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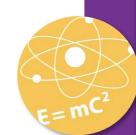
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Year 7: Growing Up Poetry Knowledge Organiser



Seven Ages of Man – Shakespeare

This speech compares the world to a stage and life to a play, it catalogues the seven stages of a man's life, sometimes referred to as The Seven Ages of Man: infant, schoolboy, lover, soldier, justice, pantaloon and old age, facing imminent death.

The Schoolboy - William Blake

A poem written in the pastoral tradition that focuses on the downsides of formal education. The boy in the poem is more interested in escaping his classroom than he is with anything his teacher is trying to teach.

Mrs Tilcher's Class - Carol Ann Duffy

The poem explores a young child growing up within a nurturing primary school environment. Mrs Tilcher was a real teacher, Duffy uses her personal memories of school throughout the poem.

Petronella

Nettles - Vernon Scannell

The poem is a short account of the

day the poet's son was stung by

correlations between the events

causing him to meditate on the

and the shadows of war that linger

in the mind of the ex-soldier father,

cyclical nature of pain and violence.

nettles – and what happened

afterwards. The poet draws

This poem focuses primarily on a young girl and her relationship with her mother and aunt. She is a conceited, demanding and bossy girl who rules the household.

When I am Old - Jenny Joseph

This poem tells the story of a young girl who feels pressured to live up to societal norms and expectations due to her age. It is about the things she wants to wear and how she wants to behave. For now, she must live the life of expected sobriety but, when she reaches old age, she is determined to let respectability fly to the wind.

Key Vocabulary

Definitions

Hyperbole

Exaggeration for effect.

Simile

Comparison using 'like' or 'as'

Metaphor

Comparing two things saying one thing is the other.

Personification

Giving something non-human, human characteristics.

Imagery

Visual descriptions

Symbolism

Symbols to represent ideas

Rhyme

Similar sounding words

Rhythm

A regular repeated pattern of sound.

Alliteration

Words with the same letter at the beginning.

Onomatopoeia

Words that sound like the noise it describes.

Repetition

The recurrence of something.

Vampire Myths from Literature

My Little Vampire by Angela Sommer-Bodenburg

Oliver Twist by Charles Dickens

Meet the authors

Angela Sommer-Bodenburg is the author of a number of fantasy books for children. Her most famous contribution to the field of children's fantasy is The Little Vampire series, which has sold over 10 million copies and has been translated into over 30 languages. Sommer-Bodenburg states that her "vampire is not a bloodthirsty monster, however, but an affectionate little vampire with fears and foibles who will perhaps help free children of their own fears."

They sleep in coffins that contain earth from their home land according to Bran Stoker's novel "Dracula".

Vampires die in the Sunlight

In the "Twilight" series by **Stephenie Meyers vampires** sparkle in the sunlight rather than die. Think about: Why did Myers change this convention?

Research—use this website to research the history of vampires for your homework project.

http://www.gods-andmonsters.com/facts-aboutvampires.html

Charles John Huffam Dickens (7 February 1812 – 9 June 1870) was an English writer and social critic. He created some of the world's bestknown fictional characters and is regarded by many as the greatest novelist of the Victorian era.[1] His works enjoyed unprecedented popularity during his lifetime, and by the 20th century, critics and scholars had recognised him as a literary genius.

Characters Tony—(boy) loves horror stories; cheeky, intrepid, audacious, valiant, kind, thoughtful, determined, protective. He shares many characteristics with Dickens' protagonist, Oliver Twist.

Rudolph- (boy vampire) breaks the rules; adventurous, determined, friendly. He can be easily compared to The Artful Dodger.

Gregory, Rudolph's brother-angry, argumentative, feisty, disobedient, antagonistic. Similarities can be made between Gregory and Fagin.

Anna, Rudolph's sister– gentle yet determined, caring and considerate.







Vocabulary you **must** know, understand, spell correctly and use in your work and classroom language.

Little Vampire

- Marginalised
- <u>D</u>ank
- Decay
- Lineage
- Gingerly
- sepulchral
- Intrepid
- Audacious
- Valiant
- Aggrieved
- Perturbed

Dickens' Oliver Twi

- Protagonist
- Antagonist
- Setting
- Context
- Imagery: visual, auditory, tactile, olfactory, gustatory.

Features of Gothic Literature: written to create fear of the unknown in the reader; contains mythical creatures; is set in a gothic setting—dark, secluded eg: castle, grave yard, decrepit and dilapidated buildings; events happen in the dark of night, often around twilight or midnight; uses repeated motifs and symbols; often set in the past; uses the supernatural to create





Holidays: Heaven or Hell? (Fiction)

Key vocabulary...

Formal Gestures

Informal Statistics

Persuasive Lists

Alliteration Triples

Rhetoric Declarative

Body Language

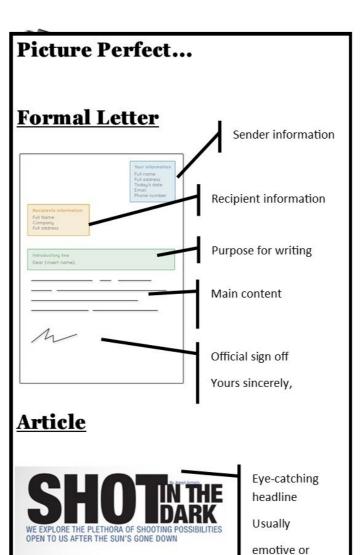


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Deeper Learning...

Where can I apply this style?

- Letters of complaint/praise/ application
- Public speaking to gain support or change opinion
- Writing for a newspaper, magazine or online blog



Always remember...

Formal Letter

- Formal professional language
- Formal address and sign off
- No contractions or slang
- Their address top right
- Your address below left

Speech

- Use of rhetoric
- Persuasive devices
- Emotive tone
- Consideration of body
 language, tone and pauses

Article

alliterative

Main content below in declarative

- Heading
- Declarative sentence—you are the expert

ALL— Paragraphs and SPaG



The Big Question: Can you use persuasive devices and the art of rhetoric effectively?

Key Vocabulary

benevolence,
endurance,
malevolent,
intangible,
hamartia,
idiom,
didactic,
protagonist,
antagonist, quest,
wretched,
adversary,
harmony,
implore,
detrimental,
significant

Practise the spellings and definitions of these words at home!

How many can you remember?

X7 Mxths and Legends Knowledge Organiser

The Man, The Myth, The Legend...

