stored as long tightly wound strands called chromosomes, which is stored in the nuclei of cells. Each chromosome is split into sections called genes. A gene is a section of DNA which codes for a sequence of amino acids. We have now developed the technology to sequence an entire genome, which is an organisms complete set of genetic material.



Biology 6: Inheritance, Variation and Evolution Knowledge Organiser

3. Meiosis

Meiosis is the type of cell division that produces **gametes. Sex cells** are called gametes. The **male gametes** are **sperm cells**, and the **female gametes** are **egg cells**. During meiosis, a cell divides twice to produce **4 genetically different gametes.**



4. Comparing Mitosis and Meiosis

	Mitosis	Meiosis
Number or daughter cells produced	2	4
Variation in cells	Genetically **identical** to each other and parent cell	Genetically **different** to each other and parent cell
Number of chromosomes	46 individual (full set) 23 pairs	23 individual (half a set)
Purpose	Growth, repair, asexual reproduction	Produces gametes for sexual reproduction

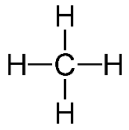
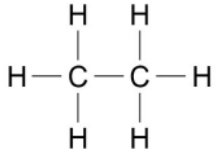
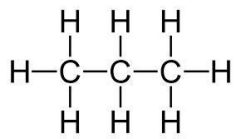
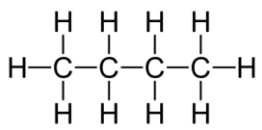
5. Genetic Disorders

Key term/question	Definition/answer
26. Inherited disorder	Caused by a faulty allele that is passed on to offspring
27. Give two examples of inherited disorders	Polydactyly and cystic fibrosis
28. What is polydactyly?	Person is born with extra fingers or toes
29. Cause of polydactyly	Dominant allele
30. What is cystic fibrosis?	Cell membranes of lungs and pancreas secretes sticky mucus
31. Cause of cystic fibrosis	Recessive allele

Chemistry 7: Organic Chemistry Knowledge Organiser

HYDROCARBONS – ALKANES

Key term/question	Definition/answer
1. Organic compounds	Compounds containing carbon atoms
2. Hydrocarbon	A molecule **only** formed form **carbon** and **hydrogen**
3. Alkane	A **saturated** hydrocarbon. The **carbon atoms form four bonds** and **hydrogen atoms only form one bond**
4. Saturated hydrocarbons	A molecule that only contains **single bonds**
5. General formula for alkanes	C_nH_{2n+2} (n is the number of carbon atoms)
6. The first four alkanes	**1.** Methane **2**. Ethane **3.** Propane **4.** Butane
7. Properties of hydrocarbons (3)	**1.** Viscosity **2**. Boiling point **3.** Flammability
8. Viscosity	How runny or gloppy a substance is.
9. Low viscosity	The shorter the chain length of hydrocarbons, the runnier the hydrocarbon is
10. High viscosity	The longer the chain length of hydrocarbons, the more gloppy the hydrocarbon is
11. Boiling point	A temperature at which a substance changes from liquid to gas (evaporates) of from a gas to a liquid (condenses)
12. Why does boiling point increase?	Longer chain lengths of hydrocarbons needs more energy to break the intermolecular forces
13. Flammability	How easy it is to ignite a substance
14. How flammability increases	The shorter the chain length of hydrocarbons the more flammable it is
15. What is complete combustion of hydrocarbons	Carbon and hydrogen is **fully oxidised** to produce carbon dioxide and water vapour
16. Word equation of complete combustion	Hydrocarbon + oxygen → carbon dioxide + water vapour

	Methane	Ethane	Propane	Butane
Chemical formula	CH_4	C_2H_6	C_3H_8	C_4H_{10}
Displayed formula				

CRUDE OIL AND FRACTIONAL DISTILLATION

Key term/question	Definition/answer
17. What is crude oil?	Remains of plankton that was buried in mud
18. Finite resource	A resource that **cannot** be replenished at the same rate which it is used.
19. Fractional distillation	A process used to separate a **mixture** of **hydrocarbons** into their **fractions**
20. Fractions	A group of hydrocarbons that have a similar number of carbon atoms so **condense** together
21. Name four fractions of crude oil	Gas, petrol, kerosene, diesel
22. How fractional distillation works (4)	1. Crude oil is pumped into the bottom of a fractional column. 2. The crude oil is heated so that is evaporates. 3. Long chain lengths of hydrocarbons condense at bottom of the column. 4. Short chain lengths of hydrocarbons condense at the top of the column.

ALKENES AND CRACKING

Key term/question	Definition/answer
23. Alkene	An **unsaturated** hydrocarbon that is more reactive than alkanes
24. Unsaturated hydrocarbon	Contains at least **one double bond** between carbon atoms. C=C
25. How to test for an alkene (2)	**1.** Add orange bromine water. **2.** If an alkene is present the bromine water will turn from orange to colourless
26. Cracking process	Used to break long-chain hydrocarbons down into shorter, more useful hydrocarbons
27. Why is cracking used? (2)	**1.** Produces useful fuels **2.** Produces ethene for making plastics
28. What type of reaction is cracking ?	Thermal decomposition (breaking molecules down by heating them)
29. Steam cracking	Uses a higher temperature of over 800°C and no catalyst
30. Catalytic cracking	Uses a temperature of approximately 550°C and a catalyst known as a zeolite
31. Catalyst	Increases the rate of a chemical reaction. Without being used up or changed.

F) Forces and motion: Terminal velocity

Key term/question	Definition/answer
65. Terminal velocity	When a falling object reaches a steady velocity
66. What is friction?	A force that opposes an object's movement by acting in the opposite direction to its motion
67. What is air resistance (drag)?	A frictional force caused by gas on a moving object
68. When an object first falls, why does it accelerate?	Gravitational force is greater than air resistance
69. Why does the acceleration of a falling object begin to decrease?	As an object moves faster, air resistance increases
70. Why is terminal velocity reached?	The air resistance force will equal the accelerating force. The resultant force will be 0
71. How does the area of an object effect terminal velocity?	Greater surface area = Lower terminal velocity

G) Forces and motion: Newton's laws

Key term/question	Definition/answer
72. Newtons first law of motion (2)	**1**. If the resultant force acting on a stationary object is zero, the object will remain stationary. **2.** if the resultant force acting on a moving object is zero, the object will carry on moving at the same velocity.
73. When do objects move at constant velocity?	When the forces acting on the object are balanced
74. HIGHER TIER What does inertia mean?	The tendency of objects to continue in their state of rest or of uniform motion (same speed and direction)
75. HIGHER TIER An objects inertia mass	Measures how difficult it is to change the velocity of an object. The greater the mass the higher the inertia
76. Newton second law of motion (2)	**1**. The larger the resultant force acting on an object, the more the object accelerates – the force and acceleration are directly proportional **2.** Acceleration is inversely proportional to the mass of an object.
77. Equation for Newton's 2nd law	Resultant force (N) = mass (kg) x acceleration (m/s^2) **F = ma**
78. Newtons third law of motion	When two objects interact, the forces they exert on each other are equal and opposite

H) Forces and breaking: Stopping distances

Key term/question	Definition/answer
79. Define stopping distance	Thinking distance + braking distance
80. Define thinking distance	The distance travelled during the driver's reaction time
81. Define braking distance	The distance travelled after the brakes are applied
82. What are the typical values for reaction time?	0.2 to 0.9 seconds
83. Factors that decrease a driver's reaction time (4)	**1.** Tiredness **2.** alcohol **3.** drugs **4.** distractions
84. Factors that increases braking distance (4)	**1.** How fast the vehicle is travelling **2.** Worn or faulty brakes **3.** Worn tyres **4.** Adverse weather conditions (e.g. wet and icy roads)
85. Which force causes a car to slow down when breaking?	Friction between brakes and wheels
86. What is the energy transfers that occur when a force is applied to a car's brakes	Kinetic energy of car → thermal energy in the brakes
87. Why is a car travelling at a high speed stopping suddenly dangerous?	Needs a larger braking force which means a larger deceleration
88. Dangers of large decelerations (2)	**1.** Overheating brakes **2.** car skidding

I) HIGHER TIER: Momentum

Key term/question	Definition/answer
89. Define momentum	A property of a moving object that is the product of its mass and velocity.
90. What quantity is momentum?	Vector quantity
91. Momentum equation	Momentum (kg m/s) = mass (kg) x velocity (m/s) **p = mv**
92. Conservation of momentum	In a closed system the total momentum before an event is the same as after an event
93. What is meant by a closed system?	No external forces are acting
94. Examples of closed system	Collisions and explosions

History Year 11 Term 1

Medicine Through Time and the Western Front

Middle Ages 1250-1500

SUMMARY OF THE PERIOD

Very few scientific advances in this period. People believed disease was sent from God as a punishment for sin and it was not possible to question these teachings. The Church used ancient texts by Hippocrates and Galen to explain illness. These put forward the theory of the four humours. People also looked to astrology and urine charts to diagnose illness. Physicians would give patients a personalised diagnosis but treatment was often given by midwives and barber surgeons. People would also go to apothecaries for herbal remedies. The invention of the printing press was perhaps the most significant innovation of this period as it would encourage the spread of new ideas.

Key Individuals

Hippocrates - Ancient Greek physician, created the theory of the four humours.

Galen - Physician in ancient Rome who developed Hippocrates' theories further and wrote more than 350 books about medicine. His teachings were promoted by the Church because they fitted with Christian ideology.

Johannes Gutenburg – Inventor of the Printing Press

Key Dates

1348 Outbreak of the Black Death

1440 Johannes Gutenberg creates the world's first printing press.

Middle Ages - Key Terms

Apothecaries – People who mixed herbal remedies and had good knowledge of the healing powers of plants.

Astrology - The study of the alignment of the planets and stars, used for diagnosing illness. Many people believed the Black Death was caused by a bad alignment of the planets.

Barber surgeon - Barbers worked with sharp knives and, as well as cutting hair, they often performed surgical procedures. Barbers would do surgery and not physicians.

The Black Death - An outbreak of the bubonic plague, spread by fleas on rats. Usually fatal within 3-5 days.

Decaying matter - Material, such as vegetables or animals, that has died and is rotting

The four humours - The theory that ill health is caused by an imbalance of the four humours in the body. These are blood, phlegm (what is coughed up or sneezed out of the nose), black bile (excrement) and yellow bile (pus or vomit).

Mass - Roman Catholic service where bread and wine is given.

Miasma - Smells from decaying matter that were believed to cause disease.

Phlebotomy or bloodletting - A common treatment for imbalance of the humours. This was done by cutting a vein, using leeches or cupping (piercing the skin with a knife).

Physicians - Medieval doctors were known as physicians. They would diagnose illness and recommend a course of treatments but rarely got involved in treating the patients themselves.

Printing press - A machine for printing text or pictures

Purging - Inducing people to vomit or giving them a laxative to clear out their digestive system; used to balance out the humours.

Regimen Sanitatis - A set of instructions by physicians to help a patient maintain good health. This would have included bathing, not over-eating and taking moderate exercise.

Supernatural cures - Religious cures such as healing prayers, paying for a mass, fasting and going on pilgrimages.

Urine charts – Physicians would examine people's urine, checking colour, thickness, smell (and even taste) to diagnose illness.

Summary of the Renaissance Period (1500-1700)

The Renaissance was a period of scientific discovery, with several philosophers and scientists coming up with new ideas. The printing press helped the sharing of these ideas across Europe and organisations like the Royal Society encouraged experimentation and the search for knowledge. The influence of the Church on medicine was reduced and many people now recognised that God did not send disease. There was a greater understanding of anatomy, thanks to Vesalius and Harvey, and most physicians, by the end of the 17th century, no longer believed in the theory of the four humours or in diagnosis using urine.
Despite all these changes, there was also a great deal of continuity. Ordinary people still believed in the four humours and miasma, and were slow to accept new ideas. While the practice of medicine did not change much at this time, ideas were starting to change. Therefore this period laid the foundations for changes in medicine to come.

Key Renaissance Vocabulary

Alchemy - An early form of chemistry. Alchemists tried to turn one material into another, mainly with metals.

Anatomy - The science of understanding the structure and make-up of the body.

Dissection - The dismembering of a body to study its anatomical structure.

Iatrochemistry - A way of treating disease using chemical solutions. Pioneered by Paracelsus.

Renaissance - The French word that means rebirth. The Medical Renaissance refers to a period in the 16th and 17th centuries when new ideas were beginning to influence medicine.

The Royal Society - A group of people who promote scientific experiments and the sharing of knowledge. The Society received a royal charter from Charles II which gave it more credibility.

Secular - Not religious; not connected with spiritual beliefs.

Syphilis - A sexually transmitted infection, also known as the Great Pox. Can cause blindness, paralysis and madness.

Key Renaissance Dates

1543 - Vesalius publishes On the Fabric of the Human Body.
1628 - William Harvey proves that blood circulates around the body.
1660 - First meeting of the Royal Society.
1665- The Great Plague arrives in Britain.
1665- Thomas Hooke develops powerful microscope.
1676 - Thomas Sydenham publishes Observationes Medicae.

Key Renaissance Individuals

Thomas Sydenham

Believed that diseases could be organised into groups and not individual to the patient. He valued close observation of symptoms rather than relying on medical books to make a diagnosis. Also known as “the English Hippocrates”.

Vesalius

Author of one of the most influential books on human anatomy (Fabric of the Human Body). He carried out many dissections on the bodies of executed criminals and discovered over 300 mistakes in Galen’s original works on anatomy.

William Harvey

Discovered that blood circulates around the body rather than being made in the liver, as had been taught by Galen.

Paracelsus

Rejected Galen’s theory of the four humours. Used chemical substances to treat illness, for example, metal mercury for the treatment of syphilis.

Robert Hooke

An English scientist and head of experiments at the Royal Society. He developed a powerful microscope and published a book of images from his observations.

