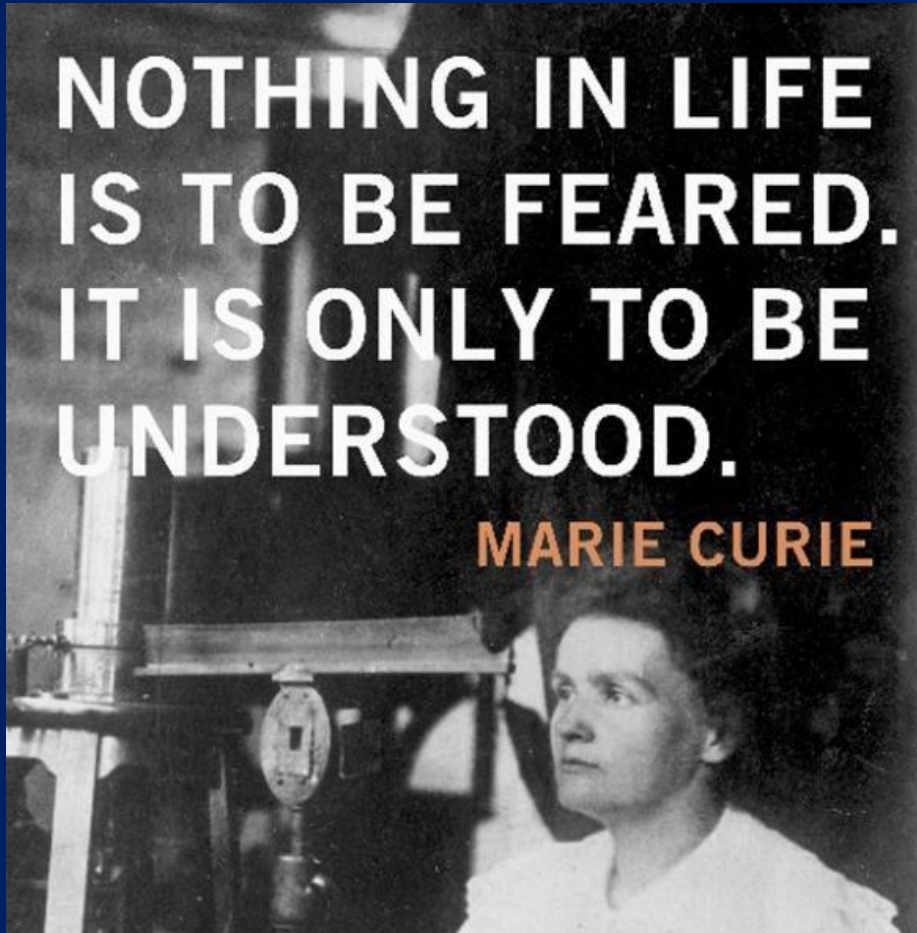


**NOTHING IN LIFE
IS TO BE FEARED.
IT IS ONLY TO BE
UNDERSTOOD.**

MARIE CURIE



Student Name _____

Form _____

**Knowledge Organisers
Cycle A – Year 9**

How to Use your Knowledge Organiser

Each week for prep, you will be asked to complete:

- **Part A:** A vocabulary activity or writing task to explore and apply new key words from your knowledge organiser.
- **Part B:** Your teacher will give you an additional task connected to your subject – for example a challenge task or dig deep task from your knowledge organiser.

Both prep tasks are **compulsory**, you must complete them both.

You should use your knowledge organiser (KO) to help you with your prep tasks and you should always have them in lessons on your desk.

You will be given a minimum of one week to complete your prep tasks for each subject. **You are expected to spend at least 30 minutes on the tasks set each week for each subject.**

Finally, a reminder that prep completion is your responsibility.

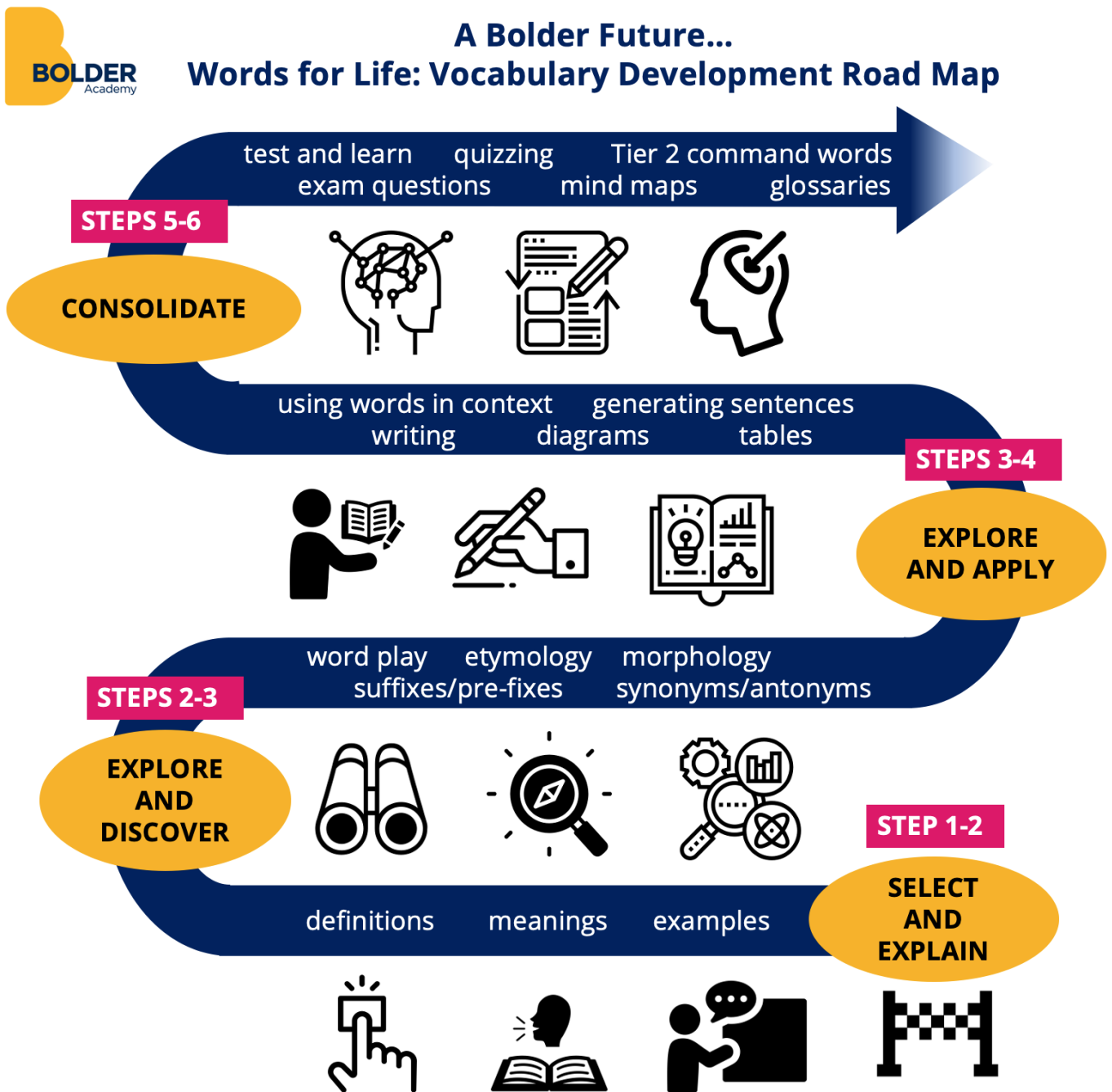
If at any point you are finding your prep difficult, you must tell your Subject teacher in advance of the lesson so that we can offer the help you need. This can be done via:

- An email
- A note in your planner
- A 1:1 conversation with your teacher.

Words for Life at Bolder: Vocabulary Activities

Each week your teacher will set you vocabulary tasks using vocabulary from your knowledge organiser. You need to check carefully which activity your teacher has set you.

The road map shows you how you will develop your vocabulary and explains the process you go through when you learn new words. Your teacher will set you a variety of strategies leading up to the end of each cycle.



Vocabulary Websites

Try using these vocabulary websites to help you with your PREP and also to boost your vocabulary skills. These websites will help with a lot of the activities.

[Describing Words](#) - This website is great for descriptive vocabulary: put in a noun and you get countless descriptive words that you can use in your writing.

[Vocabulary.com](#) - This bumper website has lots of uses, from a dictionary and countless vocabulary questions.

[Visuwords.com](#) - This website creates interesting graphic visuals for your word choices – this is really useful for making word webs and word diagrams.

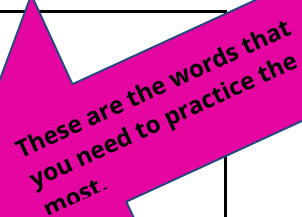
[Online Etymology Dictionary](#) - With a quick search, you can gain accessible word histories (alongside some very interesting articles) – this will help with your Greek and Latin root tasks.

[Freerice](#) - This unique website is for vocabulary quizzes! The premise of 'free rice' sees correct quiz answers activity the World Food Programme donate grains of rice to help end hunger.

[Word Sift](#) - This website is another very helpful tool that can visualise words in different ways.

Vocabulary is split into three categories. On your knowledge organiser you will see Tier 2 and Tier 3 vocabulary that you need to practice and learn:

| |
|--|
| <p style="text-align: center;"><u>Tier 1 Words (basic vocabulary)</u> Words we use all of the time: <i>dog, cat, house, green, party</i> These are words that you will already know!</p> |
| <p style="text-align: center;"><u>*Tier 2 Words* (Academic Vocabulary)</u> Sophisticated words that fit into lots of subjects.</p> <p style="text-align: center;"><i>The better knowledge you have of these words the more success you will have in all subjects! Examples: fundamental, affect, context, evaluate - They help with your writing, reading and speaking. These are the words that make you stronger!</i></p> |
| <p style="text-align: center;"><u>Tier 3 Subject Specific Terminology</u> Words that you need to learn specifically for your subjects: These more technical words are usually needed within a specific topic and are really important for classwork/homework and exams! Examples in Science: catalyst, exothermic, dissection Examples in English: dramatic irony, metaphor, tragedy</p> |



These are the words that you need to practice the most.

Word Histories: Etymology

Etymology is the study of the origin of words and the way in which their meanings have changed throughout history.

Did you know that the majority of complex vocabulary has Latin and Greek origins? For some of your vocabulary tasks you might be asked to look at where words come from and how words are created. Use these tables to help you.

Common Greek Roots

| Greek Root | Definition | Example |
|------------|----------------------|------------------------------|
| anthropo | man; human; humanity | anthropologist, philanthropy |
| auto | self | autobiography, automobile |
| bio | life | biology, biography |
| chron | time | chronological, chronic |
| dyna | power | dynamic, dynamite |
| dys | bad; hard; unlucky | dysfunctional, dyslexic |
| gram | thing written | epigram, telegram |
| graph | writing | graphic, phonograph |
| hetero | different | heteronym, heterogeneous |
| homo | same | homonym, homogenous |
| hydr | water | hydration, dehydrate |
| hyper | over; above; beyond | hyperactive, hyperbole |
| hypo | below; beneath | hypothermia, hypothetical |
| logy | study of | biology, psychology |
| meter/metr | measure | thermometer, perimeter |
| micro | small | microbe, microscope |
| mis/miso | hate | misanthrope, misogyny |
| mono | one | monologue, monotonous |
| morph | form; shape | morphology, morphing |
| nym | name | antonym, synonym |
| phil | love | philanthropist, philosophy |
| phobia | fear | claustrophobia, phobic |
| photo/phos | light | photograph, phosphorous |
| pseudo | false | pseudonym, pseudoscience |
| psycho | soul; spirit | psychology, psychic |
| scope | viewing instrument | microscope, telescope |
| techno | art; science; skill | technique, technological |
| tele | far off | television, telephone |
| therm | heat | thermal, thermometer |

Common Latin Roots

| Latin Root | Definition | Example |
|----------------|------------------|-----------------------------|
| ambi | both | ambiguous, ambidextrous |
| aqua | water | aquarium, aquamarine |
| aud | to hear | audience, audition |
| bene | good | benefactor, benevolent |
| cent | one hundred | century, percent |
| circum | around | circumference, circumstance |
| contra/counter | against | contradict, encounter |
| dict | to say | dictation, dictator |
| duc/duct | to lead | conduct, induce |
| fac | to do; to make | factory, manufacture |
| form | shape | conform, reform |
| fort | strength | fortitude, fortress |
| fract | break | fracture, fraction |
| ject | throw | projection, rejection |
| jud | judge | judicial, prejudice |
| mal | bad | malevolent, malefactor |
| mater | mother | maternal, maternity |
| mit | to send | transmit, admit |
| mort | death | mortal, mortician |
| multi | many | multimedia, multiple |
| pater | father | paternal, paternity |
| port | to carry | portable, transportation |
| rupt | to break | bankrupt, disruption |
| scrib/script | to write | inscription, prescribe |
| sect/sec | to cut | bisect, section |
| sent | to feel; to send | consent, resent |
| spect | to look | inspection, spectator |
| struct | to build | destruction, restructure |
| vid/vis | to see | televise, video |
| voc | voice; to call | vocalize, advocate |

Homework Timetables

9A

| Monday | Tuesday | Wednesday | Thursday | Friday |
|--------|------------------|-----------|----------|-----------|
| Drama | Computer Science | Science | History | Geography |
| Music | Art and Tech | French | Maths | English |

9B

| Monday | Tuesday | Wednesday | Thursday | Friday |
|-----------|------------------|--------------|----------|---------|
| Geography | Drama | Science | French | History |
| Music | Computer Science | Art and Tech | Maths | English |

9C

| Monday | Tuesday | Wednesday | Thursday | Friday |
|-----------|---------|-----------|--------------|------------------|
| Geography | Drama | Science | Art and Tech | Computer Science |
| French | Music | History | Maths | English |

9D

| Monday | Tuesday | Wednesday | Thursday | Friday |
|------------------|-----------|-----------|----------|---------|
| Computer Science | Spanish | Science | Music | History |
| Art and Tech | Geography | Drama | Maths | English |

9E

| Monday | Tuesday | Wednesday | Thursday | Friday |
|------------------|--------------|-----------|----------|---------|
| Computer Science | Geography | Science | Spanish | Music |
| History | Art and Tech | Drama | Maths | English |

9F

| Monday | Tuesday | Wednesday | Thursday | Friday |
|--------------|------------------|-----------|-----------|---------|
| History | Computer Science | Science | Geography | Drama |
| Art and Tech | Music | Spanish | Maths | English |

Whilst there is no formal PE prep on your timetable, there is an expectation that you participate in at least one extra-curricular club each week.

Whilst there is no formal Cultural and Society prep on your timetable, this will be project based and linked to the Being Bold weeks.