Text	Background and context	Author
Prometheus	The protagonist who makes a terrible mistake when creating the world with his brother. He is punished for all eternity for giving man the gift of fire.	
Pandora	Wife of Epimetheus, the son of Zeus, Pandora is beautiful and inquisitive. Her curious nature gets the better of her and she releases terrible things into the world, but the last item restores hope!	
King Midas	The greedy king who wants it all and MORE! Be careful what you wish for! When Midas wishes everything he should touch turns into solid gold, he soon starts to regret his thought- less greedy actions and begs for them to be reversed.	
Perseus	The half-god son of Zeus and Danae, Perseus slayed the infamous Medusa by beheading her and saved princess Andromeda (his future wife) from the dreaded monsters of the sea.	
Medusa	A famous gorgon with snakes for hair but unlike the others is often presented as beautiful. That's how she lures in her victims and turns them to stone.	
Persephone	A beautiful, trusting, nature loving young girl who is kidnapped by Pluto (aka Hades) the god of the Underworld. She escapes his grasp but only partly, having a pivotal impact on the world as we know it.	

Why should we study ancient myths?

Through the study of ancient myths and legends we are taken back into a world before science and religion, to a world where people believed the Gods controlled the happens on the Earth.

Many of these myths and legends have been drawn upon in literature all the way through time, even to the present day.

Modern superheroes are based on these gods through their powers and quests. However, most importantly, the didactic moral messages of these stories and just as relevant today as they've always been.

Ever heard of the sayings: "if looks could kill", "the Midas touch" OR "curiosity killed the cat"?

They all come from ancient mythical

How often do can you see allusions to these stories in modern life and the texts we study?

Place Value and Negatives

Key vocabulary

Place Value: The value given to a digit by its place in a number

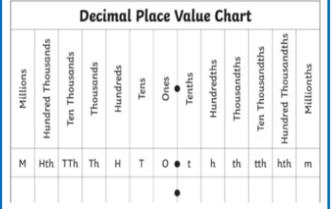
Digit: Single numbers, 0 – 9, used to write a whole number

Integers: Whole numbers

Decimals: Show parts of a whole number

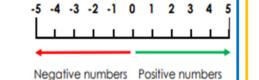
Negative: Less than zero

Picture perfect



Positive numbers are any numbers more than zero e.g. 1, 2, 3, 4, 5.

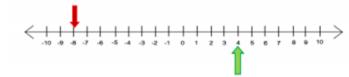
Negative numbers are any numbers less than zero e.g. -1, -2, -3, -4, -5.



Always Remember

Example: -8+12

When adding and subtracting with negative numbers, you should use a number line. Start at the first number given in the sum (here, it's -8).



Then, think about whether you are adding or subtracting your number. If you're adding the number needs to get bigger, so you move to the right each time. If you're subtracting, the number must need to be smaller, so you move left. We need to add 12 in our example, so add 8 to get back to zero, then add on in 1's until you get to 12...

The number you end up on is your answer!

Rules for multiplying with negative numbers:-

Positive x Positive = Positive Negative x Negative = Positive Positive x Negative = Negative Negative x Positive = Negative

Examples

 $5 \times 4 = 20$ $-3 \times -2 = 6$ $10 \times -7 = -70$ $-8 \times 9 = -72$

- ✓ Where the signs are the same, the product of the numbers is positive!
- ✓ Where the signs are different, the product of the numbers is negative!

Rules for dividing with negative numbers:-

Positive + Positive = Positive Negative + Negative = Positive Positive + Negative = Negative Negative + Positive = Negative

Examples

 $20 \div 4 = 5$ $-6 \div -2 = 3$ $70 \div -7 = -10$ $-72 \div 9 = -8$

- ✓ Where the signs are the same, the quotient of the numbers is positive!
- ✓ Where the signs are different, the quotient of the numbers is negative.

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Assessment style question

Here are four digits











(a) Put one digit in each box to make the smallest possible total.

Negatives: 'ristan is taking part in a maths competition. Each correct answer is worth 5 points and each incorrect answer is worth -3 If Tristan chooses not to answer a question, it is worth 0 points.

- (a) What would Tristan's final score be if he answered 5 correctly, 4 incorrectly and left 1
- (b) Can Tristan finish with -10 points? Explain your answer.

There are 10 questions in total.

When we put numbers in order, we need to compare the value of their digits.

2,123,518 2,123,736



First, look at the millions digits in each number. Each number has the same digit in the millions place so you then keep comparing digits of the same place value until you find ones that are different. The thousands digits are different so that tells us that 2,122,845 is the smallest number because it has a 2 in the thousands place. Looking at the hundreds digits, we can see that 2,123,518 is the next smallest.

2,122,845 2,123,518 2,123,736

Smallest

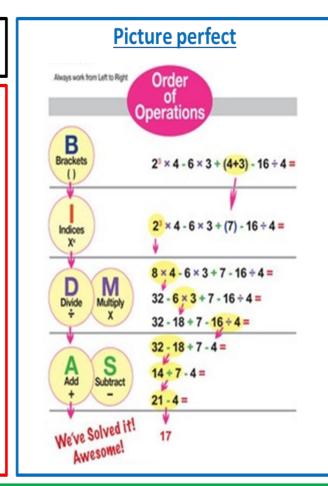
+ - x ÷ BIDMAS

Key vocabulary

Sum – The result of adding 2 or more numbers together.

Product – The result of multiplying.

Indices – Made up of a base and a power, the power tells us how many times to multiply the base by itself.



Assessment style question

Joey thinks the answer to $16 + 4 \times 2$ is 40. Albert thinks the answer to $16 + 4 \times 2$ is 24.

Who is correct? Explain your answer.

Kyle is organising a charity concert at school. The concert is sold out.
The hall holds 28 rows of 16 seats.
Each person will pay £6.

How much money will Kyle raise for charity?

Put brackets in the following statements to make them true

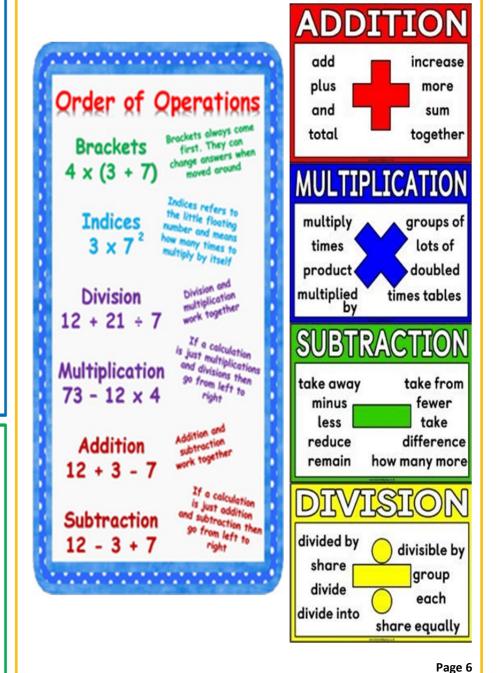
(a)
$$6 \times 7 + 3 - 8 = 52$$

(b)
$$4 + 3 \times 7 - 1 = 42$$

Poppy has £7.04 credit on her mobile phone. It costs 8p to send a text message.

