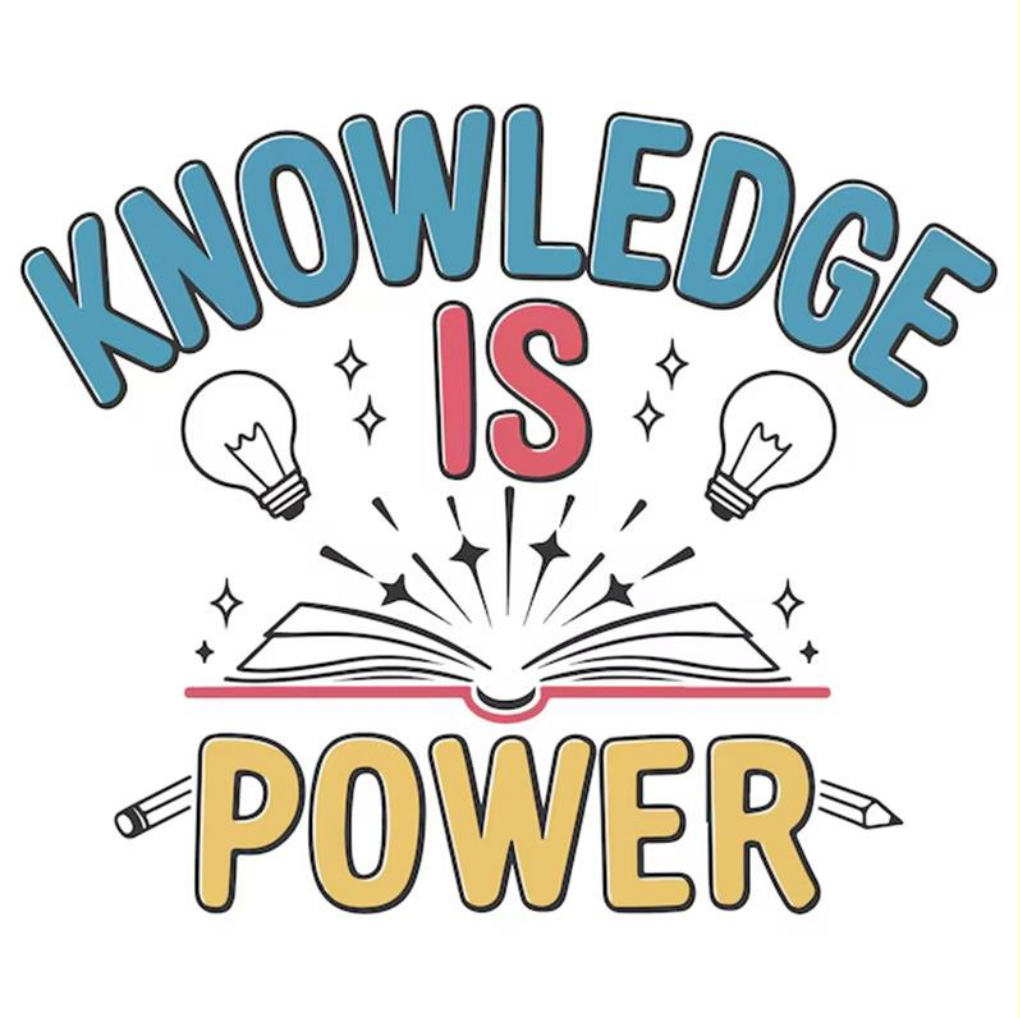
Open Academy Year 7 Knowledge Organiser

Autumn Term 1



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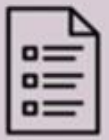
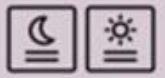
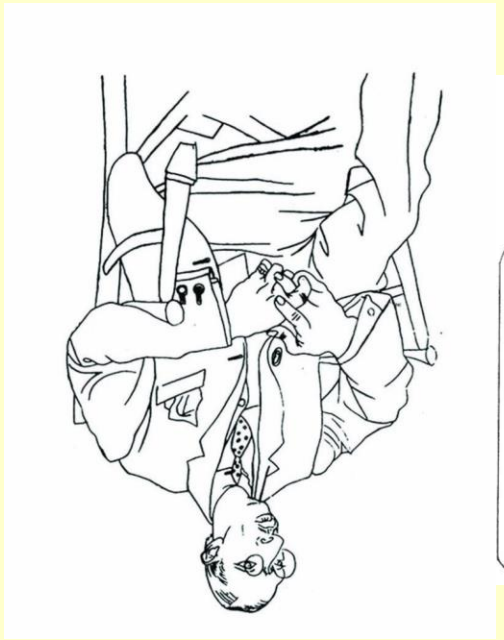
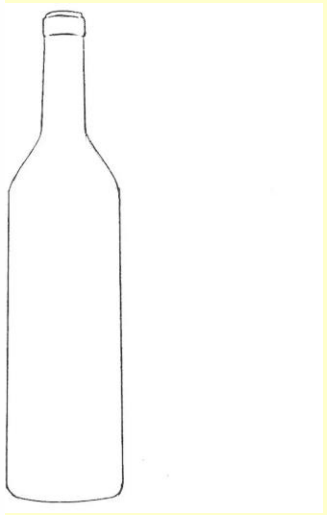
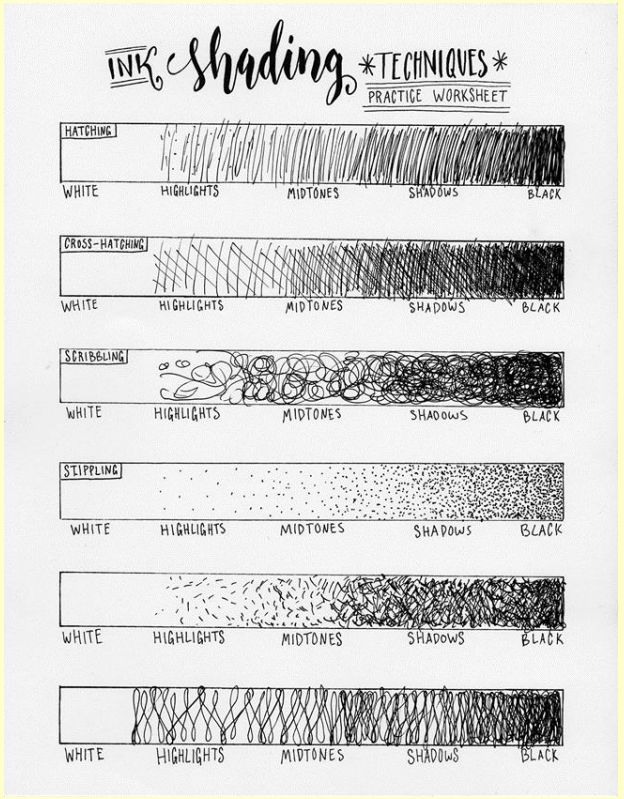
How to use you Knowledge Organiser: Step by step guide

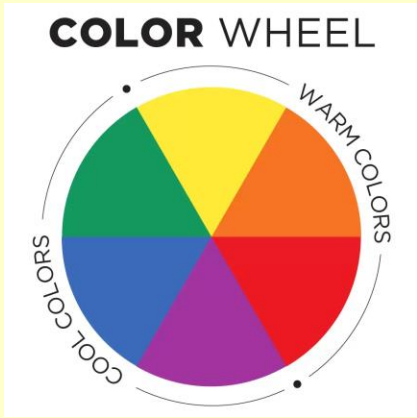
	Look, Cover, Write, Check	Definitions of Key Words	Flash Cards	Self Quizzing	Mind Maps	Paired Retrieval
Step 1	Look at and study a specific area of your KO. 	Write down the key words and definitions. 	Use your KO to condense and write down key facts or information onto flash cards. 	Use your KO to create a mini quiz. Write down your questions using your KO. 	Create a mind map with all the information you can remember from your KO. 	Ask a friend or family member to have the KO or flash cards in their hands. 
Step 2	Cover or flip the KO over and write down everything you can remember. 	Try not to use your KO to help you. 	Add pictures to help support. Then self-quiz using the flash cards. You could write questions on one side, and answers on the other! 	Answer the questions and remember to use full sentences. 	Check your KO to see if there are any mistakes on your mind map. 	They can test you by asking you questions on different sections of your KO. 
Step 3	Check what you have written down. Correct any mistakes in green pen and add anything you have missed. Repeat. 	Use your green pen to check your work. 	Ask a friend or family member to quiz you on the knowledge. 	Ask a friend or family member to quiz you using the questions. 	Try to make connections, linking the information together. 	Write down your answers, 

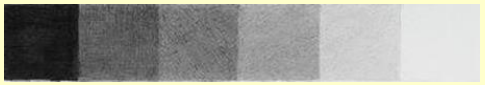
Year 7 Art- Topic: Art Fundamentals

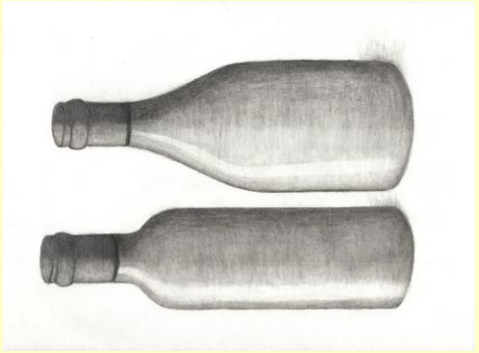




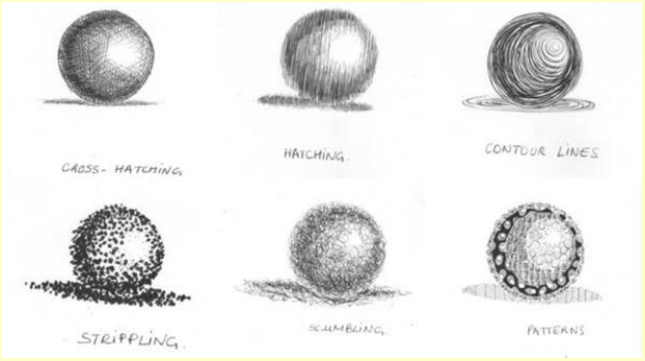








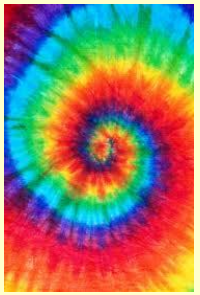
Key Vocabulary
Grainy
Contrasting
Balanced
Perspective
Faint
Emphasis



Year 7 Design and Technology – Topic: Textiles – Making a Monster Handwarmer

Sewing Machine

Batik Pot and Tjanting Tool



Tie Dye

Applique

These are the key principles of design we will be looking at this term when working in the Textiles Workshop. The project is to design and make a material hand warmer in the style of a Monster.

Exam Style Questions?

- Which natural fabrics are suitable for making a handwarmer which will need to be heated up to function?
- What key aesthetics do you need to consider when designing to achieve the Monster look?
- How will you turn it from a 2D product into a 3D product?

Method for Tie Dye

1. Pleat, fold or twist your fabric.
2. Write your initials in the top corner.
3. Wrap and twist the rubber bands round the fabric.
4. Dip in the dye bath then leave to dry.
5. Remove the elastic bands and leave to dry.

Word Bank

Material properties
Aesthetics
Measurements
Pattern Cutting
Batik
Tie Dye
Applique
Stitch Length
Sewing Machine
Pins

Method for Batik:

1. Lay your fabric flat on the heat mat.
2. Write your initials on the top corner of the fabric.
3. Use the tjanting tool to draw the design in wax.
4. When the wax is cool, put it in the dye bath and leave for 10 minutes.
5. Remove and rinse until the water runs clear then leave to dry.
6. Iron between paper to remove the wax.

Year 7 Drama: Topic 1 – Greek Theatre

Plays were often performed as part of a competition at the festival CITY DIONYSIA, which was celebration in honour of the god DIONYSUS, the Greek god of music, feasting and wine.

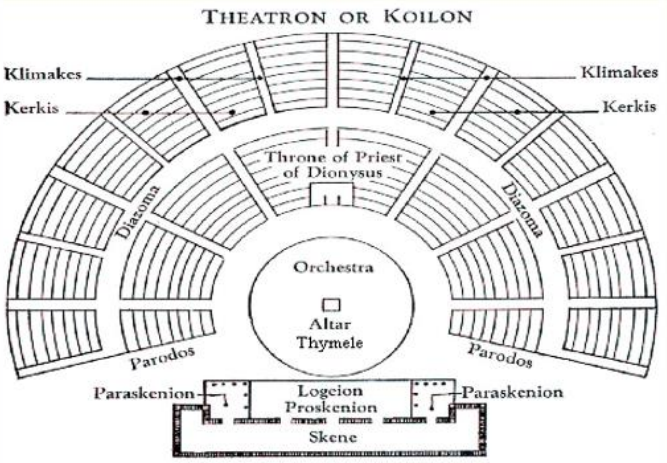
The best playwrights of the day were famous celebrities in Ancient Greece, the most famous were: Aeschylus, Sophocles, Euripes and Aristophanes. Having a play win at the City Dionysia was a great honour and playwrights would go to great extremes to win.

Ancient Greek drama was a theatrical culture that flourished in ancient Greece from 600BC. The word 'theatre' comes from the Greek word 'theatron' which means seeing place.

Most Greek cities had a theatre. It was in the open air, and was usually a bowl-shaped arena on a hillside. Some theatres were very big, with room for more than 15,000 people in the audience.

All the actors were men or boys. Dancers and singers, called the chorus, performed on a flat area called the orchestra. Over time, solo actors also took part, and a raised stage became part of the theatre. The actors changed costumes in a hut called the "skene". Painting the walls of the hut made the first scenery.

The plays were *comedies* (funny, often poking fun at rulers) or *tragedies* (sad and serious, with a lesson about right and wrong).



Key Vocabulary

Chorus – A group of people on stage commenting on the action, setting the scene and helping to tell the story.
Amphitheatre – A large open air performance space.
Canon – Doing a movement one after the other. Like a Mexican wave.
Unison – Everyone doing the same thing at the same time.
Still Image- Like a statue or a photograph.

Year 7 English: Topic – The Odyssey

Summary

Odysseus and his Greek soldiers have finally won their battle against the Trojans and are ready to sail home to their families.

Their journey isn't simple and Odysseus' men must face monsters, their own fears and a godly curse.

Will Odysseus be reunited with his

Why am I learning this?

Greek epics are some of the earliest forms of storytelling. These stories were told to entertain but also offer structure to early civilisations; such as how to behave and who to respect. Understanding this context helps us recognise that writers/speakers use language deliberately. In this way, we are practicing understanding effects of language used ourselves and by others.