Van Leeuwenhoek

A Dutch scientist who observed tiny “animalcules” under the microscope. This was the first observation of bacteria

Summary of 18th and 19th Century Period (1700-1900)

Significant changes in medicine occur in this period. By 1900, there was a better understanding of how germs cause disease and work was being done to develop new vaccines and treatments. The government, which started out with a laissez-faire attitude to public health, began to become more involved, with compulsory small pox vaccination and the Public Health Act of 1875. Hospitals developed into clean, modern institutions thanks to the work of Florence Nightingale and more surgery became possible through the use of anaesthetics. Fewer people died as a result of surgery because of Joseph Lister's pioneering work with antiseptics.

Key 18th and 19th Century Dates

1798 - **Jenner publishes his discovery about the smallpox vaccine**

1847 - Simpson discovers the anaesthetic properties of chloroform

1848- First Public Health Act (not enforced so ineffective)

1852 - Smallpox vaccine made compulsory (although fines not issued)

1854- Snow disproves miasma by proving cholera is water-bourne

1861- Pasteur publishes his germ theory, which disproves spontaneous generation

1865 - Inspired by Pasteur, Lister uses carbolic acid as an antiseptic

1875 - Public Health Act (enforced and government no longer considered laissez-faire)

1876 - Koch discovers that specific germs cause specific diseases

1881 - Koch develops anthrax vaccine

1882 - Koch discovers a way to stain microbes to make them easier to study.

Key 18th and 19th Century Individuals

Edward Jenner - Pioneers the smallpox vaccine

Louis Pasteur - Disproved spontaneous generation with his germ theory; developed vaccines for anthrax and rabies; pioneered pasteurisation.

Henry Bastian - Influential doctor in Britain who believed in **spontaneous generation**.

Robert Koch - Used Pasteur's germ theory to identify which germs caused anthrax, proving specific germs cause specific diseases. He developed a way of dying germs to help study them

Florence Nightingale - Helped establish **nursing** as a respectable profession for women; improved the sanitation and standard of care at military hospitals in the **Crimea** (became known as "the lady with the lamp"); founded school of nursing at St Thomas hospital.

Joseph Lister - British surgeon who pioneered antiseptic surgery using Carbolic Acid spray.

James Simpson - Discovered the anaesthetic properties of chloroform.

John Snow - Proved that cholera is spread by water, not miasma. Made chloroform and ether safer to use by working out correct dosage.

Key 18th and 19th Century vocabulary

Amputation - The removal of a limb by surgery.

Anaesthetic - A drug or drugs given to produce unconsciousness before and during surgery.

Antiseptics - Chemicals used to destroy bacteria and prevent infection.

Chloroform - A liquid whose vapour acts as an anaesthetic and produces unconsciousness.

Diarrhoea - A symptom of a disease (such as cholera); frequent, fluid bowel movements.

The Enlightenment - A European intellectual movement of the 18th century emphasising reason and science over religion and tradition; also known as the "Age of Reason".

Germ theory - The theory that germs cause disease, often by infection through the air.

Inoculation - Putting a low dose of a disease into the body to help it fight against a more serious one.

Laissez-faire - Belief that governments should not interfere in people's lives.

Microbe - A living organism that is too small to see without a microscope.

Pasteurisation - A way of preserving food or drink by heating to 55 degrees C and thus killing the bacteria.

Public Health Act (1875) - Government legislation that made it compulsory for city authorities to dispose of sewage, build public toilets and provide clean water. New houses had to be built to better quality and food sold in shops had to be checked for safety.

Spontaneous generation - The theory that decaying matter turns into germs.

Vaccination - Injection into the body of weakened organisms to give the body resistance. Comes from the word vacca which means cow in Latin. This was because the first vaccination involved injecting cow pox samples into people to develop immunity against small pox.

1900-present

SUMMARY OF THE PERIOD

Massive advances in the understanding, treatment and prevention of disease. Better diagnosis of illness using technology such as X-Rays, blood tests and CT, Ultrasound and MRI scans. Better treatment of disease is made possible with the discovery of antibiotics and the development of “magic bullet” drugs. The discovery of DNA and mapping of human genome enables great strides in understanding hereditary factors in disease. Advances in surgical techniques make life-saving treatments possible, such as transplants and mastectomies. The introduction of the NHS in 1948 means that free healthcare is provided to everyone in Britain. Mass vaccination campaigns to help eradicate diseases such as tetanus, polio and measles. There is more understanding of the lifestyle factors affecting disease, such as the link between obesity and diabetes and the link between smoking and lung cancer.

Key Individuals

Gehard Domagk - Discovered Prontosil could cure bacterial infections**.**

Paul Ehrlich - Tested over 600 arsenic compounds to find a **cure for syphilis**. His research was continued by a Japanese scientist called Hata who found that compound 606 (which was named Salvarsan) cured syphilis.

Alexander Fleming - Discovered by accident that penicillin, a type of mould, could kill harmful bacteria.

Howard Florey and Ernst Chain - Two scientists who took Fleming’s discovery of penicillin and developed it as an antibiotic treatment for use on humans.

Rosalind Franklin & Maurice Wilkins - Took the first X-Ray photographs of DNA.

James Watson & Francis Crick- Two scientists working at Cambridge University who identified the double helix structure of DNA.

Key Dates

1909 - Discovery of Salverson 606

1928 - Fleming discovers Penicillin in his lab

1932 - Prontosil found to kill bacterial infections in mice

1941 - Penicillin successfully used on a human by Florey and Chain

1942 - Publication of Beveridge Report

1948 - NHS launched

1990 - Launch of Human Genome Project (completed in 2000)

Key 1900-present vocabulary

Antibiotic - A treatment that destroys or limits the growth of bacteria in the human body.

Beveridge Report - A 1942 report chaired by William Beveridge which identified five "Giant Evils" in society: squalor, ignorance, want, idleness, and disease, and went on to propose widespread reform to the system of social welfare.

DNA - Short for deoxyribonucleic acid, a substance that carries genetic information that determines characteristics such as hair and eye colour.

Genome - The complete set of DNA containing all the information needed to build a particular organism.

Haemophilia - A genetic disease passed from parent to child that stops blood from clotting.

Human Genome Project - A 10-year project which decoded and mapped all the genomes in DNA. This made it possible for scientists to better understand genetic diseases such as cancer and haemophilia.

Magic Bullet - A chemical treatment that targets specific microbes without harming the rest of the body.

Mastectomy - Surgery to remove one or both breasts.

NHS - National Health Service which provides free medical care for the entire population of Britain.

Penicillin - First antibiotic to be discovered.

Prontosil - A bright red dye which was discovered by scientist Gerhard Domagk to kill bacterial infections in mice, then successfully tested on his daughter who had blood poisoning in 1935.

Salvarsan 606 - First magic bullet drug which treated Syphilis.

Streptomycin - Powerful antibiotic, discovered in 1943, effective against tuberculosis which until then, had been considered incurable.

The Western Front

Key Western Front Vocabulary

Barbed wire - Metal wire with sharp points used in no-man's-land to protect from enemy attack. It made it difficult for men to get through without being trapped by the wire.
Blighty wound - A wound serious enough to get a soldier away from the fighting and back to Britain.
Brodie helmet - Steel helmet held with a strap. Introduced in 1915, it reduced fatal head wounds by 80%.
Chlorine gas - Causes burning pain in throat and eyes and can lead to death by suffocation. First used by Germans in the second battle of Ypres, 1915.
First Aid Nursing Yeomanry (FANY) - A women's voluntary organisation which provided medical services on the frontlines such as driving ambulances and emergency first aid.
Machine guns - Guns that could fire 450 rounds a minute; their bullets could fracture bones or pierce organs.
Mustard gas - Odourless gas which passes through clothing to burn the skin, causing internal and external blisters. Gas masks offer little protection against mustard gas, as it goes through clothing. First used by the Germans in 1917.
No-man's-land - The area between two opposing lines of trenches.
Phosgene gas - Similar to chlorine gas but faster acting and can kill exposed person within 2 days. First used end of 1915.
Royal Army Medical Corps (RAMC) - The branch of the army responsible for medical care.
Salient - An area of a battlefield that is surrounded by enemy territory on 3 sides.
Trench system - A complex network of trenches in which men could live and fight. Trenches were dug to a depth of about 2.5m in a zig-zag pattern to confuse the enemy. Trenches were built over a distance of 400 miles all the way from the northern French coast to Switzerland.
Shrapnel - Fragments of metal from exploded shells.

Key Western Front Dates

June 1914 - Assassination of Archduke Franz Ferdinand - Trigger for the war
4 August 1914 - Britain declares war on Germany
Oct-Nov 1914- First battle of Ypres. British casualties were over 50,000 but kept control of Channel ports.
Apr-May 1915 - Second battle of Ypres - Germans move 2 miles closer to town of Ypres; first use of chlorine gas; British losses of 59,000.
July 1916 -Battle of the Somme. The Allies advance 5 miles using artillery bombardment to break through enemy lines. This leads to much higher casualties (400,000 men).
6 April 1917 - America enters the war. Blow to German morale and a decisive turning point in the war.
Apr-May 1917 - Battle of Arras
British advance 8 miles; 160,000 casualties.
Oct 1917 - Battle of Cambrai - First large scale use of tanks.
July 1918 - Hundred days offensive - Allies launch a series of sustained attacks against the Germans which leads to Germany's surrender.

Key Western Front Treatments/Developments in Surgery

X-rays - A type of electromagnetic radiation that can provide imaging of the inside of the body. Discovered by accident in 1895 by Wilhelm Roentgen, a German physicist. X-rays were used in the war to identify shrapnel and bullets in wounds.
Blood Transfusions -Blood taken from a healthy person and given to another person. Developed as follows:
Almroth Wright, a British scientist, prevents blood from clotting in 1894 by using a solution of acids.
Discovery of blood groups in 1901 by Karl Landsteiner followed by the identification of type "O" blood by Reuben Ottenberg in 1907 as the universal blood group.
In 1916, Francis Rous and James Turner develop a method for storing blood for up to 4 weeks by adding a citrate glucose solution to it. Stored blood was used to treat injured at the battle of Cambrai in 1917.
Brain surgery - 20% of all wounds on the Western Front were to the head, face and neck. These were often fatal.
Harvey Cushing, an American neurosurgeon, developed new techniques in brain surgery using a magnet to remove metal fragments from the brain.
He also operated using local rather than general anaesthetic, to reduce the risk of swelling in the brain.
Plastic surgery - Developed by a New Zealand doctor called Harold Gillies who was sent to the Western Front in January 1915. Gillies saw many head injuries that caused severe disfigurement and became interested in facial reconstruction.
Plastic surgery was carried out in Britain, mainly at the Queen's Hospital in Sidcup. By the end of the war, nearly 12,000 plastic surgery operations had been carried out there.
Thomas Splint
Created in the late 19th century by Robert Jones and his uncle Hugh Thomas in their medical practice, this splint was designed to stop joints from moving. The introduction of the Thomas splint to the Western Front in December 1915 helped increase survival rates for compound leg fractures from 20% to 82%.
Treatment of wounds to prevent infection
Wound excision or debridement: The cutting away of dead, damaged or infected tissue from a wound to stop infection spreading. After excision, the wound would be closed by stitching. Carrel-Dakin Method: A method for treating wounds with a sterilised salt solution through a tube.
Aseptic surgery
Surgery performed under sterilised conditions to prevent infection from germs. By the start of the 20th century, aseptic surgery was achieved by: medical staff washing hands and face before operations, wearing rubber gloves and gowns
sterilising air by pumping it through a heating system and sterilising instruments using an autoclave
Chain of Evacuation
System devised by the RAMC for getting wounded soldiers appropriate treatment as effectively as possible

Key Western Front Medical Conditions

Gangrene
A condition where a loss of blood supply causes body tissue to die. Gangrene can occur as a result of an injury and typically starts in toes, feet, fingers and hands. Treated by surgical removal (or amputation) of the affected area. Gas gangrene is an infection that produces gas in the gangrenous wound. The bacteria for gas gangrene spread from the soil on the Western Front, which had been heavily farmed with fertiliser before the war.

Shellshock
A condition that was little understood at the time of the war. Soldiers experienced headaches, nightmares, loss of speech, shaking and complete mental breakdown. Many men were treated for shellshock at the Craiglockhart hospital in Edinburgh.

Shrapnel wounds
When shells exploded, shrapnel (metal fragments from the shells) travelled at fast speeds over wide areas, causing injuries to anyone in their way.

Trench fever
Flu-like condition spread by lice in the trenches. Delousing stations developed to try to prevent.

Trench foot
Painful swelling of the feet caused by standing in cold mud and water, which could lead to gangrene. Prevention included keeping feet dry and using whale oil. Foot inspections became part of trench life.