Vocabulary Strategy Examples

SELECT AND EXPLAIN – KWL

Your teacher will give you a new word or topic that you are going to be learning. You need to research the word and fill in the boxes.

| What I K now | What I W ant to Know | What I Want to L earn |
|--|--|--|
| | | |

Your teacher will give you some new words to learn – create word maps like this to help you learn them.

SELECT AND EXPLAIN – Word mapping

| | | |
|----------------------|-----------------------|--------------------------|
| Image - draw it | Where do you find it? | Think of a symbol for it |
| A synonym | The word | An antonym |
| Use it in a sentence | What is it made of? | The definition |

EXPLORE AND DISCOVER – Alliterative sentence generator

Your teacher will give you some words – put them in the correct part of the table and create alliterative sentences to play with the word. Each word must start with the same letter. This is really good for helping you remember new words!

| | ADJECTIVE | NOUN | ADVERB | VERB | ADJECTIVE | NOUN |
|---|-----------|------|----------|------|-----------|---------|
| b | big | boys | brutally | bash | bald | bullies |
| | | | | | | |

EXPLORE AND DISCOVER – Research it, transform it, use it!

WORD:

Etymology
(Research the word origins)

Link It!
Can you link the word to any vocabulary you already know?

Transform it! Transform the word into an image to help you remember it.

Take It Further!
How does this word link to your current topic?

Use it!
Use the word in three different sentences that you can use in your own work:

- 1.
- 2.
- 3.

EXPLORE AND DISCOVER – 3 Truths and A Lie: Etymology

Your teacher will give you a word from your knowledge organiser with three truths and lie about the origins and etymology of that word.

English Example:

Pathos

Pathos makes you feel sadness or pity.
Pathos is a famous character in Greek mythology.
Pathos originally comes from the word suffering.
Pathos is a noun.

ANSWER: I think the lie is that pathos is a character from Greek mythology. This is a lie because pathos is not a character it is usually the part of the play where an audience feels sadness. It does however originate

Bolder Talk Roles for discussions in lessons

Instigator

The person who starts the discussion.



Will say:

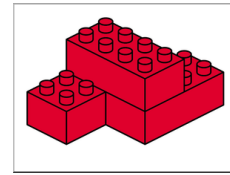
"I would like to start by saying..."

"I think the first thing we should consider is..."

"To begin with let's talk about..."

Builder

Develops, adds to or runs with an idea.



Will say:

"I agree and I'd like to add..."

"Linking to your point..."

"Building on that idea..."

Challenger

Disagrees with or presents an alternative argument.



Will say:

"That's true, but have you considered..."

"You mentioned X but what about..."

"I hear what you're saying, but..."

Clarifier

Makes things clearer and simplifies ideas by asking questions.



Will say:

"What do you mean when you say..."

"Could you tell me more about..."

"Does that mean that..."

Prober/Questioner

Digs deeper into the argument, asks for evidence or justification of ideas.



Will say:

"What evidence do you have to support that?"

"How does that support your argument?"

"How did you come to that conclusion?"

Summariser

Presents reflections on the discussion. May offer a conclusion or balanced assessment of the main points.



Will say:

"Overall, the main points covered were..."

"In summary..."

"From today's discussion, it's clear that..."

SPEAK STRONG AND WRITE BRAVELY!

"I'm stuck for something to say!" BE BRAVE

- Could you repeat the question please?
- Please could you come back to me in a minute?
- Please can I have some more thinking time?
- Could you clarify the last point please?
- Please can I have a sentence starter to help?
- Could you simplify the question for me?
- Could you give me an example?

Phrases to help you respond: BE STRONG

- I have another example of that...
- ___ said ___, but I disagree because...
- I think I can clarify that last point
- I'd like to offer an alternative answer
- To build on what ___ said,

Fillers that I SHOULD NOT USE: BE KIND

Like
isn't it that
Literally
basically
obviously
Innit
yeah
actually

These phrases are very informal and are not part of academic speech.

How sure are you? BE BRAVE

Statement of Claim - What point are you trying to make when you answer a question?

Almost certain!

It is certain that...
It seems clear that...
X is definitely...

I'm fairly sure...

It appears probable...
It is usually the case that... In the majority of cases...
The results suggest it is likely that...
It is most likely that....

Hmm...

Conceivably,...
It is possible that...
Occasionally,...
It may be the case that...
The answer might be....however.....

Answering questions -
How sure are you?

Try NOT to say:
'I think that'
'My answer is'
'I don't know'

SPEAK STRONG AND WRITE BRAVELY!

Academic Verbs - these are very helpful when you are analysing

Inference:

suggests implies indicates
shows expresses demonstrates
symbolises represents
illustrates reveals signifies
insinuates

Writer's purpose:

establishes creates constructs
devises develops epitomises
outlines encapsulates

Comparison:

contrasts contradicts
juxtaposes reinforces refers
alludes to opposes supports
develops

Discourse Markers - These are helpful in discussions and your writing

| Sequencing Arguments | Contrasting and counter Arguments | Adding information and furthering arguments | Concluding Arguments | Introducing evidence |
|-------------------------------|-----------------------------------|---|----------------------------|------------------------------------|
| To begin with... | Others might argue... | Many people believe... | Admittedly... | For instance, ... |
| In the first place... | Conversely... | In addition to this... | Certainly... | Such as... |
| First and foremost.... | However... | Similarly... | In conclusion... | In the case of... |
| Primarily... | Although... | Equally... | Finally... | As illustrated by... |
| Firstly... | On the other hand... | Likewise... | Consequently... | As revealed by... |
| Secondly... | Whereas... | Also... | Subsequently... | This can be seen when... |
| Thirdly... | Contrasting with... | Moreover... | Therefore... | |
| Lastly... | On the contrary... | What's more... | Thus... | |
| Finally... | Nevertheless... | Furthermore... | We can conclude that... | This is/was demonstrated when... |
| After this it can be seen.... | In comparison... | In the same way... | Finally, it can be seen... | Evidence of this can be found..... |
| | Nonetheless... | For example... | Above all.... | |
| | Even though.... | For instance... | Most of all.... | |
| | In contrast.... | Likewise... | | |

How do we revise using knowledge organisers?

RECORD IT

Try reading information and key vocabulary out loud, record it on your phone and listen back to it!

POST IT NOTES

Use post it notes – write out as many key words, dates and facts that you can remember in a minute.

FLASH CARDS

Write the key words, dates or facts on one side and the explanation/definition on the other side. Test your memory by asking someone to quiz you on either side of the flash card.

PRACTICE

Sometimes re-writing notes and writing out key facts and information repeatedly can really help it stick.

RAG RATE

Use red, orange and green to highlight and colour code how confidently you can remember facts and key words.
RED – I need to revise the most.
AMBER – I need to go over.
GREEN – What I have mastered.

LOOK, SAY, COVER, WRITE, CHECK

LOOK at your knowledge organiser and take the information in.
SAY the facts and key words out loud.
COVER your knowledge organiser.
WRITE down everything you can remember on a blank piece of paper.
CHECK what you know and did not know.

REVISING EXAM QUESTIONS

Box the question
Observe the marks available
Line key vocabulary
Do your best (do not give up)
Extend your vocabulary
Re-read your work and your answers

READ ALOUD

Practice reading out facts, key words and information out loud – it really helps you to remember it.

SKETCH IT

Draw pictures to represent facts, words or dates. It could even be a symbol that helps you to remember a difficult word.

Q&A

Make up questions, where the answers are on your knowledge organiser. Write different questions that will help you to remember the answers.

TEACH IT

Teach someone the facts or get someone to test you. Test someone else on the questions you would be asked.

Art – Year 9 Cycle A

| Tier 2 Vocabulary | | | Tier 3 Vocabulary | | |
|---|----------------------|---|-------------------|-------------------------|--|
| 1 | Arrangement | This describes the organisation of objects placed together | 1 | Still Life | A work of art depicting inanimate subject matter- objects that do not move. |
| 2 | Overlapping | Layering objects on top of one another | 2 | Composition | This describes the positioning of different elements in an artwork |
| 3 | Perspective | Creating an impression of height, width and depth when drawing on a 2D surface | 3 | Tonal Value | This is how light or dark something is compared to other things around it |
| 4 | Proportion | This describes the size of different parts of a picture in relation to each other | 4 | Negative Space | This is the empty or open space around and between objects that helps to define their shape. |
| 5 | Contrast | The striking difference between two things near or next to each other | 5 | Gradual Blending | Using your medium skilfully to smoothly change from one tone/colour to another. |
| 6 | Distance | The length of the space between two points or objects | 6 | Form | This is a 3 dimensional shape created using tone |
| 7 | Foreground | The part of a picture that is nearest to the observer | 7 | Dimensions | Measurements of an object in a particular direction- height, width and depth |
| 8 | Background | The part of a picture that appears furthest from the observer | 8 | Aesthetic | A term to describe the beauty of art- aesthetically pleasing is art that you feel looks appealing |
| 9 | Birdseye View | A view from a high angle looking down | 9 | Mark making | This describes the range of ways you can make a mark |
| 10 | Consumerism | This is the idea that it is good and desirable to buy and use a lot of goods | 10 | Typography | The design and style of letterforms as a type of Graphic Art |
| Challenge Questions | | | 11 | Pop Art | An Art movement in which everyday objects were used as subject matter due to a rise in consumerism |
| <ol style="list-style-type: none"> 1. Why is the artist Caravaggio famous for his use of chiaroscuro? 2. Why was the advent of Pop Art considered as a revolution in the art world? How did consumerism affect this? 3. Is there any point to Photorealism? Why not just take a photo? What does the artist and the observer gain from this type of art? | | | 12 | Chiaroscuro | The use of highly contrasting light and dark areas to create the illusion of 3D forms on a flat surface |
| | | | 13 | Abstract | Art that does not attempt to represent reality |
| | | | 14 | Representational | Something that looks realistically like what it is meant to be |
| | | | 15 | Photorealism | A style of art in which paintings and drawings are so painstakingly realistic that they look like a photograph |

Art – Year 9 Cycle A



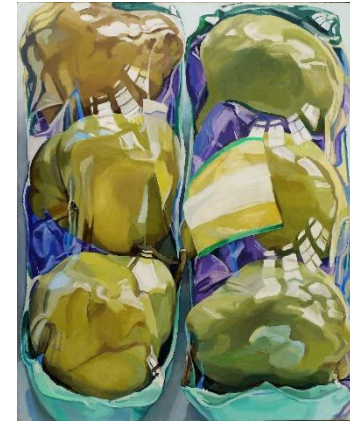
CARAVAGGIO



ANDY WARHOL



SARAH GRAHAM

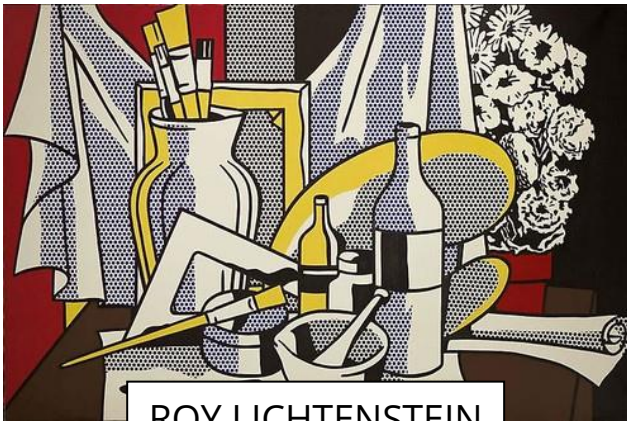


JANET FISH

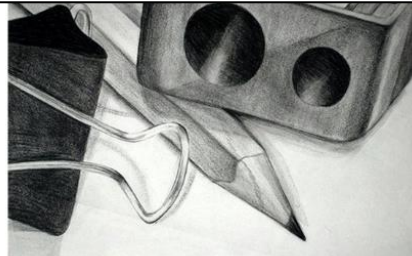


MICHAEL
CRAIG MARTIN

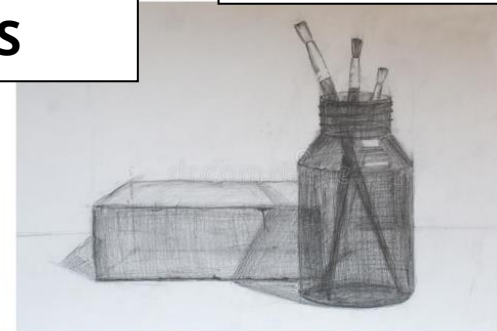
COMPOSITION IDEAS



ROY LICHTENSTEIN



CLOSE UP
COMPOSITION



RULE OF THIRDS
COMPOSITION



TRIANGULAR
COMPOSITION

Dig Deeper

Explore the work of still life artists by visiting exhibitions at Art galleries. If you cannot go in person take Virtual Tours on gallery websites.