Tasks:

1. Read a chapter and create a glossary of any language you need to ***clarify*** or check.
2. After reading a chapter, ***summarise*** the key events and how your understanding of characters have changed.
3. ***Predict*** what you think will happen in the next chapter of the story. Develop this further by writing an explanation of why you made this prediction.
4. Write down a list of ***questions*** you have after reading a chapter. For instance, what more do you want to know about a character or their choices? Why did the author make that choice of vocabulary and not another?

Technical Vocabulary

Allegory – A story that can be read to have a moral message to teach its readers.

Context – Background information that helps us understand the text's meaning.

Epic – A form of poetry made famous by the Ancient Greeks. It tells heroic stories.

Personification – Giving human qualities to non-living things. This might bring an envrionment to life etc.

Simile – Making a description more vivid by comparing to another thing using 'like' or 'as'.

Use these in analysis to show awareness of the author's methods. Explain their effects.

Ambitious Vocabulary

Cunning – Achieves goals through tricks.

Deceptive – Intending to mislead or trick.

Formidable – Powerful, intimidating or threatening.

Heroic – Brave and courageous.

Resilient – Able to recover quickly from adversity.

Treacherous – Dangerous or betraying.

Vengeful – Seeking revenge or retribution.

Wanderer – Someone who travels without a fixed destination.

Try to use the ambitious vocabulary in your writing and analysis.

Year 7 Food Technology – Topic: Health and Safety

Preparing self for cooking

- Tie hair back to prevent hair and dandruff falling in food
- Take off coats and blazers
- Wear an apron to prevent bacteria transferring from our clothes to our food
- Wash hands with hot soapy water to kill bacteria

Preparing the room for cooking

- Sanitise all work surfaces
- Check equipment is clean and dry
- Tuck all stools in as they can be a trip hazard
- Put all high-risk foods in the fridge to slow bacteria growth

Example exam questions

What is the function of sugary and starchy carbohydrates? (2 marks)
Why is protein especially important for children? (2 marks)
What are the functions of fat? (3 marks)
List 5 food sources of plant-based protein (5 marks)
What is the macro nutrient found in the following ingredients – butter, sugar, flour, egg? (4 marks)

Cooking (75°C)	The danger zone (5°C-63°C)
Cooking food above 75°C kills bacteria Re-heat food properly, only once. Reheat food so 75°C for at least 3 minutes Check the food is 75°C with a temperature probe	Bacteria can grow and multiply quickly between 5°C to 63°C. This is called the danger zone. The optimum temperature for bacterial growth is 37°C
Chilling (0°C – 5°C)	Freezing (-18°C)
Keeping food between 0°C and 5°C slows down the growth of bacteria This extends the shelf life of food Chilling food doesn't change the properties much – food looks and tastes the same	Freezing food below -18°C stops bacteria growing – they become dormant Freezing generally extends shelf life, and the nutrients aren't lost It doesn't kill the bacteria though. They become active again once the food defrosts.

Key Vocabulary

Apron
Bacteria
Chilling
Cooking
Danger
Equipment
Freezing
Hazard
Hygiene
Prepare
Sanitise
Temperature
Wash

Practical skills

Peeling
Dicing
Slicing
Weighing
Baking
Organisation skills
Washing up and cleaning down

Year 7 Geography – Topic: Geographical Skills

3 types of Geography

Physical

Relief means the height and shape of the land

Topics include rivers and coastlines, landscapes and environments.

Human

Topics like: Cities (settlements)

Transport networks (rail, roads etc)

Levels of wealth ('development')

Energy and resources

Environmental

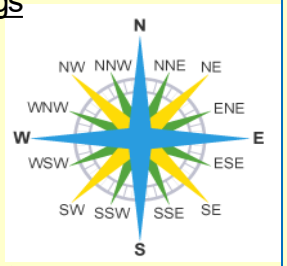
Pollution, deforestation, climate change, ecosystem damage

Directions/bearings

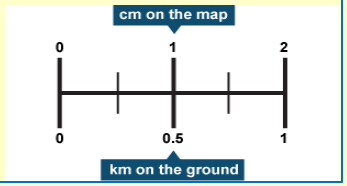
Never, Eat, Slimy, Worms.

One circle is 360 degrees.

Bearings are the directions in numbered degrees.



Scale and distance



Atlas Skills

Atlases contain physical maps which show relief, deserts, rivers and continents and political maps which show settlements, roads, countries, cities etc.

Use the contents or the glossary to locate places.

Co-ordinates are shown in Longitude and Latitude; these show the degrees North or South of the 'Equator' and degrees east or west of the 'Prime Meridian line'.

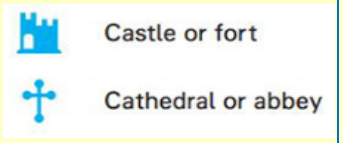
Key Vocabulary

Relief
Prime Meridian
Equator
Longitude
Latitude
Mercator projection
Robinson projection
Scale
Ordnance Survey
Cardinal points
Grid North
Magnetic North
Elevation
Sea level
Bearings
Eastings
Northings

OS Map symbols

Pictures

Small icons to show the main attractions or land-marks.



Abbreviations

One, two or three letters to show features on a map

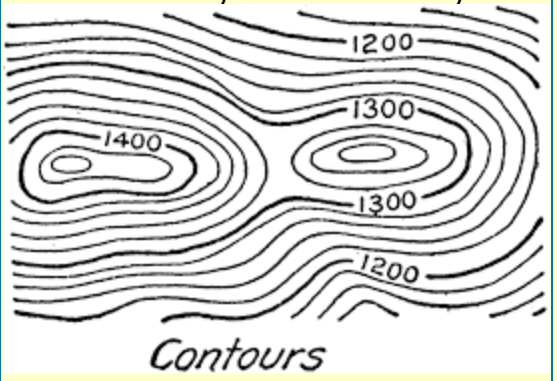
Lines/shapes

Roads, tracks and railways

Railways

Contours

These mark places of equal height in metres above sea level. Close lines show steep relief. Flat areas have few if any contours nearby.



Map projections

The world is a 3D sphere, but an Atlas is a 2 D image, therefore when shown it is disproportionate.

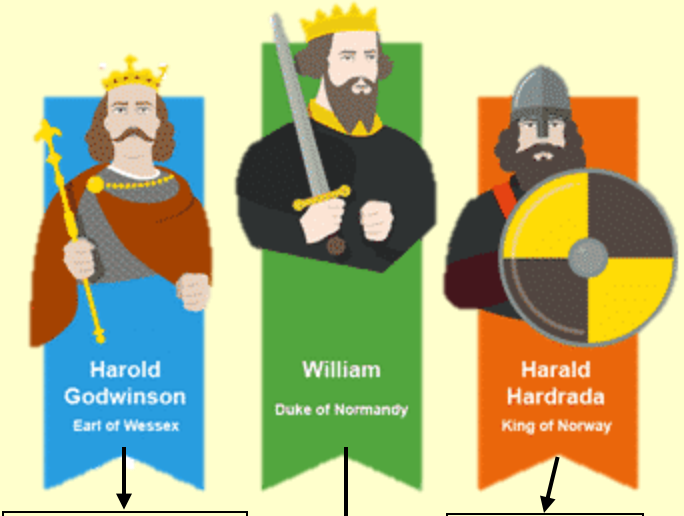
The Mercator projection distorts the size of Greenland to be huge.

The Peters projection is area accurate but shape inaccurate.

The best projesphere,the Robinson.

Using an Atlas
Measuring distance
Give directions
Recognise symbols

Year 7 (History): Topic – Historical Skills & Nasty Normans



English, with experience of ruling Wessex

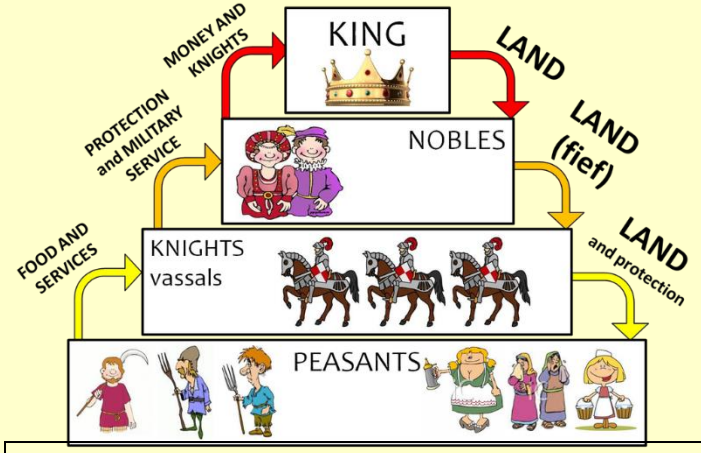
Betrayed the old King and tried to overthrow him

Protected the old King against Harold Godwinson

Already the ruler of a foreign land!

Has experience of being a King

A foreigner who uses force to get what he wants



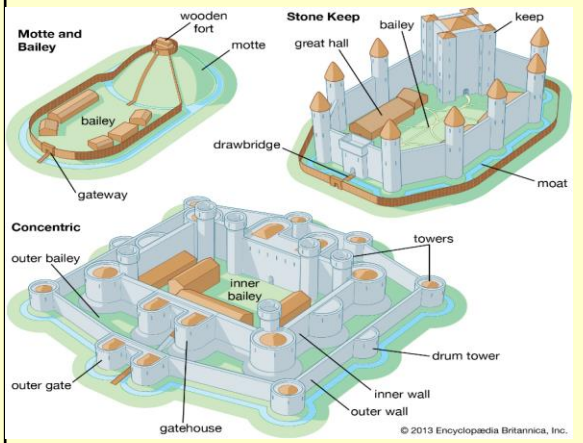
The Feudal system, introduced by William the Conqueror to keep order in medieval society. Each layer receives something from those above them, and gives something in return.

The Battle of Hastings, 14th October 1066

- **Harold's Saxon forces assembled at the top of Senlac Hill**
- **William's archers fire but the Saxon shield wall holds**
- **William's footmen charge but the shield wall still holds**
- **William's cavalry charge and even they can't break the shield wall!**
- **The Normans believe William is dead – they retreat and some Saxons follow. Once William declared that he was still alive, his men turned and killed the pursuing Saxons**
- **The Normans carried out another false retreat and killed more gullible Saxons**
- **The shield wall now weakened, William's archers fired again and killed Harold Godwinson. The Saxons surrendered.**

Key Vocabulary

Chronology - The order in which things happen. The earliest event comes first.
BC – 'Before Christ' the number of years before 0.
AD – ' Anno Domini' The number of years after the birth of Christ.
Decade – 10 years
Century – 100 years
Millennium – 1000 years
Primary source – Something made at the time being studied.
Secondary source – Something made after the time being studied
Evidence – Facts/statistics/or knowledge



Year 7 Unit 1 - Sequences

What do I need to be able to do?

By the end of this unit you should be able to:

- Describe and continue both linear and non-linear sequences.
- Explain term to term rules for sequences
- Find missing terms in sequences

Vocabulary

Arithmetic: A sequence where the difference between the terms is constant.
Difference: the gap between two terms
Geometric: A sequence where each term is found by multiplying the previous one by a fixed non-zero number
Linear: The difference between terms increases or decrease by the same value each time
Non Linear: The difference between terms increase or decreases in different amounts.
Position: The place something is located
Rule: Instructions that relate two variables
Sequence: Items or numbers put in a pre-decided order
Term: A single number belonging to a sequence.

Sequences

Patterns in Sequences

Fibonacci Sequences

Continue Linear Sequences

7, 11, 15, 19...

How do I know this is a linear sequence?
It increases by adding 4 to each term
How many terms do I need to make this conclusion?
At least 4 terms – two terms only shows one difference not if this difference is constant. (a common difference)
How do I continue the sequence?
You continue to repeat the same difference through the next positions in the sequence.

Continue non-linear Sequences

1, 2, 4, 8, 16 ...

How do I know this is a non-linear sequence?
It increases by multiplying the previous term by 2 – this is a geometric sequence because the constant is multiply by 2
How many terms do I need to make this conclusion?
At least 4 terms – two terms only shows one difference not if this difference is constant. (a common difference)
How do I continue the sequence?
You continue to repeat the same difference through the next positions in the sequence.

Explain term-to-term rule

How you get from term to term

Try to explain this in full sentences not just with mathematical notation
Use key maths language – doubles, halves, multiply by two, add four to the previous term etc.

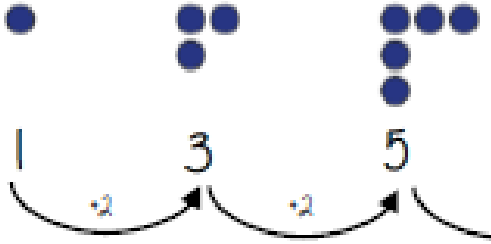
To explain a whole sequence you need to include a term to begin at...

The next term is found by tripling the previous term. The sequence begins at 4.

4, 12, 36, 108...
x3 x3 x3
First term

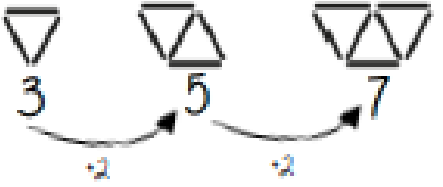
Describe and continue a sequence diagrammatically

Count the number of circles or lines in each image



What will the next number be? Can you draw this?

Predict and check terms



CHECK – draw the next terms

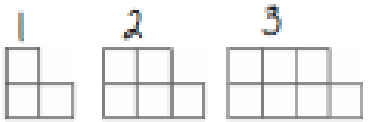
9 11 13

Predictions:
Look at your pattern and consider how it will increase.

e.g. How many lines in pattern 6?
Prediction - 13
If it is increasing by 2 each time - in 3 more patterns there will be 6 more lines

Sequence in a table and graphically

Position: the place in the sequence



3 5 7

Term: the number or variable (the number of squares in each image)

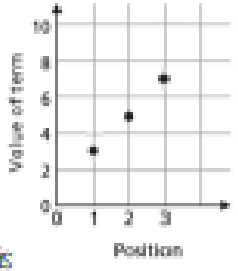
"The term in position 3 has 7 squares"

In a table

Position	1	2	3
Term	3	5	7

+2 +2

Graphically



Because the terms increase by the same addition each time this is linear – as seen in the graph

Linear and Non Linear Sequences

Linear Sequences – increase by addition or subtraction and the same amount each time

Non-linear Sequences – do not increase by a constant amount – quadratic, geometric and Fibonacci

- Do not plot as straight lines when modelled graphically
- The differences between terms can be found by addition, subtraction, multiplication or division

Fibonacci Sequence – look out for this type of sequence

0 1 1 2 3 5 8 ...