QUESTION 1: AO1	QUESTION 2a: AO3	QUESTION 2b: AO3
Describe two features of…. (4 MARKS) One feature of……. **(P)** This means…… **(E)** Another feature of **(P)** This is because… **(E)**	**How useful are sources A & B into an enquiry into…?** (8 MARKS) 1. Explain why Source A is useful… 2. Give examples of what you can learn… 3. Analyse reliability (Nature, Origin, Purpose) 4. Own knowledge – How accurate is the source? **Repeat for Source B**	**How could you follow up Source (A/B) to find out more about….** (4 MARKS) Detail in Source B that I would follow up…… The Question I would ask…… What type of source I would look for…. How this might help answer my question…

QUESTION 3: AO1&2	QUESTION 4: AO1&2	QUESTION 5: AO1&2
Explain one way that X was (similar / different) to Y. (4 MARKS) Give an example of a difference or similarity Use your own knowledge to support your answer using an example from BOTH time periods given.	**Explain why…** (12 MARKS) P = Make a valid point in response to the question E = Give an example to support the point you made E = Explain your answer further by adding your own knowledge L = Link your answer back to the focus of the question **3 x P.E.E.L paragraphs** You may use the stimulus material and at least one example of your own	**(Statement) How far do you Agree? Explain your answer.** (16 MARKS, 4 for SP&G) 1x Intro making a judgement about the question and introducing alternate factors/views 3 x P.E.E.L paragraphs that agree and disagree with the statement 1 x Overall Judgement to evaluate both sides of the argument you put forward – firm conclusion about how far you agree

Skills and Fieldwork Enquiry
Geography

Year: 11
Term: 1

BIG QUESTIONS

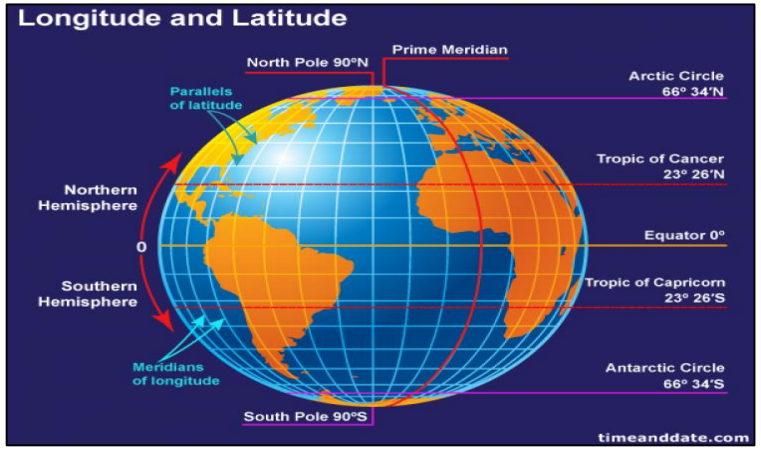
1. **How do you read a map?**
2. **What is the difference between 4 and 6 figure grid references?**
3. **Why do maps have a scale?**
4. **What is a rose diagram?**
5. **How can I analyse data?**
6. **How can I map data?**
7. **What are MMM?**
8. **Can I just go with the flow?**

Homework Skills Revision…

1. Do you know the location of the 7 continents, 3 countries within each continent and the 5 oceans without looking at an atlas?
2. Explain the link between lines of longitude and time zones
3. Give at least 3 sets of data that could be appropriately shown as a flow line map.
4. Use PEA to describe the distribution of 3 different global biomes.

Latitude and longitude are used for global coordinates

1) The position of anywhere on Earth can be given using coordinates if you use latitude and longitude
2) Lines of latitude run horizontally around the Earth. They measure how far north or south from the Equator something is.
3) Lines of longitude run vertically around the Earth. They measure how far east or west from the Prime Meridian (a line of longitude running through Greenwich in London) something is.
4) Latitude and longitude are measured in degrees

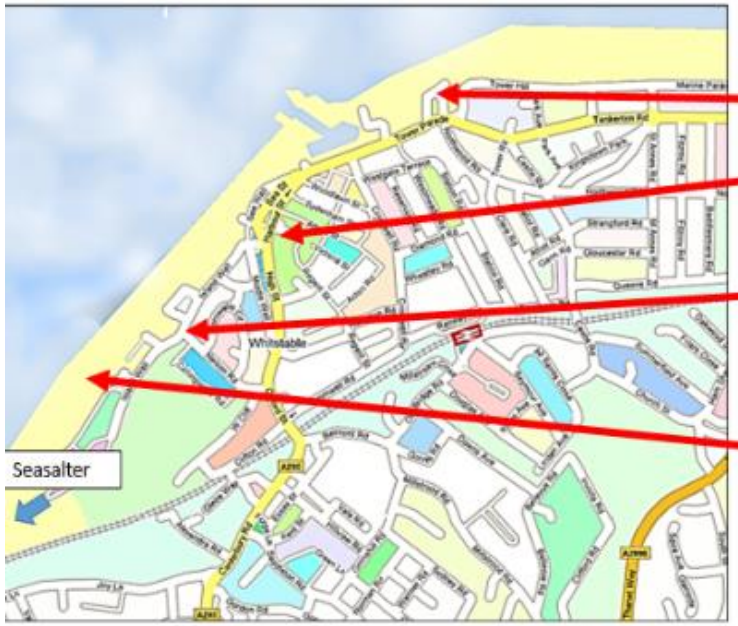


Describing distributions on maps – describe the pattern

1) In your exam you could get questions like, 'use the map to describe the distribution of volcanoes' and explain the distribution of deforestation'.
2) Describe the general patterns and any anomalies (things that don't fit the general pattern) using **PEA – pattern, evidence, example and anomaly.**
3) Make at least as many points as there are marks and use names of places and figures if they're given.
4) If you're asked to describe **say what you see.** If you're asked to give a reason or explain, you need to **give reasons why**

Term 6 Fieldwork: Data Collection, Presentation and Analysis

The 4 sites you will be collecting data from in Whitstable.



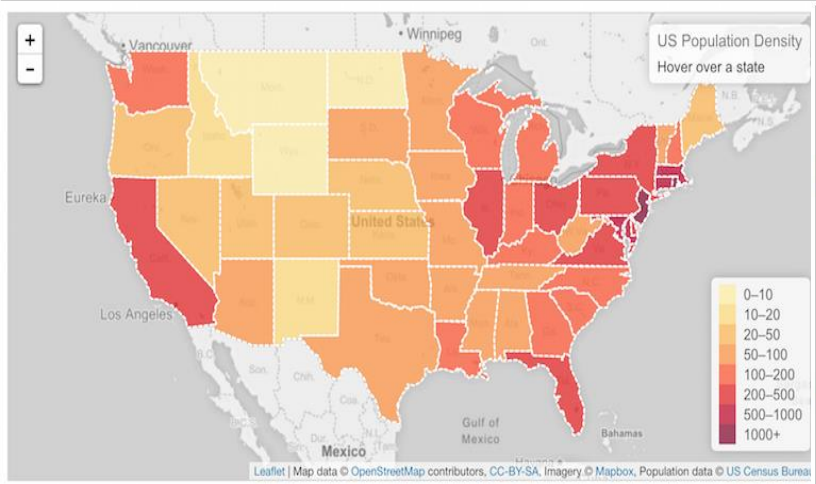
Data collection you will carry out:

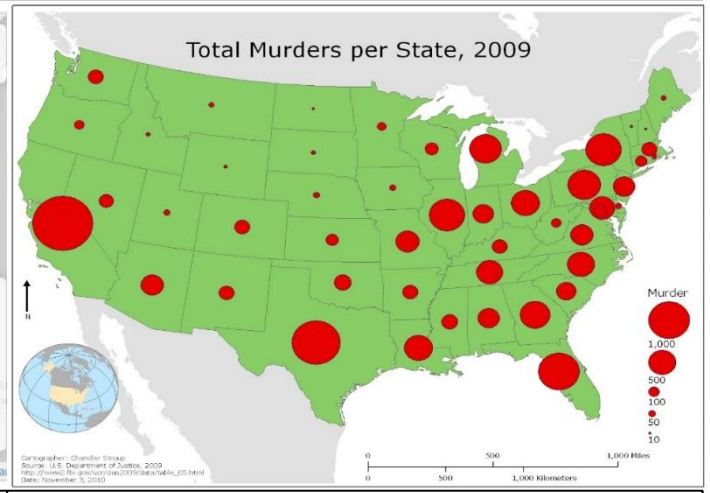
Site 4 – Harbour.
- Land use study
- Environmental quality survey

Site 3 - High Street.
- Type of shop
- Environmental quality survey

Site 2 – Whitstable Beach.
- Succession; transects and vegetation cover
- Longshore drift
- Environmental quality survey

Site 1 – Seasalter Beach.
- Longshore drift
- Groyne study
- Environmental quality survey
- Succession; transects and vegetation cover
- Pebble roundness





Choropleth maps show how something varies between different areas using shades of a colour OR a pattern

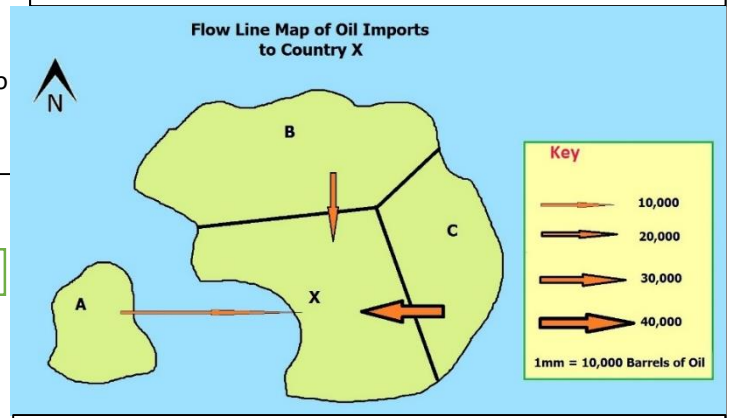
1) Choropleth maps show how something varies between different areas using colours or patterns
2) The maps in exams often use cross-hatched lines and dot patterns
3) If you're asked to talk about all the parts of the map with a certain value or characteristic, look at the map carefully and put a big tick on all the parts with the pattern that matches what you're looking for. This makes them all stand out
4) When you're asked to complete part of a map, first use the key to work out what type of pattern you need. Then carefully draw on the pattern, e.g. using a ruler

Proportional symbol maps use symbols of different sizes

1) Proportional symbol maps use symbols of different sizes to represent different quantities
2) A key shows the quantity each different sized symbol represents. The bigger the symbols, the larger the amount
3) The symbols might be circles, squares, semi-circles or bars but a larger symbol always means a larger amount

Ordnance Survey map symbols:

Motorway	County boundary	Footpaths
Main (A) road	National Park boundaries	Viewpoint
Secondary (B) road		Tourist information centre
Bridge	Building	Parking
Railway	Bus station	Places of worship



Flow lines show movement

1) Flow line maps have arrows on, showing how things move (or are moved) from one place another.
2) They can also be proportional symbol maps – the width of the arrows show the quantity of things

Keywords…

1. Pattern
2. Evidence
3. Data
4. Anomaly
5. Distribution
6. Choropleth
7. Proportional
8. Latitude
9. Longitude
10. Equator
11. Prime Meridian

Important Homework Links…

Geographical skills - GCSE Geography Revision - AQA - BBC Bitesize

- **Introduction to fieldwork**
- **Cartographic skills**
- **Improve your graphical skills**
- **Numerical and statistical skills**
- **Qualitative and quantitative data**

GEOGRAPHICAL SKILLS - Geography (geogyourmemory.com)

Art
Personal Histories (Mock Exam)

Year: 11
Term: 1

BIG QUESTIONS

How can the study of other artists help you find your own direction in the development of ideas?

Describe the process of development in artists' work.

Compare similarities and differences in artists' work.

Explain why primary sources are the richest form of research.

How can Secondary sources enrich the development of ideas?

List different ways of recording your observations of the subject matter.

Why should you plan a wide range of ideas before selecting a final one?

How can the refining process help you to fully realise intentions?

Overarching Big Question

(Past Exam Question) Many artists use personal histories as the inspiration for their work. Paula Rego frequently creates paintings that refer to episodes in her childhood. Frida Kahlo's paintings often related to her life experiences. The images and memories of his early years in Belarus were a major inspiration for the work of Marc Chagall. The vivid colours found in India influenced the early sculptures of Anish Kapoor. Students will be asked to consider appropriate sources and produce their own response ***to Personal histories.***

Key Skills

RECORD	DEVELOP
I will independently record... • images and information appropriate to the theme • using wet, dry and digital media • examples of artists work appropriate to the theme • information about artists, showing appreciation of how they use media and techniques to create meaningful work.	**I will independently develop...** • my observation skills using a range of media, techniques and processes. • artwork and ideas from primary sources • my knowledge and understanding of artist styles and techniques • my drawing and planning skills • ideas in response to a given theme, linking to artists work • my higher order thinking skills
REFINE I will independently... • experiment making the most of media and techniques relevant to my intentions • select ideas to adapt and improve e.g. adjustments to size, colour and composition. • develop a piece of work from one media into another	EVALUATE I will independently... • analyse and reflect on the development of my own work, through annotation making connections to artists and suggesting ways I could I improve. • evaluate artists using analytical writing skills and forming opinions.
PRESENT OUTCOMES I will independently... prepare a plan for a final piece to be completed during the 5-hour Mock Exam.	

Homework Links

Tasks linked to the theme 'Personal Histories' (2 hours per two-week cycle)

Key Vocabulary

Theme...
Identity/Personality/ Heritage/Culture/Society/ Family/Relationships/ Belongings/Hobbies/ Memories/Events etc.

Technical...
Tone/Texture/Shape/ Colour/Form/Scale/ Media/Technique/ Composition/Research/ Primary source/ Secondary Source

I will be expected to recall keywords learned in previous projects and use them in the appropriate context.

EVALUATING ARTISTS' WORK

1. Describe the piece of art you are looking at
2. What is the name of the artist or type of art?
3. What art movement or culture does the art link to?
4. Research and list 5 or more things about the artist or culture?
5. What important things have happened in the country that the art comes from?
6. What has influenced the art E.g. other artists, people, personal experiences, society, culture, politics, gender, colour, pattern, movement, religion, travel, places, objects etc.
7. Describe the materials used to make the art
8. How has the art been produced?
9. What is being communicated through the art?
10. Which of these words best describes the mood of the picture? EMOTIONAL/POWERFUL/BUSY/SLOW/PEACEFUL/WARM/COLD/HAPPY/SAD/CALM/INTENSE/SCARY can you think of any other words?
11. What do you like or dislike about the picture? Explain your reasons…

ANNOTATING YOUR OWN WORK

- In this artwork I was trying to…
- The artist/culture that has influenced my work is…
- The source I have used is…
- I found the source I used at…
- In this artwork I used the technique of...
- The media I have used is...
- I like/dislike this piece because...
- My idea links to the theme because…
- I can improve this piece by…
- I could develop this work further by...