<https://www.tate.org.uk/visit/tate-modern>

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

<https://www.moma.org/>

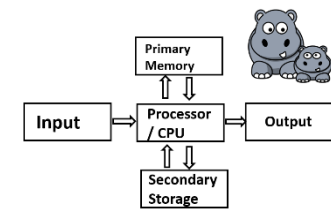
BE STRONG - Knowledge Organiser

Topic: Computing

| Tier 2 Vocabulary | | | Tier 3 Vocabulary | | |
|---|---|--|-------------------|---|--|
| 1 | Identify/ State E | Give/provide an answer | 1 | Secondary Storage <i>Optical (focus on the O), magnetic, and Solid State.</i> | Non-volatile storage internal (inside) or external (outside) a computer. This can be optical, magnetic or solid state. CQ1 |
| 2 | Describe E | Provide detail to your answer | 2 | CPU/ Processor <i>brain of the computer</i> | Central processing unit – It controls all of the computer’s activity. |
| 3 | Evaluate E | State what is good and bad with what you are describing. | 3 | Peripheral device <i>Think of your peripheral vision</i> | Hardware which is outside the CPU . This could be an input, output or storage device. |
| 4 | Internal/ External | Something that is inside/outside. | 4 | Pixel | The smallest unit of a digital image or graphic that can be displayed and represented on a device’s monitor. |
| 5 | Analogy <i>Metaphor/ simile</i> | A comparison between one or more objects. | 5 | Metadata | Sets of data that describes and gives information about other data CQ7 |
| 6 | Characteristic | Something that describes an object. CQ1,3 | 6 | Lossy Compression | Method to reduce the file size by eliminating data in the file. CQ4, 5 |
| 7 | Conversion | The process of changing or causing something to change from one form to another CQ8 | 7 | Boolean | A data type used to represent two possible values: True or False. |
| 8 | Switches | An act of changing or adopting one thing in place of another | 8 | Logic Gates | A device that performs a boolean logic operation with one or more binary inputs CQ2 |
| 9 | Denary | Our base 10 number system using number 0-9 CQ8 | 9 | Binary / Machine code <i>1s and 0's</i> | A series of 1’s and 0’s. It is a low-level language (C) and it is the only language a computer can understand. CQ6 |
| 10 | Frequency | The rate at which something occurs over a period of time | 10 | Truth Table | A table showing the outputs for all possible combinations of logic gates or circuits. |
| 11 | Representation | The description of someone or something in a particular way. | 11 | Hexadecimal | A numerical notation that is base 16. |
| <p>Key: E – exam command word C = Challenge words CQ = specific challenge question associated. <i>red text</i> is hints to help avoid misconceptions and remember the knowledge.</p> | | | | | |



Key Diagrams



You can't forget your previous learning! Ensure you keep your KO safe year on year.

| | Magnetic HDD | Solid State Drive (SSD) | Optical Media |
|-------------|--------------|-------------------------|---------------|
| Cost | Medium | High | Very low |
| Capacity | High | Medium | Very Low |
| Durability | Medium | High | Medium |
| Reliability | Medium | High | Low |
| Portability | Medium | High | Very High |
| Speed | Medium | High | Slow |

AND gate

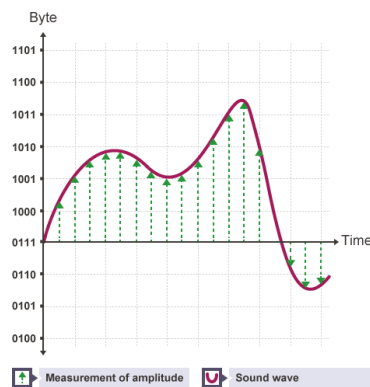
| Input A | Input B | Output |
|---------|---------|--------|
| 0 | 0 | 0 |
| 1 | 0 | 0 |
| 0 | 1 | 0 |
| 1 | 1 | 1 |

NAND gate

| Input A | Input B | Output |
|---------|---------|--------|
| 0 | 0 | 1 |
| 1 | 0 | 1 |
| 0 | 1 | 1 |
| 1 | 1 | 0 |

OR gate

| Input A | Input B | Output |
|---------|---------|--------|
| 0 | 0 | 0 |
| 1 | 0 | 1 |
| 0 | 1 | 1 |
| 1 | 1 | 1 |



Challenge Questions/ Tasks

- 1 A photographer wants to send wedding photos to her client. Suggest a suitable **storage technology** for her and justify your choice.
- 2 Draw and label all 7 of the **logic gates**.
- 3 **Explain** why an **analog** recording is closer to the original sound than a **digital** recording?
- 4 Compare the difference between **lossy** and **lossless** compression.
- 5 Explain why it would be more suitable to save a picture using lossy compression than a word document.
- 6 Describe why a computer uses binary.
- 7 State the different metadata that will be attached to a picture/image.
- 8 **Convert** the numbers 32, 118, 191 & 205 from denary to binary.
- 9 **Convert** the binary numbers 101101, 100011, 1101101 to denary and hexadecimal.
- 10 Create a **presentation on the different file extensions and how they affect the bitmap of an image**
- 11 How many links can you make with the words above? Can you create a mind map to illustrate this?

(Be brave, dig deep and discover) People, places, events, emotions (website links, famous people, historical, people, events). Recommended texts/websites/writers

**Be
Brave
Kind
And
Strong**

- https://www.youtube.com/watch?v=_0KIfGxp37E&t=258s - **search computer science tutor secondary storage on YouTube to discover more about technologies.**
- <https://www.bbc.co.uk/bitesize/subjects/zvc9q6f> - **go over or learn more content here!**
- <https://www.it4nextgen.com/emerging-trends-computer-science/> - **learn about some future technologies**
- https://www.youtube.com/watch?v=O5nskjZ_Gol&t=12s - **find out about early computing here**
- https://tools.withcode.uk/keywords/subject/ks3_computing - **a great website where you can play games and revise computing knowledge.**
- <http://the.computing.cafe/8e35d438/0ad728cd> - **Find out more about how computers work and pioneers here**

SCIENCE BE STRONG - Knowledge Organiser - Y9 Cycle A

Science Command Words



| Tier 2 Word | Meaning |
|------------------|---|
| Calculate | Use numbers given in the question to work out the answer. |
| Conclude | Look at both sides of an idea and come to a decision. |
| Define | Say the meaning of something. |
| Describe | Recall some facts or processes in a scientific way. |
| Evaluate | Make points for and against an idea and come to a conclusion. |
| Explain | Say the reasons for something happening. |
| Label | Point out the correct names on a diagram. |
| Measure | Find the amount, size or degree of something. |
| Predict | Give a likely outcome. |
| Plan | Write a method. |

Units



| Quantity being measured | Unit in words and symbols | Quantity being measured | Unit in words and symbols |
|-------------------------|---------------------------|-------------------------|------------------------------|
| Length | metre m | Temperature | degrees Celsius °C |
| Mass | gram g | Speed | metres per second m/s |
| Pressure | Pascal Pa | Density | square metres m ² |
| Force | Newton N | Volume | cubic metres m ³ |

Experimental Words



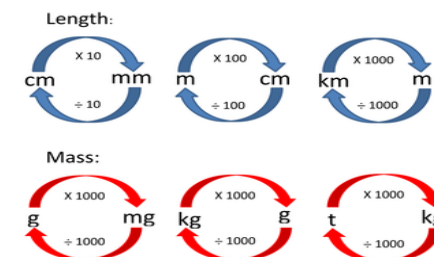
| Tier 3 Word | Meaning |
|-----------------------------|---|
| Reliable | The original experimenter repeats the investigation using same method and equipment and obtains the same results. Also known as repeatable . |
| Variables | These are physical, chemical or biological quantities. |
| Control Variable | Control variable are the parts of the practical that have to be kept constant or monitored. |
| Dependent Variable | Dependent variable is the part of the practical that is measured. |
| Independent Variable | Independent variable is the part of the practical that is changed on purpose. |
| Anomalies | These are values in a set of results which are judged not to be part of the variation caused by random uncertainty (an odd one out) |

Maths Challenge



| Quantity measured | Name of unit | Symbol |
|-------------------|-------------------|----------------|
| length | metre | m |
| mass | kilogram | kg |
| time | second | s |
| force | newton | N |
| area | square metres | m ² |
| volume | cubic metres | m ³ |
| temperature | degrees Celsius | °C |
| speed | metres per second | m/s |
| current | ampere or amp | A |
| energy | joule | J |
| voltage | volt | V |
| pressure | pascal | Pa |
| power | watt | W |
| frequency | hertz | Hz |

Converting Units



| FROM | TO | OPERATION | BY |
|------|----|-----------|-----------|
| mm | cm | ÷ | 10 |
| mm | m | ÷ | 1000 |
| mm | km | ÷ | 1,000,000 |
| cm | mm | x | 10 |
| cm | m | ÷ | 100 |
| cm | km | ÷ | 100,000 |
| m | mm | x | 1000 |
| m | cm | x | 100 |
| m | km | ÷ | 1000 |
| km | mm | x | 1,000,000 |
| km | cm | x | 100,000 |
| km | m | x | 1000 |

Physics equations and rearranging



Density = mass/volume
Make m the subject.

$$P = \frac{m}{V}$$

$$P \times V = m$$

Values
Equation
Substitute
Rearrange
Answer
Units

Extra Lesson support:

Need more help or missed a lesson? Access the content for these lessons with the QR codes below:

Chemistry 1-5

Oak Lessons 1, 6, 7, 8, 9, 10.

Physics 1-5

Oak Lessons 1, 2, 3, 4.

Biology 1-5

Oak Lessons 4, 5, 13, 14, 15.

SCIENCE BE STRONG - Knowledge Organiser - Y9 Cycle A

Density


| Tier 3 Word | Meaning |
|------------------------|---|
| State of matter | One of three different forms that a substance can have: solid, liquid, gas. |
| Change of state | Changing of one state to another e.g. solid to liquid |
| Sublimation | Physical change A change in which no new substances are formed, such as changes of state. |
| Physical change | A change in which no new substances are formed, such as changes of state. |
| Chemical change | A change that results in a new substance being formed. |
| Compress | To squash something together to make it smaller. |
| Density | The mass of a substance per unit volume. It has units such as kg/m ³ or g/cm ³ . |
| Kinetic energy | The model that explains the properties of different states of matter in terms of the movement of particles. |

Density is the **mass per unit volume**. It can be measured in several ways.

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

$$\rho = \frac{m}{v}$$

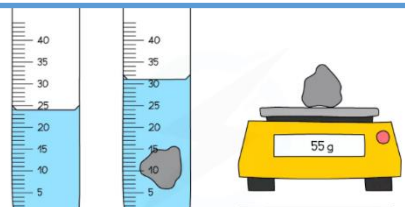
Density/Mass/Volume



m = 7.36 g

← 2 cm →

2. A cube of ice of side 2 cm has a mass of 7.36 g. Find the density of ice.

$$d = \frac{m}{v} \quad d = \frac{7.36}{8} = 0.92 \text{ g/cm}^3$$


e.g. VOLUME OF OBJECT = 31 - 24 = 7cm³

DENSITY = $\frac{\text{MASS}}{\text{VOLUME}}$

= $\frac{55}{7}$

= 7.9 g/cm³

WE SAW EARLIER THAT THIS IS THE DENSITY OF IRON, SO THE OBJECT IS MADE FROM IRON.



Ring A
Mass = 33.40 g
Volume = 2.0 cm³



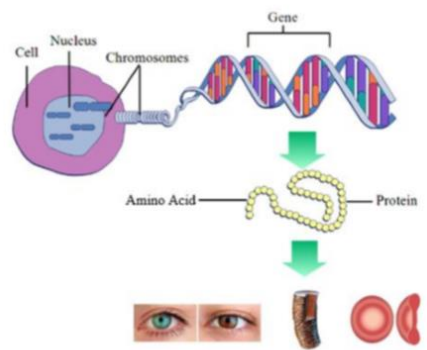
Ring B
Mass = 42.24 g
Volume = 3.3 cm³

$$\text{Density of Ring A} = \frac{\text{mass}}{\text{volume}} = \frac{33.40 \text{ g}}{2.0 \text{ cm}^3} = 16.70 \text{ g/cm}^3$$

$$\text{Density of Ring B} = \frac{\text{mass}}{\text{volume}} = \frac{42.24 \text{ g}}{3.3 \text{ cm}^3} = 12.80 \text{ g/cm}^3$$

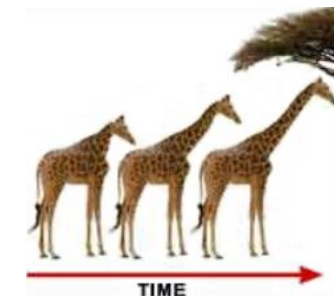
Genetics

| Tier 3 Word | Meaning |
|--------------------------------|---|
| Genome | All the DNA in an organism. |
| Variation | Differences in the characteristics of organisms. |
| Genetic Variation | Differences between organisms passed on to offspring by their parents |
| Environmental variation | Differences between organisms caused by environmental factors |
| Polymer | A chain of similar repeating units |
| Double helix | Two helices (strands) joined together. |
| Mutation | A random change to a gene |

| DNA, Genes & Chromosomes | Organ | Definition |
|--|-------------------|---|
|  | DNA | Deoxyribonucleic acid. A polymer made of sugar and phosphate groups joined to bases. One molecule of DNA is found in each chromosome. |
| | Gene | Section of the long strand of DNA found in a chromosome, which often contains instructions for a protein |
| | Chromosome | A structure found in the nuclei of cells. Each chromosome contains one enormously long DNA molecule packed up with proteins. |

Natural Selection and Evolution

- 1) Mutations cause variation in the population.
- 2) Mutations cause changes in the characteristics of a species.
- 3) Some of the species are more adapted to the environment than others.
- 4) Organisms more adapted to the environment survive.
- 5) Beneficial characteristics are passed on to offspring.
- 6) These characteristics become more prevalent in the population.

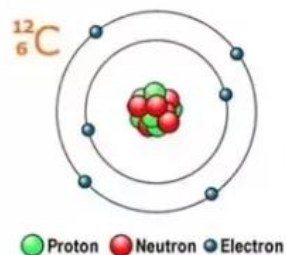
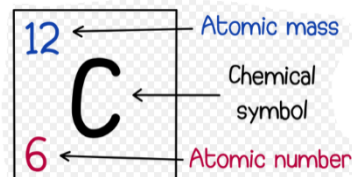
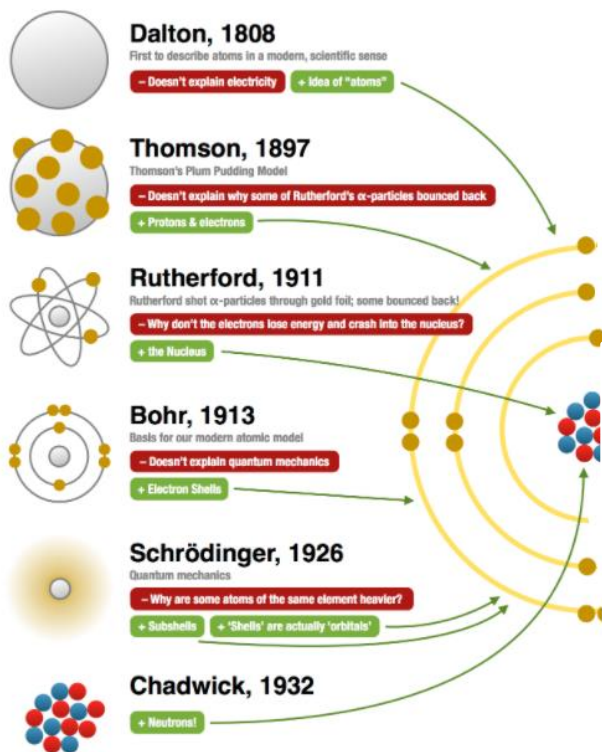


SCIENCE BE STRONG - Knowledge Organiser - Y9 Cycle A

Atomic Structure

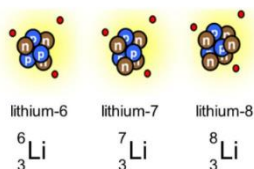
| Tier 3 Word | Meaning |
|-----------------------|--|
| Acid | A substance with a pH value of between 0 and 6 |
| Base | A substance with a pH value of between 8 and 14 |
| Alkali | A base that is dissolved in water |
| Indicator | A substance that can test whether a substance is acidic or basic |
| Neutralisation | The process that occurs when an acid and a base react together |
| Salt | The product formed from neutralisation |

History of the atom



Electronic configuration:
Maximum number of electrons in each shell: 2.8.8

Isotopes are different forms of the same element with different number of **neutrons**.



Deep Dive

Here are some websites and links to support and upgrade your learning!