Each term is the sum of the previous two terms

A job that relies on number skills:

An Urban Planner

Urban planners identify community needs and develop short- and long-term plans to create, grow, or revitalize a community or area. For example, they may examine plans for proposed facilities, such as schools, to ensure that these facilities will meet the needs of a changing population. As an area grows or changes, planners help communities manage the related economic, social, and environmental issues, such as planning a new park, sheltering the homeless, or making the region more attractive to businesses.

Year 7 Unit 2 – Algebraic Notation

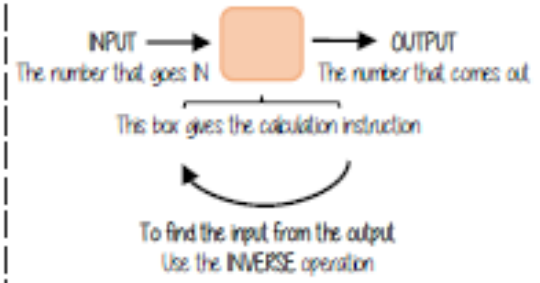
What do I need to be able to do?

- Be able to use inverse operations and fact families
- Be able to substitute into singe and multi-step function machines
- Find functions from expressions
- Form sequences from expressions

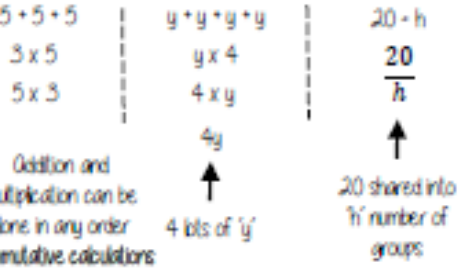
Vocabulary

Commutative: The order of operations does not matter.
Evaluate: Work out
Expression: a maths sentence with a minimum of two numbers and at least one operation
Function: A relationship that instructs how to get from an input to an output
Input: the number/symbol put in to a function
Inverse: The operation that undoes what was done by the previous operation
Linear: The difference between terms increase or decreases by the same value each time.
Operation: a mathematical instructions
Output: The number/expression that comes out of the function.
Substitute: replace one variable with a number

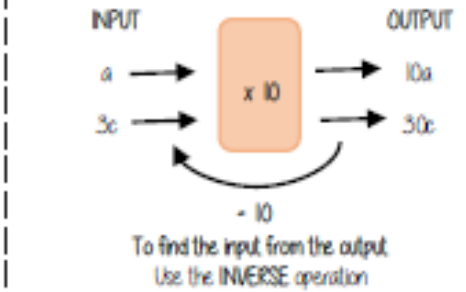
Single function machines



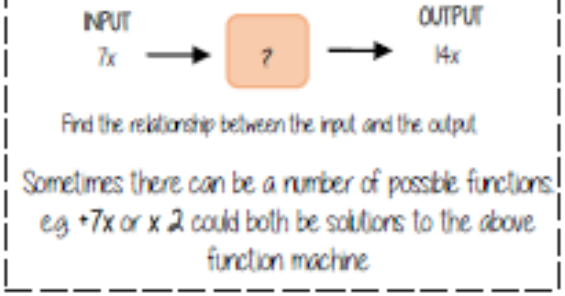
Using letters to represent numbers



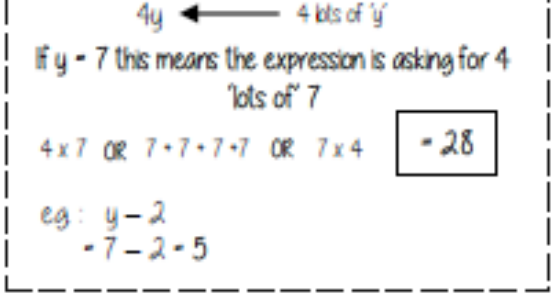
Single function machines (algebra)



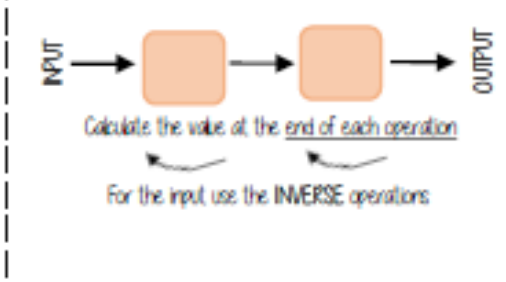
Find functions from expressions



Substitution into expressions



Two step function machines



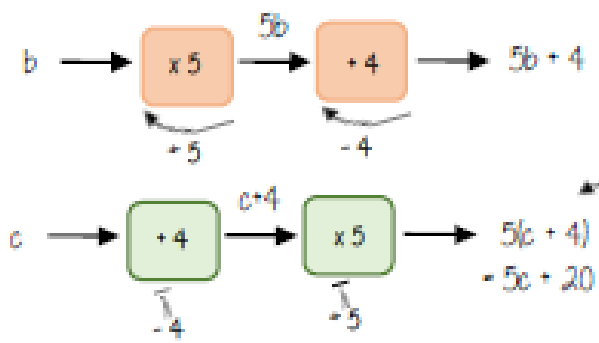
Function Machines

Algebraic Substitution

Plotting Graphs

Algebraic Notation

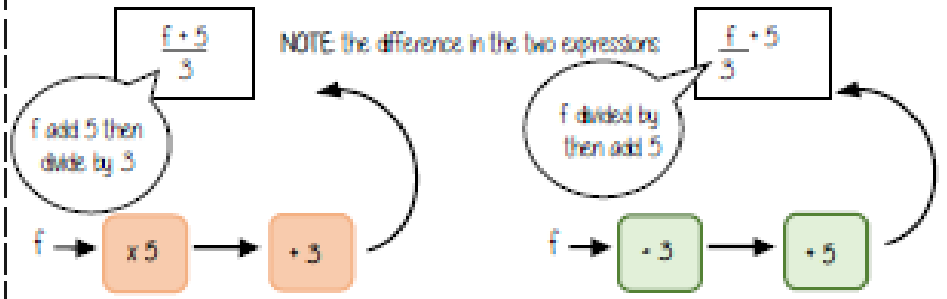
Two step function machines (algebra)



IMPORTANT
Calculate the value at the end of each operation

NOTE:
The whole first output is multiplied by 5

Find functions from expressions



NOTE: the difference in the two expressions

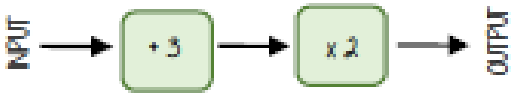
Sometimes it helps to try to explain the expression in word – and consider what has happened to the input

Substitution into an expression

2(x + 3)

Add 3 to the input, then times 2

Put the expression into a function machine



If x = 10
10 + 3 = 13.... 13 x 2 = 26

Forming a sequence

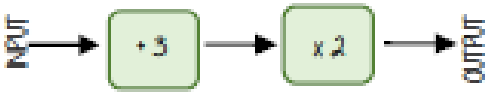
2(x + 3)

INPUT	1	2	3
OUTPUT	8	10	12

The substitution is the "input" value
The OUTPUT becomes the sequence

Representing functions graphically

Take the function and generate a sequence 2(x + 3)



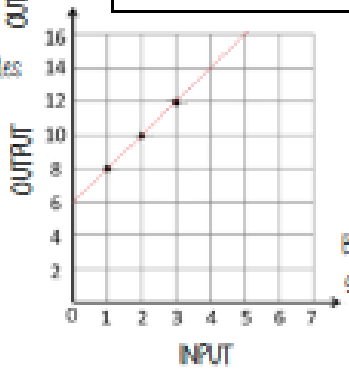
To represent graphically the input becomes x co-ordinates and the output becomes y co-ordinates

y=2(x + 3)

INPUT (x)	1	2	3
OUTPUT (y)	8	10	12

This becomes a co-ordinate pair (2, 10) to plot on a graph

Not all graphs will be linear only those with an integer value for x
Powers and fractions generate differently shaped graphs



NOTE:
Because this is a linear graph you can predict other values

A job that relies on Algebra: **A Computer Engineer**

Computer engineers manage and design the computer hardware and software systems of a company. These skilled individuals may specialize in hardware or software and are often referred to as programmers. Their duties include developing software systems,updating hardware, and designing new equipment. In computer vision, linear algebra is a key element.

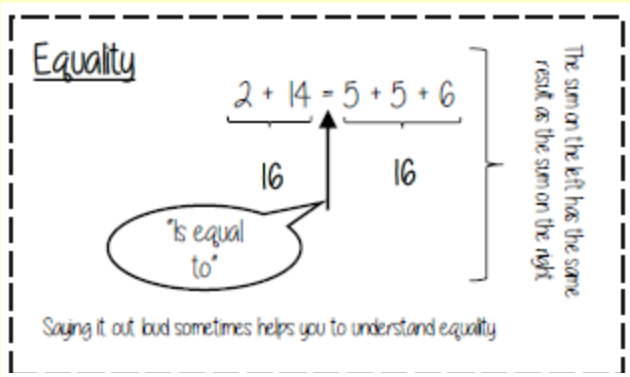
Year 7 Unit 3 – Equality and Equivalence

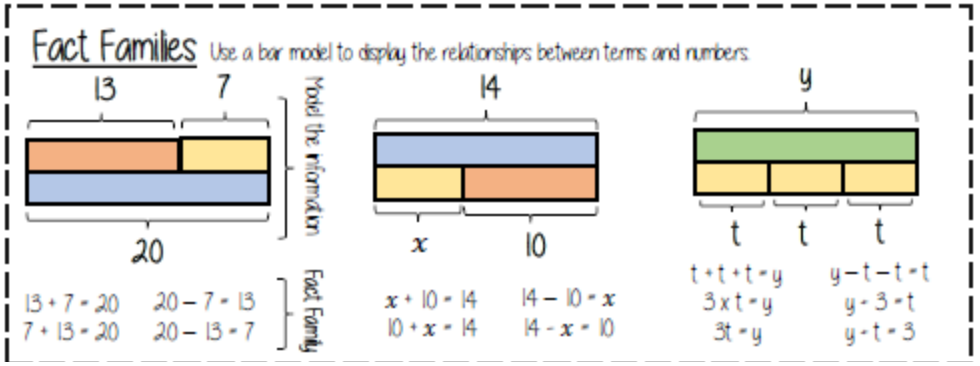
What do I need to be able to do?

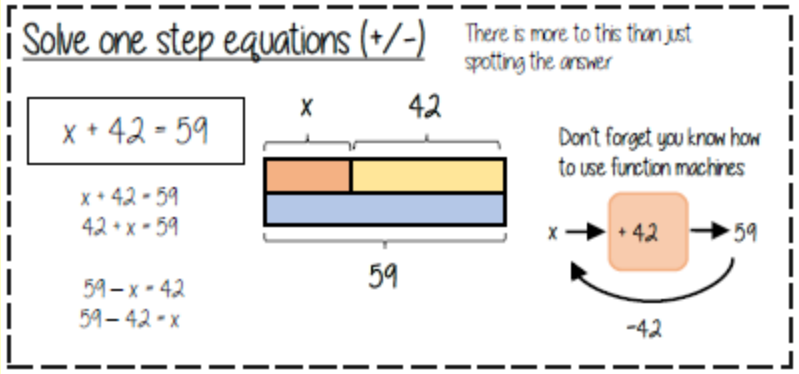
- Form and solve linear equations
- Understand like and unlike terms
- Simplify algebraic expressions

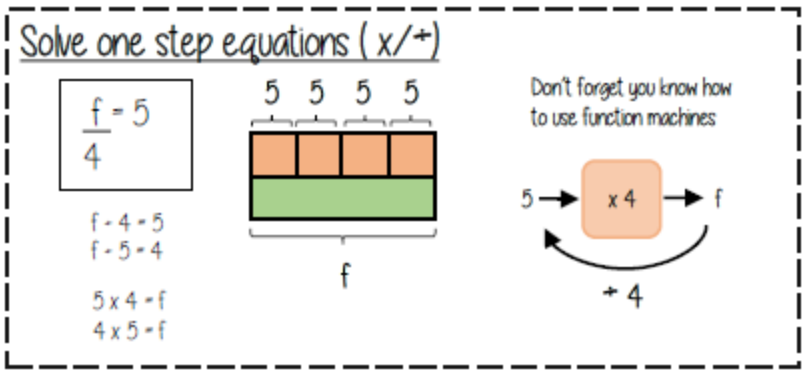
Vocabulary

Coefficient: the number in front of an algebraic variable
Equality: two expression that have the same value
Equals: represented by the symbol = , means the same
Equation: a mathematical statement that two things are equal
Expression: a maths sentence with a minimum of two terms and no equals
Index: the power
Inverse: the operation that undoes what was done by the previous operation
Like: Variable that are the same are like e.g 3a and -4a
Solution: the set or value that satisfies the equation
Solve: to find the value of the unknown e.g x
Term: a single number or variable









Solving Linear Equations

Fact Families

Collecting Like Terms

Multiplying Terms

Like and unlike terms

Like terms are those whose variables are the same

♡ and 3♡ are like terms

the variable is the same

★ 3♡ are unlike terms

the variables are NOT the same

Examples and non-examples

Like terms	Un-like terms
y, 7y $2x^2$, x^2 ab, 10ba 5, -2	y, 7x $2x^2$, $2c^2$ ab, 10a 5, -2t

Note here ab and ba are commutative operations, so are still like terms

Equivalence

Check equivalence by substitution

e.g. m = 10

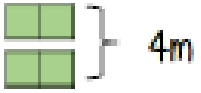
5m	2 x 2m	7m – 3m
5 x 10	2 x (2x10)	(7x10) – (3x10)
= 50	= 2 x 20	= 70 – 30
	= 40	= 40

Equivalent expressions

Repeat this with various values for m to check

5m

2 x 2m



7m – 3m

Collecting like terms ≡ symbol

The ≡ symbol means equivalent to

It is used to identify equivalent expressions

Collecting like terms

Only like terms can be combined

$4x + 5b - 2x + 10b$

$4x + 5b - 2x + 10b$

$2x + 15b$

Common misconceptions

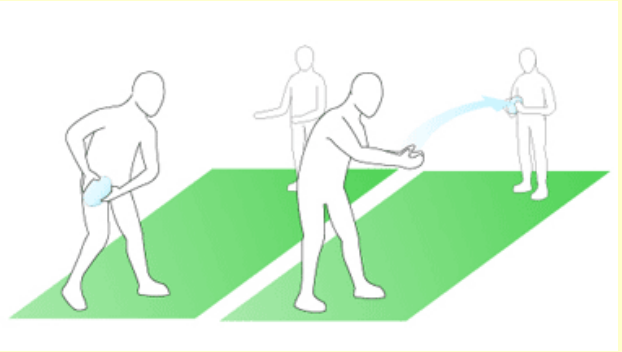
$2x + 3x^2 + 4x \equiv 6x + 3x^2$

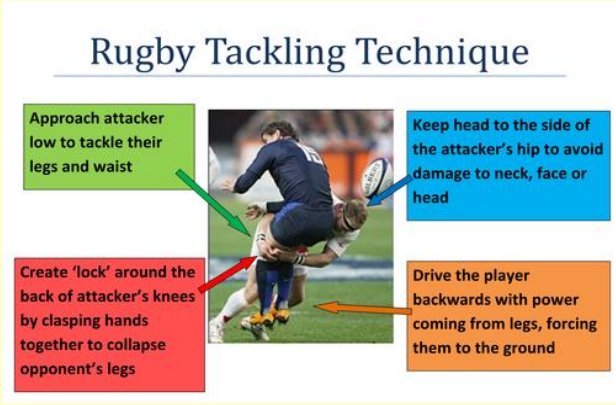
Although they both have the x variable x2 and x terms are un-like terms so can not be collected

A job that relies on Algebra: **A Chemist**

Chemistry is the study of elements, atoms, molecules, and how they react together. Chemists research and test medicines, explosives, and a lot of other things. Chemistry is a very important science because it is how we got almost all of the newer, more powerful medicines. Chemists role is to improve the quality of products and procedures while ensuring safety. Chemists need a good understanding of basic mathematical concepts including numerical calculations, algebraic functions and data handling skills in order to succeed in chemistry

Year 7 Physical Education – Topic – Rugby





Key skills

Ball Familiarisation –
Is being able to perform fundamental rugby handling skills and use these in a small-sided game to maintain ball possession & outwit opponents. It's also developing understanding and knowledge of the basic rules of rugby union.