Annotate means to explain your own creations
Artist evaluation is when you write about the artist
Project evaluation is written about the whole project at the end

END OF PROJECT EVALUATION

1. Describe each stage of the project from start to finish
2. What media did you use to produce your work? E.g. Paint/Pencil/Clay etc.
3. Describe how you used different techniques in your project? E.g. painting/drawing/modelling with clay etc.
4. Which artist's culture have you looked at?
5. Write down 2 or more similarities between your work and the artist's work.
6. Which piece of your work best shows the Artist's style or the influence of another culture and why?
7. Describe some of your own ideas…
8. Have you used a primary or a secondary source?
9. Have you included the secondary source in your work? Where did you find it?
10. Imagine your final piece was displayed in a public place.... Describe the effect looking at your work might have on people and society. E.g. relax them, make them feel sad, curious, happy, angry, thoughtful, surprised, confused, nostalgic etc. explain why e.g. because of your use of colour, images, content, arrangement? etc.
11. Explain any other influences on your work e.g. personalities *(including your own)*, places, memories, objects, politics, events, activities, religion, fact, fiction etc.
12. Describe how your work links to the project theme?
13. Explain what you have done well…
14. Explain how you could improve…
15. What would you do differently, if you were to repeat any part of this project?

BIG QUESTIONS

1) Can I define all 11 Components of Fitness (6 Health-related, 5 Skill-related)?
2) Can I calculate a person's Maximum Heart Rate using 220 – Age?
3) Can I identify and explain Training Methods for each of the Components of Fitness?
4) Do I understand the importance of fitness testing and why reliability and validity are so crucial?
5) Can I identify and explain all the fitness tests, noting pros and cons?

Principles of Training

F =	**Frequency**	- how many times you train
I =	**Intensity**	- how hard you train
T =	**Time**	- how long you train for
T =	**Type**	- what type of training you do

Additional Principles of Training

Progressive overload = increasing the amount you lift, run, etc. over time
Reversibility = if training stops, or the intensity is not sufficient to cause adaptation, training effects are reversed
Variation = your training program has variety of exercises, thus allowing your training to not become boring
Rest and recovery = putting breaks into your training to ensure you body can recover. Without this adaptation cannot occur
Individual differences and needs = your program should be based around YOU and your goals and needs
Specificity = training should be specific to the individual's sport, activity or physical/skill-related fitness goals to be developed
Adaptation = how the body reacts to training loads by increasing its ability to cope with those loads. Adaptation occurs during the recovery period after the training session is completed

Components of Fitness

Skill Related

Power = It's a combination of strength x speed
Reaction Time = the time taken to present a movement to a stimulus
Coordination = the ability to use 2 or more body parts at the same time
Agility = the ability to change direction quickly
Balance = retaining your centre of mass over your base of support without falling

Physical Related

Aerobic Endurance = the ability of the cardio-respiratory system to supply oxygen to working muscles during sustained physical activity
Muscular Endurance = the ability to use voluntary muscles, over long periods of time without getting tired
Speed = the amount of time taken to cover a set distance
Strength = the ability to exert a large amount of force in a single maximum effort
Body Composition = the proportion of body weight that is fat, muscle and bone
Flexibility = the range of motion at a joint

Exercise Intensities

Max Heart Rate (MHR) the maximum amount of times your heart can beat in a minute = = 220 – Age

RPE = Rate of Perceived Exertion / Borg Scale. Number based grid from 6 – 20, each number refers to an exercise intensity which will give a rough estimate of your heart rate. You multiply that number by 10.
E.g. Lewis is working at level 15 (multiplied by 10) which will give him a rough heart rate of 150 BPM.

Training Thresholds
Aerobic Training Threshold = 60 – 85% of MHR
(work out MHR. 0.6 x MHR = 60% - 0.85 x MHR = 85%)

Fitness Tests

1) Flexibility: Sit and Reach Test = the user sits with his feet touching the box and pushes the marker as far back as possible without bending the knees

2) Strength: Hand grip Dynamometer = start with your hand up and bring down to side while pulling in handle

3) Aerobic Endurance:
- Multi Stage Fitness Test = 20 metre shuttle runs, trying to beat the beep
- Forestry Step test = performers step onto and off the bench/step continuously for 5 minutes (steady pace). Recovery heart rate is then measured

4) Speed: 35 Meter Sprint Test = performers to cover a straight 35 m from a standing start

5) Agility: Illinois Agility Test = performers start at the first cone. On the whistle pupils should follow the course and finish at the end cone

6) Power: Vertical Jump Test = performers to reach up to highest point without going onto tiptoes. They then jump vertically and touch highest point on the wall/board

7) Muscular Endurance: 1 Minute Press Up or Sit Up Test = complete as many press ups or sit ups as you can in one minute

8) Body Composition:
- Body Mass Index (BMI) = Weight (kg) divided by Height x Height = put results into a data table
- Bioelectrical Impendence Analysis (BIA) = works out body fat via bioelectrical impendence analyser
- Skin Fold Test = measure the level of fat at certain points of the body. Points on the body will differ for male and female

Training Methods

1) **Flexibility**
   a. Static = Either stretching on your own (active) or stretching with another person assisting or using an object to assist you stretch (passive)
   b. Ballistic = performing a stretch with swinging or bouncing movements to push a body part even further.
   c. PNF = where the muscle is contracted isometrically for a period of at least 10 seconds. It is then relaxed and stretched again, usually going further the second time
2) **Muscular Strength and Endurance: (Free Weight Training)**
   a. Muscular Strength = High load (90% 1RM) x Low reps (6)
   b. Elastic Strength = Med Load (75% 1RM) x Med reps (12)
   c. Muscular Endurance = Low load (50-60% 1RM) x High reps (20)
3) **Power**
   a. Plyometrics = Jumpy, bounding movements which cause the muscle to lengthen (eccentric action) before a maximal muscle shortening (concentric action)
4) **Aerobic Endurance**
   a. Continuous = running, cycling, etc. at a continuous pace, for at least 30 minutes in your ATT
   b. Fartlek = is a combination of different intensities. i.e. 1 lap at 50% max, 1 lap walking, 1 lap at 80%/. It means speed play and is good for team sports like football
   c. Interval = training which involves periods of work followed by periods of rest
5) **Speed**
   a. Hollow Sprints = is training which involves a series of sprints separated by a 'hollow' period of jogging or walking
   b. Acceleration Sprints = is where the pace is gradually increased from a standing or rolling start. Progressively the athlete will build up to a maximum sprint or intensity
   c. Interval = is where an individual will sprint for a set distance, followed by a period of rest
6) **Circuit Training**
   a. Each exercise is called a station. Each station should work a different area of the body to avoid fatigue
   b. It is a very good way of developing strength, muscular endurance and power
   c. The intensity of a circuit can be increased by changing the time of work at each station, increasing the intensity or decreasing the rest

Homework Links

The EverLearner
www.theeverlearner.com

Key Vocabulary
- ✓ Components of Fitness
- ✓ Exercise Intensities
- ✓ Borg Scale
- ✓ RPE
- ✓ Aerobic Training Threshold
- ✓ Principles of Training
- ✓ Training Methods
- ✓ VO2 Max
- ✓ Fitness Testing

Sports Science
Unit 2 – Practical Performance in Sport

Year: 9-11
Term: 1-6

BIG QUESTIONS

1) Can I explain the differences between rules and regulations?
2) Can I verbally explain an official applying a rule into a selected sport?
3) Can I offer improvements to my selected sport?
4) Can I justify the components of fitness needed for my selected sport?
5) Can I officiate and physically participate my selected sport correctly?
6) Can I evaluate my performance in my selected sport?

Rules, Regulations and Officiating in Sport

Rules: are something that happens **during** gameplay. E.g. handball, travelling, etc.

Regulations: are principles, which are applied consistently in sport. To uphold these regulations, each sport requires a "regulator" or "Governing Body". E.g. timing of a game

Scoring Systems: How the sport is scored, which allows a team to win. E.g. 2 or 3 point shot in basketball

Roles and Responsibilities of an Official: Who are the officials which implement the laws and regulations of the game and what guidelines must they adhere to, e.g. use of technology and communication, etc.

Tactics: The strategies used to overcome an opponent. E.g. full or half court press in basketball

Skills and Technical Demands: The skills and techniques required to perform. E.g. Breaking down how to perform a set shot in basketball

Components of Fitness

Skill Related

Power = It's a combination of strength x speed
Reaction Time = the time taken to present a movement to a stimulus
Coordination = the ability to use 2 or more body parts at the same time
Agility = the ability to change direction quickly
Balance = retaining your centre of mass over your base of support without falling

Physical Related

Aerobic Endurance = the ability of the cardio-respiratory system to supply oxygen to working muscles during sustained physical activity
Muscular Endurance = the ability to use voluntary muscles, over long periods of time without getting tired
Speed = the amount of time taken to cover a set distance
Strength = the ability to exert a large amount of force in a single maximum effort
Body Composition = the proportion of body weight that is fat, muscle and bone
Flexibility = the range of motion at a joint

Pass, Merit or Distinction Examples

PASS: describe, define, outline identify, interpret, plan, list.
E.g. The components of fitness a 100m sprinter would need are; power, reaction time and speed.

MERIT: explain, compare, discuss, account for, demonstrate, distinguish.
E.g. A 100meter sprinter would need a good reaction time for the start of the race, so he can be quickest out of the blocks. Power would help him push out of the blocks and speed would allow him to finish the race in the quickest possible time.

DISTINCTION: Analyse, critically analyse, conclude, assess, criticise, evaluate, justify
E.g. I believe that reaction time is one of the most important components of fitness for a sprinter to have. This is because the start of the race is pivotal, and this is where reaction time is at its most important. If the sprinter gets away slowly, due to his reaction time he will be towards the back of the race and will have to rely on other components of fitness more (speed and power) to get him back into it. But if he were to have a great reaction to the gun, he would be near the front and not have to rely as much on the other components of fitness.

Example of a Rule Being Explained:

Handball:
YES: You move your hand towards the ball, and it makes contact or the ball hits your hand in an unnatural position. At this point a free kick or penalty is awarded.
NO: The ball hits your hand

Types of Skill

Continuous: These are skills which have no obvious beginning or end. E.g. running.

Discrete: These have a clear beginning and end. E.g. serving in badminton.

Serial: involves two or more discrete skills linked together in a predefined sequence. E.g. creating a floor routine in gymnastics

Open: are those the athlete is constantly adapting to, according to what is happening around them. E.g. dribbling around opposition players in football.

Closed: are pre-learned patterns of movement which the athlete can follow with very little reference to the surrounding environment. E.g. Playing a shot in snooker.

Evaluating my Performance

What Went Well: What were the parts of you game which you believe that you performed / demonstrated well? Why did this help you performance? What were you / your team able to do, because of this?

Ares for Improvement: What parts of your game do you believe you can improve on? Don't just consider the physical aspects. Why would this area / skill help improve your performance and your teams? How are you going to improve?

Rules, Regulations and Officials

Rules		
Football	**Badminton**	**Basketball**
Handball	Double hit	Double dribble
Corner kick	Hitting the net	Travelling
Goal kick	Serving diagonally	Contact
Throw on	Serving below the waist	Ball hitting foot
Keeper on his line for penalties	Foot must be behind service line when serving	5 foul rule

Regulations		
Football	**Badminton**	**Basketball**
Pitch dimensions	Court dimensions	Court dimensions
Subs	Net size	Game length
Game length	Points in a set	Shot clock
How many players are on the pitch at one time	Post height	How many players are on the court at one time
Players attire	Size of racket	

Roles and Responsibilities of the Officials		
Football	**Badminton**	**Basketball**
Referee	Referee	Referee
Linesman	Umpire	Score keeper
4th Official	Line judge	Time keeper
	Service judge	Shot clock

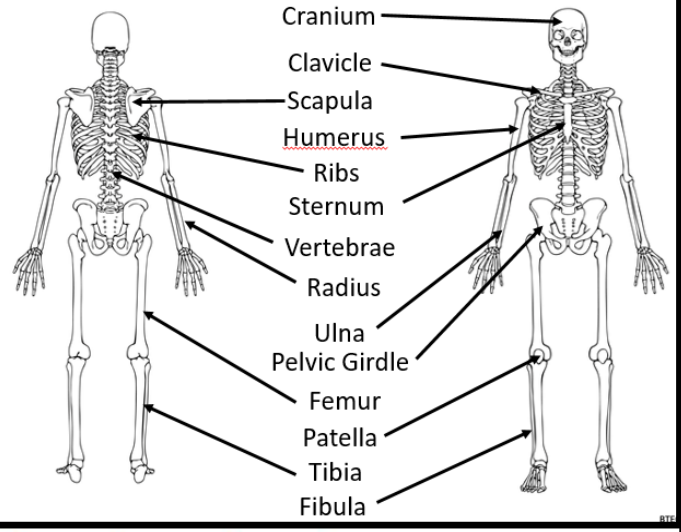
Responsibilities: Control of players, Health and safety, Appearance, Fitness, Effective communication to players, Fair play

BIG QUESTIONS

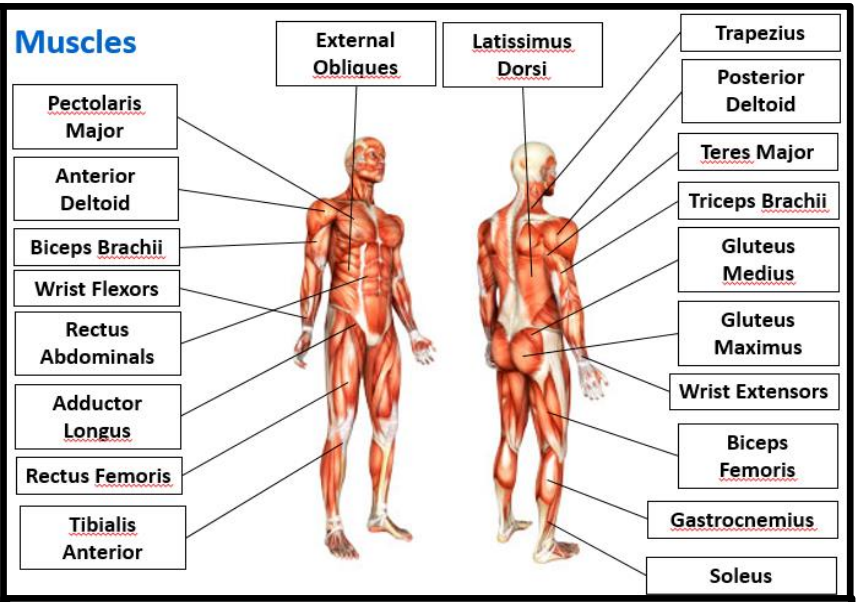
1) Can you design a 6 week training programme?
2) Can you explain the short-term effects on the musculoskeletal and cardiorespiratory systems during the fitness training programme?
3) Can you safely implement a successful six-week personal fitness training programme, maintaining a training diary to evaluate performance and progress?
4) Can you fully explain the results, strengths and improvements for your training programme, justifying recommendations for future training and performance?