Useful websites

<https://www.dogonews.com/category/science>
<https://www.sciencenewsforstudents.org/>
<https://sciencejournalforkids.org/>
<https://edu.rsc.org/eic/section/the-mole?adredir=1>
<https://cellfiemagazine.wixsite.com/blog>
<https://informationisbeautiful.net/beautifulnews/>
<https://www.positive.news/environment/renewal-why-clean-energy-should-power-the-new-normal/>
<https://www.tweentribune.com/>
<https://www.nationalgeographic.com/>

Useful podcasts

<https://www.bbcearth.com/podcast/>
<https://www.rebelgirls.com/pages/podcast>



Other fun websites

<https://scaleofuniverse.com/>
<https://phet.colorado.edu/>
<https://www.biointeractive.org/classroom-resources/how-animals-use-sound-communicate>

Tier 2 Vocabulary

| | | |
|----------|----------------|---|
| 1 | Customer | A person who will buy OR use your product. |
| 2 | Client | A person or company asking you to work for them. |
| 3 | Design Brief | A guide for a project given to you by the client. |
| 4 | Sustainability | Avoidance of the depletion of natural resources in order to maintain an ecological balance. |
| 5 | Environment | The natural world, as a whole or in a particular geographical area, especially as affected by human activity. |
| 6 | Eco-Friendly | Not harmful to the environment. |

Tier 3 Vocabulary

| | | |
|----------|-------------------|---|
| 1 | Ore | The solid material which metal is taken from. |
| 2 | Ferrous Metal | A metal which contains iron. |
| 3 | Non-Ferrous Metal | A metal which does not contain iron. |
| 4 | Alloy | A metal made from 2 or more metals to improve its properties. |
| 5 | Pewter | Alloy metal which will melt at low temperatures. Contains many metals including Tin and Copper. |

Tier 3 Vocabulary

| | | |
|-----------|------------|--|
| 6 | Mould | A hollow container designed for casting. |
| 7 | Casting | The process of using a mould to pour molten metal inside and create a shape when the metal has cooled. |
| 8 | Sprue Hole | The gap where the metal enters the mould. |
| 9 | Sprue | The metal which is left over from moulding which takes the shape of the sprue hole. |
| 10 | R Reduce | Minimise the amount of material and energy used in the production or use of the product. |
| 11 | R Recycle | Take an existing product that has become waste and reprocess the material to use in a new product. |
| 12 | R Reuse | Take an existing product that has become waste and use the material or parts for another purpose, without processing it. |
| 13 | R Repair | When a product breaks down or doesn't function properly, you should be able to fix it. |
| 14 | R Refuse | Don't use or buy a product if you think you don't need it or if it is bad for the environment. |
| 15 | R Rethink | Ask if we can sustain our current way of life and the way we design and make. Come up with new solutions. |
| 16 | Hacksaw | Saw design to cut metals. Can be used with some plastics. |
| 17 | File | A tool used to remove material and shape metal or plastic. |
| 18 | Metal Vice | Used to grip pieces of metal to allow you to work on it. |

Tier 2 Vocabulary

| | | |
|----|-------------------|--|
| 19 | Wet and Dry Paper | Abrasive paper used to create a finish on metal. Use rough paper first, moving to finer. |
| 20 | Brasso | Liquid containing small particles to polish the surface of metal. |
| 21 | Pillar Drill | Used to cut holes in materials. Creates an accurate hole. |

Key Diagrams and Images

Hacksaw



Metal Vice



Wet and Dry Paper



File



Pillar Drill

Challenge Questions/Tasks

- 1 What are the characteristics of the different categories of metal?
- 2 Research different artists and create a image mood board of work that inspires you.
- 3 Use the mood board to create different 2D Designs for a keyring that will be laser cut for reclaimed materials.
- 4 Draw as many isometric cuboid shapes on a plain piece of A3 paper. For each shape, draw a more complex shape inside.
- 5 Create a unique packaging solution for your jewellery design using materials from your home that would normally thrown in the bin.
- 6 Research online about new and emerging manufacturers that aim to reduce their environmental impact and write a summary of what you find.

BE BRAVE, DIG DEEP AND DISCOVER

- 1 Practice your isometric drawing skills by following the video tutorials on the Bolder D&T YouTube. Go to the isometric drawing playlist.
https://www.youtube.com/channel/UCxJbos3MpuHuC_r8YI2moWg
- 2 Test your knowledge using the flashcards available on Quizlet. Go to the Year 9 Zero Waste Jewellery set.
<https://quizlet.com/>
- 3 Watch some great videos that explore all of the different elements of Design and Technology.
<https://www.bbc.co.uk/bitesize/subjects/zfr9wmn>
- 4 Explore what is currently on offer at some of London's best museums.
<https://designmuseum.org/> - The Design Museum
<https://museumofbrands.com/> - The Museum of Brands
<https://www.saatchigallery.com/> - The Saatchi Gallery
<https://www.tate.org.uk/visit/tate-modern> - The Tate Modern

Drama - Cycle A - 'Movie Mayhem'

Seven States of Tension

- 1) Catatonic - Completely relaxed. If you have to move or speak it's a real effort
- 2) Californian - Everything you say is cool, relaxed, probably lacking in credibility
- 3) Natural - Normal behaviour. You are totally present and aware. It is the state of tension before something happens.
- 4) Alert - Look at things. Sit down. Stand up. Indecision. Mr Bean.
- 5) Melodrama - more tension than normal. The crisis is about to happen. All the tension is in the body, concentrated between the eyes.
- 6) Passionate - Bigger than melodrama, really scared, or overly happy amazingly excited act very, very over the top.
- 7) Tragic - so tense can't even move - petrified, so incredible excited.



Tier 2 Vocabulary

| | |
|--------------------|--|
| Climax | The most intense and exciting part of something. |
| Anti-climax | When the most intense of exciting part of something is expected but does not happen. |
| Mannerism | A gesture or way of speaking or behaving. |
| Vocal | Using vocal techniques to create a character such as volume, pace, pitch, and tone. |
| Physical | Using physical techniques to create a character such as movement, action, body language and gesture. |
| Justify | To show yourself to be right by explaining your reasons. |
| Describe | To give a detailed account of something. |
| Analyse | To look at something very closely in order to explain it. |
| Evaluate | To explain how good or bad something is. |

Tier 3 Vocabulary

| | |
|----------------------------------|---|
| Synchronised Movement | Two or more people create movements at the same time. |
| Thought-tracking | A character steps out of the scene to address the audience about their feelings and thoughts on a situation. |
| Still image/ freeze frame | A frozen picture that communicates meaning. |
| Marking the moment | Highlighting the most important moment in a scene in order to draw the audience's attention to something significant. |
| Role on the wall | Writing on the outside of a character outline what other character's think of you and writing on the inside of your character outline what your character thinks of themselves. |
| Devising | To create an original piece of drama. |
| Explorative Strategy | Something you can use to explore the issues in a text and characters to develop a better understanding of the drama you are creating. |
| Soundscape | Create many different sounds to create an atmosphere that reflects the situation you are creating. |
| Konstantin Stanislavski | A key practitioner who developed a naturalistic approach to acting. |
| Cross-cutting | To change the focus between two scenes. |
| Stimulus | Using an image, sound, prop or any type of text to generate ideas. |
| Tension | When you create mental and emotional strain for the audience. |
| Physical Theatre | A form of theatre that puts emphasis on movement rather than dialogue. |
| Improvisation | To make something up on the spot. |

Dig Deeper - Further Reading

BBC BITESIZE- Explorative strategies

<https://www.bbc.co.uk/bitesize/guides/zxpc2hv/revision/1>

BBC BITESIZE - Konstantin Stanislavski

<https://www.bbc.co.uk/bitesize/guides/zxn4mp3/revision/1>

BBC BITESIZE - Physical Theatre

<https://www.bbc.co.uk/bitesize/guides/ztfk6sg/revision/1>

Make sure you check out your local theatre: *Richmond Theatre, The Orange Tree theatre, Rose Theatre, Lyric Hammersmith, National Theatre*

The 5 C's: Concentration, Co-operation, Creativity, Confidence, Communication

Drama - Cycle A - 'Movie Mayhem'

Writing a drama evaluation:

Start by introducing:

- What the performance was called/about
- A brief summary of the plot
- How well you think the performance went

Then use **PEEL** to evaluate any of the areas below (unless specified otherwise)

- Physical or Vocal Skills (Choose from your Knowledge Organiser)
- Use of staging/stage space/spatial awareness
- Use of props/lighting/sound
- The overall structure of the performance.

Conclude with: How successful the performance was overall and why.

P oint: What is the area you will be evaluating and what is the **point** of your paragraph?

E xample: Give a **specific** example of what acting skills were used – paint a picture of this moment using

E xplain: **Explain** the effect of this moment on the audience – why were these acting skills used?

E valuate: Now **evaluate** – was this moment effective? Why/why not?

L ink: **Link** it back to the original point and draw the paragraph to a conclusion – how **successful** was the moment?

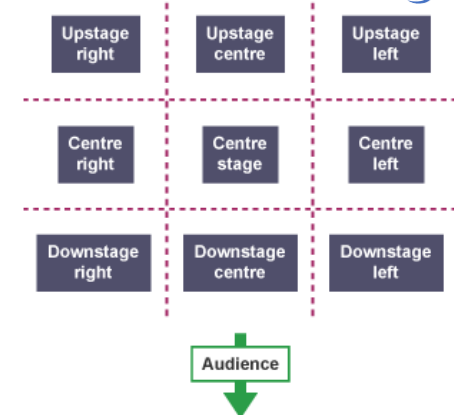
TOP TIPS FOR CREATING:

- ✓ Be co-operative! (Take part and follow the instructions of your team members)
- ✓ Listen respectfully to others' ideas
- ✓ Share your own ideas and make contributions
- ✓ Stay in your working space
- ✓ Plan your time effectively and structure your rehearsal
- ✓ Think about where your audience will be and rehearse with this in mind
- ✓ Make sure everyone knows what they are doing
- ✓ Practice your transitions (the moments between a scene change)

TOP TIPS FOR PERFORMING:

- ✓ Perform with confidence – do not be embarrassed!
- ✓ Stay in role at ALL times, even if something goes a bit wrong!
- ✓ Make eye contact with the audience to engage them
- ✓ Project your voice loudly and clearly
- ✓ Use a range of vocal and physical skills to show strong and convincing characterisation!
- ✓ Make sure you are facing the audience, so they can see your facial expressions
- ✓ Don't shuffle about – move with purpose!

Areas of the Stage
























Remember: The stage is always from the **actor's** point of view, as they are the ones standing on the stage. Demonstrate good **spatial awareness** by using all areas of the stage, where appropriate.




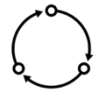








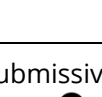
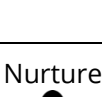


Challenge Questions

1. Describe how one or more actors in a play that you have seen (or a film/ TV show you have watched) used their vocal and physical skills to interpret their role in the performance. Analyse and evaluate how successful they were in communicating their role to the audience.
2. Describe how a play that you went to see used lighting and/ or sound to create a mood or atmosphere. Analyse and evaluate how successful it was in creating mood or atmosphere for the audience.

Year 9 English Term 1: Jane Eyre by Charlotte Bronte

| Tier 2 key vocabulary | | | Tier 3 key vocabulary Pink = The writer's techniques | | | Vocabulary for analytical writing | | |
|-----------------------|--|---|---|--|--|-----------------------------------|---|--|
| 1 | rural  | Relating to the countryside, rather than the town. | 1 | Victorian society  | The period of British history when Queen Victoria ruled; 1837-1901. Jane often describes the oppressive social ideas of Victorian England. | 1 | suggests  | Explaining what you think a quote could mean and what you interpret from it. |
| 2 | antipathy  | A very strong dislike of something or someone | 2 | theme  | The central ideas of a novel/text. | 2 | highlights  | What does the writer draw attention to/what stands out in the quotation. |
| 3 | impudence  | The trait of being rude and impertinent. | 3 | Gothic literature  | Writing that uses elements of fear, horror, death, and gloom, as well as romantic elements and very high emotions. | 3 | reveals  | Interpreting what the writer is trying to expose or show the reader (in a quotation). |
| 4 | intimidation  | Having a frightening, overawing, or threatening effect. | 4 | theist  | The belief in one God as the creator and ruler of the universe, without rejection of revelation. | 4 | emphasises  | The particular importance or attention that is given to something. |
| 5 | formative  | Relating to the time when someone or something is starting to develop in character. | 5 | oppression  | Prolonged cruel or unjust treatment or exercise of authority. | 5 | metaphor  | A word or phrase used to compare two unlike objects, ideas, thoughts or feelings to provide a clearer description. |
| 6 | benevolence  | Kindness and generosity. | 6 | repentance  | The action of showing sincere regret or remorse. | 6 | tone  | The attitude or approach that the author takes toward the work's central theme or subject. |
| 7 | punitive  | Inflicting or intended as punishment. | 7 | Juxtaposition  | Two things being seen or placed close together with contrasting effect. | 7 | thesis  | The main idea that you want to discuss throughout an essay. |

Year 9 English Term 1: Jane Eyre by Charlotte Bronte

| | | | | | | | |
|----|---|--|----|---|---|------------------------|--|
| 8 | <p>mortality</p>  | The condition of one day have to die, being subject to death. | 8 | <p>comparison</p>  | The similarities or differences between two things or people. | CHALLENGE TASKS | |
| 9 | <p>Endurance</p>  | The power to withstand hardship or stress. | 9 | <p>symbolism</p>  | The use of symbols throughout a text to represent ideas. | | |
| 10 | <p>Infliction</p>  | An act causing pain or damage. | 10 | <p>allusion</p>  | A technique used to make an indirect reference to something that is intended to make you think of particular person or thing. | 2 | Write your own piece of creative writing about an incident of bullying. |
| 11 | <p>morality</p>  | Distinction between right and wrong or good and bad behaviour. | 11 | <p>pathetic fallacy</p>  | A technique used to give human emotions or qualities to nature or inanimate objects. | 3 | Write your own description of the Red Room. |
| 12 | <p>Dependent</p>  | Someone who relies on another person to support them financially. | 12 | <p>Hypocrite</p>  | Someone who says one thing, but does the opposite at another time. | 4 | Compare Jane Eyre to another famous orphan (could be from a novel or film) |
| 13 | <p>Humiliate</p>  | To make someone feel stupid or ashamed. If something makes you feel stupid or ashamed. | 13 | <p>comeuppance</p>  | When a villain receives some form of punishment for what they did. | 5 | How did Victorians punish children for poor behaviour? |
| 14 | <p>Submissive</p>  | Allowing yourself to be controlled by other people or animals. | 14 | <p>Nurture</p>  | Care that is given to someone while they are growing and developing. | 6 | Write your own piece of creative writing about childhood fears. |
| | <p>meek</p>  | Quiet and unwilling to disagree or fight or to strongly support personal ideas and opinions. | 15 | <p>Governess</p>  | A woman who cares for and supervises a child especially in a private household. | 7 | Write Jane's diary as she thinks about going to school. |
| | | | | | | 8 | Were there different types of schools during the Victorian era? What were they like? What subjects did students study? |
| | | | | | | 9 | Write a description of Mr Brocklehurst. Is he a likeable character? Why? Why not? |
| | | | | | | 10 | Do you think that Mr Brocklehurst and Mrs Reed should be trying to change Jane's personality? Explain your answer using references to the novel. |
| | | | | | | 11 | What are Jane's opinions of the upper classes and the lower classes? |
| | | | | | | 12 | The narrator in the novel is an older Jane remembering her childhood. Find a few places where the voice of the older Jane intrudes on the narrative. |

Year 9 English Term 1: Jane Eyre by Charlotte Bronte

KEY DIAGRAMS AND QUOTES

"I will never call you aunt again as long as I live; I will never come to see you when I am grown up."