Passing –
Is being able to outwit opponents using skills and techniques and to understand the importance of width in order to attack. This demonstrates an understanding of the basic rules such as no backwards pass & how to score a try.

Tackling –
Is developing understanding and knowledge of how to tackle safely in order to perform and accurately replicate the correct techniques for front and side tackles. To understand the rules regarding tackling within the game such as "no high tackling".

Attacking/Outwitting Opponents -
Is being able to outwit opponents using learnt skills and techniques by developing the decision making process in a game situation. You should be able to confidently describe most of the rules and laws of rugby union and to begin to recognize and identify strengths and weaknesses when playing small sided games.

Rules of The Game

Scoring

Try - 5 points
A try is scored when the ball is grounded over the opponents' goal-line in the in-goal area. A penalty try can be awarded if a player would have scored a try but for foul play by the opposition.

Penalty - 3 points
When awarded a penalty after an infringement by the opposition, a team may choose to kick at goal.

Conversion - 2 points
After scoring a try, that team can attempt to add two further points by kicking the ball over the crossbar and between the posts from a place in line with where the try was scored.
The conversion kick can be taken either as a place kick (from the ground) or a drop kick.

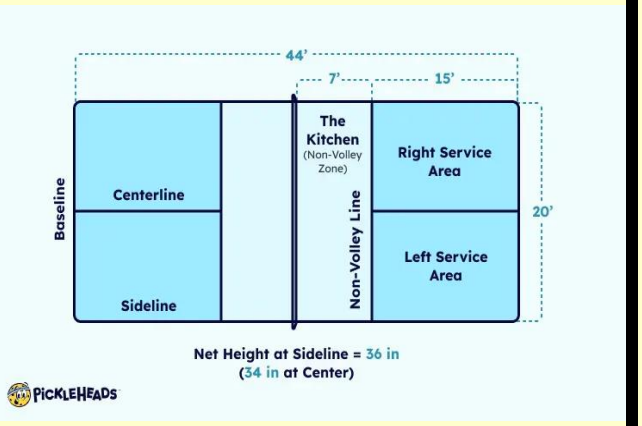
Key Vocabulary

Backwards
Conversion
Maul
Offside
Pass
Penalty
Ruck
Tackle
Tactical
Try

Year 7 Physical Education – Topic: Pickleball

The pickleball court:

The size of the pickleball court is the same court as the badminton court. It is separated into two sides with a line down the middle.



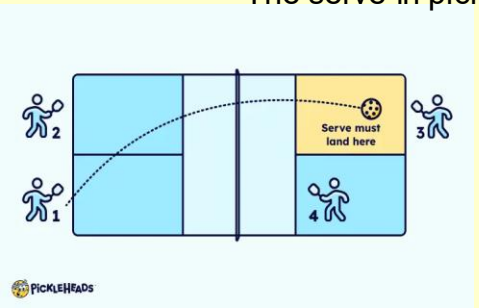
The non volley zone (Kitchen):

This zone is in the middle of the court, on either side of the net. As the name suggests, you can never hit a volley while any part of your body is in the kitchen (or even on the kitchen line). You can't let your momentum carry you into the kitchen after a volley either.

The serve:

The pickleball game starts with a serve. The player on the right side of their court always starts the serve. You serve diagonally to your opponent.

The serve in pickleball is underarm.

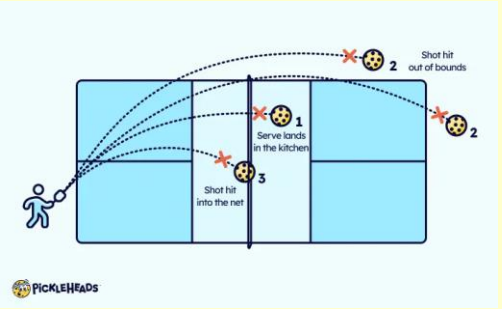


You must stand behind the baseline when serving in pickleball. Your feet cannot touch the baseline or sideline during your serve.

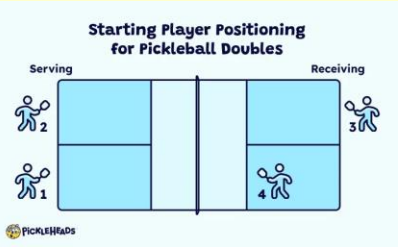
Your serve must completely clear the kitchen line, and land between the sideline and baseline to count. The serve can land "on the line" for the baseline and sideline, but *not* on the kitchen line.

In pickleball, there are four basic serving faults:

1. The serve lands in the kitchen
2. The ball lands out of the court
3. The ball hits the net and falls on your side.
4. The ball bounces twice on one side before the player can return it.



Starting position:



first team to 11 points wins—but you must win by 2.

Key words:

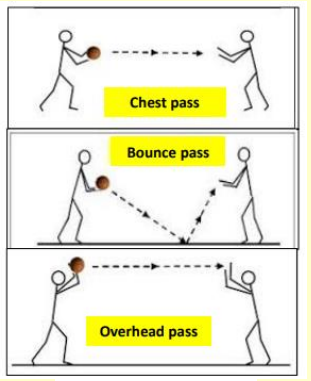
Non-Volley
Kitchen
Serve
Fault
Sideline
Underarm

Year 7 Physical Education – Topic: Netball

Centre:
To take the centre pass and to link the defence and the attack

Wing Attack:
To feed the circle players giving them shooting opportunities

Wing Defence:
To look for interceptions and prevent the WA from feeding the circle



Goalkeeper:
To work with the GD and to prevent the GA/GS from scoring goals

Goal Defence:
To win the ball and reduce the effectiveness of the GA

Netball positions:

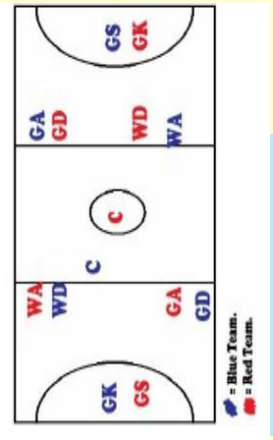
There are seven playing positions in a team.

Each has an important role to play for their team

Goal Shooter:
To score goals and to work in and around the circle with the GA

Goal Shooter:
To score goals and to work in and around the circle with the GA

Goal Attack:
To feed and work with GS and to score goals

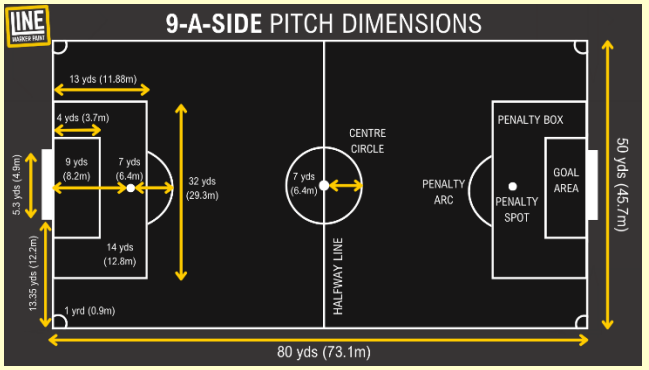


Key Vocabulary:
Attack
Defence
Goal
Positions
Wing

Year 7 Physical Education – Topic: Football

Rules of The Game 9-a-side

- A match consists of 60 minutes, 30 minutes a half.
- Each team can have a maximum off 9 players
- Each team can name as many substitute players as they want, and be made whenever throughout the game
- Each game must include one referee and two assistant referee's (linesmen). It is the job of the referee to act as timekeeper and make any decisions which may need to be made such as fouls, free kicks, throw ins, penalties and added on time at the end of each half.
- If teams are still level after extra time, then a penalty shootout must take place.
- The whole ball must cross the goal line for it to constitute as a goal.
- For fouls committed a player could receive either a yellow or red card depending on the severity of the foul; this comes down to the referee's discretion.
- If a ball goes out of play off an opponent in either of the side lines, then it is given as a throw in. If it goes out of play off an attacking player on the base line, then it is a goal kick. If it comes off a defending player, it is a corner kick.



Key skills

Passing - To be able to perform the basic Football skills of passing and receiving. To be able to perform these in a small, sided game. To understand and know where passing is used in football. To be able to outwit opponents with passes.

Dribbling - To be able to perform the basic dribbling with control. To be able to outwit opponents with the use of these techniques.

Shooting - To understand and know the benefits of types of shot on goal. To develop their understanding and knowledge of how to execute a successful shot on goal.

Attack - To develop their understanding and knowledge of how to outwit an opponent using the skills learnt.

Defence - To be able to perform basic defensive skills i.e. Tackling To understand when to defend and how to stop opponents from advancing.

Scoring

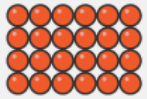
To score the ball must go into your opponent's goal. The whole ball needs to be over the line for it to be a legitimate goal. A goal can be scored with any part of the body apart from the hand or arm up to the shoulder. The goal itself consists of a frame measuring 8 feet high and 8 yards wide.

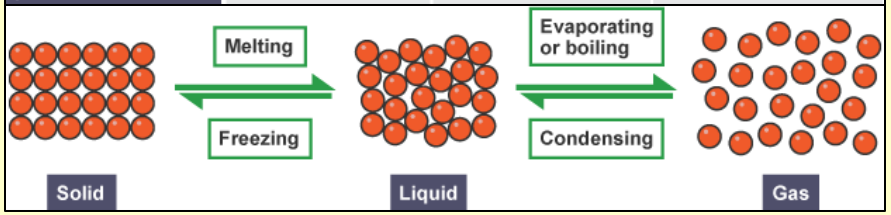
A team is awarded 3 points for a win (more goals scored than the opposition), 1 point for a draw (equal number of goals scored for each team), and 0 points for a loss (less goals scored than the opposition).

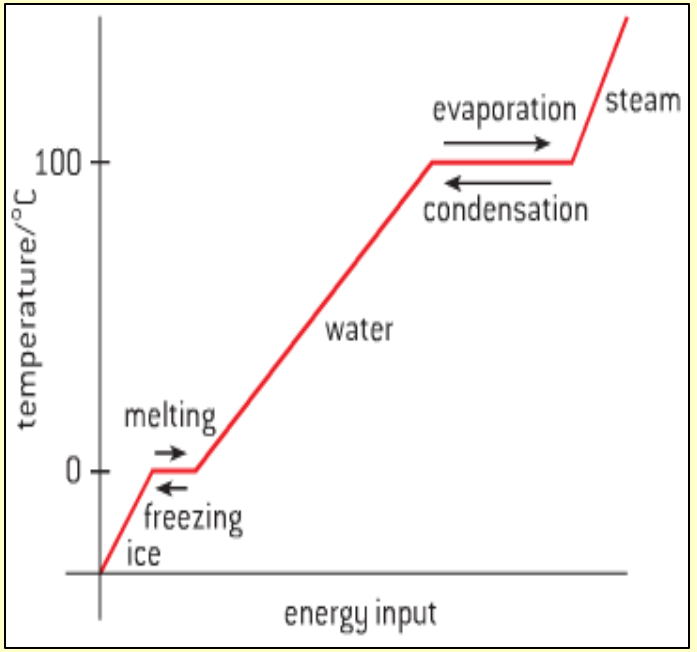
Key Vocabulary

Corner Kick
Hand-ball
Indirect Free Kick
Mark
Offside
Penalty Kick
Slide Tackle
Throw-In
Volley
Wall

Year 7 Science Topic - Particles

State	Solid	Liquid	Gas
Diagram			
Arrangement of particles	Regular arrangement	Randomly arranged	Randomly arranged
Movement of particles	Vibrate about a fixed position	Move around each other	Move quickly in all directions
Closeness of particles	Very close	Close	Far apart





Key Vocabulary

Solid
Liquid
Gas
Evaporation
Condensation
Freezing
Melting
Energy
Steam
Boiling
Temperature
Heat

Density

1 kg of a gas has a larger volume than 1 kg of a solid. There is empty space between particles in a gas, but in a solid, they are tightly packed together.

Density = Mass / Volume

… so the density of the gas is much smaller than the density of the solid.

Diffusion

Particles in a liquid or a gas **spread** out from an area of **high concentration** to an area of **low concentration** until the concentrations are equal.

The **higher** the concentration **gradient** the **faster** the net diffusion. The **higher** the **temperature** the **faster** the net diffusion. If the particles that are spreading are **water** molecules

As a substance is heated it gains **energy**. When the particles gain enough energy they overcome the **forces** between them. Whilst a **change of state** is happening the **temperature** of the substance does not change. (flat line on graph)

Risk Assessment			
Hazard	Risk	Level of risk	Control measure
What could cause harm? e.g. electricity	What harm could it cause? e.g. electrical shock, burns to the skin	How likely is it to happen and how bad would it be? Low, medium or high risk?	What safety precautions will be taken? e.g. wear safety goggles, ensure all wires and equipment is tested, fused, earthed and insulated. Do not use near water.