Musculoskeletal and Cardiorespiratory system (Assignment 2)

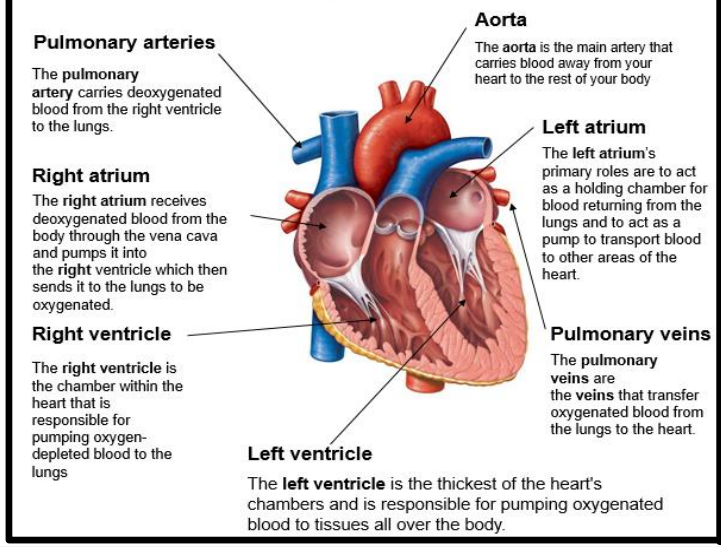
Musculoskeletal system



Muscles

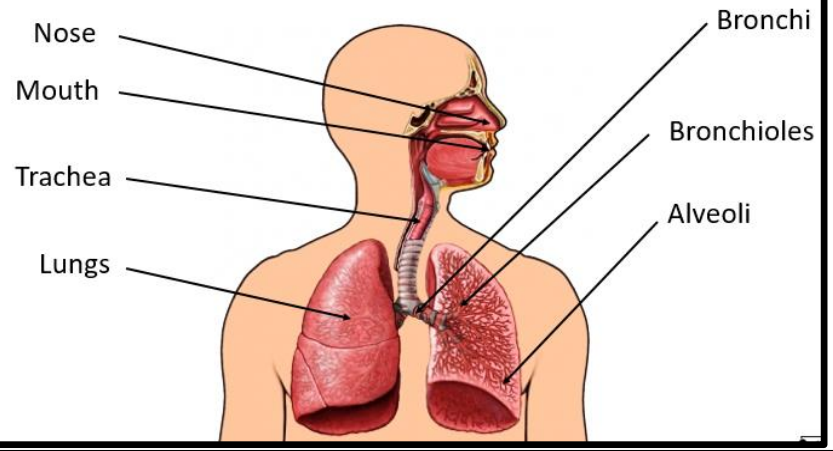


The cardiovascular system



Cardio-respiratory system

Oxygen travels along the following pathway from the mouth/nose to the alveoli.



Personal Training Programme (Assignments 1, 3 & 4)

Principles of Training

Frequency, Intensity, Time, Type

Specificity – how is your programme specific to your goals/sport?
Progressive Overload – how are you gradually increasing the intensity of your training programme
Adaptation – what adaptations do you expect to occur?
Rest and Recovery – how will you ensure you don't get an injury?
Reversibility – how will you ensure you make fitness gains?
Variation – how will you make sure you don't get bored?
Individual needs and differences – how do you know your programme is suitable for you?

Types of Training

Flexibility ;Static, Ballistic, PNF
Aerobic Endurance;
Circuit, Continuous, Interval, Fartlek
Speed;
Interval, acceleration sprints, hollow sprints
Muscular Strength/Endurance; Circuits/Weights
Power; Plyometrics

Intensity

Warm-Up

Gradually increase HR (jogging, running, sprinting)
Reduce risk of injury (Static/dynamic stretching)

Cool Down

Gradually decrease HR & Prevent DOMS (jogging and static stretching)

Session Review

What went well?
What did you enjoy? How did you perform?
Even Better If ?
How will you improve in your next session?

Motivation

What is your motivation to exercise?

- Training for sport
- Improve a component of fitness
- Mental health
- Release stress
- Be physically fit

Programme Reflection

Did you meet the goals you set at the start of the programme?
What did the review of each training session tell you and how did you use this information?
What short-term physiological effects did you experience during your training sessions?
What changes did you need to make to your programme and why did you make those changes?
Which areas of fitness have you improved?
Which areas of fitness do you still need to improve?
What evidence do you have to support your identified strengths and areas for improvement?
How has the fitness training programme impacted on your fitness for your sport/activity?

Subject: Religion Year Group: 11
Topic: Human rights Term: 1

Big Questions

What is prejudice?

What is discrimination?

Do we have a moral responsibility to stop prejudice and discrimination?

What is prejudice and discrimination?

Prejudice means to pre-judge something or someone usually without any real evidence to base that judgement on. In most cases it is negative. – prejudice can be against race, religion, age, nationality, sexuality or appearance. Prejudice is what we think about someone in our head. However this can lead to discrimination.

Discrimination is when we put these prejudiced ideas into action. We treat people differently or say things because they are not the same as us. We make known to them our dislike and therefore it can have a great effect on a person's life. In Britain it is against the law to discriminate against a person with certain protected characteristics.

Religious views on Prejudice and discrimination?

Buddhism believes that as discrimination leads to suffering, it must be wrong and should be avoided.

- The belief not to harm others or use harmful language (one of the 5 precepts)
- Everyone should try to develop Metta (loving kindness)
- Everyone is unique as individuals, but we share the fact of suffering and the capacity for awareness and compassion. We are all equal in our Buddha nature.
- Prejudice create bad karma and has a negative effect on your rebirth.
- The Dalai Lama stated that the best way to live life was to "always think compassion".

Christianity believes that all forms of discrimination are wrong

- "God created everyone equally" (old testament)
- "There is neither Jew nor Gentile, slave or free, male or female. We are all equal in Christ" (Galatians)
- "So in everything, do unto other what you would have done to you" (Matthew 7:12)
- Jesus told us to love our neighbour.
- In the Good Samaritan story, the man is helped because of his need, not because of who he was or was not" (Luke 10:25-37)

Causes of Prejudice and discrimination

1.Having a **bad experience** with someone might make you think anybody else like them is like that.

2.Having been told bad things about certain group of people by your **parents or carers**. The words and attitudes of others shape your own, you copy and repeat them.

3.Having seen something on TV or read something in a newspaper (Facebook, snapchat, ticktock etc), that was very biased – you may believe it. **(MEDIA)**

4.When you do not have enough detail about something to base an opinion on, yet you think you are able to judge someone, this is called **ignorance.**

5.Scapegoating is when you use others to blame or as an excuse for a problem. For example, Hitler blamed Jewish people for economic problems in Germany.

What are human rights?

Human rights are the basic rights and freedoms that belong to every person in the world, from birth until death.

Key words:

Prejudice - preconceived opinion that is not based on reason or actual experience

Discrimination - the unjust or prejudicial treatment of different categories of people.

Racism - prejudice, discrimination, or antagonism by an individual, community, or institution against a person on the basis of their membership of a particular racial or ethnic group

Homophobia - dislike of or prejudice against gay people.

Stereotypes - a widely held but fixed and oversimplified image or idea of a particular type of person or thing.

Subject: Drama **Year: KS4** **Topic: HTS Unit 3** **Term:1**

Big Questions

- Where was HTS originally performed?
- What is Verbatim Theatre?
- What style of performance was the HTS Original performance?
- What is Anorexia?
- What are the 4 main types of stage?
- Name the appropriate rehearsal techniques for actors in HTS
- How should I plan my time in the exam?

GCSE DRAMA COMPONENT 3
Hard to Swallow was originally performed by the Oaklands Youth Theatre Group at the Edinburgh Festival in August 1988.

Mark Wheeller's play uses the words from Catherine's diaries and also of those most closely involved and affected. This is known as Verbatim Theatre.
The play has 31 characters in all: 6 female, 3 male and 22 characters of either sex.
The main characters are:
Catherine Dunbar
John Dunbar (Catherine's father), **Maureen Dunbar** (Catherine's mother) **Simon Dunbar** (Catherine's older brother) **Anna Dunbar** (Catherine's younger sister).

Hard To Swallow by Mark Wheeller

Written in 1989
Main Themes- High expectations, family, anorexia, Death, loss
Unit 3 Interpreting Theatre:
Worth 40% of overall grade

Structure & Style: It is based on the true story of a girl called Catherine Dunbar who suffered from Anorexia. The play was adapted from the book 'Catherine' by Maureen Dunbar.
It is a mix of **Abstract stylised scenes and naturalistic scenes** and the stage directions will clearly state the intended style for each scene. There are stylised and physical theatre scenes. The play is teaching the audience about anorexia.

What is Anorexia Nervosa?

Anorexia nervosa – oftentimes simply called anorexia – is a serious medical and mental health condition that can be life-threatening without treatment.
Some of the more common anorexia symptoms include:

- An obsessive fear of weight gain
- Refusal to maintain a healthy body weight
- Distorted body image
- Restricting caloric intake
- Purging calories consumed

Anorexia nervosa is the most deadly mental illness, with a higher mortality (death) rate than any other mental illness. Due to this complexity, this condition requires comprehensive anorexia treatment from an experienced, multidisciplinary approach to include medical and psychiatric stabilization, nutritional intervention and psychological support.

Anorexia and co-occuring issues

Anorexia often occurs alongside other mental illnesses, including:

- Depression
- Anxiety disorders
- Mood disorders
- Personality disorders
- Obsessive compulsive disorders
- Substance abuse

Rehearsal techniques:

Hot seating – answering questions in character Improvisation – making up a new scene, but playing your character in the play.

Conscience alley – The cast makestwo lines and one actor walks down the middle, listening to advice.

Character-based drama game – e.g. park bench Thought tracking – saying what your character would be thinking at any moment.

A vocal or physical warm up – to prepare the actor for the scene

Role on the wall – a drawn outline of your character, filled in with information

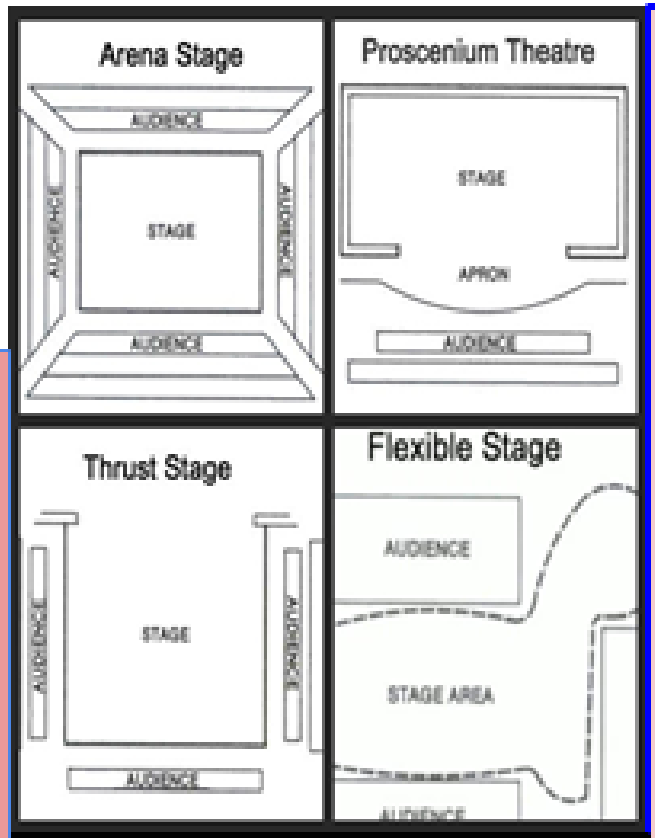
Always read the stage directions for the scene you are writing about. Most of the information and even ideas on character or staging will be in the stage directions

Stages

Proscenium
Arch/Endon
Traverse
Thrust
In the round

Original staging conditions -

Downstage left was the meal table with cutlery and white plates and 5 chairs Downstage right was Catherine's bedroom desk At the back across the middle was a raised area Catherine's face was painted white to show the difference after she was sent home from school. It was usually performed end on.



Timing breakdown for exam questions

10 min read of script and questions
2 marks = 2 mins 3 marks = 4 mins 4 marks = 5 mins 6 marks = 9 mins 15 marks = 18 mins

Key Terminology

Costume
colour, fabric, time-period, texture, style, fit, worn, torn, material

Words to describe movement
defined, fluid, erratic, smooth, open, closed, naturalistic, non naturalistic, graceful, exaggerated, mimed, energetic. refined

Words to describe voice
tone, pitch, pace, pause, accent, inflection, volume, emphasis, intonation, articulation, projection

Lighting
angle, position, intensity, coloured - gel, profile spot, gobo, floodlight, shadow, uplighting.

Sound and Music
tempo, pitch, tone, rhythm, atmosphere, volume

Dance
Dance Technique – Skills for Performance

Year: 11
Term: 1

BIG QUESTIONS

Define all skills listed.

Can you identify and offer specific movement examples of the 5 basic body actions?

How do expressive skills contribute to the overall performance of a piece of dance?

How do physical skills contribute to the overall performance of a piece of dance?

What is the difference between mental skills for process and mental skills for performance?

How might a dancer improve their expressive skills?

How can a physical skill be improved over time?

Can you define each of the 5 basic body actions?