How many text messages can Poppy send?

Always remember



Factors and multiples

Key vocabulary

Multiples – The times tables of a specific number.

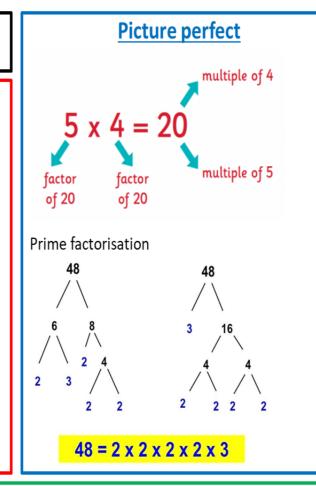
LCM – Lowest common multiple.

Factor – An integer which divides into another fully with no remainder.

HCF – Highest common factor.

Prime number – An integer with only 2 factors.

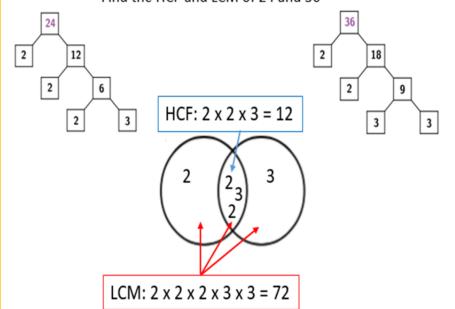
Prime factorisation – Writing a number as a product of it's prime factors.



Always remember

HCF and LCM

Find the HCF and LCM of 24 and 36



Assessment style question

Mary is organising a charity hot dog sale.

There are 18 bread rolls in each packet.

There are 15 hot dogs in each packet.

Mary buys exactly the same number of bread rolls as hot dogs.

What is the smallest number of each packet that Mary can buy?

The Highest Common Factor (HCF) of two numbers is 6.
The Lowest Common Multiple (LCM) of the same numbers is 60.

What are the two numbers?

2 is the only even prime number.

1 is NOT a prime number because it only has 1 factor.

Powers and Roots

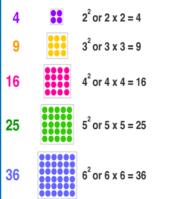
Key vocabulary

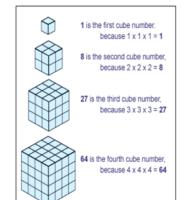
Square number – Answer to a number multiplied by itself, e.g. 2 x 2 = 4

Cube number – Answer to a number multiplied by itself 3 times e.g. 2 x 2 x 2 = 8

Indices – Made up of a base and a power, the power tells us how many times to multiply the base by itself.

Picture perfect





Always remember

$$\sqrt{0} = 0$$
 $\sqrt{16} = 4$ $\sqrt{64} = 8$ $\sqrt[3]{0} = 0$ $\sqrt[3]{64} = 4$ $\sqrt[3]{512} = 8$ $\sqrt{1} = 1$ $\sqrt{25} = 5$ $\sqrt{81} = 9$ $\sqrt[3]{1} = 1$ $\sqrt[3]{125} = 5$ $\sqrt[3]{729} = 9$ $\sqrt{4} = 2$ $\sqrt{36} = 6$ $\sqrt{100} = 10$ $\sqrt[3]{8} = 2$ $\sqrt[3]{216} = 6$ $\sqrt[3]{1000} = 10$ $\sqrt[3]{9} = 3$ $\sqrt{49} = 7$ $\sqrt[3]{27} = 3$ $\sqrt[3]{343} = 7$

Negative powers change numbers to fractions $5^{-2} = \frac{1}{5^2} = \frac{1}{25}$

Power $\frac{1}{2}$ is the same as square root. Power $\frac{1}{3}$ is the same as cube root

$10^{1} = 10$ $10^{2} = 10 \times 10 = 100$ $10^{3} = 10 \times 10 \times 10 = 1,000$ $10^{4} = 10 \times 10 \times 10 \times 10 = 10,000$ $10^{5} = 10 \times 10 \times 10 \times 10 \times 10 = 100,000$ $10^{6} = 10 \times 10 \times 10 \times 10 \times 10 \times 10 = 1,000,000$

Assessment style question

The population of the United Kingdom in 1950 was 5.06×10^7 The population of the United Kingdom in 2015 was 6.47×10^7

Work out how many more people live in the United Kingdom in 2015 than 1950. Give your answer as an ordinary number.

Question 3: Work out

Arrange in order from smallest to largest.

(a)
$$64^{\frac{1}{3}} \times 2^3$$

$$\frac{1}{50}$$
 5⁻² $\frac{3}{10}$ 2

Numbers in standard form

number between

and 10 power of 10

1.2×10³

Fractions

Key vocabulary

Fraction - A quantity which is not a whole number.

Decimal - A decimal number is often used to mean a number that uses a decimal point followed by digits that show a value smaller than one.

Percentage - Amount out of one hundred.

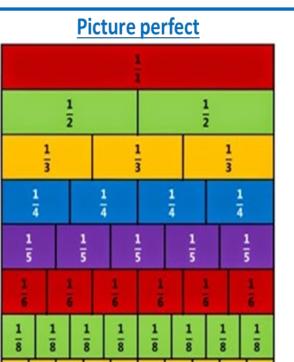
Improper fraction - The numerator is larger than the denominator.

Mixed Number - A whole number and a fraction together.

Equivalent - When 2 amounts are equal they are equivalent

Numerator - The top number of a

Denominator - The bottom number of a fraction.



10

10

10 10

Assessment style question

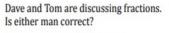
Shown is a rectangle. Find the value of x

Area = 20cm² $2\frac{1}{c}$ cm

A wall measures $3\frac{3}{4}m$ by $4\frac{1}{3}m$

Each can of paint cover 2.5m² and costs £5.50

Work out the cost of painting the wall.

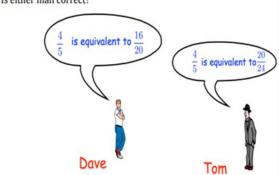


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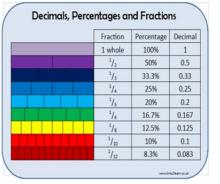
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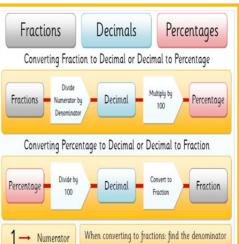
10 10 10

12 12 12 12 12 12



Always remember



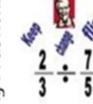


Multiply the numerators

Fractions

Multiply the denominators Multiplying $\frac{3}{6} \times \frac{1}{11} = \frac{1}{66}$

Dividing Fractions



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

'Per cent' (%) means 'out of 100'. 'Of' means 'multiply'

Adding and subtracting simple fractions

We can use equivalent fractions to add fractions that do not have the same denominator.