The independent variable – The one factor that can be changed in an investigation

The dependent variable – The one thing that needs to be measured in an investigation

Control variable – all the factors that need to be kept the same to ensure the investigation is fair

Year 7 Spanish – Topic: Mi tiempo libre – My freetime

- **Qué te gusta hacer? *What do you like to do?***
- Me gusta… *I like…*
- Me gusta mucho… *I really like…*
- No me gusta… *I don't like…*
- No me gusta nada… *I don't like at all…*
- chatear *to chat online*
- escribir correos *to write emails*
- escuchar música *to listen to music*
- jugar a los videojuegos *to play videogames*
- leer *to read*
- mandar SMS *to send text messages*
- navegar por Internet *to surf the net*
- salir con mis amigos *to go out with friends*
- ver la television *to watch TV*
- porque es… *because it is…*
- porque no es… *because it is not…*
- interesante *interesting*
- guay *cool*
- divertido/a *amusing, funny*
- estúpido/a *stupid*
- aburrido/a *boring*

¿Qué haces en tu tiempo libre? *What do you do in your spare time?*
bailo *I dance*
canto karaoke *I sing karaoke*
hablo con mis amigos *I talk with my friends*
monto en bici *I ride my bike*
saco fotos *I take photos*
toco la guitarra *I play the guitar*

Palabras muy frecuentes
High-frequency words
con *with*
cuando *when*
generalmente *generally*
mucho *a lot*
no *no*
o *or*
pero *but*
porque *because*
sí *yes*
también *also, too*
y *and*
¿Y tú? *And you?*

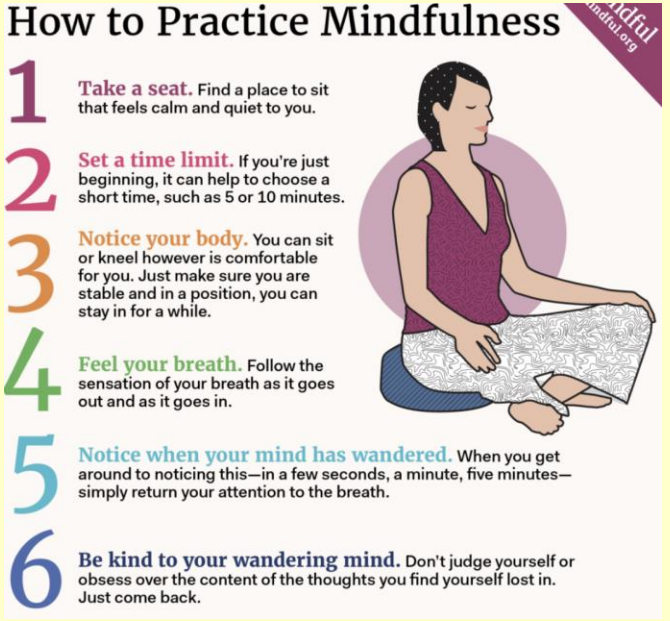
Las estaciones *The seasons*
la primavera *spring*
el verano *summer*
el otoño *autumn*
el invierno *winter*

¿Qué tiempo hace? *What's the weather like?*
hace calor *it's hot*
hace frío *it's cold*
hace sol *it's sunny*
hace buen tiempo *it's nice weather*
llueve *it's raining*
nieva *it's snowing*
¿Qué haces cuando llueve? *What do you do when it's raining?*

Expresiones de frecuencia
Expressions of frequency
a veces *sometimes*
de vez en cuando *from time to time*
nunca *never*
todos los días *every day*

Year 7 Wellbeing – Topic: Meditation

Mindfulness and Meditation can help most people at times!
Our 'everyday mind' can end up full of worries about things which are no longer true or happening or fretting about what MIGHT happen in the future – even though we know it may not!
The idea is that we are more than these conscious thoughts.
Challenging things happen, we cannot avoid that, but what we think about those challenges is very much up to us
To worry and repeatedly think about difficult things can become suffering - a habit it is all too easy to fall in. The good news however is that we can avoid it! How?
When we notice that we are worrying about things - playing through possible futures like a film in our heads or imagining something going wrong, or even remembering difficult things, unpleasant experiences, **we can simply choose to bring ourselves back to the present moment, by thinking about our breathing**.
This practice comes with lots of benefits…

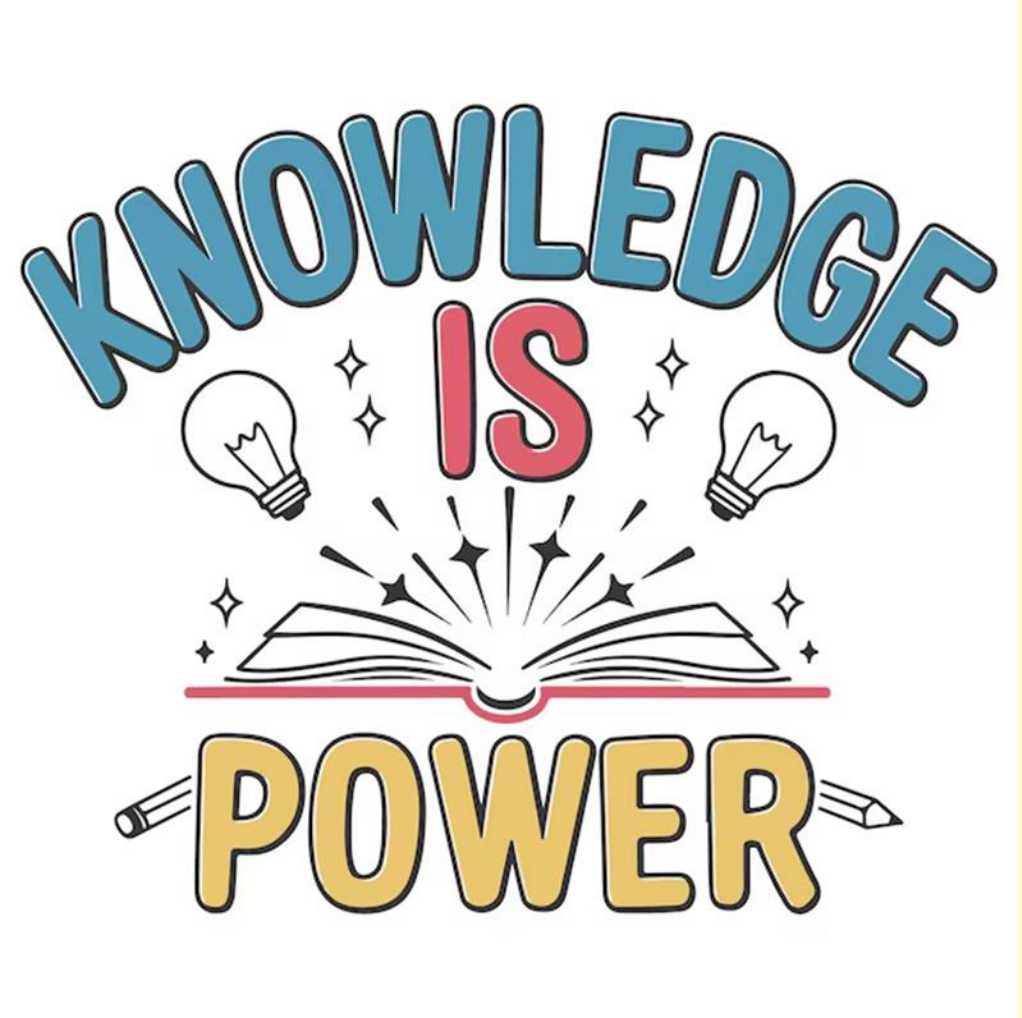


I know it seems way too simple! But this is an ancient practice with traditions in all major religions – including Islam and Christianity!
I know that it will seem odd at first. That is your worrying mind trying to stop you taking control over it!
But stick with it – it will help! Regularly practicing will really help!

If you are struggling with worries regularly you might want to get some support – you can start with Kooth – go to their website and sign up – it is easy, and they will help! If you need help on a specific aspect of Mental Health you can always start at the excellent FYI website here: https://www.fyinorfolk.nhs.uk/ - it costs nothing to sign up and get help!

Open Academy Year 7 Knowledge Organiser

Autumn Term 2



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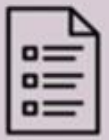
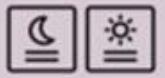
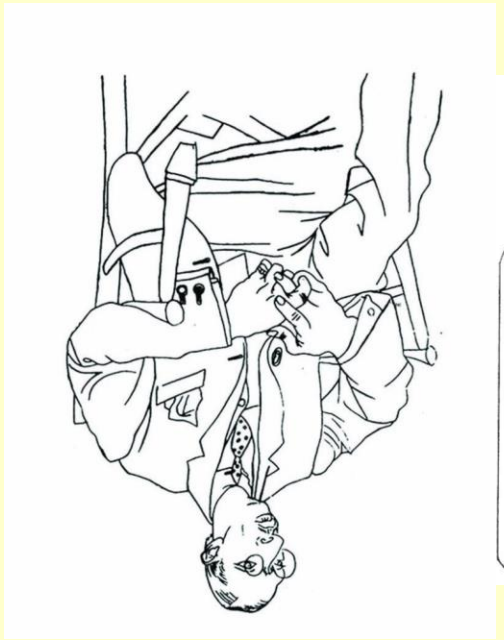
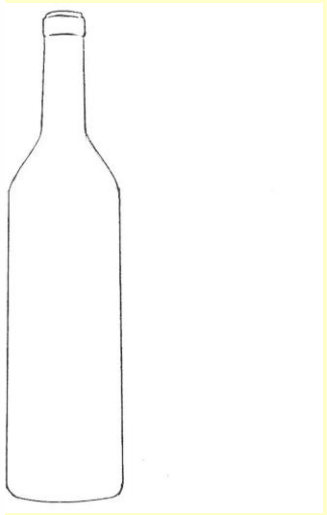
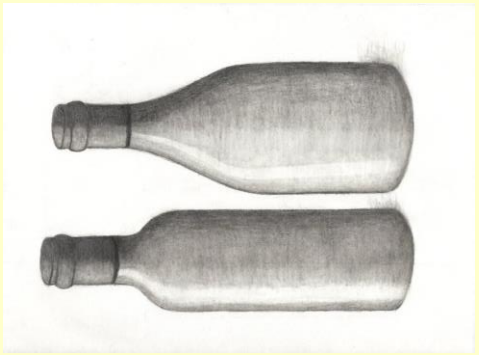
How to use you Knowledge Organiser: Step by step guide

	Look, Cover, Write, Check	Definitions of Key Words	Flash Cards	Self Quizzing	Mind Maps	Paired Retrieval
Step 1	Look at and study a specific area of your KO. 	Write down the key words and definitions. 	Use your KO to condense and write down key facts or information onto flash cards. 	Use your KO to create a mini quiz. Write down your questions using your KO. 	Create a mind map with all the information you can remember from your KO. 	Ask a friend or family member to have the KO or flash cards in their hands. 
Step 2	Cover or flip the KO over and write down everything you can remember. 	Try not to use your KO to help you. 	Add pictures to help support. Then self-quiz using the flash cards. You could write questions on one side, and answers on the other! 	Answer the questions and remember to use full sentences. 	Check your KO to see if there are any mistakes on your mind map. 	They can test you by asking you questions on different sections of your KO. 
Step 3	Check what you have written down. Correct any mistakes in green pen and add anything you have missed. Repeat. 	Use your green pen to check your work. 	Ask a friend or family member to quiz you on the knowledge. 	Ask a friend or family member to quiz you using the questions. 	Try to make connections, linking the information together. 	Write down your answers, 

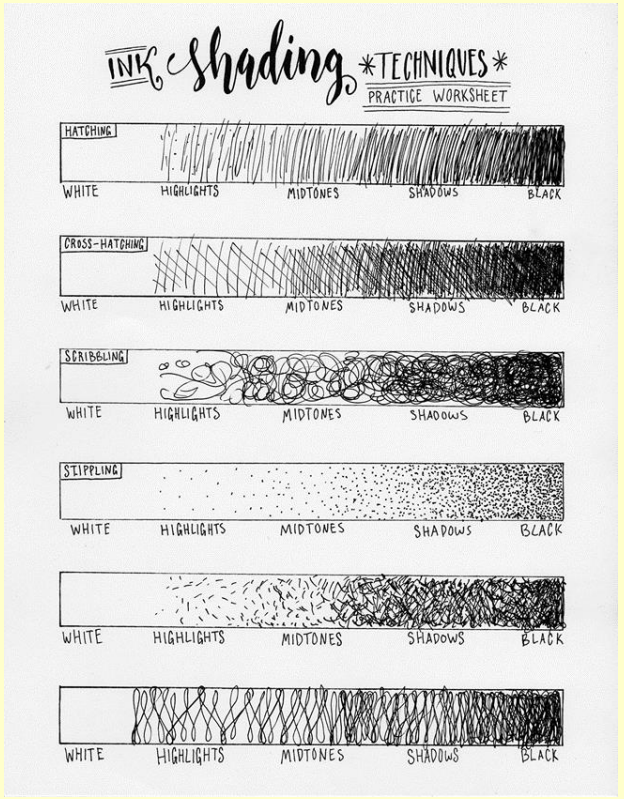
Year 7 Art- Topic: Art Fundamentals

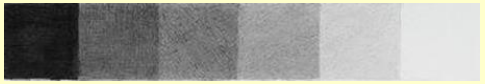


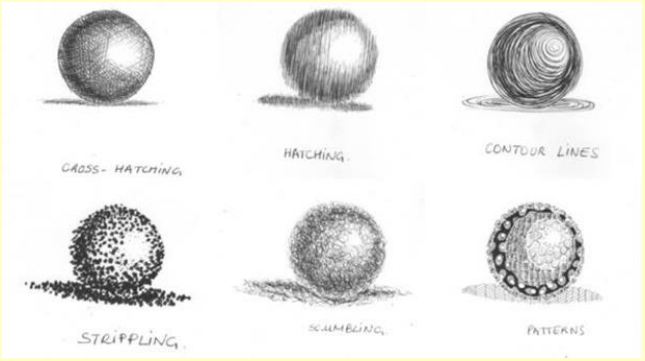




Key Vocabulary
Grainy
Contrasting
Balanced
Perspective
Faint
Emphasis



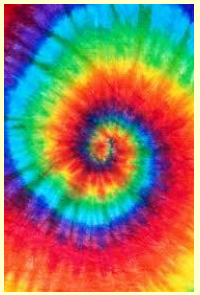




Year 7 Design and Technology – Topic: Textiles – Making a Monster Handwarmer

Sewing Machine

Batik Pot and Tjanting Tool



Tie Dye

Applique

These are the key principles of design we will be looking at this term when working in the Textiles Workshop. The project is to design and make a material hand warmer in the style of a Monster.