Physical Skills: aspects enabling effective performance

Posture – The way the body is held
Alignment – Correct placement of body parts in relation to each other
Balance - A steady or held position achieved by an even distribution of weight
Coordination – The efficient combination of body parts
Control – The ability to start and stop movement, change direction and hold a shape efficiently
Flexibility - The range of movement in the joints (involving muscles, tendons and ligaments)
Mobility – The range of movement in a joint; the ability to move fluently from action to action
Stamina – Ability to maintain physical and mental energy over periods of time
Extension – Lengthening of one or more muscles or limbs
Isolation: an independent movement of part of the body

Expressive Skills: aspects that contribute to performance artistry and that engage the audience.

Projection – The energy the dancer uses to connect with and draw the audience in
Focus – The use of the eyes to enhance performance or interpretative qualities
Spatial awareness – Consciousness of the surrounding space and its effective use
Facial expressions – use of the face to show mood, character or feeling
Phrasing – The way in which the energy is distributed in the execution of a movement phrase
Musicality – the ability to make the unique qualities of the accompaniment evident in performance
Sensitivity to other Dancers – Awareness of and connection to other dancers

Mental Skills: skills in preparation for a performance

Systematic repetition – repeating something in an ordered way

Mental rehearsal – thinking through or visualising the dance

Rehearsal discipline – attributes and skills required for refining a performance – effective use of a rehearsal and time

Planning of rehearsal – organisation of when to go over material

Response to feedback – implementing changes and making improvements based on feedback/opinion given to you

Capacity to improve – willing to make changes and better, relearn, implement or adapt to make something better

Mental Skills: skills needed during a performance

Movement memory – the automatic recall of learned movement material without conscious thought

Commitment – dedication to a performance

Concentration – the power to focus all of one's attention

Confidence – the feeling or belief that one can have in one's performance or work

Technical Skills: the accuracy of content

- **Action Content**; 5BBA, use of different body parts
- **Spatial Content;** size, direction, level, pathway
- **Dynamic Content**; flow, speed, force
- **Relationship Content;** lead and follow, mirroring, action and reaction, accumulation, complement and contrast, counterpoint, contact, formations
- **Timing Content**
- **Rhythmic Content**

The Five Basic Body Actions: 5BBA
Jump, Turn, Travel, Stillness and Gesture

What is the overall impact of technical skills in a performance?

What is the acronym to remember physical skills?

Describe an exercise you could do to improve strength.

Describe an exercise you could do to improve your mental skills and how could this be developed over time?

Why do we need movement memory?

Homework Links

https://www.aqa.org.uk/resources/dance/gcse/dance/teach/subject-specific-vocabulary

Key Vocabulary

You must be able to identify and define ALL vocabulary listed.

You must be able to distinguish what category each skill falls under

EG: strength is a physical skill NOT a mental skill

Dance
Choreography – Creating a motif

Year: 11
Term: 1

BIG QUESTIONS

How can a motif be developed through action content?

How can a motif be developed through spatial content?

How can a motif be developed through dynamic content?

How can a motif be developed through relationship content?

Can you identify and define each content category?

What is action content?

What is dynamic content?

What is relationship content?

What is spatial content?

What is rhythmic content?

A motif – a section or phrase of a dance (performed by a soloist)
A motif should always refer to action, space and dynamics

Technical Skills: These include accuracy of action, timing, dynamic, rhythmic and spatial content and the reproduction of movement in a stylistically accurate way.
There are 6 technical skills. Each category is followed by the word 'content'.

1. **Action content**
2. **Dynamic content**
3. **Spatial content**
4. **Relationship content**
5. **Timing content**
6. **Rhythmic content**

Action Content: the movement

A range of action content must be used in your practical work.

You must show variation of the 5 Basic Body Actions; travel, turn, gesture, stillness and jump

You may choose to develop a motif through action content using the checklist below.

- Adding an action to a phrase
- Taking an action away
- Repeating an action
- Performing an action on a different body part
- Re-order motif

Example:

Motif = jump, turn, seat roll, reach arms to ceiling, fall
Motif developed = jump, jump, seat roll, reach arms to ceiling, fall handstand (jump repeated, turn taken away, new action added)

Dynamic Content: how an action is performed

A range of dynamic ontent must be used in your practical work.

Fast/slow – **speed**
Sudden/sustained – **execution**
Acceleration/deceleration – **tempo**
Strong/light – **force**
Direct/indirect – **route**
Flowing/abrupt - **flow**

A range of dynamics must be included in your practical work. When describing a movement always refer to a dynamic.

Example:

- jump slowly
- abruptly turn to face the front and then reach your arms out to the sides in a strong motion

Rhythmic Content: repeated patterns of sounds or movements

A range of rhythmic content must be used in your practical work.

Relationship Content: with who the action is performed

A range of relationship content must be used in your practical work.

Mirroring – reflecting the actions of another dancer as if there is a mirror line
Example: dancer 1 extends right arm whilst leaning to the right but dancer 2 extends left arm to the left

Action and reaction – a dancer responds to the action of another dancer's action
Example: dancer 1 elbows to left, dancer 2 falls to floor after dancer 1 has performed their action

Accumulation – the movements are added to existing movements in a successive manner
Example: A, AB, ABC = jump, jump + turn, jump + turn + slide

Complementary – perform actions or shapes that are similar but not exactly the same as another dancer's actions
Example: dancer 1 performs seat roll whilst dancer two performs an elevated turn

Contrast – movements or shapes that have nothing in common
Example: fast dynamics of sharp elevated actions vs slow fluid arm gestures

Counterpoint – when dancers perform different phrases simultaneously
Example: floor phrase in one place vs elevation

Contact – a moment of physical contact which could be in the form of a counterbalance, touch or lift
Example: fan lift, hand on shoulder, and sacrifice lift

Formations – where the dancers stand in the space
Example: zig zag, circular, vertical line, diagonal line, horizontal line, cluster, sporadic

Spatial Content: where an action is performed

A range of spatial content must be used in your practical work.

Pathways; circular, linear, diagonal, zig – zag

Levels; floor work, mid-level, standing, elevation

Direction; left, right, front, back, diagonal front, diagonal back

Size of movement; small, medium and large

Spatial design; upstage, centre stage, downstage, stage right, stage left

You may choose to develop a motif through spatial content using the checklist above.

Example:
Change of levels
Version 1: Reach right arm to ceiling, left arm up to ceiling whilst jumping in the air.
Version 2: The dancer could kneel and perform the same arm actions.

Timing Content: The use of time or counts when matching movements to sound and/or other dancers

A range of timing content must be used in your practical work.

Give examples of formations.

Describe a motif that includes contrast and complementary.

Why might a choreographer use mirroring in their dance work?

When performing contact, how can dancers perform safe practice?

Why might a choreographer use levels in their dance work? What could levels represent?

Homework Links

https://www.aqa.org.uk/resources/dance/gcse/dance/teach/subject-specific-vocabulary

Key Vocabulary

You must be able to identify and define ALL vocabulary listed. You MUST be ale to give movement examples of each skill listed.

Business
The role of the Finance function and sources of finance

Year 11
Term: 1

BIG QUESTIONS

- What are the key financial accounts?
- Can you explain why it is important to update and monitor financial accounts?
- Can you explain how the finance function analyses the financial performance of a business?
- Why might a business need finance?
- Where could they source this finance from?
- Can you explain why different sources of finance are suitable for new and for established businesses?

Finance function
is the finance department and is only found in larger businesses

It is vital for any business to have accurate financial data. Without accurate data wrong decisions could be made which affect the business negatively.

When will financial info be useful in business decision-making?	
When a business decides to become more environmentally friendly	There may be increased costs to monitor, it may need extra finance - finance function will provide this
When the business is thinking about changing production methods	A prediction in changes of costs will be needed from the finance function as well as what extra finance will be needed and how the changes might affect cash flow
When the business wants to change the way it markets its products	The finance department would provide information about the costs of these new advertising methods and may need to raise extra finance

Interest *The amount of money that has to be paid back on borrowed money*

Sale of assets *Items sold by the business*

Crowd funding *Money raised through an appeal to public*

Overdraft *An arrangement with a bank to spend more money than it has in its account*

Retained profit *Profit not distributed to owners*

Loan *Sums borrowed for a certain period at an agreed rate of interest*

Owners' capital *Money from savings put into the business by the owner*

Homework: Read the Data Response 31 case study and answer the following question; Discuss one source of finance that Pleasurewear plc should use to finance its new factory (9 marks)

BIG QUESTIONS

- Can you identify examples of different costs?
- Can you calculate costs and revenues for a given business situation?
- Are you able to calculate profit/loss?
- Can you calculate profitability ratios
- Can you calculate the average rate of return from data provided

	Calculation
Revenue	Quantity sold x selling price
Variable costs	Quantity sold x variable cost per unit
Total costs	Fixed costs + variable costs
Gross profit	Revenue - cost of sales
Net profit	Gross profit - expenses
Gross profit margin	Gross profit ÷ revenue x 100
Net profit margin	Net profit ÷ revenue x 100
Profit	Revenue - costs

Businesses will need to interpret these figures to help make business decisions

Revenue
Money from sales
Average rate of return
A method of measuring and comparing the profitability of an investment over its life
Loss
Occurs in a business when costs are greater than revenue
Expenses
The costs of operating the business
Profitability ratios
Calculations which help to interpret financial data

BIG QUESTIONS

Learning Aim A

1. What is cloud computing and how can this be used to work collaboratively?
2. What are the features and uses of cloud storage
3. What are the implications of converting from traditional computing to cloud computing?
4. How can modern technologies be used to manage teams?
5. What are the impacts of modern technology on organisations and individuals?

Learning Aim B

1. What are the main threats posed from outside of an organisation?
2. What are the impacts of the threats to individuals and organisations?
3. How can threats to data be managed?
4. How can threats to data be managed and prevented?

Ad hoc networks are temporary networks with two or more computing devices

- They do not require Wi-Fi access points or routers to work

An ad hoc network could be used between two laptops to connect them together so they can share:

- Files
- Internet access

What are the advantages and disadvantages of an ad hoc network?

Open Wi-Fi is offered, often for free, in many places such as:

- Hotels
- Trains
- Airports

If you don't need a password to connect to the Wi-Fi, then it doesn't use encryption and is therefore very insecure

Modern teams

- 24/7/365 (can work anytime)
- Remote working vs office based
- Permanent vs casual

Personal area networks (PANs) connect computers or devices together using Bluetooth or Wi-Fi

For instance, a phone could connect to an in car entertainment system to play music and make hands free phone calls

- A **stakeholder** is anyone who is affected by or who can affect an organisations' actions and policies

Communication channels

- Companies can use the following channels to communicate with customers and clients:

Collaboration tools

- Shared documents using cloud services such as Google Docs have the following features:
  - Several people can work together on the same document at the same time, creating a single, consistent version
  - Changes are made in real time

Accessibility features

- Switch control
- Assistive touch
- Use alt-tags to show alternative information about the image
- Text to speech
- Magnifier
- Adjustable font size
- Bold Text

Mobile

There are different generations of network.
1G was only analogue
-2G was digital and added text messages
-3G improved data speeds to up to 2 Mbps
-4G and 5G increase speeds further

For communication technologies, the most important infrastructure today is the method of connecting to the Internet

The following methods can be used:

- Cables (copper or fibre)
- Mobile
- Satellite

What is a hacker?

- A hacker is a person who gets access to a computer system without permission
- They can use this access to:

Malware

- Malware comes from two words:
  - **Mal**icious – to cause an act of harm
  - Soft**ware**
- Malware are executable programs that run on a computer

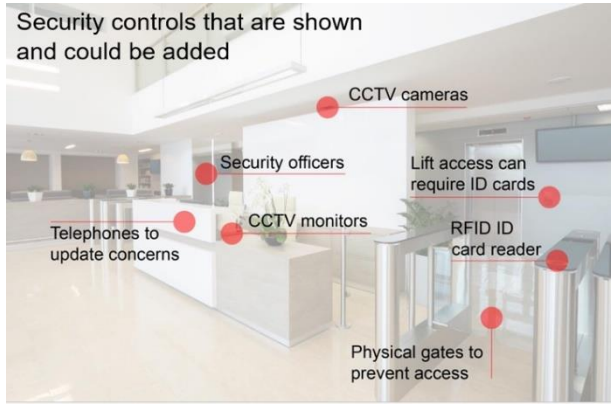
Social engineering

- Social engineering is the ability to obtain confidential information by asking people for it
- Shoulder surfing is the ability to get information or passwords by observing as someone types them in
- Phishing is a type of social engineering technique. Emails, texts or phone calls are sent to users commonly pretending to be from a bank or website

Malware - Viruses and worms

- Computer viruses infect computers
- A worm replicates itself in order to spread to other computers
- A Trojan have negative program code which causes damage, takes control, or provides access to the computer
- Ransomware holds a computer hostage by locking or encrypting access to it
- Spyware allows an attacker to spy on a user's computer without their consent

Reasons for attacking systems



- Security controls prevent data and security breaches. They have four categories:
  1. Physical – fences, gates, locks
  2. Technical – firewalls, settings, antivirus
  3. Procedural – incident processes
  4. Legal – laws

Homework Links

Access to all tasks and quizzes can be found here:

https://www.knowitallninja.com/courses/effective-digital-working-practices/

Homework 1 and 2: Modern Teams –Complete 4 tasks

Homework 3 and 4: Impact of technology – Complete 4 tasks

Homework 5: Impact of technology – Complete final quiz.

Key Vocabulary

Learning Aim A	Malware
Network	Virus, worm,
Ad Hoc	botnet, rootkit,
Open Wi-Fi	trojan,
Tethering	ransomware,
Hotspot	spyware
Blackspot	Denial of service
Syncronise	Phishing
Access rights	Pharming
Collaboration	Social
Stakeholders	engineering
24/7/365	Breach
Disaster	Biometric
recovery	Access levels
Security	Penetration
Downtime	testing
Learning Aim B	Firewall
Hacker	Anti virus
Black/White hat	Encryption
	backup

Modern Languages – French **Year: 11**
Module 7 – Au boulot – World of work **Term: 1**

BIG QUESTIONS

1) **Qu'est-ce qu'il fait comme travail?**
   What does he do for work?
2) **Quelle est ta passion?**
   What's your passion?
3) **Quelle sorte de métier aimerais-tu?**
   What type of job would you like?
4) **Qu'est-ce que tu voudrais faire à l'avenir?**
   What would you like to do in the future?
5) **Quels sont tes rêves?**
   What are you dreams?
6) **Tu as un petit boulot?**
   Do you have a part time job?