For example:

fraction with a 8

We need to change 3 into an equivalent

denominator of 8.

Now we have:

$$\frac{6}{8} + \frac{1}{8} = \frac{7}{8}$$

Percentages

Key vocabulary

Fraction - A quantity which is not a whole number.

Decimal - A decimal number is often used to mean a number that uses a decimal point followed by digits that show a value smaller than one.

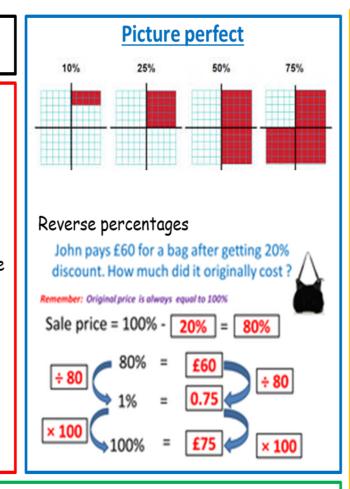
Percentage - Amount out of one hundred.

Increase - To make bigger.

Decrease - To make smaller.

Depreciate - Decrease in value over time.

Multipliers - a quantity by which a given number is to be multiplied.



Assessment style question

A primary school has 212 students. 50% of the students are boys. How many of the students are boys?

A fish tank, that is full of water, has sprung a leak. 12% of the water is lost every hour. What percentage of the water is lost after three hours?

A cereal bar weighs 24g.
The cereal bar contains 3.8g of protein.
Work out what percentage of the cereal bar is protein.

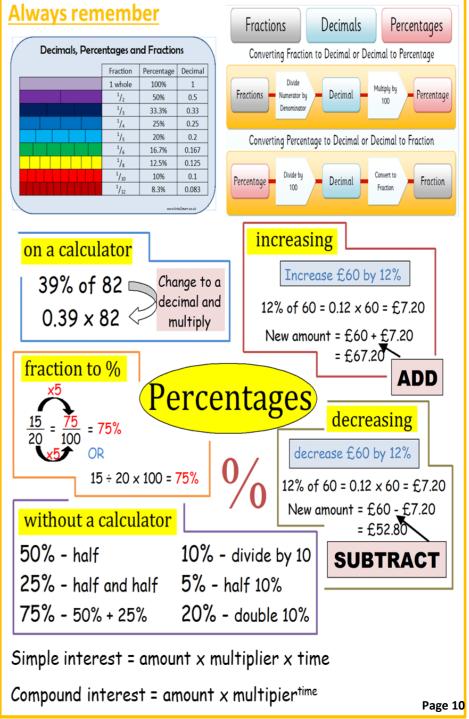
When a tennis ball is dropped, it bounces and then rises. The ball rises to 80% of the height from which it is dropped. The ball is dropped from a height of 4 metres.

- (a) Calculate the height of the rise after the first bounce.
- (b) Calculate the height of the rise after the second bounce.

The ball carries on bouncing, each time rising to 80% of the last rise.

(c) For how many bounces does the ball rise to a height greater than 10 cm?

Dorothy organises a charity raffle.
She sells 800 tickets for £2 each.
4% of the tickets win a prize that costs £20.
65% of the profit goes to Charity A and the rest goes to Charity B.
How much money does Dorothy raise for Charity B?



Rounding and Estimating

Key vocabulary

Rounding - to alter a number making it less accurate but easier to use in calculations.

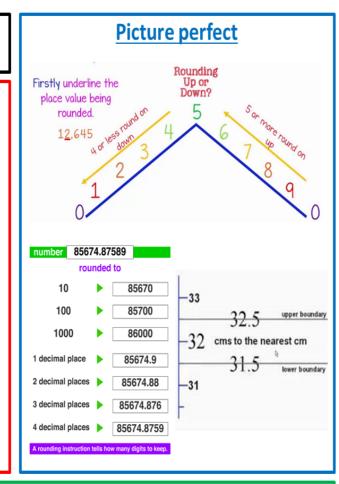
Estimation - A rough calculation using a mathematical method.

Decimal place - Place value after the decimal point.

Integer - A whole number.

Significant figures (S.F of Sig Fig) - Digits that carry meaning.

Bounds - Upper and lower values of rounded numbers.



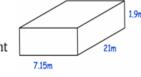
Assessment style question

Nicole has rounded a number to one decimal place. Her answer is 9.2

Write down 10 different possible numbers that she could have rounded.

In an election 43.8% of people voted for a candidate. Round this figure to one significant figure

> Andrew fills the swimming pool with water at a constant rate of 2.1 litres per second.



A roll of wallpaper cost £7.85. Richard buys 29 rolls of wallpaper.

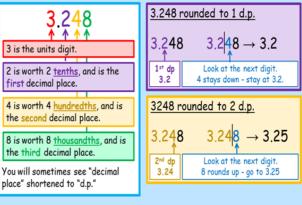
Work out an estimate for the total cost.

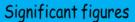
Given $1m^3 = 1000$ litres, estimate how long it takes to fill the pool.