Exam Style Questions?

- Which natural fabrics are suitable for making a handwarmer which will need to be heated up to function?
- What key aesthetics do you need to consider when designing to achieve the Monster look?
- How will you turn it from a 2D product into a 3D product?

Method for Tie Dye

1. Pleat, fold or twist your fabric.
2. Write your initials in the top corner.
3. Wrap and twist the rubber bands round the fabric.
4. Dip in the dye bath then leave to dry.
5. Remove the elastic bands and leave to dry.

Word Bank

Material properties
Aesthetics
Measurements
Pattern Cutting
Batik
Tie Dye
Applique
Stitch Length
Sewing Machine
Pins

Method for Batik:

1. Lay your fabric flat on the heat mat.
2. Write your initials on the top corner of the fabric.
3. Use the tjanting tool to draw the design in wax.
4. When the wax is cool, put it in the dye bath and leave for 10 minutes.
5. Remove and rinse until the water runs clear then leave to dry.
6. Iron between paper to remove the wax.

Year 7 Drama: Topic 2 – Greek Theatre

Plays were often performed as part of a competition at the festival CITY DIONYSIA, which was celebration in honour of the god DIONYSUS, the Greek god of music, feasting and wine.

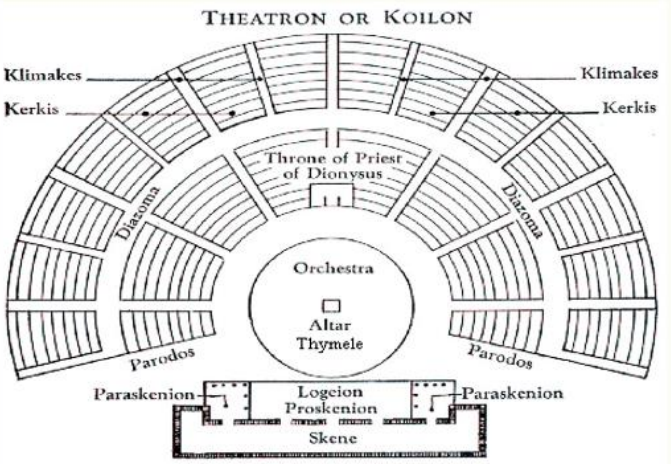
The best playwrights of the day were famous celebrities in Ancient Greece, the most famous were: Aeschylus, Sophocles, Euripes and Aristophanes. Having a play win at the City Dionysia was a great honour and playwrights would go to great extremes to win.

Ancient Greek drama was a theatrical culture that flourished in ancient Greece from 600BC. The word 'theatre' comes from the Greek word 'theatron' which means seeing place.

Most Greek cities had a theatre. It was in the open air, and was usually a bowl-shaped arena on a hillside. Some theatres were very big, with room for more than 15,000 people in the audience.

All the actors were men or boys. Dancers and singers, called the chorus, performed on a flat area called the orchestra. Over time, solo actors also took part, and a raised stage became part of the theatre. The actors changed costumes in a hut called the "skene". Painting the walls of the hut made the first scenery.

The plays were *comedies* (funny, often poking fun at rulers) or *tragedies* (sad and serious, with a lesson about right and wrong).



Key Vocabulary

Chorus – A group of people on stage commenting on the action, setting the scene and helping to tell the story.
Amphitheatre – A large open air performance space.
Canon – Doing a movement one after the other. Like a Mexican wave.
Unison – Everyone doing the same thing at the same time.
Still Image- Like a statue or a photograph.

Year 7 English: Topic – Poetry through the ages

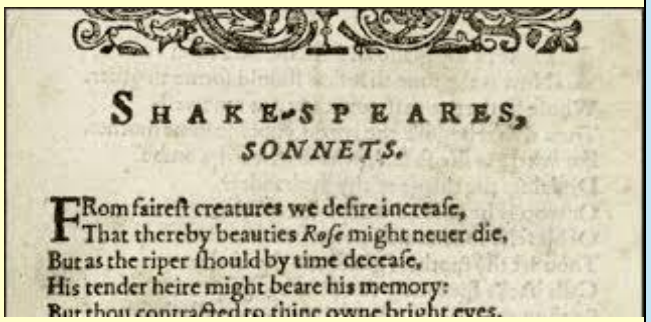
Summary

Last term we read our first poem, an epic. On this course, you'll witness how poetry has developed across thousands of years. Starting with another epic, you'll study poetry that established cultures, challenged social hierarchies, became intimate and personal, questioned humankind's relationship with religion and science, before capturing the experience of conflict and life after world war.

Why am I learning this?

On this course we consider how poetry adapted over time. We call this a 'historicist' approach. We learn to use context to understand stories and an author's intentions.

Understanding this helps us across our subjects, for instance in history, but also encourages us to consider how the language we use is a result of circumstances and situations.



SHAKE-SPEARES,
SONNETS.

FRom faireſt creatures we deſire increaſe,
That thereby beauties Roſe might neuer die,
But as the riper ſhould by time deceaſe,
His tender heire might beare his memory:
But thou contracted to thine owne bright eyes.

Tasks:

1. Read a poem and write down your initial impressions. Develop further by explaining what caused this.
2. Create a glossary of any words you need to **clarify**.
3. Write a response to the author – how do you feel about their views? Would you agree or challenge them?

Be ambitious:

Last term we learned about psychoanalysis and how it explains human behaviour. Can you use the terms ego, super-ego and id to explain the ideas in the poem you are reading?

Technical Vocabulary

Context – Background information that helps us understand the text's meaning.

Epic – A form of poetry made famous by the Ancient Greeks. It tells heroic stories.

Imagery – Using sensory language and comparisons to create a vivid image.

Sonnet – A form of poetry with 14 lines, often romantic.

Stanza – A group of lines in poetry. There are different names for types of stanza such as couplet and quatrain.

Use these in analysis to show awareness of the author's methods. Remember to explain their effects.

Ambitious Vocabulary

Evocative – Producing strong emotions.

Dismal – A mood of gloom or depression.

Melancholic – Feeling or showing sadness about the past.

Pious – Complete devotion to religion and faith.

Provocative – Intentionally stirring up action or response.

Hierarchy – A structure that shows or suggests who holds power over others.

Satirical – Using humour to make a political point.

Try to use the ambitious vocabulary in your writing and analysis.

Year 7 Food Technology – Topic: Bacteria Growth

Micro-organisms

Micro-organisms are tiny forms of life.They spoil food and make it unsafe to eat because they contaminate it with their waste products, their physical presence and the toxins they produce.

What micro-organisms can spoil food and make it unsafe to eat?

There are three groups of micro-organisms that you need to know about that spoil food and cause food poisoning. These are..

- Bacteria
- Moulds
- Yeasts

Micro organisms need 5 conditions to grow and multiply:

1. A warm temperature
2. Plenty of moisture (water)
3. Plenty of food
4. Time (bacteria split every 10-20 minutes)

High risk foods

- High risk food have ideal conditions for bacteria
- High risk foods are ready to eat foods that could grow harmful bacteria
- They are moist and high in protein which is food for bacteria.
- High risk foods have a short shelf life – you can't keep them for long or the bacteria might multiply to dangerous levels.

Examples of high risk foods:

Cooked meat, fish and poultry, dairy products (eggs, cheese etc.), gravies, stocks and sauces, shellfish, cooked rice.

Key Temperates!

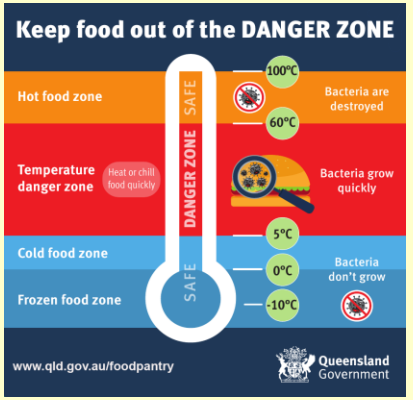
- 75°C – the correct temperature to reheat food to
- 5-63°C – the danger zone – between these temperatures bacteria multiplies quickly
- 37.5°C - bacteria multiplies the quickest at this temperature
- 0-4°C – the temperature of the fridge
- -18°C – the temperature of the freezer.

Key Vocabulary

Bacteria
Re-heat
High risk
Cross-contamination
Temperature
Fridge
Freezer
Conditions

Example exam questions

Name the 4 conditions that bacteria needs to multiply.
What are the three different micro-organisms?
Where do we store high risk foods to prevent bacteria growth?
Explain what high risk foods are?



Practical skills

Slicing
Dicing
Mincing
Boiling
Simmering
Baking
Multi-tasking skills

Year 7 Geography – Topic: Geographical Skills

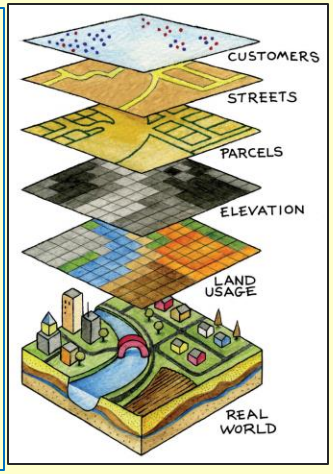
Grid References

We use a grid system for locating places and features on an OS map. Similar to a maths graph these use 'x' and 'y' co-ordinates. The numbers are located on the lines of each grid square at intervals along each axis.

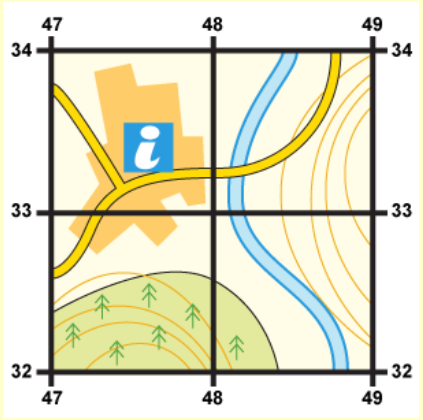
4 figure grid references contain 4 numbers.
The numbers along the bottom of the map (47,48 and 49) are the Eastings.
The numbers along the top of the map are the Northings. We aim for the bottom left corner of any square that we look at, The tourist information square is in 47,33.

GIS

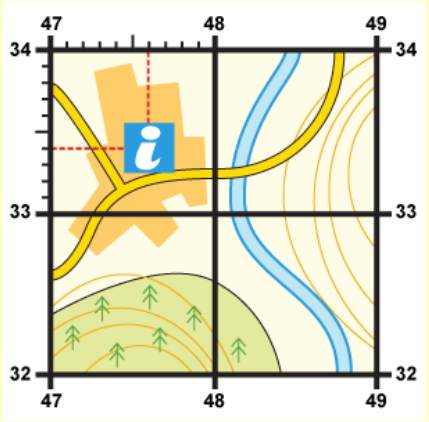
Geographical , information, systems or digital mapping is a store of digitally layered information



4 Figure Grid References



6 Figure Grid References



The tourist information is within square 47,33. We must decide how many eastings inside the 47 square it is, in this case 6. The same for the northings give 4, so the 6 Fig GR is 476334.

UK Geography

The United Kingdom is made up (comprised) of 4 separate countries: England, Wales, Scotland, Northern Ireland.

Great Britain is the large single island made up of England, Wales and Scotland.

The British Isles are all of the Islands including the Republic of Ireland which is a separate country to the UK.

The UK is not part of the EU, however the Republic of Ireland (ROI) is part of the EU. Northern Ireland has some special arrangements that allow it to trade more easily with the ROI.

London is the capital city of the UK. Edinburgh is the capital city of Scotland. Cardiff is the capital city of Wales. Belfast is the administrative capital of Northern Ireland and Dublin is the capital city of the ROI.

Key Vocabulary

Relief
Prime Meridian
Equator
Longitude
Latitude
Mercator projection
Robinson projection
Scale
Ordnance Survey
Cardinal points
Grid North
Magnetic North
Elevation
Sea level
Bearings
Eastings
Northings

Using an Atlas
Measuring distance
Give directions
Recognise symbols

Year 7 (History): Topic – Medieval Life

1. Medieval Life.
- Most Medieval people lived in villages.
- They worked as farmers growing food to survive.
- The church and religion was very important to them.
- Life was hard – for example, they had to work hard and there were many illnesses and diseases. But there were some positives – for example, they had regular Holy Days (holidays) and took part in fun activities like sports and dancing.
- Historians look at evidence to try to understand what life was like for people living in the Medieval period.

2. The Church
- Almost everyone was a Christian and went to church.
- The church was a hierarchy. The leader of the church was called the Pope. He lived in Rome, in modern Italy. In England, the church was led by wealthy, powerful religious men called Archbishops and bishops. Each village, or small group of villages, had its own church. A parish priest worked here and would have regular contact with the local people.
- The church was very powerful and played an important role in people's lives. For example, it collected taxes, organised social events, and helped the poor and needy.
- The most important reason that the church was powerful is that it could help people go to heaven, instead of going to hell.

3. Medieval medicine
- The church provided support for the sick. For example, monks and nuns often had an understanding of herbs and flowers, and would use these to make medicines. They would also pray for people to get better.
- People did attempt some difficult medical treatment, like surgery. For example, there is evidence of people drilling into skulls to relieve severe migraines. The bone had grown back after the surgery, showing that the patient did survive.
- There were different types of people who might help with the sick. The rich might go to physicians. They had had long medical training. Other people went to barber-surgeons. They had little or no training, but might perform things like pulling teeth out (they also cut hair!). Other people relied on 'wise women' – women in the village who understood herbs and natural medicine.

Key Vocabulary
- **Christian**
- **Evidence**
- **Fine**
- **Hanging**
- **Heaven and hell**
- **Hierarchy**
- **Hue and cry**
- **Monks and nuns**
- **Parish priest**
- **Pillory**
- **Pope**
- **Stocks**
- **Surgery**
- **Theft**
- **Trial by ordeal**

4. Crime and punishment
- There was no official police force.
- Most people policed themselves. They used a system called the hue and cry, where if a crime happened, everyone in the village had to try to solve it.
- The hue and cry worked well, because most people lived in small village sand knew each other well.
- Theft was the most common crime.
- To decide if someone was innocent or guilty, people used juries. Or sometimes, people had to do 'trials by ordeal'. This normally meant that had to do something painful, like hold a hot piece of metal. If their injuries healed quickly, they were innocent because god had healed them. If they did not heal quickly, they were guilty.
- The most common punishment was a fine. But there were also punishments like the stocks and pillories, and death by hanging.