Saying what I do for work

Mon père (My dad)	Mon frère cadet (My younger brother)	travaille comme (works as)	acteur (actor)	cuisinier (cook)	infirmier (nurse)	policier (police officer)	dans (in)	un atelier (a workshop)	un garage (a garage)
Mon beau-père (My step dad)	Mon demi-frère (My step brother)		avocat (lawyer)	facteur (postman)	ingénieur (engineer)	professeur (teacher)		une boulangerie (a bakery)	un hôtel (a hotel)
Mon grand-père (My grandad)	Mon oncle (My uncle)		chanteur (singer)	fermier (farmer)	mécanicien (mechanic)	secrétaire (secretary)		un bureau (an office)	un magasin (a shop)
Mon frère (My brother)	Mon cousin (My cousin (m))		coiffeur (hairdresser)	homme au foyer (house husband)	médecin (doctor)	serveur (waiter)		un collège (a school)	un restaurant (a restaurant)
			comptable (accountant)	homme d'affaires (businessman)	ouvrier (labourer)	vendeur (shop assistant)		un commissariat de police (a police station)	un salon de coiffure (a hairdressers)
Ma mère (My mum)	Ma soeur cadette (My younger sister)	est (is)	actrice (actor)	cuisinière (cook)	infirmière (nurse)	policier (police officer)		une entreprise (a business)	un supermarché (a supermarket)
Ma belle-mère (My step mum)	Ma demi-soeur (My step sister)		avocate (lawyer)	factrice (postman)	ingénieuse (engineer)	professeur (teacher)		une ferme (a farm)	un théâtre (a theatre)
Ma grand-mère (My grandma)	Ma tante (My aunt)		chanteuse (singer)	femme au foyer (house husband)	mécanicienne (mechanic)	secrétaire (secretary)			
Ma soeur (My sister)	Ma cousine (My cousin (f))		coiffeuse (hairdresser)	femme d'affaires (businessman)	médecin (doctor)	serveuse (waiter)			
			comptable (accountant)	fermière (farmer)	ouvrière (labourer)	vendeuse (shop assistant)			

Talking about a future job

Ma passion, c'est (My passion is)	la cuisine (cooking)		le théâtre (drama)	
	la mode (fashion)		les ordinateurs (computers)	
	le sport (sport)		les voitures (cars)	
Je voudrais travailler (I would like to work)	dans un magasin (in a shop)	avec des ordinateurs (with computers)	et je voudrais faire (and I would like to do)	un métier créatif (a creative job)
J'aimerais travailler (I would like to work)	dans un bureau (in an office)	seul (alone)		un métier manual (a manual job)
	en plein air (outside)	en équipe (in a team)		un métier à responsibilité (a job with responsibility)
	avec des enfants (with children)	à l'étranger (abroad)		
	avec des animaux (with animals)			

Talking about a future job

Je voudrais travailler dans (I would like to work in)	le sport et les loisirs (sport and leisure) le commerce (business) le médecine et la santé (medicine and health) l'audiovisuel et les médias (audiovisual and media) l'informatique (IT) les télécommunications (telecommunications) l'hôtellerie et la restauration (hospitality and catering)	parce que je suis (because I am)	indépendant (independant) intelligent (intelligent) motivé (motivated) bien organisé (well organised) actif (active) créatif (creative) ambitieux (ambitious) sérieux (serious) travailleur (hardworking) sociable (sociable) timide (shy)	
J'aime (I like) J'adore (I love)	le contact avec les gens (having contact with people) travailler en équipe (working in a team) gagner de l'argent (earning money)			
Si je réussis mes examens, (If I succeed in my exams,) Si mes rêves se réalisent, (If my dreams come true,) Si j'ai de le choix, (If I have the choice,)	je veux (I want) j'espère (I hope)	prendre une année sabbatique (take a gap year) voyager (to travel) visiter des autres pays (to visit other countries) faire un apprentissage (to do an apprenticeship) devenir apprenti (to become an apprentice) aller à l'université (to go to university)	continuer mes études à la fac (to continue my studies at university) faire du bénévolat (to do volunteering) me marier (to get married) avoir des enfants (to have children) m'installer avec mon petit-copain (to move in with my boyfriend) m'installer avec ma petit-copine (to move in with my girlfriend)	

Saying what you do to earn money

Chez moi (At home)	je passe l'aspirateur (I do the hoovering) je fais la vaisselle (I do the dishes) je lave la voiture de mon père (I wash my dad's car) je tonds la pelouse (I mow the lawn) je promène le chien (I walk the dog)	et je gagne (and I earn) et je reçois (and I receive)		cinq (5) dix (10) quinze (15) vingt (20)	livres (pounds) euros (euros)	par heure (per hour) par jour (per day) par semaine (per week) par mois (per month)
J'ai un petit boulot (I have a part time job)	où (where)	je sers les clients (I serve customers) je remplis les rayons (I stack shelves) je fais du babysitting pour mes voisins (I babysit for my neighbours) je livre des journaux (I deliver newspapers)	et mes parents me donnent (and my parents give me)			

Mid-Term Assessment Prep – I can write 90 words about...

- ❑ What people in my family do for work
- ❑ What I did to earn money
- ❑ What I think of part time jobs
- ❑ What I would like to do in the future and why

HOMEWORK

Every week you will be set an assignment on sentence builders.
My homework day is:

_____

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!

SentenceBuilders

Modern Languages – Spanish **Year: 11**
Module 7 – ¡A currar! – World of work **Term: 1**

BIG QUESTIONS

1) **¿En qué trabajas?**
   What do you do for work?
2) **¿Qué tipo de persona eres?**
   What type of person are you?
3) **¿Qué te gustaría ser en el futuro?**
   What would you like to do in the future?
4) **¿Qué haces para ganar dinero?**
   What do you do to earn money?
5) **¿Qué hiciste para tus prácticas laborales?**
   What did you do for work experience?
6) **¿Valió la pena hacer prácticas laborales?**
   Is work experience worth it?

Saying what I do for work

Trabajo de (I work as)	Me gustaría trabajar de (I would like to work as)	cocinero (a chef)	diseñador (a designer)	peluquero (a hairdresser)	ingeniero (an engineer)
Soy (I am)	Me gustaría ser (I would like to be)	peluquero (a hairdresser)	azafato (a flight attendant)	socorrista (a lifeguard)	dependiente (a shop assistant)
		periodista (a journalist)	enfermero (a nurse)	veterinario (a vet)	
Mi padre trabaja de (My dad works as)	Mi padre es (My dad is)				
Mi madre trabaja de (My mum works as)	Mi madre es (My mum is)	cocinera (a chef)	diseñadora (a designer)	peluquera (a hairdresser)	ingeniera (an engineer)
		peluquera (a hairdresser)	azafata (a flight attendant)	socorrista (a lifeguard)	dependiente (a shop assistant)
		periodista (a journalist)	enfermera (a nurse)	veterinaria (a vet)	
Trabajo en (I work in)	Mi padre trabaja en (My dad works in)	un hospital (a hospital)	una tienda (a shop)	un hotel (a hotel)	un instituto (a school)
Mi madre trabaja en (My mum works in)	Me gustaría trabajar en (I would like to work in)	una oficina (an office)	un taller (a garage)		

Ayudo a (I help)	los pasajeros (the passengers)	y (and)	enseño a los niños (I teach the kids)	preparo platos distinto (I prepare different dishes)	hago entrevistas (I do interviews)
	los clientes (the clients)		sirvo comida y bebida (I serve food and drinks)	corto el pelo a los clientes (I cut clients' hair)	vendo ropa (I sell clothes)
Cuido (I look after)	los jardines (the gardens)				reparo coches (I fix cars)
	a los pacientes (the patients)				
	a los animales (the animals)				

Me gusta (I like it)	Me encanta (I love it)	porque (because)	es (it is)	interesante (interesting)	fácil (easy)	importante (important)	variado (varied)
No me gusta (I don't like)	Lo odio (I hate it)			repetitivo (repetitive)	difícil (difficult)	aburrido (boring)	

Saying what type of person I am

Siempre soy (m) (I am always (m))	sincero (sincere)	serio (serious)	y soy (and I'm)	tonto (silly)	perezoso (lazy)
A veces soy (m) (Sometimes I am (m))	tímido (shy)	simpático (nice)	y soy un poco (and I'm a bit)	listo (clever)	hablador (chatty)
Nunca soy (m) (I am never (m))	tranquilo (calm)	optimista (optimistic)	pero no soy (but I'm not)	generoso (generous)	valiente (brave)
	divertido (fun)	pesimista (pesimistic)		trabajador (hard working)	fiel (loyal)
Siempre soy (f) (I am always (f))	sincera (sincere)	seria (serious)		tonta (silly)	perezosa (lazy)
A veces soy (f) (Sometimes I am (f))	tímida (shy)	simpática (nice)		lista (clever)	habladora (chatty)
Nunca soy (f) (I am never (f))	tranquila (calm)	optimista (optimistic)		generosa (generous)	valiente (brave)
	divertida (fun)	pesimista (pesimistic)		trabajadora (hard working)	fiel (loyal)

Talking about work experience

El año pasado (Last year) Hace dos años (Two years ago) El julio pasado (Last July) El junio pasado (Last June)	trabajé (I worked)	en una oficina (in an office) en una escuela (in a primary school) en una tienda benéfica (in a charity shop)	en una agencia de viajes (in a travel agents) en un polideportivo (in a leisure centre) en la empresa de mi madre (in my mum's company)	donde (where) y (and)	archivé documentos (I filed documents) contesté al teléfono (I answered the phone) atendí a los clientes (I helped the customers)	mandé correos electrónicos (I sent emails) escribí cartas (I wrote letters) di clases (I gave classes)
No me gustó (I didn't like it) Lo odié (I hated it)	porque (because)	mis compañeros eran (my colleagues were) los clientes eran (the customers were)	desagradables (unpleasant) maleducados (rude)	y (and)	fue una perdida de tiempo (it was a waste of time) no aprendí nada (I didn't learn anything)	
Me gustó (I liked it) Me gustó mucho (I really liked it) Me encantó (I loved it)			alegres (cheerful) agradables (pleasant) educados (polite)		fue una experiencia positiva (it was a positive experience) aprendí mucho (I learnt alot)	

Saying what you do to earn money

Normalmente (Normally) Cuando necesito dinero (When I need money) Cuando tengo tiempo (When I have time) A veces (Sometimes) A menudo (Often)	ayudo en casa (I help at home) ayudo a mi padre (I help my dad)	pongo y quito la mesa (I set and clear the table) lavo los platos (I do the washing up)	pero (but)	ayer (yesterday) el fin de semana pasado (last weekend)	planché la ropa (I ironed the clothes) pasé la aspiradora (I did the hoovering) lavé el coche (I washed the car)
	plancho la ropa (I iron the clothes) paso la aspiradora (I do the hoovering)	lavo el coche (I wash the car)			ayudé en casa (I helped at home) ayudé a mi padre (I helped my dad) puse y quité la mesa (I set and cleared the table) lavé los platos (I did the washing up)
Además (In addition)	tengo in trabajo a tiempo parcial (I have a part time job)	dos veces a la semana (twice a week) tres veces a la semana (three times a week) los fines de semana (on the weekends)	hago de canguro (I baby sit) reparto periódicos (I deliver newspapers) trabajo de cajero/a (I work as a cashier)		

Mid-Term Assessment Prep – I can write 90 words about...

- ❑ What people in my family do for work
- ❑ What I did to help around the house
- ❑ What I think of part time jobs
- ❑ What I would like to do in the future and why

HOMEWORK

Every week you will be set an assignment on sentence builders.
My homework day is:

_____

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!

SentenceBuilders

Child Development **Year:11**
Component 3: Supporting Children to Play, Learn and Develop **Term:1**

BIG QUESTIONS

To Investigate how to support play and learning

- ✓ What are Individual Circumstances
- ✓ How do these circumstances impact the 5 areas of development
- ✓ Why is it important to promote play to support development?

A Investigate individual circumstances that may impact on learning and development

Learners will understand how the following individual circumstances can impact on a child's learning and development.

A1 Individual circumstances

Physical circumstances:

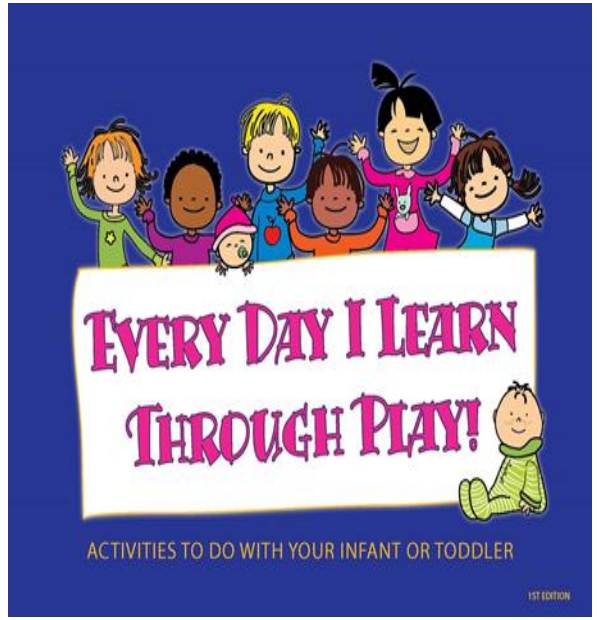
- a child with a sensory impairment
- a child who has restricted gross motor skills
- a child who has restricted fine motor skills
- a child who has delayed gross motor skills
- a child who has delayed fine motor skills

Cognitive/intellectual circumstances:

- poor concentration levels
- a child who has delayed literacy skills.