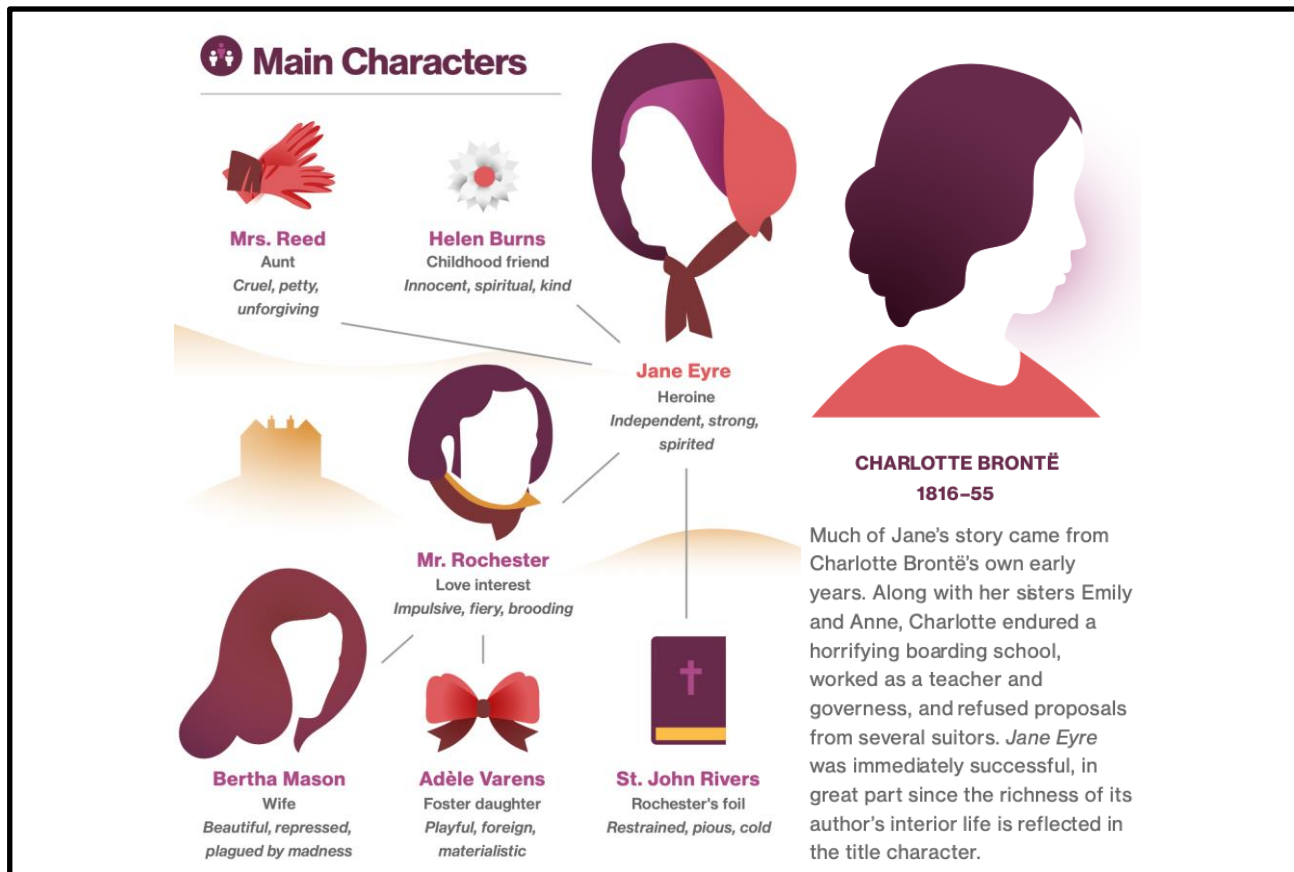
"Even for me life had its gleams of sunshine."

"I stood lonely enough; but to that feeling of isolation I was accustomed; it did not oppress me much."

"For it becomes my duty to warn you that this girl, who might be one of God's own lambs, is a little cast-away..."

"I desired liberty; for liberty I gasped; for liberty I uttered a prayer; it seemed scattered on the wind then faintly blowing."

(Who says these quotes? What do these quotes reveal? Can you analyse them?)



BE BRAVE, DIG DEEP AND DISCOVER

RESEARCH:

Research the Bronte sisters – why are they so famous as sisters and individually?

<https://www.bronte.org.uk/the-brontes-and-haworth/haworth>



WATCH:

Watch how they created The National Theatre production of *Jane Eyre* – how did they adapt it for the stage?



Watch these scenes from the 2011 film version. What do you notice about Jane and Rochester's relationship?

LISTEN:

Listen to this podcast: *Jane Eyre – In Our Time*. What key facts do you learn?



READ:

Read an article where famous female writers discuss *Jane Eyre*. Why is the novel so famous still today?



Year 9 Food Technology Knowledge Organiser

Tier 2 Vocabulary

Tier 3 Vocabulary

| | | | |
|------------------------|---|-----------------------------|--|
| Ginger | Ginger is the spicy root of a tropical plant which is used in cooking | Nutrition Labels | Nutrition labels on food packaging are required by law in the UK. They are often displayed as a panel or grid on the back or side of packaging. |
| Garlic | Garlic is a plant of the onion family that has a strong taste and smell and is used in cooking to add flavour it is also used in herbal medicine. | High blood pressure | A higher than normal force of blood pushing against the arteries. |
| Chilli | Chilli is a small red or green seed case from particular types of pepper plant that is used to make some foods very hot and spicy. | Intensively farmed | is a farming system that aims to produce as much yield as possible, usually with the use of chemicals and in a restricted area. Genetically modified – animals and plants that have their genetic information modified by scientist. |
| Food security | Food security is about ensuring that all people, at all times, have access to enough safe and nutritious food required for an active, healthy life. | Genetically modified | animals and plants that have their genetic information modified by scientist. |
| The use of food | The use of food is about how the body uses the nutrients in food. People need to know how to use food and eat a balanced diet. | Food hygiene | are the conditions and measures necessary to ensure the safety of food from production to consumption. |

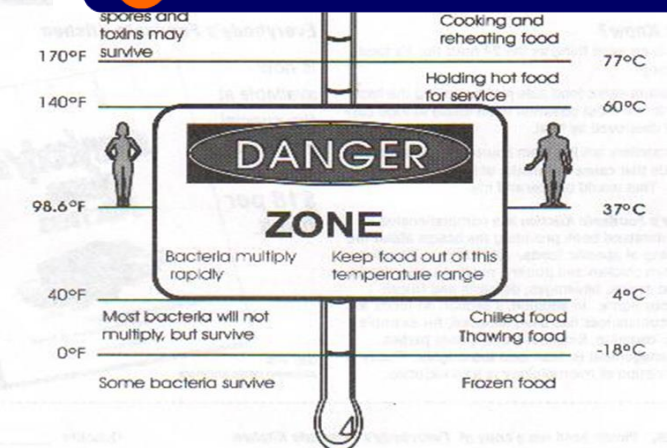
Year 9 Food Technology Knowledge Organiser

Challenge Questions

- + Keep food below 5°C to _____ bacteria _____.
- + _____ food to stop bacteria getting to it.
- + Use food _____ its 'use by' date.
- + _____ raw and ready-to-eat foods _____.
- + Make sure _____ from raw meat don't _____ onto food which isn't going to be cooked.

| | | | |
|------|-------------|--------|------------|
| drip | Cover | juices | separately |
| stop | multiplying | Store | before |

Fill in the missing words:



Cooking Terms

WORD SEARCH

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | H | U | C | K | M | A | D | C | X | M | O | I | S | T | E | N | U | K |
| E | K | N | E | A | D | P | O | A | C | H | L | D | E | S | E | M | N | M |
| T | K | S | E | H | Y | A | Z | Q | Q | Z | I | U | R | T | O | C | S | I |
| U | E | T | P | O | H | C | K | Y | W | W | O | S | O | Q | A | T | I | X |
| A | S | L | Y | D | A | S | H | F | H | N | B | T | C | C | E | R | A | D |
| S | E | S | I | Y | M | A | R | I | N | A | T | E | S | E | R | R | G | G |
| D | E | E | P | F | R | Y | S | R | H | L | A | A | P | F | E | U | R | X |
| U | Q | Z | U | I | Y | K | P | A | S | A | E | F | S | M | Z | E | S | T |
| E | K | R | A | S | E | S | E | L | S | T | B | S | M | R | T | B | I | H |
| H | C | N | A | L | B | C | P | C | U | W | E | I | A | L | S | T | I | R |
| C | O | A | T | U | G | A | R | L | R | R | S | C | I | E | G | E | O | Y |
| B | H | J | S | M | S | L | I | E | T | D | U | F | U | G | R | U | A | S |
| R | R | U | U | E | E | D | G | E | A | B | L | E | N | D | X | G | X | R |
| A | T | O | L | L | A | E | T | R | T | M | A | O | O | E | E | M | M | P |
| I | T | N | I | L | I | S | R | M | I | N | A | S | F | R | B | R | I | J |
| S | T | T | J | L | A | E | O | U | M | L | E | S | I | D | U | N | M | W |
| E | M | X | A | B | K | W | N | N | P | U | L | D | H | F | C | Z | H | Y |
| G | R | I | N | D | W | C | E | N | D | R | L | L | L | H | T | I | C | I |
| E | K | A | B | D | N | I | L | B | E | X | W | L | P | A | P | A | R | E |

- AL DENTE
- BASTE
- BEAT
- BLANCH
- BLEND
- BLIND BAKE
- BOIL
- BRAISE
- BROIL
- CHOP
- CLARIFY
- COAT
- CREAM
- CRUSH
- CUBE
- DASH
- DEEP FRY
- DICE
- DILUTE
- DREDGE
- DUST
- EMULSIFY
- FILET
- FILTER
- FOLD
- GLAZE
- GRATE
- GREASE
- GRILL
- GRIND
- HULL
- JULIENNE

- KNEAD
- MARINATE
- MASH
- MIX
- MOISTEN
- MULL
- PARE
- PINCH
- POACH
- PUREE
- REDUCE

- ROUX
- SAUTÉ
- SCALD
- SCORE
- SEAR
- SEASON
- SHUCK
- SIFT
- SIMMER
- STEAM
- STEEP

- STIR
- TOSS
- TRUSS
- WHIP
- WHISK
- ZEST



Year 9 Food Technology Knowledge Organiser Challenge Questions/dig deeper

Correct the spelling errors in Food Technology



| Incorrect spelling | Correct spelling | Incorrect spelling | Correct spelling |
|--------------------|------------------|--------------------|------------------|
| Vegatables | | chocolate | |
| Ingredients | | bacteria | |
| Potatoe | | food poisoning | |
| Potatos | | contamination | |
| Tomatoe | | wisk | |
| Tomatos | | Creaming method | |
| Self-rasing flower | | Need the doe | |
| Cauliflour | | | |
| Brocoli | | | |
| Mesure | | | |
| Simer | | | |



Traffic Light Labelling

You're standing in a supermarket aisle looking at two similar products, trying to decide which to choose. You want to make the healthier choice but, you're in a hurry. Well, help is at hand. A growing number of supermarkets and food manufacturers are using traffic light colours on the labels of some products.

What the colours mean:



means **HIGH**
indicating that the food is **high** in fat, sugars or salt

It's fine to eat this food occasionally or as a treat, but think about how often you choose it and how much of it you eat.



means **MEDIUM**
making it an **OK** choice





Although going for green is even better!






means it's **LOW**

*Which makes it a **healthier** choice.*

Watch the tv ads on traffic light labelling <http://www.eatwell.gov.uk/foodlabels/trafficlighs/>

| Tier 2 words | | | Tier 3 words | | |
|--------------|----------------|--|---|--------------------|--|
| 1 | region | an area, part of a country or the world. having definable characteristics but not always fixed boundaries. | 1 | tectonic activity | the movement of the earth's plates which cause volcanic activity, mountain-building, ocean trench formation and earthquakes. |
| 2 | exports | send (goods or services) to another country for sale. | 2 | riverbank | the land along the edge of a river. |
| 3 | imports | bring (goods or services) into a country from abroad for sale. | 3 | climate | the weather conditions prevailing in an area over a long period of time. |
| 4 | predominately | <u>mainly</u> ; for the most part. | 4 | monotheistic | relating to or characterized by the belief that there is only one God. |
| 5 | range | the area of variation between upper and lower limits on a particular scale. | 5 | Eurocentric | focusing on Europe, viewing Europe as the most important place in the world |
| 6 | distribution | the way in which something is shared out among a group or spread over an area. | 6 | arid | (of land or a climate) having little or no rain; too dry or barren to support vegetation. |
| 7 | economic | concerned with the production, distribution, and consumption of goods and services. | 7 | refugee | a person who has been forced to leave their country in order to escape war, persecution, or natural disaster. |
| 8 | infrastructure | the basic physical and organizational structures and facilities (e.g. buildings, roads) needed for the operation of a society or enterprise. | 8 | geologist | the science that deals with the dynamics and physical history of the earth, the rocks of which it is composed, and the physical, chemical, and biological changes that the earth has undergone. |
| 9 | ethnic | a population subgroup with a common national or cultural tradition. | 9 | Mediterranean | a climate distinguished by warm, wet winters under prevailing westerly winds and calm, hot, dry summers, as is characteristic of the Mediterranean region and parts of California, Chile, South Africa, and south-western Australia. |
| 10 | civil war | a war between citizens of the same country. | Geographical skills | | |
| 11 | development | the increase in standard of living in a nation's population. It comes when a country changes from a low-income country, to a high-income industrialised economy. |  | Choropleth map | Choropleth maps show data that is linked, rather than data from different categories, as colours. Darker shades represent high numbers and the lighter shades represent low numbers. |
| 12 | dense | crowded closely together. |  | Pie chart | Show percentages as a circle, divided into segments. |
| 13 | sparse | thinly dispersed or scattered. |  | Proportion symbols | Proportional symbols can be added to a map to show differences between places. The same symbol appears larger or smaller, depending on how something changes. |
| | | |  | Climate graph | This is a combination of a line graph and bar graph. The x-axis shows the months of the year and the two y-axes show average temperature and total rainfall. |