Example questions:
1. Give one form of punishment for criminals in Medieval England [1 mark]
2. Write a clear and organised summary of crime and criminals in Medieval England [9 marks]
3. Explain why there was no police force in Medieval England [10 marks]

Year 7 Unit 4 – Ordering Integers and Decimals

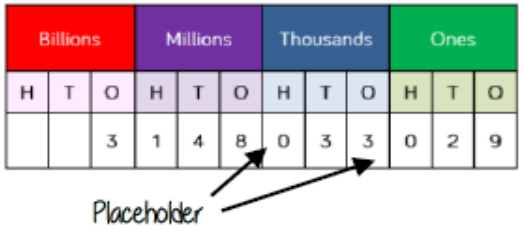
What do I need to be able to do?

- Understand place value and the number system.
- Understand and use place value for decimals.
- Order numbers and use a number line for positives and negatives including fractions.
- Use inequalities to compare numbers.
- Convert decimals and fractions.
- Round numbers to an appropriate accuracy
- Describe, interpret and compare data using the median and range.

Vocabulary

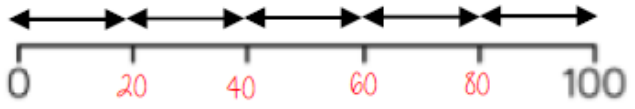
Approximate: To estimate a number, amount or total often using rounding of numbers to make them easier to calculate,
Integer: A whole number.
Interval: Between two parts or values.
Median: Found by putting all of the data values in order and finding the middle value of the list
Negative: Any number less than zero written with a minus sign.
Place Holder: We use 0 as a place holder to show that there are none of a particular place in a number.
Place Value: The value of a digit depending on its position in a number. Each place is 10 times bigger than the place to its right.
Range: The difference between the biggest and smallest number in a set.
Significant Figure: A digit that gives meaning to a number. The most significant figure is the non-zero digit furthest to the left.

Integer Place Value



Three billion, one hundred and forty eight million, thirty three thousand and twenty nine
1 billion 1, 000, 000, 000
1 million 1 000, 000

Intervals on a number line



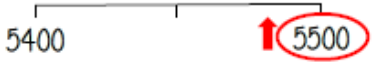
Divide the difference by the number of intervals (gaps).
E.g. 100 ÷ 5 = 20

Rounding to the nearest power of ten

If the number is halfway between we "round up"

5495 to the nearest 1000

5475 to the nearest 100



5475 to the nearest 10

Intervals on a number line

Rounding to the nearest ten

Place Value

Inequalities

Compare integers using <, >, =, ≠

< less than
> greater than
= equal to
≠ not equal to

Two and a half million = 2 500 000
300 000 000 = Three billion
Six thousand and eighty < 68 000

Range

Spread of the values

Difference between the biggest and smallest

3 9 8 12

Range: Biggest value – Smallest value

12 – 3 = 9

Range = 9

Median

The middle value

Example 1

4 3 9 8 12

Median: put the in order 3 4 8 9 12

find the middle number 3 4 (8) 9 12

Example 2

150 154 148

137 160 158

Median: put the in order

137 148 (150 154) 158 160

There are 2 middle numbers

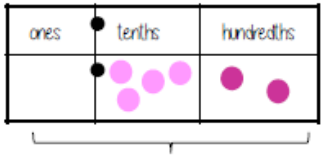
Find the midpoint

152

Decimals

We say "nought point five two"

Five tenths and two hundredths



0 ones, 5 tenth and 2 hundredths

0 + 0.1 + 0.1 + 0.1 + 0.1 + 0.1 + 0.001 + 0.001

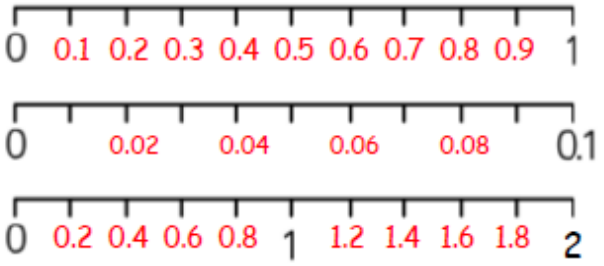
= 0 + 0.5 + 0.02

= 0.52

Decimal intervals on a number line

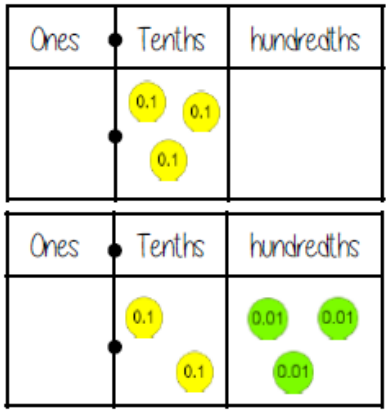
One whole split into 10 parts makes tenths = 0.1

One tenth split into 10 parts makes hundredths = 0.01



Comparing decimals

Which the largest of **0.3** and **0.23**?



0.3 > 0.23

"There are more counters in the furthest column to the left"

0.30
0.23

Comparing the values both with the same number of decimal places is another way to compare the number of tenths and hundredths

Round to 1 significant figure

370 to 1 significant figure is 400

37 to 1 significant figure is 40

3.7 to 1 significant figure is 4

0.37 to 1 significant figure is 0.4

0.00000037 to 1 significant figure is 0.0000004

Round to the first non zero number

Range

Median

Significant Figures

Comparing Decimals

A job based on number:

An Accountant

Accountants prepare and review financial reports and tax documents. Some accountants work for accounting firms and some own their own businesses. Others work for large companies or the government. Accountants work with numbers a lot. Tax accountants must also be able to interpret tax laws in order to help the people and companies for which they work. Some accountants become auditors. Auditors check the accuracy of a company's or an individual's financial records.

Year 7 Unit 5 – Fraction, Decimals and Percentages

Quarters

One **quarter** (one whole split into 4 equal parts) = $\frac{1}{4}$ = 0.25

Twenty five hundredths

One Whole = 1

One whole

One half = 0.5

One quarter = 0.25

Simple pie charts

A pie chart has 360° so all FDP calculations are out of 360

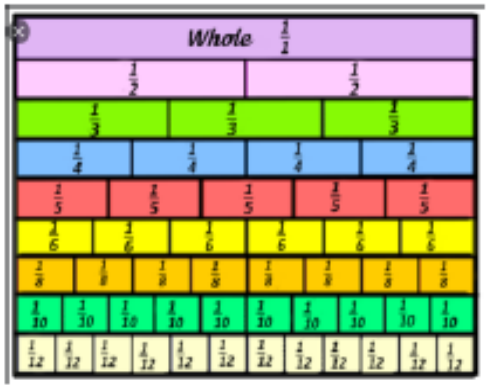
Split into 10 parts = 10% = 36°

Split into 2 parts = 50% = 180°

Split into 5 parts = 20% = 72°

Equivalent fractions

Represent equivalence with fraction walls

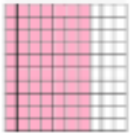


Fractions – on a diagram

The denominator is represented by EQUALLY sized parts – this is split into quarters

Convert FDP

$\frac{70}{100}$ → This also means 70 ÷ 100 → 70 out of 100 squares → 70 "hundredths" = 7 "tenths" = 0.7



→ 70 hundredths = 70%

Using a **calculator**

→ S⇔D Convert to a decimal

This will give you the answer in the simplest form

× 100 converts to a percentage

Be careful of recurring decimals

e.g. $\frac{1}{3}$ = 0.3333333 = $0.\dot{3}$

The dot above the 3

Fractions – on a number line

This point is at the 6th part

6 is the **numerator**

One whole split into 18 equal parts

18 is the **denominator**

$\frac{6}{18}$ ← $\frac{3}{9}$ ← $\frac{1}{3}$

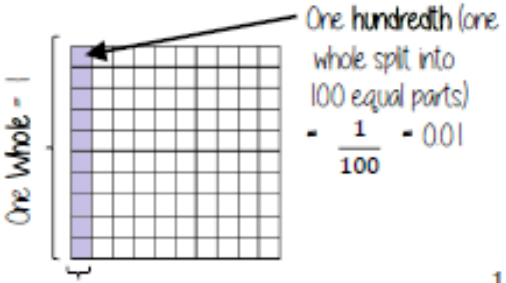
Fractions to percentages

Percentages to Fractions

Fraction of a shape

Equivalent Fractions

Tenths and hundredths



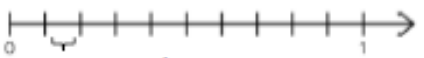
0 ones, 5 tenth and 2 hundredths

0 + 0.1 + 0.1 + 0.1 + 0.1 + 0.1 + 0.01 + 0.01

= 0 + 0.5 + 0.02

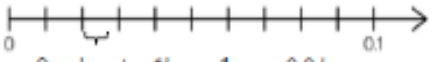
= 0.52

On a number line



One whole – split into 10 equal parts

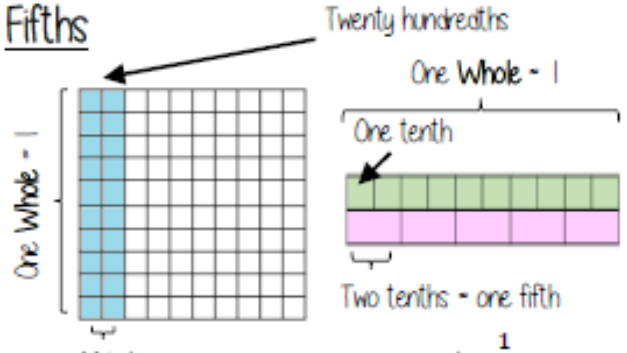
One tenth = 1/10 = 0.1



One tenth – split into 10 equal parts

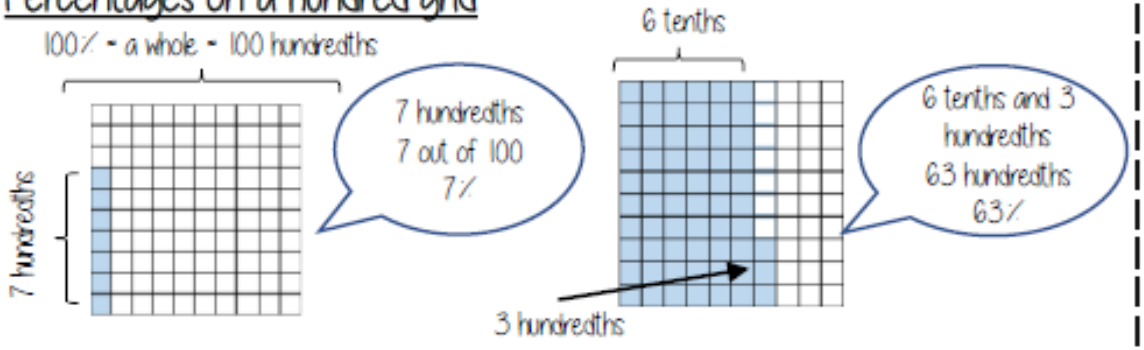
One hundredth = 1/100 = 0.01

Fifths



One fifth (one whole split into 5 equal parts) = 1/5 = 0.2

Percentages on a hundred grid



Percentages to Decimals

Decimals to Percentages

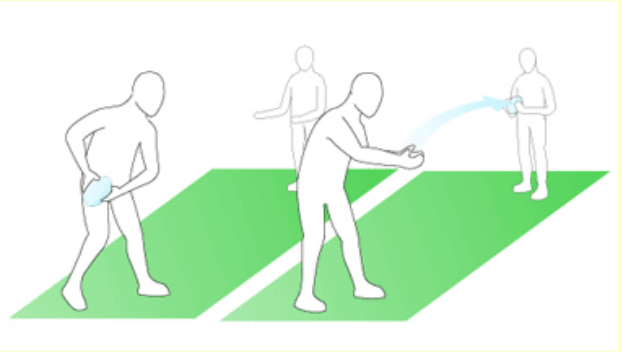
Key Equivalents

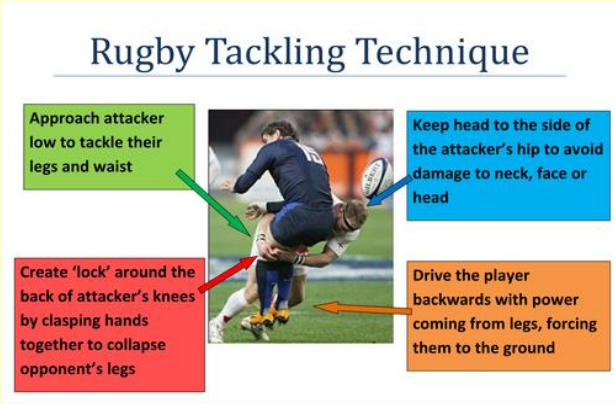
Expressing as a fraction

A Business Owner

Business owners are responsible for the day-to-day operations of their company. They oversee all aspects of the business, from hiring and training employees to purchasing inventory and supplies to developing new products or services. Business owners are also responsible for making sure that their company is profitable—they have to ensure that they're making enough money to pay their employees, cover their costs, and earn a reasonable return on their investment.

Year 7 Physical Education – Topic – Rugby





Key skills

Ball Familiarisation –
Is being able to perform fundamental rugby handling skills and use these in a small-sided game to maintain ball possession & outwit opponents. It's also developing understanding and knowledge of the basic rules of rugby union.

Passing –
Is being able to outwit opponents using skills and techniques and to understand the importance of width in order to attack. This demonstrates an understanding of the basic rules such as no backwards pass & how to score a try.

Tackling –
Is developing understanding and knowledge of how to tackle safely in order to perform and accurately replicate the correct techniques for front and side tackles. To understand the rules regarding tackling within the game such as "no high tackling".

Attacking/Outwitting Opponents -
Is being able to outwit opponents using learnt skills and techniques by developing the decision making process in a game situation. You should be able to confidently describe most of the rules and laws of rugby union and to begin to recognize and identify strengths and weaknesses when playing small sided games.

Rules of The Game

Scoring

Try - 5 points
A try is scored when the ball is grounded over the opponents' goal-line in the in-goal area. A penalty try can be awarded if a player would have scored a try but for foul play by the opposition.

Penalty - 3 points
When awarded a penalty after an infringement by the opposition, a team may choose to kick at goal.

Conversion - 2 points
After scoring a try, that team can attempt to add two further points by kicking the ball over the crossbar and between the posts from a place in line with where the try was scored.
The conversion kick can be taken either as a place kick (from the ground) or a drop kick.