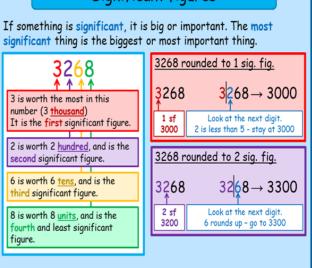
Always remember

Rounding to decimal places

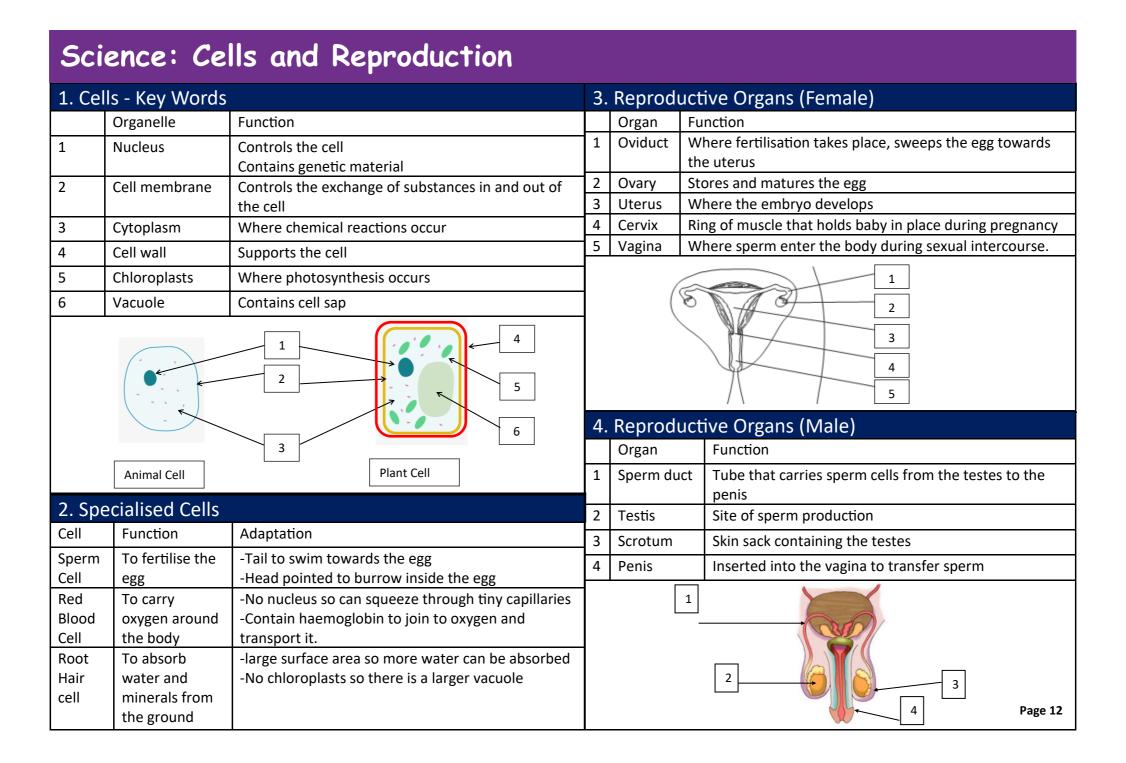
Rounding to decimal places is exactly like rounding whole numbers - you just have more numbers (and therefore greater accuracy).







We estimate by rounding all values to 1 significant figure before completing the calculation.



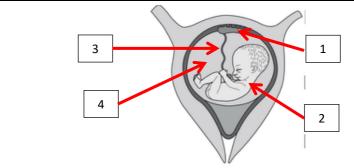
Science: Cells and Reproduction

5. Puberty	
This is the period of adolescence when the body changes in preparation for	
reproduction	
Changes to boys	Changes to girls
Penis grows larger	Periods start
Testes start to produce sperm	Hips widen
Chest and back broaden	Ovaries start to release egg cells
Hair grow on chest and face	Breasts develop

6. Menstrual Cycle		
Keyword		Meaning
Hormone		A chemical messengers in the body
Menstrua- tion	=	When blood passes out of the vagina, also known as a period
Ovulation		When a mature egg is released from the ovary
Fertilisation		When the nuclei of an egg and sperm cell fuse
Menstrual		The process of menstruation and ovulation which usually
Cycle		takes 28 days in human females
Days	Eve	nt
1-5	Ute	rus lining breaks down, period starts
5 – 14	Ute	rus lining starts to build up again ready for implantation
14	Ονι	ulation
14 – 28	Ute	rus lining remains thick
28	If n	o pregnancy occurs the cycle starts again

7. A Healthy Pregnancy	
Lifestyle Factor	Effect on Pregnancy
Smoking	Smoking causes reduces oxygen to the fetus leading to
	low birth weights, premature births and even death.
Drinking Alcohol	This can affect the brain of the foetus and cause low birth
	weights, miscarriages and still births.

8. Pregnancy		
Organ	Function	
Placenta	Organ that exchanges substances between the mother's blood and the fetus'	
Fetus	Name for an unborn baby	
Umbilical cord	Transfers products from the mothers blood to the fetus and vice versa	
Amniotic fluid	Fluid surrounding the baby that protects the baby from damage inside the uterus	
	Organ Placenta Fetus Umbilical cord	



Challenge Questions		
1	What substances pass from the mother's blood to the fetus?	
2	What are the main stages when a woman goes into labour?	
3	Compare the structure of a plant and animal cell	
4	The world oldest woman to conceive naturally and give birth is Dawn Brook, aged 59 in 1997. Other women over 59 have given birth after having IVF. Evaluate the use of IVF for women over 50.	

Science: Particles and Separation Techniques

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States of matter The particles of a substance do not change but the arrangement of the particles are different in each state of matter Liquid Solid Gas **Comparing Properties** Property Solid Liquid Gas Fixed shape ü û û Fixed volume û ü ü Can be compressed û û ü

Mixtures & pure substances	
Pure substances	Mixtures
Contains one type of particle	Contains particles that are not all the same
Cannot be separated	Can be separated
Has a fixed boiling and melting point	Has a boiling and melting temperature range
	866888888888888888888888888888888888888

Ch	anging states	
1	Evaporation Liquid changing into a gas	
2	Condensation Gas changing into a liquid	Gas
3	Melting Solid changing into a liquid	1 2
4	Freezing A liquid changing into a solid	6 5 7
5	Deposition A gas changing into a solid	3 4.
6	Sublimation A solid changing into a gas	
7	Increasing energy Energy is added to the substance	Solid

û

Can flow

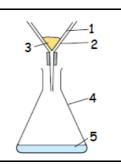
Solubility Key Words		
Solute	A substance that dissolves to make a solution	
Solvent	A substance that dissolves a solute	
Solution	A substance that is a mixture of a solvent	
	and a solute	
Solubility	A measure of how well a substance will	
	dissolve	
Insoluble	A substance that will not dissolve	
Saturated	When the maximum amount of solute has	
solution	dissolved and no more is able to dissolve	

Science: Particles and Separation Techniques

5. Filtration

Separates: an insoluble solid from a liquid

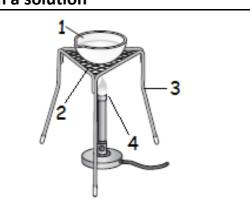
1	Filter paper
2	Funnel
3	Residue (solid)
4	Conical flask
6	Filtrate (liquid)



6. Evaporation

Separates: a soluble solid from a solution

1	Evaporating
	basin
2	Gauze
3	Tripod
4	Bunsen burner



Challenge questions

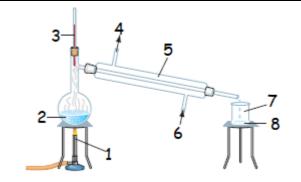
1	Describe the arrangement of particles in the 3 states of matter
	Describe and explain how you could investigate the saturation point of different solutes
_	English the difference had nearly better and a second or

Explain the difference between boiling and evaporation
 Explain the changes in energy and particle arrangement as ice is heated to steam.