Tier 2: Key command words

| COMMAND WORD | DEFINITION | SENTENCE STARTERS |
|---|---|---|
| Describe | Set out characteristics. | The trends that can be seen are..... An example of this is..... However, there are some anomalies to the trends. For <u>example</u> |
| Compare  | Identify similarities and differences. | X is similar to Y as they both have/share..... Comparatively, Y is different to X as it..... |
| Evaluate  | Judge from available evidence. | One advantage is.... This impacts on people/the economy/the environment because... This means..... One disadvantage is.... This impacts on..... because..... This means..... In conclusion/This means/ The best option is.... |
| To what extent  | Judge the importance or success of something. | Some might agree that..... This is due to..... Consequently, Nevertheless, some might argue that..... This is due to..... To conclude, I agree/disagree |

Challenge questions

| | |
|---|--|
| 1 | Describe the population of the Middle East. (4 marks) |
| 2 | Compare the causes of war in the Middle East. (6 marks) |
| 3 | Evaluate the impact the climate has on population distribution (6 marks). |
| 4 | To what extent are the UAE and Yemen similar? (9 marks) |
| 5 | Compare the Middle East's climate to the climate of the United Kingdom (4 marks) |

Dig Deeper

Added challenge:

Conflict:

Water scarcity:

Ulsu Dam:

Drought in Iran:



Sites on culture:

Camel racing:



Natural wonders:



Videos and photos:



Middle East history:



Introduction:



Middle East changes:



Conflict zone, football:



The land:



Beaches:



Year 9 Cycle A History – Europe after World War One

TIER 3 VOCABULARY

- 1 **Capitalism** – trade and industry are controlled by private companies, rather than by the state.
- 2 **Socialism** – the state should control all trade, wealth and manufacturing.
- 3 **Communism** – the people control all and have an equal share according to their needs.
- 4 **Autocracy** – one person controls all government decisions.
- 5 **Dictatorship** – where one person (or group) rule without challenge.
Authoritarian -
- 6 **Bolshevik** – a Russian Communist who advocates the violent overthrow of Capitalism.
- 7 **Fascism** – ultra-right wing ideology that
Hyperinflation -
- 8 **Proportional representation** – a system of voting where parties win the same percentage of seats that they gain in a vote.
- 9 **Nazism** – extreme racism or authoritarian views.
- 10 **Tsar** – the emperor of Russia before 1917
- 11 **Fuhrer** – the ruler of Nazi Germany
- 12 **Constitutional Monarch** – a King or Queen who rules with help of parliament.

Key Leaders 1919-1939



Georges Clemenceau,
France 1917-1920



David Lloyd George,
Great Britain 1916-1922



Woodrow Wilson,
USA 1913-1921



Gustav Stresemann,
Germany (Chancellor)
1923



Vladimir Lenin,
USSR 1917-1924



Friedrich Ebert,
Germany (President)
1919-1925



Adolf Hitler,
Germany 1933-1945



Neville Chamberlain,
Great Britain 1937-1940



Josef Stalin,
USSR 1924-1953

CHRONOLOGY



Inter-War period events

Russian Revolution

1917

Treaty of Brest-Litovsk (March)

1918

Tsar Nicholas and his family are executed (July)

1918

End of WWI (November)

1918

Treaty of Versailles

1919

The Bolsheviks win the Russian civil war

1922

Hyperinflation Crisis in Germany

1923

Wall Street Crash

1929

Hitler becomes chancellor (January)

1933

Enabling Act (March)

1933

Nuremberg Laws

1935

German expansion

1938

Outbreak of WWII

1939

Year 9 Cycle A History – Europe after World War One

TIER 2 VOCABULARY

- 1 **Abdicate** – where a monarch leaves their position as King or Queen.
- 2 **Republic** – a country ruled without a monarch.
- 3 **Election** – a formal vote for political office.
- 4 **Ideology** – ideas that make up political theory and policies.
- 5 **Guilty** – to blame for something.
- 6 **Treaty** – an agreement between countries
- 7 **Monarchy** – a country where a King or Queen is head of state.
- 8 **Industrialisation** – development industry in a country.
- 9 **Reparations** – compensation to those who have been wronged
- 10 **Oppression** – prolonged cruel treatment by authority.
- 11 **Terror** – the use of extreme fear to intimidate people.
- 12 **Chancellor** – a senior figure in government.

CHALLENGE

1. How significant was the Russian Revolution?
2. Was the Treaty of Versailles justified?
3. How far did the failure of the Munich Putsch help Hitler?
4. What was the most important factor for Hitler gaining power in Germany?
5. How far did the Treaty of Versailles caused World War Two?

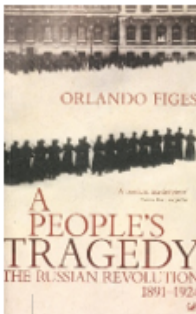
KEY HISTORICAL WORKS

To Hell and Back - Ian Kershaw:

“The result would be Hitler’s takeover of power in Germany on 30th January 1933, a date that would prove a disastrous turning point in European history. Of all the ways the Wall Street Crash and Great Depression reshaped Europe, what happened in Germany would prove the most fateful – not just for the people of Germany, but for the entire continent of Europe and, eventually much of the world. ”



You will read extracts from this book in Cycle A lessons.



Want to challenge yourself further?

Why not read what another historian has said about Europe After World War One!

To supplement your reading during your prep, collect another hand out, from your teacher, of an article on the Russian Revolution by Orlando Figes! He wrote a *People's Tragedy: The Russian Revolution 1881-1924*.

DIG DEEPER

Research - Follow the links to discover what was happening around the world!

The fall of the Ottoman Empire

<https://drive.google.com/file/d/1qNBDtvbvlk3oz9weCjBjDQgim2yglxxz/view>

The Australian Emu War

<https://drive.google.com/file/d/1Z2DVdBrqCScoqfWnETOmXgGqvleHcv/view>

The Spanish Civil War

<https://drive.google.com/file/d/1nQP5HPbKTbFivHDPWrZ6jUul3hjSzWX7/view>

The British Union of Fascists

<https://drive.google.com/file/d/1X1WEq-SfeW3fvVT90bGoiVW1o8pW8uzL/view>

Listen – Listen to the following History Extra podcasts on Europe after WWI!

Lenin and the Russian Revolutions

6/10/2016

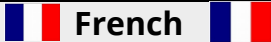
















Dictators Explain 4/3/2020

The Rise of Hitler 17/2/2020

Appeasement and the road to WWII 24/6/2019

Watch – scan the following QR codes to watch documentaries on Europe after WWI!



| | |  French | Literal English |  Standard English  |
|-----|---|---|--|---|
| 1. |  | Où habites-tu? | <i>Where live you?</i> | Where do you live? |
| 2. |  | Actuellement, j'habite à Paris, en France. | | currently I live in Paris, in France. |
| 3. |  | Moi, j'habite à Hounslow | <i>me I live to Hounslow</i> | Me, I live in Hounslow, |
| 4. |  | une ville près de la capitale. | | a town near to the capital |
| 5. |  | Hounslow se trouve à l'ouest de Londres. | <i>Hounslow itself finds at the west of London</i> | Hounslow is to the west of London. |
| 6. |  | Pendant les cours de français, | <i>during the lessons of French</i> | During French lessons |
| 7. |  | j'étudie la Francophonie. | <i>I am studying the French-speaking countries</i> | I am studying the French-speaking countries |
| 8. |  | Heureusement, je la trouve sensass | <i>luckily, I find it sensational</i> | Luckily, I find it sensational |
| 9. |  | Quel temps fait-il? | <i>What weather does it?</i> | What's the weather like? |
| 10. |  | Aujourd'hui il y a du vent mais il y a du soleil aussi | <i>today, there is some wind but there is some sun also</i> | Today, it's windy but also sunny. |
| 11. |  | Moi, je l'aime quand il neige car c'est le Noël | <i>Me, I it like when it snows as it is the Christmas</i> | Me, I like it when it snows because it's Christmas. |
| 12. |  | Où se trouve la Martinique? | | Where is Martinique? |
| 13. |  | La Martinique est située aux Caraïbes | <i>Martinique is situated in the Caribbeans</i> | Martinique is in the Caribbean. |
| 14. |  | Où veux-tu aller pendant les vacances? | <i>Where want you to go during the holidays?</i> | Where do you want to go during the holidays? |
| 15. |  | Pendant les vacances d'été je veux aller au Canada. | <i>During the holidays of summer, I want to go to Canada</i> | During the summer holidays I want to go to Canada. |
| 16. |  | Je veux manger plein de nourriture traditionnelle | <i>I want to eat full of food traditional</i> | I want to eat lots of traditional food. |

| | | | | |
|-----|---|--|--|--|
| 17. |  | Au Canada on peut manger du bon bacon, | | In Canada we can eat some good bacon. |
| 18. |  | mais je ne peux pas me bronzer car il fait froid | <i>but I can't myself bronze as it does cold</i> | but I can't sunbathe as it's cold (weather) |
| 19. |  | Où vas-tu aller en vacances? | <i>Where are going you to go on holiday?</i> | Where are you going to go on holiday? |
| 20. |  | L'année prochaine, | <i>the year next</i> | Next year, |
| 23 |  | je vais aller en France, | <i>I am going to go in France</i> | I am going to go to France, |
| 24 |  | où je vais visiter les sites touristiques. | <i>where I am going to visit the sights tourists</i> | where I am going to visit the tourist sights. |
| 25 |  | Ma famille et moi allons prendre des photos. | | My family and I are going to take some photos. |
| 26 |  | Ça va être formidable! | | It is going to be awesome! |

Challenge Questions: Translate the sentences into French



| | |
|---|---|
| 1 | I want to go to Madagascar with my sister and visit the jungles – I love animals, especially monkeys! |
| 2 | There are many French-speaking countries with different cultures but they share the same language. |
| 3 | What can one do in Morocco? I want to go there next year with my family because it I want to eat traditional food! |



(Be brave, dig deep and discover)
Recommended texts/websites/writers

French Vocabulary Learning:

- Senecalearning.com → French KS3 → French AQA (For Bilingual students and Challenge)
- Quizlet.co.uk
- <https://www.duolingo.com> Select **French** as the language you want to learn → The app is also available
- <https://www.memrise.com/courses/english/french/>

French culture:

- https://www.britishcouncil.org/sites/default/files/the_great_french_language_challenge.pdf
- <https://lyricstraining.com/fr> → The app is also available
- <https://www.culturetheque.com/exploitation/GBR/accueil-portal.aspx> → **LOTS AND LOTS** of **FREE** French magazines, comic, audio books, articles and film guides.



| Autumn | Probability | | | Linear simultaneous equations | |
|---------------|-------------|-------------|--------------------------------------|-------------------------------|---------------------|
| | FDP review | Probability | Sets, Venn and sample space diagrams | Solving algebraically | Solving graphically |