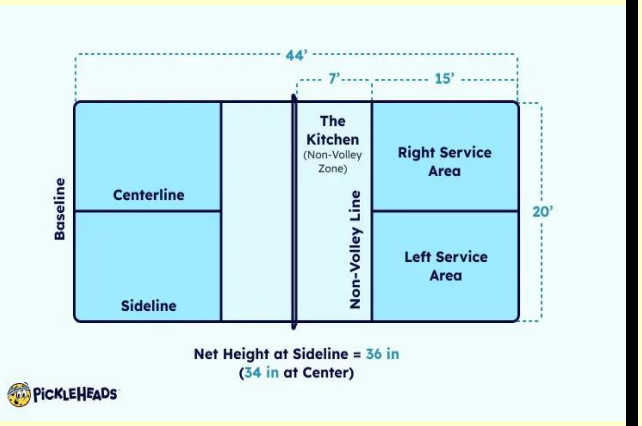
Key Vocabulary

Backwards
Conversion
Maul
Offside
Pass
Penalty
Ruck
Tackle
Tactical
Try

Year 7 Physical Education – Topic: Pickleball

The pickleball court:

The size of the pickleball court is the same court as the badminton court. It is separated into two sides with a line down the middle.



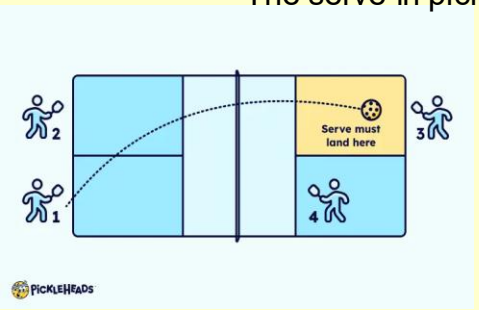
The non volley zone (Kitchen):

This zone is in the middle of the court, on either side of the net. As the name suggests, you can never hit a volley while any part of your body is in the kitchen (or even on the kitchen line). You can't let your momentum carry you into the kitchen after a volley either.

The serve:

The pickleball game starts with a serve. The player on the right side of their court always starts the serve. You serve diagonally to your opponent.

The serve in pickleball is underarm.

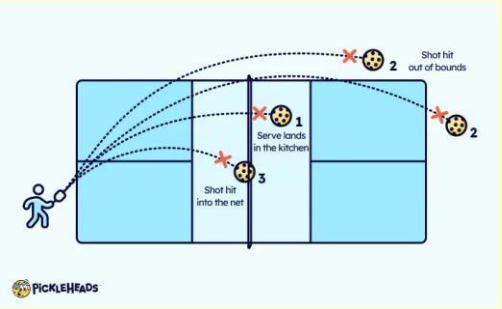


You must stand behind the baseline when serving in pickleball. Your feet cannot touch the baseline or sideline during your serve.

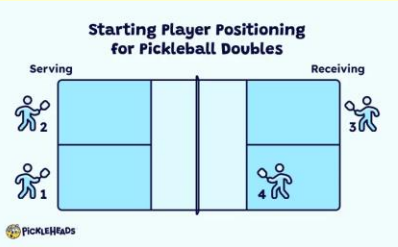
Your serve must completely clear the kitchen line, and land between the sideline and baseline to count. The serve can land "on the line" for the baseline and sideline, but *not* on the kitchen line.

In pickleball, there are four basic serving faults:

1. The serve lands in the kitchen
2. The ball lands out of the court
3. The ball hits the net and falls on your side.
4. The ball bounces twice on one side before the player can return it.



Starting position:



first team to 11 points wins—but you must win by 2.

Key words:

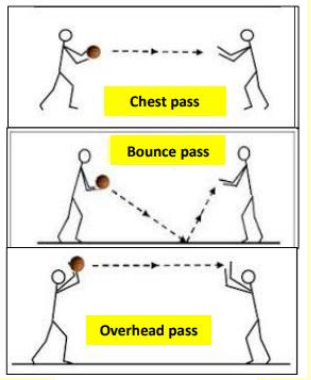
Non-Volley
Kitchen
Serve
Fault
Sideline
Underarm

Year 7 Physical Education – Topic: Netball

Centre:
To take the centre pass and to link the defence and the attack

Wing Attack:
To feed the circle players giving them shooting opportunities

Wing Defence:
To look for interceptions and prevent the WA from feeding the circle



Goalkeeper:
To work with the GD and to prevent the GA/GS from scoring goals

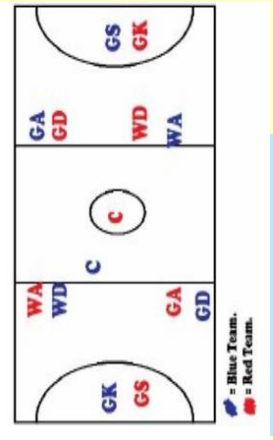
Goal Defence:
To win the ball and reduce the effectiveness of the GA

Netball positions:
There are seven playing positions in a team. Each has an important role to play for their team

Goal Shooter:
To score goals and to work in and around the circle with the GA

Goal Shooter:
To score goals and to work in and around the circle with the GA

Goal Attack:
To feed and work with GS and to score goals

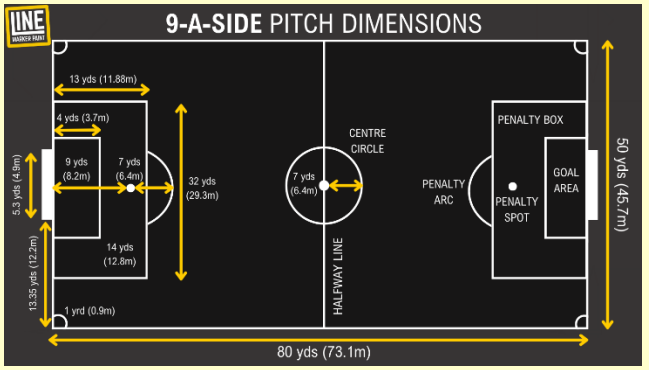


Key Vocabulary:
Attack
Defence
Goal
Positions
Wing

Year 7 Physical Education – Topic: Football

Rules of The Game 9-a-side

- A match consists of 60 minutes, 30 minutes a half.
- Each team can have a maximum off 9 players
- Each team can name as many substitute players as they want, and be made whenever throughout the game
- Each game must include one referee and two assistant referee's (linesmen). It is the job of the referee to act as timekeeper and make any decisions which may need to be made such as fouls, free kicks, throw ins, penalties and added on time at the end of each half.
- If teams are still level after extra time, then a penalty shootout must take place.
- The whole ball must cross the goal line for it to constitute as a goal.
- For fouls committed a player could receive either a yellow or red card depending on the severity of the foul; this comes down to the referee's discretion.
- If a ball goes out of play off an opponent in either of the side lines, then it is given as a throw in. If it goes out of play off an attacking player on the base line, then it is a goal kick. If it comes off a defending player, it is a corner kick.



Key skills

Passing - To be able to perform the basic Football skills of passing and receiving. To be able to perform these in a small, sided game. To understand and know where passing is used in football. To be able to outwit opponents with passes.

Dribbling - To be able to perform the basic dribbling with control. To be able to outwit opponents with the use of these techniques.

Shooting - To understand and know the benefits of types of shot on goal. To develop their understanding and knowledge of how to execute a successful shot on goal.

Attack - To develop their understanding and knowledge of how to outwit an opponent using the skills learnt.

Defence - To be able to perform basic defensive skills i.e. Tackling To understand when to defend and how to stop opponents from advancing.

Scoring

To score the ball must go into your opponent's goal. The whole ball needs to be over the line for it to be a legitimate goal. A goal can be scored with any part of the body apart from the hand or arm up to the shoulder. The goal itself consists of a frame measuring 8 feet high and 8 yards wide.

A team is awarded 3 points for a win (more goals scored than the opposition), 1 point for a draw (equal number of goals scored for each team), and 0 points for a loss (less goals scored than the opposition).

Key Vocabulary

Corner Kick
Hand-ball
Indirect Free Kick
Mark
Offside
Penalty Kick
Slide Tackle
Throw-In
Volley
Wall

Year 7 Science Topic – Forces and Space

A force can be a **push or a pull,** for example when you open a door you can either push it or pull it. You can not see forces, you can only see what they do.
When a force is applied to an object it can lead to a change in the objects; **Speed**, **Direction or Shape**

Forces can also be divided into 2 types, contact forces and non-contact forces.

Contact forces for example friction, are caused when two objects are in contact.

Other forces for example gravity, are **non contact forces.** The two objects do not need to be in contact for the force to occur.

The unit of force is the **Newton (N), w**e measure force using a piece of equipment called a Newton metre.

Balanced forces
When two forces acting on an object are equal in size but act in opposite directions, we say that they are **balanced forces**. If the forces on an object are balanced (or if there are no forces acting on it), this is what happens:
•a stationary object stays still
•a moving object continues to move at the same speed and in the same direction
Remember that an object can be moving, even if there are no forces acting on it.

Unbalanced forces
When two forces acting on an object are not equal in size, we say that they are unbalanced forces. The overall force acting on the object is called the **resultant force**. If the forces are balanced, the resultant force is zero. If the forces on an object are unbalanced, this is what happens:
•a stationary object starts to move in the direction of the resultant force
•a moving object changes speed and/or direction in the direction of the resultant force

Weight and Mass
Mass is the amount of matter there is in something. It is measured in kilograms, **kg.** An objects mass the same everywhere in the universe.
Weight is the force of gravity on an object. All forces including weight are measured in Newtons, **N.** Gravity is not the same everywhere. So, an object's weight depends on where in the universe it is.
To work out the weight of an object we do some Maths. **Weight (N) = mass (kg) x gravitational field strength (N/kg)**

Key Vocabulary
Mass
Weight
Gravity
Newtons
Force
Orbit
Season
Contact force
Non-contact force
Resultant force

The Earth orbits the Sun ***once every 365 days***. Planets further out from the Sun travel more slowly and take longer to go round once. The Earth's axis is tipped over in space. In Britain we get different ***seasons*** because sometimes we are tilted towards the Sun and sometimes away.

Year 7 Spanish – Topic: Mi tiempo libre – My freetime

- **Qué te gusta hacer? *What do you like to do?***
- Me gusta… *I like…*
- Me gusta mucho… *I really like…*
- No me gusta… *I don't like…*
- No me gusta nada… *I don't like at all…*
- chatear *to chat online*
- escribir correos *to write emails*
- escuchar música *to listen to music*
- jugar a los videojuegos *to play videogames*
- leer *to read*
- mandar SMS *to send text messages*
- navegar por Internet *to surf the net*
- salir con mis amigos *to go out with friends*
- ver la television *to watch TV*
- porque es… *because it is…*
- porque no es… *because it is not…*
- interesante *interesting*
- guay *cool*
- divertido/a *amusing, funny*
- estúpido/a *stupid*
- aburrido/a *boring*

¿Qué haces en tu tiempo libre? *What do you do in your spare time?*
bailo *I dance*
canto karaoke *I sing karaoke*
hablo con mis amigos *I talk with my friends*
monto en bici *I ride my bike*
saco fotos *I take photos*
toco la guitarra *I play the guitar*

Palabras muy frecuentes
High-frequency words
con *with*
cuando *when*
generalmente *generally*
mucho *a lot*
no *no*
o *or*
pero *but*
porque *because*
sí *yes*
también *also, too*
y *and*
¿Y tú? *And you?*

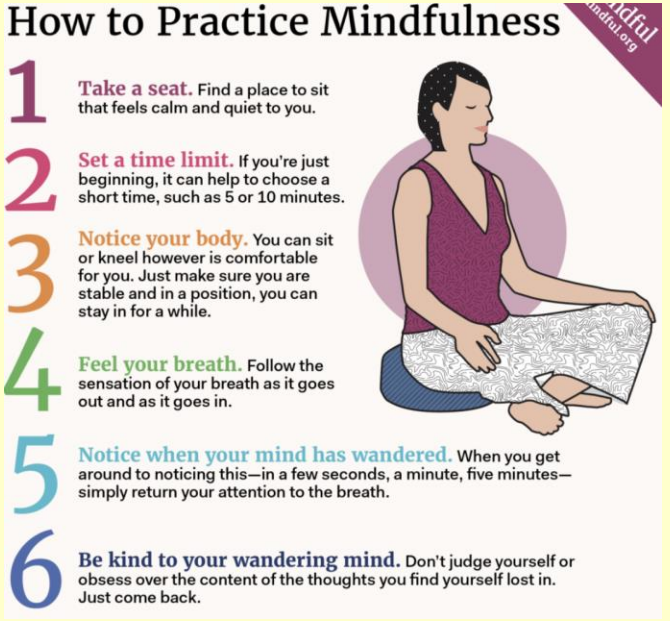
Las estaciones *The seasons*
la primavera *spring*
el verano *summer*
el otoño *autumn*
el invierno *winter*

¿Qué tiempo hace? *What's the weather like?*
hace calor *it's hot*
hace frío *it's cold*
hace sol *it's sunny*
hace buen tiempo *it's nice weather*
llueve *it's raining*
nieva *it's snowing*
¿Qué haces cuando llueve? *What do you do when it's raining?*

Expresiones de frecuencia
Expressions of frequency
a veces *sometimes*
de vez en cuando *from time to time*
nunca *never*
todos los días *every day*

Year 7 Wellbeing – Topic: Meditation

Mindfulness and Meditation can help most people at times!
Our 'everyday mind' can end up full of worries about things which are no longer true or happening or fretting about what MIGHT happen in the future – even though we know it may not!
The idea is that we are more than these conscious thoughts.
Challenging things happen, we cannot avoid that, but what we think about those challenges is very much up to us
To worry and repeatedly think about difficult things can become suffering - a habit it is all too easy to fall in. The good news however is that we can avoid it! How?
When we notice that we are worrying about things - playing through possible futures like a film in our heads or imagining something going wrong, or even remembering difficult things, unpleasant experiences, **we can simply choose to bring ourselves back to the present moment, by thinking about our breathing**.
This practice comes with lots of benefits…



I know it seems way too simple! But this is an ancient practice with traditions in all major religions – including Islam and Christianity!
I know that it will seem odd at first. That is your worrying mind trying to stop you taking control over it!
But stick with it – it will help! Regularly practicing will really help!

If you are struggling with worries regularly you might want to get some support – you can start with Kooth – go to their website and sign up – it is easy, and they will help! If you need help on a specific aspect of Mental Health you can always start at the excellent FYI website here: https://www.fyinorfolk.nhs.uk/ - it costs nothing to sign up and get help!