7. Distillation

Separates: a liquid from a solution

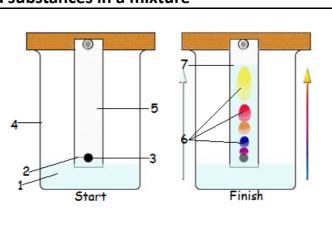
1	Bunsen burner	
2	Solution	
3	Thermometer	
4	Water out	
5	Condenser	
6	Water in	
7	Beaker	
8	Separated liquid	



8. Chromatography

Separates: dissolved substances in a mixture

Separates: dissolved		
1	Water	
2	Pencil base	
	(start) line	
თ	Ink spot	
4	Beaker	
5	Paper	
6	Separated	
	dyes	
7	Solvent front	



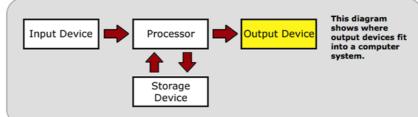
Key Vocabulary...

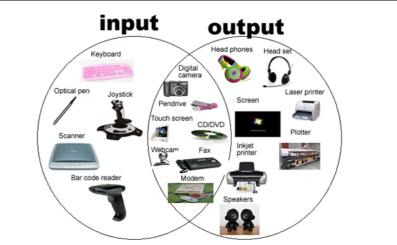


Picture This...

Always Remember...

Name	Purpose
hardware	Parts of a computer that you can physically touch such as a mouse.
Software	Programs that are used to make things on a computer
Input Devices	Hardware that is used to enter information into a computer such as keyboard or a mouse.
Process	The calculations that are performed by a computer.
Output Devices	Hardware that is used to take information out of computer such as a monitor or a printer.
Multimedia Software	Software package where you can make presentations. A common example is PowerPoint.
Purpose	What you want to achieve from your presentation.
Audience	The people who you have written your presentation for.
Transition	How slides can change from one to another.
Animation	How text or images can appear on the presentation.





- Input Devices is hardware that allows information to entered into a computer. Examples on the image on the left.
- Output Devices is hardware that allows information to be taken out of a computer.
- CPUs are very quick but not good at remembering information. They need help from something called RAM which holds the information for it.



Questions

- Which input device would be best suited for writing a letter?
- 2. Which software package would be used for creating a presentation?
- 3. Who are the people that your presentation is aimed at?
- 4. Explain what is meant by hardware and give some examples?
- 5. Explain what is meant by software and give some examples?
- 6. Explain what is meant by clock speed.

Deeper Learning...

Central Processing Unit (CPU) is the brains of the computer that does all the thinking. CPUs can work very quickly and this speed is measured in clock speed, which is like a heart beat.



An average heart rate for an 11 year is 55-85 beats per minute.
An average CPU has a "heart beat" of

2,400,000,000 times per second!!!



That's over 2 billion times per second!!!

Activity – Use a search engine to find different specifications of CPUs and put the information on a PowerPoint.

Page 16

Autumn Term 1: Using Computers

Key Vocabulary		
Aesthetics	How something looks including shape and colour.	
Accuracy	The quality or state of being correct or precise. Free from errors.	
Thermoplastic	A type of plastic that can be re heated and shaped to make new products.	
Thermosetting	A thermosetting plastic is a plastic which becomes irreversibly hardened when heated and moulded into shape. Can not be recycled.	
IIG	A jig is used to make sure that parts are made exactly the same, without the need for marking out. For example, when drilling through a block of wood with two holes in, it will make sure that the holes are drilled in the same place in each component.	
Target Market	To whom the product is aimed at or designed for.	

CAD/CAM

Computer Aided Design – In school we use 2D Design, in the industry they use AutoCAD, we also use sketch Up for virtual model making.

Computer Aided Manufacture – In school we manufacture products using a laser cutter and 3D printer. They also use laser cutters and 3D printers in industry but on a larger scale. They also use CNC milling machines and other computer controlled devices to manufacture different products.







A light emitting diode provides a source of light. It is energy efficient, LED small, available in different colours and brightness and has a long lifespan. A component that joins and breaks part of a circuit to connect or isolate **SWITCH** the supply of electricity. A fixed value component that reduces the amount of electricity able to pass through part of the RESISTOR circuit. Made from a mixture of carbon (to conduct) and ceramic (to isolate. A printed circuit board mechanically supports and connects electrical components **PCB** using conductive tracks. A USB lead (Universal Serial Bus) are used mostly to connect computers to peripheral devices **USB LEAD** such as cameras and printers, in our case, yourlamp.

Picture This...

Tools & Equipment

Vacuum Former	
Pillar Drill	
Strip Heater	
Soldering Iron	

The BIG question..

How might thermosetting plastics, be bad for the environment?

Always Remember...

Isometric Drawings are 3D drawing. They show three sides, all in dimensional proportion, but none are shown as a true shape with 90 degree corners. All the vertical lines are drawn vertically but all the horizontal lines are drawn at 30 degrees to the base line. Isometric is an easy method of drawing 3D images.