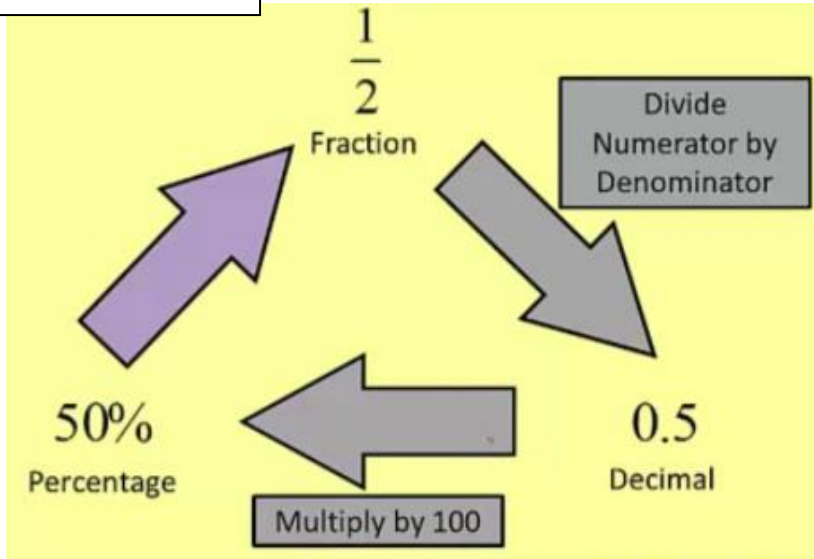
TIER 2 VOCABULARY

TIER 3 VOCABULARY

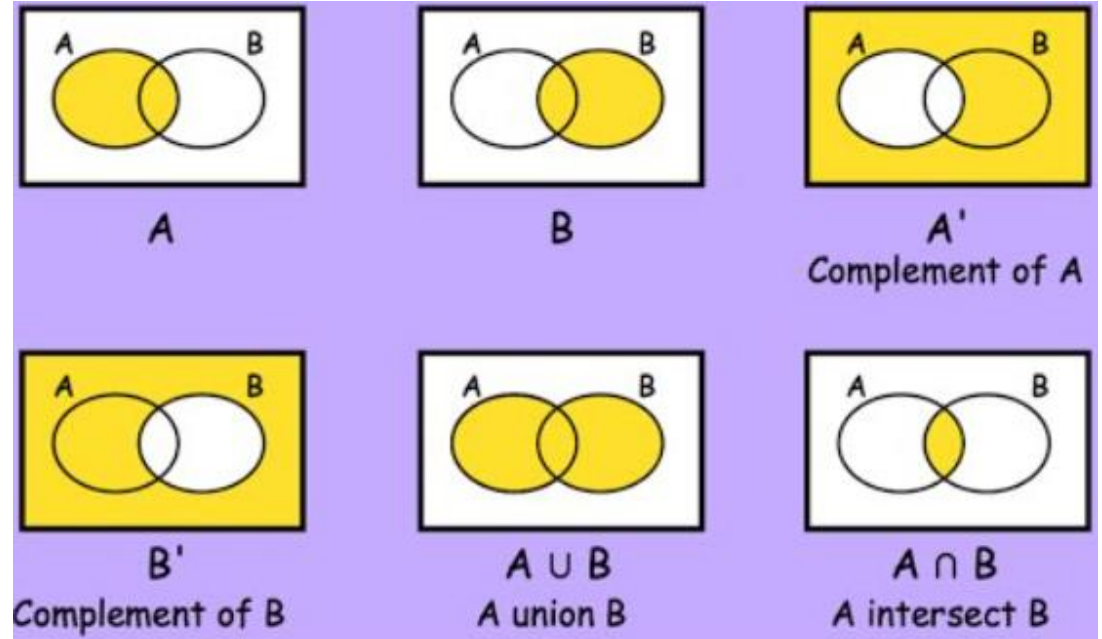
| | | | | | |
|-----------|--------------------|---|-----------|--|---|
| 1 | Simplify | Replace a mathematical expression by an equivalent one that is simpler. | 1 | Numerator | Top number of a fraction. |
| 2 | Conversion | Change a value or expression from one form to another. | 2 | Denominator | Bottom number of a fraction. |
| 3 | Equivalence | 2 quantities that are the same. | 3 | Relative frequency (Experimental probability) | How often something happens divided by the total number of trials in an actual experiment. |
| 4 | Trial | Performing an experiment. | 4 | Theoretical probability | The chance or likelihood of an event happening. It is determined on the basis of reasoning. |
| 5 | Systematic | Working and displaying results in a coherent, ordered manner. | 5 | Mutually exclusive | 2 or more events that cannot happen simultaneously (at the same time). |
| 6 | Prove | To show using evidence that something is true. | 6 | Outcome | Something that follows as a result or consequence. |
| 7 | Form | Write (create) an expression to represent what is said in words. | 7 | Venn diagram | Illustration that uses circles to show the relationships among objects. |
| 8 | Event | A possible outcome resulting from an experiment. | 8 | Union | The result of combining 2 or more sets. The symbol used to represent this is 'U'. |
| 9 | Justify | Explain why something is reasonable or appropriate. | 9 | Intersection | The items that 2 or more sets have in common. The symbol used to represent this is '∩'. |
| 10 | Plot | Graphical technique for representing a data set, usually as a graph showing the relationship between two or more variables. | 10 | Complement | The amount you must add to something to make it whole. The complement of a set A, denoted A', is the set of all elements which belong to the Venn Diagram, but not A. |
| 11 | Solve | Find the solution showing your steps. | 11 | Simultaneous | Happens at the same time. |
| 12 | Substitute | Replace the letters with their values. | 12 | Change the subject | Rearrange an equation to have the term desired by itself on one side of the equation. |
| 13 | Sketch | Construct a rough drawing representing the key features of an object. | 13 | Gradient | Steepness of a line. |
| 14 | Rearrange | To change the order, or place of the items given. | 14 | Intercept | The point where a line intersects one of the axes. |

USEFUL DIAGRAMS

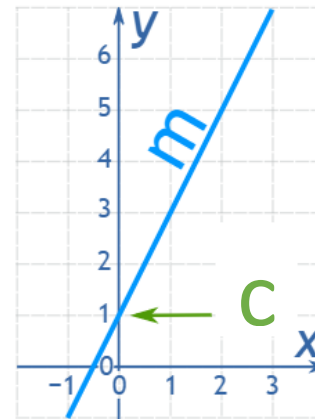
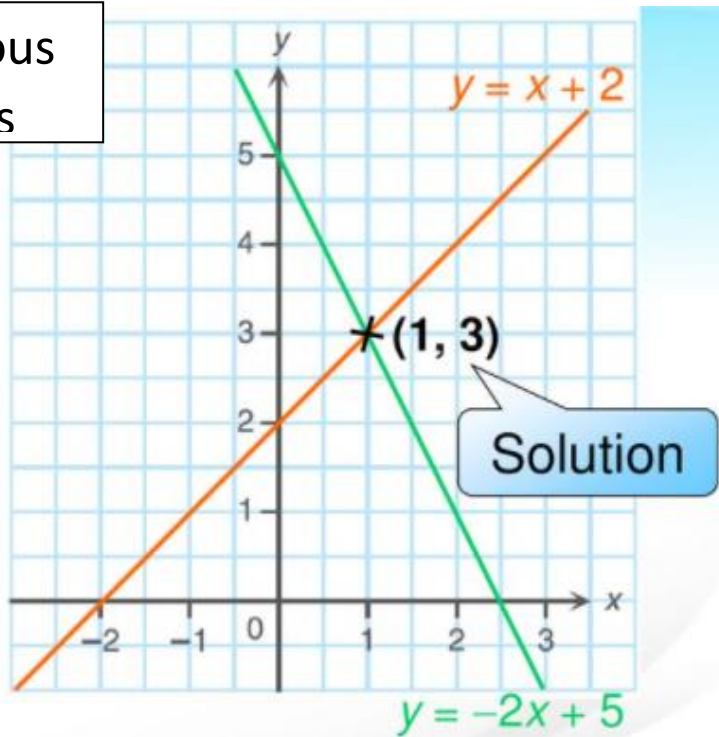
FDP Conversion



Venn Diagrams notation

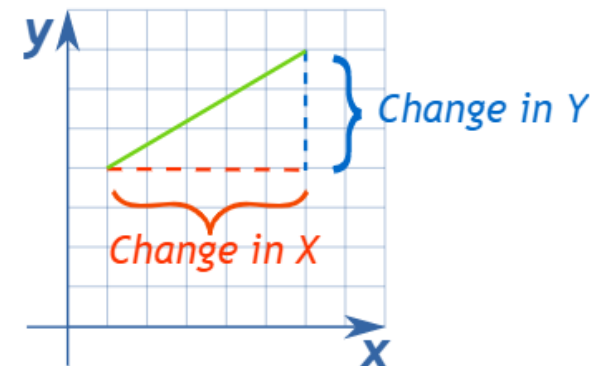


Simultaneous equations



$y = mx + c$
 m is the gradient
 c is the y-intercept

$$m = \frac{\text{Change in Y}}{\text{Change in X}}$$



ETYMOLOGY

| Number | Greek Prefix | Latin Prefix | Examples |
|--------------------|--------------|---------------|---|
| 0, zero | | Nul- | Null, nil |
| 1, one | Mono- | Uni- | Monotone, unicycle, uniform |
| 2, two | Di- | Bi-, du- | Bicycle, bisect, bilingual, dioxide, duo, double, |
| 3, three | Tri- | Tri- | Tricycle, triangle, triathlon, tripod |
| 4, four | Tetra- | Quad- Qua- | Quadrilateral, tetrahedron |
| 5, five | Penta- | Quin- | Pentagon, quintuplet |
| 6, six | Hexa- | Sext- | Hexagon, sextuplet |
| 7, seven | Hepta- | Sept- | Heptagon, septuagenarian |
| 8, eight | Octo- | Oct- | Octagon, octopus |
| 9, nine | Ennea- | Nona- Novem- | Novena, nonagon |
| 10, ten | Deca- | Deci – Decem- | Decade, decimal, decagon |
| 100, one hundred | Hecto- | Cent- | Century, centurion, cent |
| 1000, one thousand | Kilo- | Milli- Mille- | Kilogram, Kilometre, millennium |
| ½ Half | Hemi- | Semi- | Hemisphere, semicircle |
| ¼ Quarter | | Quart- | Quarter, Quartile |
| Many | Poly- | Multi- | Polygon, multiplication |

Did you know?

During Roman times the year had 10 months with the first month as March. Some of the months were named after Gods or important people while others were just numbered. Can you use the prefixes in the table to work out which months were numbered?

| Understanding Units of Measurement | | | | |
|------------------------------------|---------------|------------------|-------------------|--------------|
| Prefix Name | Prefix Symbol | Base 10 | Decimal | English word |
| Tera- | T | 10 ¹² | 1 000 000 000 000 | trillion |
| Giga- | G | 10 ⁹ | 1 000 000 000 | billion |
| Mega- | M | 10 ⁶ | 1 000 000 | million |
| Kilo- | k | 10 ³ | 1 000 | thousand |
| Hecto- | h | 10 ² | 100 | hundred |
| Deca- | da | 10 ¹ | 10 | ten |
| | | 10 ⁰ | 1 | one |
| Deci- | d | 10 ⁻¹ | 0.1 | tenth |
| Centi- | c | 10 ⁻² | 0.01 | hundredth |
| Milli- | m | 10 ⁻³ | 0.001 | thousandth |
| Micro- | μ | 10 ⁻⁶ | 0.000001 | millionth |
| Nano- | n | 10 ⁻⁹ | 0.000000001 | billionth |

Examples

A centimetre cm is one hundredth of a metre 1cm = 0.01m
 A millilitre is one thousandth of a litre 1ml = 0.001l
 A kilogram is one thousand times larger than a gram 1kg = 1000g

Did you know?

The word for one thousand comes from Italian "mille – thousand" "-oné – big" . A millioné was a 'big thousand' or a thousand thousand.

DIG DEEPER

Read **The Everything Kids: Maths Puzzle Book** by Meg Clements – puzzles, games and trivia.



Listen to the podcast on mathematics, logic and puzzles with Chaim Goodman-Strauss and Kyle Kellmas series – **The Math Factor**
<https://mathfactor.uark.edu>



Watch the documentary: **The Story of 1 – history of numbers** presented by Terry Jones, directed by Nick Murphy



Challenge

$$\frac{1}{6}$$

is equivalent to...

A

B

C

D

0.666...

0.121212...

0.1666...

0.6

Which number below is $\frac{3}{4}$ more than 0.5?

A

B

C

D

$\frac{4}{6}$

0.84

1.205

$\frac{5}{4}$

Shamila picks a marble from bag 1, then a marble from bag 2. What is the probability that she picks two black marbles?

A. $\frac{4}{9}$

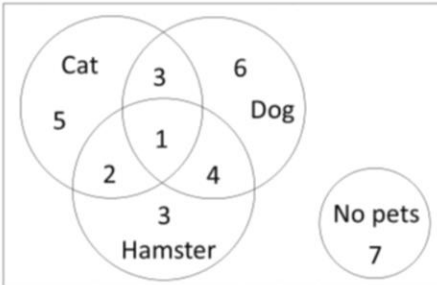
B. $\frac{1}{2}$

C. $\frac{1}{5}$

D. $\frac{2}{5}$



Ark



A class of students drew this Venn diagram to show how many of them have a cat, dog, hamster, or no pets.

Given that a random student in the class has a hamster, what is the probability that they have a cat?

A $\frac{3}{31}$

B $\frac{11}{31}$

C $\frac{3}{10}$

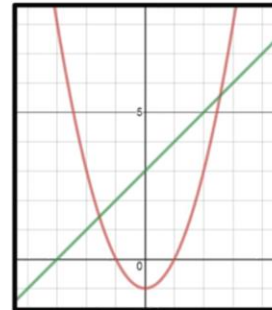
D $\frac{2}{10}$

The following graph shows

$$y = x^2 - 1$$

$$y = x + 3$$

How many solutions to the simultaneous equations are there?



A

B

C

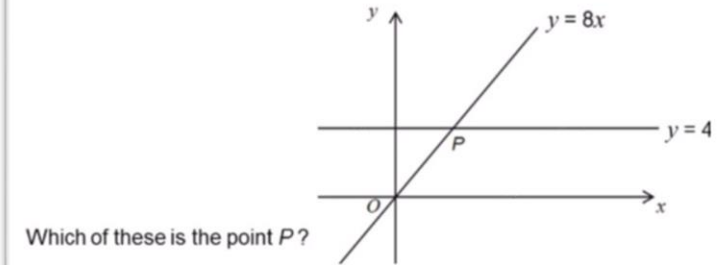
D

2

1

None

Try substituting



Which of these is the point P?

A (2, 4)

B (4, 32)

C $(\frac{1}{2}, 4)$

D $(4, \frac{1}{2})$

Year 9 – Music: Cycle A - Knowledge Organiser

Tier 2: Music Vocabulary

| | | |
|---|-----------------|---|
| 1 | IDENTIFY | Recognise and name something or someone. |
| 2 | DEFINE | Describe something exactly. |
| 3 | APPRAISE | Assess the quality of something. |
| 4 | JUSTIFY | Explain your argument and provide evidence. |
| 5 | ANALYSE | Examine in detail from different angles. |

Tier 3: Music Vocabulary

| | | |
|---|--|--|
| 1 | Pitch High / Low | A particular frequency or note. |
| 2 | Interval Tone / Semitone | The distance between two or more notes / pitches. |
| 3 | Scale Ascending / Descending | An ordered series of notes / pitches used to form melodies and chords. |
| 4 | Key Relative / Harmonic | The group of notes or scales that are used in a piece of music. |
| 5 | Harmony Assonant / Dissonant | Different pitches or notes at the same time. |
| 6 | Tonality Major / Minor | The character of a chord, scale or key e.g. C Major, C Minor, C Augmented, C Diminished. |
| 7 | Melody Conjunct / Disjunct | The tune in a piece of music. |



Music In The Community Challenge: 50 HPTS

Cycle A – Year 9



Record a Baka Water Drum performance
(10 house points)

Review an orchestral concert **(10 house points)**

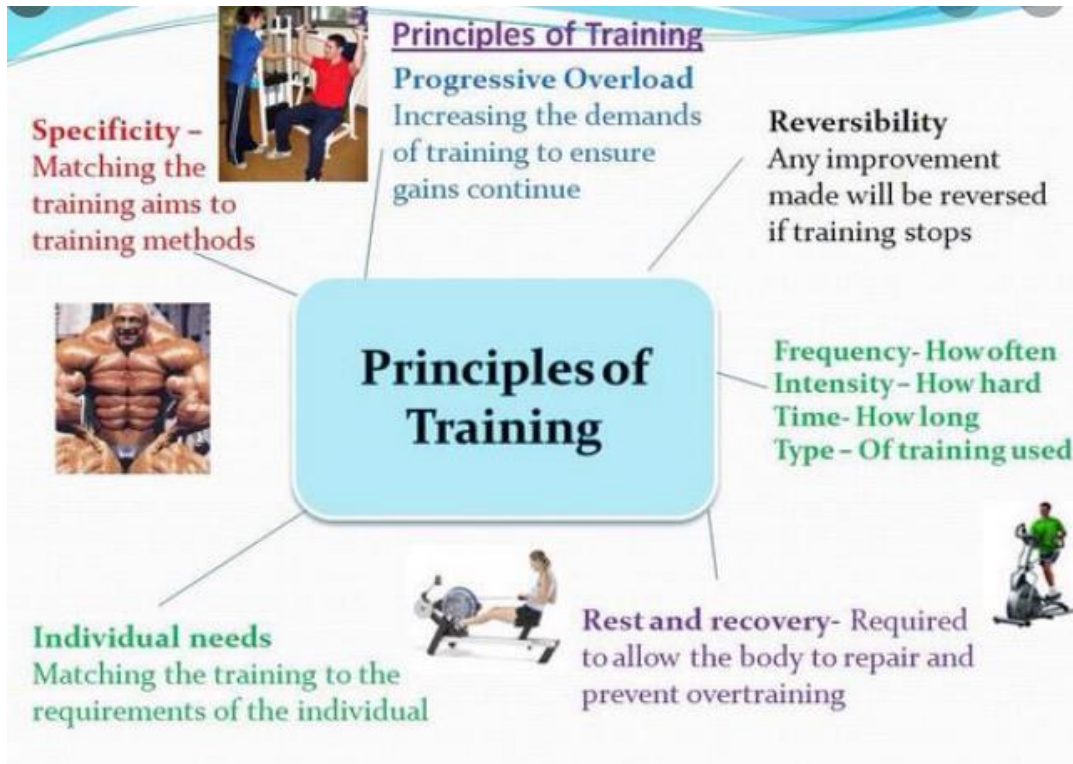
Report information on music from a museum visit
(10 house points)