Communication and language circumstances:

- English as an additional language
- o a child who has language and communication delay.



Child Development **Year:11**
Component 3: Supporting Children to Play, Learn and Develop **Term:1**

A Investigate individual needs that may impact on play, learning and development

Social and emotional needs

Negative role models

- limited interaction with adults
- poor awareness of social norms and values
- difficulty forming bonds with adults
- limited experience of play
- difficulty forming friendships with other children
- disruptive behaviour

A child experiencing a transition

- starting care/educational providers
- moving between care/educational providers
- birth of new sibling
- death of a significant family member
- change in family structure
- moving

Homework-

1.1 Produce a poster on the one types of play and how it impact on one area of development

Homework Links

Research from the following websites-

- ✓https://www.thebalance.com/how-to-separate-wants-and-needs-453592
- ✓ https://www.thebalance.com/how-to-separate-wants-and-needs-453592
- ✓ https://simplicable.com/en/needs-and-wants
- ✓ https://www.earlyyearsmatters.co.uk/eyfs/a-unique-child/play-learning/
- ✓ https://www.earlyyearscareers.com/eyc/send-support/identifying-and-supporting-all-childrens-individual-needs/

Key Terms LA-A/B

Holistic developments the social, emotional, physical, mental, and intellectual growth of a person

Need-require (something) because it is essential or very important rather than just desirable

Want-have a desire to possess or do (something); wish for

Norms- something that is usual, typical, or standard

Disability-a physical or mental condition that limits a person's movements, senses, or activities

Long-term Health- is defined as a condition that cannot at present be cured but can be controlled by medication and therapies

Short-term -A minor health problem such as persistent coughs to sports injuries, aches and pains, allergies, rashes and infections.

Child Development
Component 3: Supporting Children to Play, Learn and Develop

Year: 11
Term: 1

BIG QUESTIONS

To investigate how to support play and learning

- ✓ What are Individual Circumstances
- ✓ How do these circumstances impact the 5 areas of development
- ✓ Why is it important to promote play to support development?

A2 Know how individual circumstances may impact on learning and Development

All areas of development:

- not meeting expected milestones
- may not be able to initiate play.

Physical learning and development:

unable to access learning activities at varying levels

unable to grasp small objects or manipulate materials in a constructive way

may tire easily and not be able to sustain involvement in activities

may be unable to navigate the play areas and activities.

Cognitive and intellectual learning and development:

- may not be able to understand rules in play

Communication and language learning and development:

- difficulties communicating preferences and choices
- play with others may be limited as they may be perceived as not wanting to play due to lack of responsiveness.
- Social and emotional learning and development: may find cooperative play difficult
- poor emotional resilience may isolate themselves or be isolated by others
- may refuse or find it difficult to join in team or group activities
- may have limited expression of thoughts and feelings
- may find it difficult building positive relationships with adults
- may find it difficult to cope with change/routines/new situations-low self-esteem.

Health and Social Care
Component 3 Health and Wellbeing

Year: 11
Term: 1

BIG QUESTIONS

Learning aim A:

Factors that affect health and wellbeing

1. What is meant by health and wellbeing?
2. How can our lifestyle choices have a positive or negative effect on our health and wellbeing?
3. How do our relationships affect our health and wellbeing?

A1: Demonstrate knowledge and understanding of factors that affect health and wellbeing

Different factors and how they affect health and wellbeing:

Physical and lifestyle factors that can have positive or negative effects on health and wellbeing:

- genetic inheritance, included inherited conditions and a pre-disposition to certain conditions
- ill health (acute and chronic)
- diet (balance, quality and amount)
- amount of exercise
- substance use, including alcohol, nicotine, illegal drugs and misuse of prescribed drugs
- personal hygiene.

Social, emotional and cultural factors that can have positive or negative effects on health and wellbeing:

- social interactions, e.g. supportive/unsupportive relationships, social integration/isolation
- stress, e.g. work-related
- willingness to seek help or access services, e.g. influenced by culture, gender, education.

Economic factors that can have positive or negative effects on health and wellbeing:

- financial resources.

Environmental factors that can have positive or negative effects on health and wellbeing:

- environmental conditions, e.g. levels of pollution, noise
- housing, e.g. conditions, location.

The impact of life events relating to relationship changes and changes in life circumstances

B1: Physiological indicators

Measurable indicators of health include:
- Waist-to-hip ratio, your waist measurement divided by your hip measurement
- Cholesterol levels
- Blood glucose
- Liver function
- Resting pulse and recovery pulse rates after exercise
- Peak flow
- Blood pressure
- Height/weight
- Temperature

Positive aspect of lifestyle include:
- Regular exercise
- Good personal hygiene
- Supportive relationships
- Balanced diet
- Enough sleep
- Use of health monitoring and illness prevention services e.g. screening and vaccination

Negative aspects of lifestyle include:
- Genetic inheritance
- Substance misuse e.g. alcohol, nicotine, illegal drugs
- Social isolation
- Stress
- Reluctance to seek help or access services
- Poverty
- Environmental pollution
- Poor housing

Key Terms LA-B

Physiological -relates to how a person and their bodily parts function normally

Acute illness – comes on quickly, is short term and can be cured

Chronic illness – comes on gradually, is long term and generally can be treated but not cured

Predisposition – someone is more likely to suffer from a particular condition due to genetic factors, environmental factors or a combination of both

Health and Social Care

Subject: 3D Design
Topic: Flight (Mock Exam)

Year / Group: 11
Term: 1 and 2

BIG QUESTIONS

How can the study of other artists help you find your own direction in the development of ideas?

Describe the process of development in artists work.

Compare similarities and differences in artists work.

Explain why primary sources are the richest form of research.

How can Secondary sources enrich the development of ideas?

List different ways of recording your observations of the subject matter.

Why should you plan a wide range of ideas before selecting a final one?

How can the refining process help you to fully realise intentions?

What does it mean to realise intentions?

Why is it important to Evaluate

Walking Talking Mock Exam Past Question- 'Flight' Artists, craftspeople and designers have often created work inspired by flight and flying. Aboriginal peoples of Australia carved and painted wooded boomerangs with decorative patterns. Nicola Godden created sculptures in response to the story of the flight of Icarus. The wall-mounted sculptures of Tom Hare are a response to flying seed pods. Air travel has led to designs for commemorative memorabilia and the development of in-flight services, such as the eco-friendly meal trays design by PriestmanGoode.

Study suitable sources and produce your own response to ***Flight.***

Key Skills

RECORD	DEVELOP
I will independently record... • images and information appropriate to the theme • using wet, dry and digital media • examples of artists/designers work appropriate to the theme • information about artists/designers, showing appreciation of how they use media and techniques to create meaningful work.	**I will independently develop...** • my observation skills using a range of media, techniques and processes. • artwork and ideas from primary sources • my knowledge and understanding of artist styles and techniques • my drawing and planning skills • ideas in response to a given theme, linking to artists work • my higher order thinking skills
REFINE I will independently... • experiment making the most of media and techniques relevant to my intentions • select ideas to adapt and improve e.g. adjustments to size, colour and composition. • develop a piece of work from one media into another	EVALUATE I will independently... • analyse and reflect on the development of my own work, through annotation making connections to artists and suggesting ways I could I improve. • evaluate artists using analytical writing skills and forming opinions.
PRESENT OUTCOMES I will independently... prepare a plan for a final piece to be completed during the 5-hour Mock Exam.	

Homework Links

Tasks linked to the theme 'Flight' (2 hours per two-week cycle)

Key Vocabulary

Flight/Texture/Shape/ Colour/Form/Scale/ Media/Technique/ Abstract/Research/ Primary source/Wings Secondary/Source/ Concept

I will be expected to recall keywords learned in previous projects and use them in the appropriate context.

EVALUATING ARTISTS' WORK

1. Describe the piece of art you are looking at
2. What is the name of the artist or type of art?
3. What art movement or culture does the art link to?
4. Research and list 5 or more things about the artist or culture?
5. What important things have happened in the country that the art comes from?
6. What has influenced the art E.g. other artists, people, personal experiences, society, culture, politics, gender, colour, pattern, movement, religion, travel, places, objects etc.
7. Describe the materials used to make the art
8. How has the art been produced?
9. What is being communicated through the art?
10. Which of these words best describes the mood of the picture? EMOTIONAL/POWERFUL/BUSY/SLOW/PEACEFUL/WARM/COLD/HAPPY/SAD/CALM/INTENSE/SCARY can you think of any other words?
11. What do you like or dislike about the picture? Explain your reasons…

ANNOTATING YOUR OWN WORK

- In this artwork I was trying to…
- The artist/culture that has influenced my work is…
- The source I have used is…
- I found the source I used at…
- In this artwork I used the technique of...
- The media I have used is...
- I like/dislike this piece because...
- My idea links to the theme because…
- I can improve this piece by…
- I could develop this work further by...

Annotate means to explain your own creations
Artist evaluation is when you write about the artist
Project evaluation is written about the whole project at the end

END OF PROJECT EVALUATION

1. Describe each stage of the project from start to finish
2. What media did you use to produce your work? E.g. Paint/Pencil/Clay etc.
3. Describe how you used different techniques in your project? E.g. painting/drawing/modelling with clay etc.
4. Which artist's culture have you looked at?
5. Write down 2 or more similarities between your work and the artist's work.
6. Which piece of your work best shows the Artist's style or the influence of another culture and why?
7. Describe some of your own ideas…
8. Have you used a primary or a secondary source?
9. Have you included the secondary source in your work? Where did you find it?
10. Imagine your final piece was displayed in a public place.... Describe the effect looking at your work might have on people and society. E.g. relax them, make them feel sad, curious, happy, angry, thoughtful, surprised, confused, nostalgic etc. explain why e.g. because of your use of colour, images, content, arrangement? etc.
11. Explain any other influences on your work e.g. personalities *(including your own)*, places, memories, objects, politics, events, activities, religion, fact, fiction etc.
12. Describe how your work links to the project theme?
13. Explain what you have done well…
14. Explain how you could improve…
15. What would you do differently, if you were to repeat any part of this project?

PSHE Year: 11
WPD Term: 1

Big Questions

PSHE Careers

What is a Personal statement?

Can I explain my reasons for studying chosen courses?

Why is a personal statement relevant to my courses and chosen career?

Can I demonstrate transferable skills and expand on the most relevant one?

Can I show that I am a critical thinker and explain my long term plans?

House news/competitions:

Write an article for the soon to be launched termly house newsletter.

The article would be to talk about your personal aspirations for the future, either personal and/or as a citizen of the world we live in.

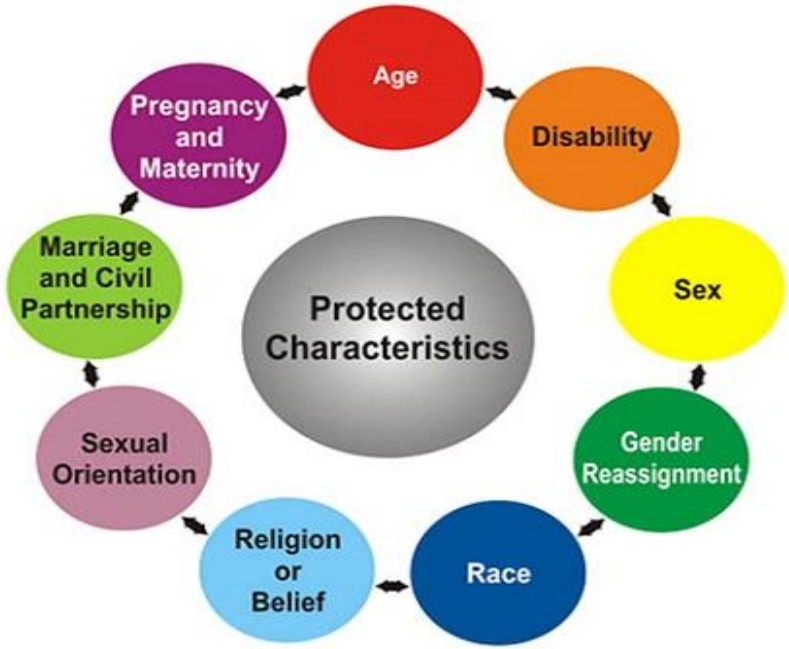
Work to be submitted to Mrs Green via your tutor or email direct to kgreen@abbeyschoolfaversham.co.uk

Depending on the quality of submissions there may be more than one published!

All articles published will receive a golden ticket and the best one will get 20 house points, a certificate and a small prize.

Year 11

Term	PSHE Personal, Social and Health Education		WPD Wider Personal Development INTERVENTION		CAREERS
1	**Living in The wider World** Destinations Personal statements • What is a personal statement • Good models of personal statements • What information to include • Poor personal statements • How to avoid mistakes How to write a good personal statement for further		**Wider Personal Development** **INTERVENTION PROGRAMME** **Tutor Coaching** *The British Values* *The Protected Characteristics*		**Living in The wider World** Destinations – • Explaining reasons for studying chosen course • Explain why you are right for the course you have studied • Extra Curriculum/outside the classroom/work experience • Relevant courses to your chosen career • Demonstrate transferable skills • Expanding on most relevant transferable skills • Being a critical thinker Your long term plan



Careers:

Employability Focus during form time – Personal Statements

Careers Event – Apprenticeship Assembly and Careers Interviews with CXK. You will have the opportunity to have a one-to-one appointment with professional careers advisor to support you with your next step after school and beyond. There will also be an assembly on what an apprenticeship is and the range of apprenticeships available.

PSHE GROUND RULES

Understand everyone has a right to a different opinion – listen with tolerance and respect.

Put your hand up if you wish to make a comment – await your turn.

Keep questions and comments general, not personal.

Respect what others say – no put-downs. We make sure everyone feels listened to.

We make sure everyone feels able to join in.

We use the correct vocabulary and check if unsure.

We know who to ask for help or advice – and if not we will ask!