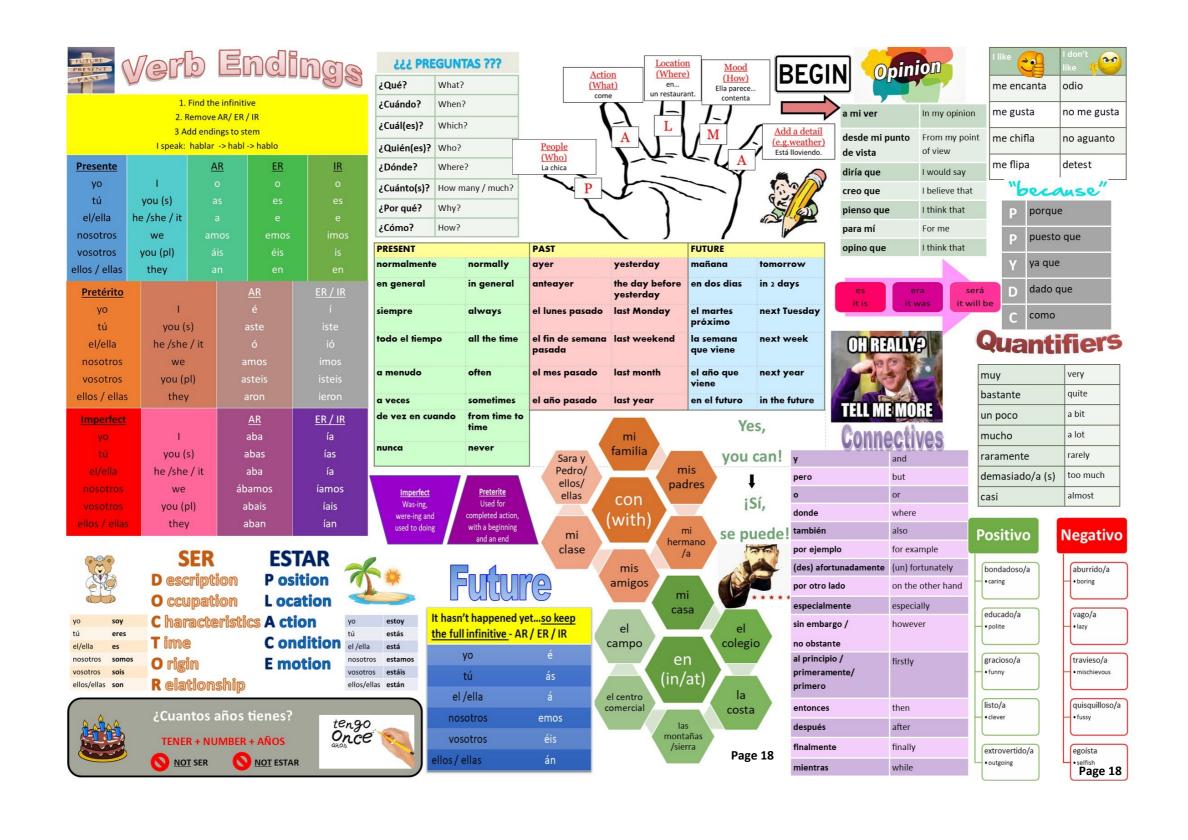


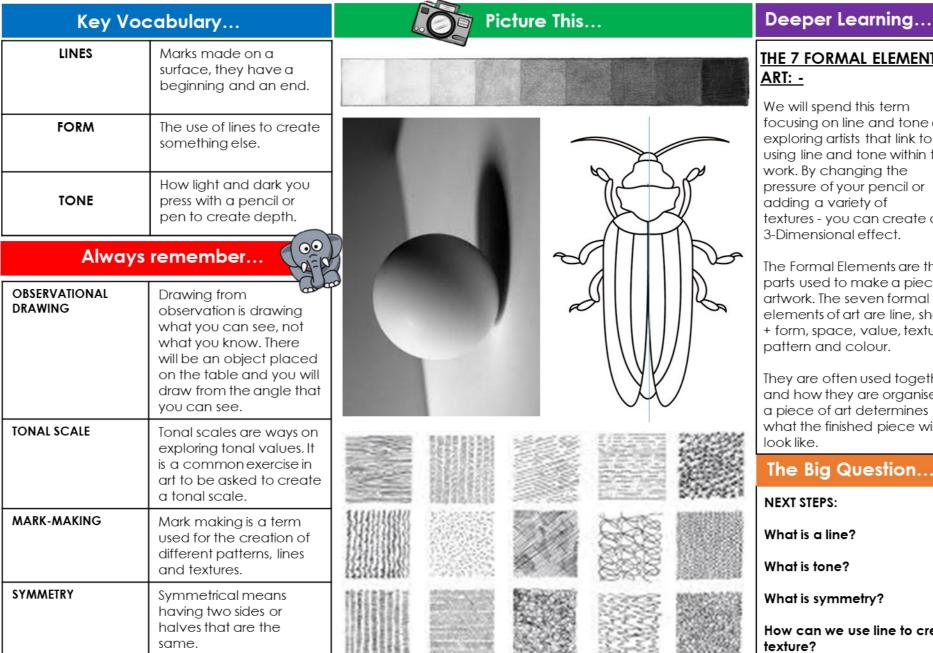
Deeper Learning...

Plastics are made from oil which is a fossil fuel. We have to drill deep into the earth to extract the oil and this can cause disruption to wildlife, sea life and their habitats. The burning of crude oil to make plastic products, produces CO2 emissions, which pollutes the earth's atmosphere.

Activity – Take some isometric grid paper home with you and practice drawing objects, that you can find around the house. Remember to bring your designs in to show your class mates.

Page 17





THE 7 FORMAL ELEMENTS OF ART: -

We will spend this term focusing on line and tone and exploring artists that link to using line and tone within their work. By changing the pressure of your pencil or adding a variety of textures - you can create a 3-Dimensional effect.

The Formal Elements are the parts used to make a piece of artwork. The seven formal elements of art are line, shape + form, space, value, texture, pattern and colour.

They are often used together, and how they are organised in a piece of art determines what the finished piece will look like.

The Big Question...

NEXT STEPS:

What is a line?

What is tone?

What is symmetry?

How can we use line to create texture?

Activity: Using the template provided or creating your own animal outline, Fill will Zentangle patterns and try to create depth by using lots of small clustered lines to create dark areas and lots of space between lines to create lighter areas. Page 19



Deeper learning

- A sharp knife is a safe knife.
- If trying to cut a surface using a blunt knife it's more likely to slip and cause a cut/injury.
- Make sure your knife is always placed fully on your chopping board, without the handle sticking out into the work areas.
- Accidents may happen from time to time.
 Maybe you or someone else will bump a knife handle, resulting in a falling knife. We all have a natural instinct to grab. Don't, just leave it! Remember keep your hands and feet clear until the knife lands on the floor.
- Always carry a knife pointed straight down, with the blade turned towards your thigh.
- Never run holding a knife.
- Wash knives carefully in hot soapy water.
- Store safely in a clean drawer.

<u>Equipment</u>



Mixing bowl





peeler 1

peeler 2





Saucepan

table knife

weighing scales

The big question what is healthy? where do these fruits come from and what are they?





What are the healthy groups on the eatwell plate? Why is junk food bad for us? Why do we eat it? How have lifestyles changed? What are the dietary goals?



<u>Always remember</u>

Wear a clean apron.

Wear closed-in shoes to protect your feet, in case of hot spills or breakages.

Wash your hands before and after handling food.