Perform with a local choir **(10 house points)**

| | | |
|----|--|---|
| 8 | Texture Thick / Thin | How many layers there are and how they interact. |
| 9 | Meter On-beat / Off-beat | The method of measuring rhythm through time signatures, beats and bars. |
| 10 | Tempo Fast / Slow | The underlying pulse measured in beats per minute (BPM) with a metronome. |
| 11 | Dynamics Loud / Soft | The volume of an sound. |
| 12 | Timbre Clean / Distorted | The unique distinctive quality or colour of a sound. |
| 13 | Articulation Staccato / Legato | How the music is communicated e.g. spiky and detached or flowing and smooth. |
| 14 | Ornamentation Decorative / Plain | Decorative flourishes added to a performance e.g. melisma for a vocalist or tremolo for a violin. |
| 15 | Form Structured / Through-Composed | How a piece of music is put together e.g. through reoccurring sections like a chorus. |

Year 9 Physical Education Knowledge Organiser

| Tier 2 Vocabulary | | | Tier 3 Vocabulary | | |
|-------------------|-----------------|---|-------------------|----------------------------|--|
| 1 | EXAMINE | Look in close detail and establish the key facts and important issues surrounding a topic | 1 | F.I.T.T. PRINCIPLE | Frequency, Intensity, time and type. Use this principle when planning a programme. |
| 2 | JUSTIFY | You need to explain the basis of your argument by presenting the evidence that informed your outlook. | 2 | AEROBIC TRAINING | In aerobic exercise, which is steady and not too fast, the heart is able to supply enough oxygen to the muscles. Aerobic training improves cardiovascular fitness. |
| 3 | ANALYSE | To examine in detail in order to explain the findings. | 3 | ANAEROBIC TRAINING | Anaerobic exercise is performed in short, fast bursts where the heart cannot supply enough oxygen to the muscles. Anaerobic training improves the ability of the muscles to work without enough oxygen when lactic acid is produced. |
| 5 | IDENTIFY | To recognise and name something or somebody | 4 | METHODS OF TRAINING | Specific training methods can be used to improve each fitness factor. |
| 6 | EXPLAIN | Describing it in more detail | 5 | CIRCUIT TRAINING | Circuit training involves performing a series of exercises in a special order called a circuit. It can be designed to improve speed, agility, coordination, balance and muscular endurance. |
| 7 | DISCUSS | Requires an in-depth answer that takes into account all aspects of the debate concerning a research topic or argument | 6 | CONTINUOUS TRAINING | Continuous training involves working for a sustained period of time without rest. It improves cardio-vascular fitness. |
| 8 | DEFINE | To describe something exactly. | 7 | CROSS TRAINING | Cross training involves using another sport or activity to improve your fitness. It happens when an athlete trains in a different environment. |
| 9 | EVALUATE | Reflecting on or assessing how effective a performance was. | 8 | FARTLEK TRAINING | Fartlek training or 'speed play' training involves varying your speed and the type of terrain (ground) over which you run, walk, cycle or ski. It improves aerobic and anaerobic fitness. |
| | | | 9 | INTERVAL TRAINING | Interval training involves alternating between periods of hard exercise and rest. It improves speed and muscular endurance. |
| | | | 10 | WEIGHT TRAINING | Weight training uses weights to provide resistance to the muscles. It improves muscular strength, muscular endurance and power. |
| | | | 11 | ALTITUDE TRAINING | Altitude training is aerobic training high above sea level, where oxygen levels are lower. It is used to increase aerobic fitness quickly. |
| | | | | | |



Why not challenge yourself?

1. Identify which method of training a middle distance runner best needs to improve their performance
2. Using the F.I.T.T. principle, design a programme for a Netball or Football player.
3. How do you calculate your maximum heart rate.
4. Research and explain what is meant by target zones and thresholds of training
5. How can we link components of fitness with methods of training

Dig Deeper

Further Research:

<https://www.bbc.co.uk/bitesize/guides/z2b9q6f/revision/3> - Principles and methods of training.

Watch:

The English Game (Netflix) - Two 19th-century footballers on opposite sides of a class divide navigate professional and personal turmoil to change the game — and England — forever.

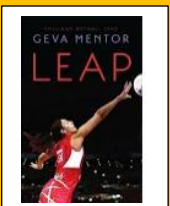
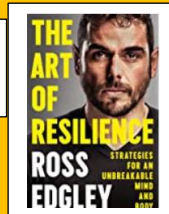
The Dawn Wall (Youtube) - Legendary free climber Tommy Caldwell tries to get over heartbreak by scaling the Dawn Wall of El Capitan in Yosemite National Park.

Why not read a book:



Faster than Lightning – Usain Bolt

The Art of Resilience - Ross Edgley



Leap – Geva Mentor

BE STRONG - Spanish Knowledge Organiser

Cycle A Topic: 'Mi casa, mi hogar'

U1: ¿Dónde vives? ¿Cómo es tu calle?

| | | | | | |
|---|--|--|-------------------------|--|---|
| En mi calle hay [On my street there is] | Masculine nouns un aparcamiento [parking] un edificio [a building] un campo de fútbol un centro comercial un polideportivo un parque pequeño un restaurante chino/indio un supermercado un teatro | Feminine nouns una biblioteca [a library] una carnicería [a butchers] una estación de tren [a train station] una iglesia [a church] una mezquita [a mosque] una panadería [a bakers] una piscina municipal [a local pool] una sinagoga [a synagogue] una zapatería [a shoe shop] | El cine [The cinema] | a la derecha [to the right] a la izquierda [to the left] a diez minutos a pie [a 10 minute walk away] a diez minutos en coche [a 10 minute car ride away] al lado [next to] cerca [near] delante [in front] enfrente [opposite] detrás [behind] en la esquina [on the corner] lejos [far] al final de la calle [at the end of the street] | Fem. nouns de la [of/from m] biblioteca carnicería tienda de música panadería piscina |
| | Masculine nouns una tienda de [a ... shop] | Mi casa [My house] Mi edificio [My building] Mi piso [My flat] | | | Masc. nouns del [of/from m] campo de fútbol centro comercial colegio estadio museo parque |

U1: ¿Dónde está tu casa?

| | | | | | |
|--------------------------|-------------------------|-----------------|---|---|-------------------------------|
| Mi casa Mi piso | está | entre [between] | la carnicería el cine | y | el supermercado la piscina |
| No hay [There is not] | ningún [any - sg. masc] | restaurante | cerca de donde vivo [near where I live] en mi barrio [in my neighbourhood] por aquí [around here] | | |
| | ninguna [any - sg. fem] | tienda | | | |



BE STRONG - Spanish Knowledge Organiser

Cycle A Topic: 'Mi casa, mi hogar'


U2: ¿Dónde vives? ¿Cómo es tu casa?

| | | | |
|---|---|---|---|
| Vivo en | una casa en [a house in]  | el campo  | el centro de la ciudad  |
| | un piso en [a flat in]  | la costa  | las afueras  |
| | un edificio en [a building in] | la montaña  | |
| En mi casa  [In my house] | hay [there are] | cinco seis siete | habitaciones, [rooms] |
| En mi piso  [In my flat] | | | por ejemplo [for example] |
| | | | como [such as] |
| | | | el dormitorio de mis padres [my parents' bedroom] mi dormitorio [my bedroom] una cocina [a kitchen] un comedor [a dining room] un cuarto de baño [a bathroom] un salón [a living room] una sala de juegos [a playroom] |
| También hay [There is also] | un desván [an attic] un sótano [a basement] | y | un garaje  un jardín  |
| Me gusta mi casa porque [I like my house because]  | *es [it is] | acogedora [cosy] antigua [old] bonita [beautiful] fea [ugly] grande [big] luminosa [well lit]  | |
| No me gusta mi casa porque [I don't like my house because]  | | está [it is] | pequeña [small]  bien amueblada [well furnished] limpia [clean] / sucia [dirty] |
| Me gusta mi piso porque [I like my flat because]  | es | acogedor antiguo bonito espacioso [spacious] | feo  luminoso  pequeño |
| No me gusta mi piso porque [I don't like my flat because]  | | está | bien amueblado limpio / sucio |

*Author's note: "Es" [it is] and "está" [it is] are used for different purposes. You will see them used in context throughout this unit.



U2: ¿Qué hay en la cocina/el salón/en tu habitación?

| En la cocina hay | En el salón hay | En mi habitación hay |
|---|---|---|
| un horno [an oven] un lavaplatos [a dishwasher] una despensa [a pantry] una mesa [a table] una nevera [a fridge]  una silla [a chair]  | una alfombra [a rug] una mesa [a table] una mesita [a small/coffee table] un sillón [an armchair]  un sofá  una televisión  | un armario [a wardrobe] una cama [a bed] un espejo [a mirror] un escritorio [a desk] un espejo [a mirror] una estantería [a bookshelf] un ordenador [a computer]  cortinas [curtains]  |

Challenge Translations/Questions

- Translate into Spanish:** I would say that I love my flat because it is small, but cosy and well furnished. My mum doesn't like the flat because there is no dining room.
- Translate into Spanish:** Let's be honest, my house is very big, however it's quite ugly too. I would like a smaller house in the mountains.
- Record yourself** introducing yourself and describing where you live and what's in your town using <https://vocaroo.com/> Email it to your teacher.
- Write about your ideal home** using the conditional tense: 'me gustaría' [I would like] + noun / verb in the infinitive.

Dig Deeper: Find out more about Spanish and Hispanic culture

Spanish Vocabulary Learning:

- [Quizlet.com](https://www.quizlet.com/)
- <https://www.duolingo.com> Select **Spanish** as the language you want to learn → The app is also available

Spanish culture:

- Do a Spanish song challenge on [LyricsTraining.com](https://www.lyricstraining.com)
- Learn a Spanish tongue-twister and try to say it as fast as you can <https://www.fluentu.com/blog/spanish/spanish-tongue-twisters-pronunciation/>
- Research 'Casas Cueva' [cave houses] in Andalucía.



YEAR 9 TEXTILES TECHNOLOGY KNOWLEDGE ORGANISER

Tier 2 Vocabulary

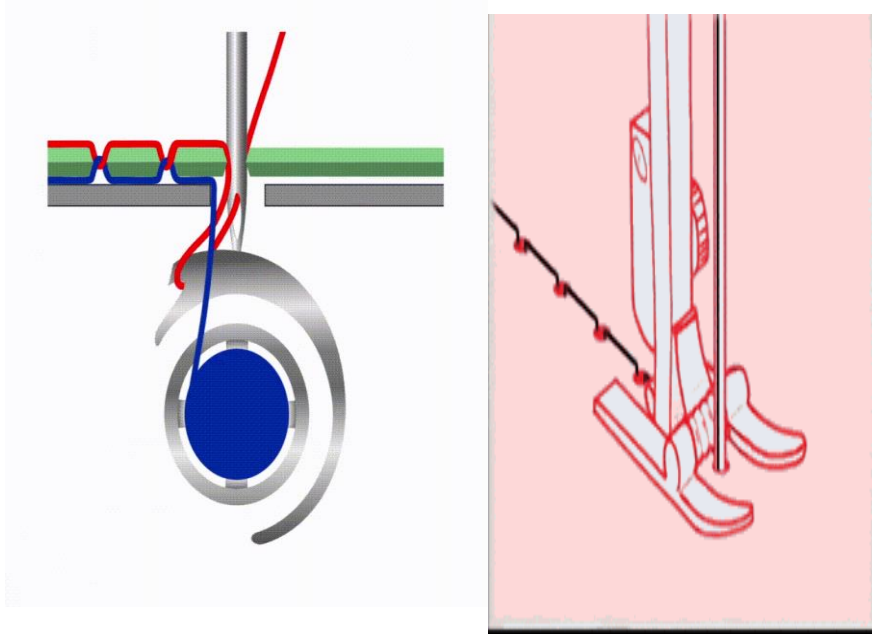
Tier 3 Vocabulary

| | | | |
|------------------------------------|---|-----------------------|--|
| Pop Art | Pop art is an art movement that emerged in the United Kingdom and the United States during the late 1940s to the mid- to late-1950s | Repeat Pattern | A Repeat Pattern is the repetition of lines, shapes, tones, colours, textures and forms |
| Bobbin | A bobbin is a spindle or cylinder, with or without flanges, on which wire, yarn, thread or film is wound. Bobbins are typically found in sewing machines,. | Fabric crayons | These fabric crayons are formulated so that they will be permanent on fabric after heat setting with an iron |
| Over locker sewing machine | The overlock machine is designed to stitch over the edge of one or two pieces of fabric to produce neat edging that will not fray | Fabric pens | Fabric pens are specially made pens for designing on fabric. Fabric pens can contain ink, dye or paint. They are made so that when the material is washed, the colours don't wash out or fade. |
| Computerised sewing machine | More modern computerized machine embroidery uses an embroidery machine or sewing/embroidery machine that is controlled with a computer that embroiders stored patterns. | Fabric paints | It tends to have a creamy consistency like that of glue which makes it ideal for painting on cloth. |
| Embroidery | Can be hand or machine. The most popular stitches are straight, blanket, | Applique | Appliqué is a decorative technique where one material is sewn on top of |

Two threads

Challenge Task

Circle the correct answers



- A fabric care symbol with a circle inside a square denotes what?
 - Do not iron
 - Hand wash only
 - May be dry cleaned
 - May be tumble dried
- What are the lengthwise threads of a woven fabric called?
 - Distort
 - Shrink
 - Warp
 - Y-axis
- Which of these fabrics is associated waterproof items?
 - Cotton corduroy
 - Cotton poplin
 - Polyester cotton

Rip stop nylon

The thread at right angles to the selvedge is called the

- weft
- whelp
- wend
- west

A fabric care symbol with a capital 'P' in a circle denotes what?

- Hand wash only
- May be dry cleaned
- May be tumble dried
- Polyester fabric

Which kinds of fabrics do not stretch along the length or width?

- Coloured
- Knitted
- Patterned
- Woven

Dig Deeper

<https://www.conrado.com/blog/fabric-printing-methods/>

<https://www.youtube.com/watch?v=wpik1coC3Rk>

Video Tip: Winding and Threading Your Bobbin