Tie back long hair

Wash up in hot soapy water



Drain pots upside down
Time is important

Key vocabulary

Hygiene Bacteria

Mis en place

Croque Monsieur

Food practical

Risk

The Eatwell Plate

Vitamins

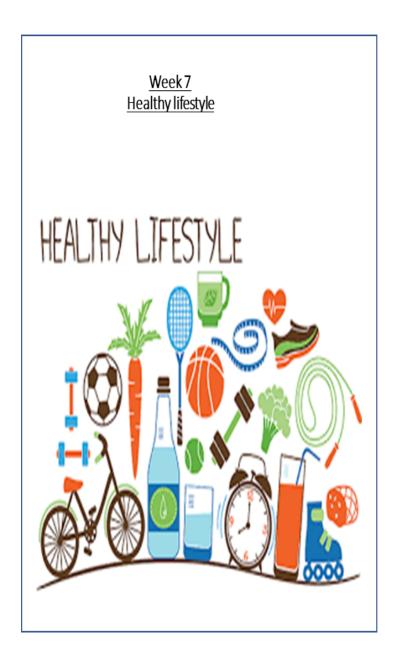
Minerals

Sugary drinks

Grams g

Kilograms Kg

Callibrate



Week 1 Make a list of up to 10 things which are wrong in the messy kitchen

Week 2 A Chef should be clean. Design a poster to show good hygiene when preparing food

Week 3 Find 5 pieces of equipment in your kitchen at home and explain what they are used for

Week 4 write out the alphabet and add as many fruits as you can which begin with each letter

Week 5 Write down the 3 rules which you think are most important when using knives

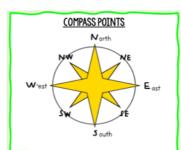
Week 6 Write a paragraph which includes what has gone well in Food Technology and an area where you could improve

Week 7 Write up to 7 tips for a healthy lifestyle

Can be 4, 8 or 16-point. The most basic form being North, East, South and West. 2 things that are different to each other e.g. a town and the countryside The length of the space between two points, usually measured in metres. kilometres or miles. egetation/ Trees, Plants, Grass, Shrubbery, Forests How people use an area or landscape An important topic or problem for debate The people who live in a place, often given as a number. Tokyo in Japan is the city with the highest population in the world. A diagrammatic representation of an area of land or sea showing physical features, cities, roads, etc. Homework Activity...

Key Vocabulary...

As well as completing a map activity, you will be assigned a country and will need to create a study project on it. This can be as a booklet, poster, video – you choose how to present the information. You need to include lots of key pieces of information – Location, size, population, climate, major cities, culture, food, landmarks as well as loads of interesting facts about the country. This is your chance to create a piece of work to go on display in the school and even feature on the schools Twitter page.



Geography examines issues on different scales. Some affect the world and are Global issues. Some may affect a whole country and are National Issues. Some will just affect a town or village and are Local Issues.

Diversity means that

there are lots of different kinds of things. Just as there are lots of different makes of cars, bikes, clothes or just about anything you can think of. Places are diverse also. Diversity is not just about the way things look. Where we are in the world can make for a great deal of diversity too.

Location of Wigan





Geography is the study of Earth's landscapes, peoples, places and environments. It is, quite simply, about the world in which we live.

Human geography is the study of the many cultural features found throughout the world. It looks at how they relate to the spaces and places where they originate and how they can travel as people continually move across various areas.

Physical geography is the study of the natural features of the earth's surface, this includes land formation, climate, currents, and distribution of natural world (wildlife and vegetation).

LONGITUDE AND LATITUDE

Unlike grid lines where we go along the corridor and the stairs, here we go UP and ACROSS

LATITUDE

Flat lines. Flat-itudel

LONGITUDE Long lines - up and

Key Vocabulary		
Compass Directions	Can be 4, 8 or 16-point. The most basic form being North, East, South and West.	
Contour Line	A line on a map joining points of equal height above or below sea level.	
Distance	The length of the space between two points, usually measured in metres, kilometres or miles.	
Four Figure Grid References	A four figure grid reference points you towards a particular square on a map. On all OS maps these squares represent one square kilometre.	
Six Figure Grid References	Six figure grid references allowyou to be more accurate with a location than a 4 figure grid reference. Harder to get the hang of, but an essential tool for geographers	
The Ordnance Survey	A government agency that are responsible for mapping. They create a number of maps at different scales used originally by the armed forces, and then as an accurate maps of the whole country, as well as overseas. Often referred to as OS Maps.	
Location	A particular place or position.	
Мар	A diagrammatic representation of an area of land or sea showing physical features, cities, roads, etc.	

Symbols are useful for lots of reasons including, space saving on a map, multi-lingual (all languages can understand them), saves time, clear.

mem),	saves time, clear.
TOURIST INF	ORMATION
Ă	Camp site
	Caravan site
t <u>i</u> t	Garden
	Golf course or links
i	Information centre, all year / seasonal
1	Nature reserve
P PaR	Parking, Park and ride, all year / seasonal
X	Picnic site
	Selected places of tourist interest
66	Telephone, public / motoring organisation
3/2	Viewpoint
V	Visitor centre
•	Walks / Trails
A	Youth hostel

COMPASS POINTS North Vest South



Homework Project: Design and build an Island. Your task is to design and create your own model Island. You can create this from anything you like - rubbish, lego, clay, foam, sponges, cardboard - Whatever you have at hand. Assessment Criteria - You need to include: Grid References, Scale, Compass Star, Map Symbols and a Key. The best will be displayed in the Humanities Department and featured on Twitter.

SCALE AND DISTANCE

OS maps have a scale. On some smaller maps, Icm on the map equals 250m in real life. On some larger maps, Icm on the map equals 500m. Different maps might have different scales, so check on your map to find its scale.

Oml 20km 20km 30km Using a line scale on a map is as easy as using a ruler. The important thing to

One centimeter on the map represents 3 kilometers on the ground. (1cm = 3 km)

WORD SCALE

using a ruler. The important thing to remember is that a line scale shows measurements in km and the measurements on a ruler are in cm. Using the scale above, if we measure the distance on a map between two places with our ruler. The measurement is 4cm. We then have to multiply that measurement by 3 to calculate that the real distance between the two places is 12km.

4 FIGURE GRID REFERENCES

Along the edges of each map there are numbers. These numbers help you work out where a location is on a map. Northings are numbers that go from bottom to top, Eastings go from left to right.

25 22 22 23 23 24 25 26

The first two numbers give the edstings.

The second two numbers give the northings.

Remember... eastings then northings!

Along the corridor and up the stairs!

6 FIGURE GRID REFERENCES

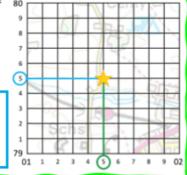
We can use six-figure grid references to find an exact location within a grid square, so they are much more accurate 80

The grid square is divided into tenths.

Example:



The first three numbers give the easting which includes the number of tenths. The last three numbers give the northing which includes the number of tenths.



Key Vocabulary		
Chronology	The arrangement of events or dates in the order that they occurred.	
Source	Any leftover of the past can be considered a source. It could be a written document, but it might also be a building, a piece of art or an object – a train ticket, a coin or an item of clothing.	
Primary Source	A document, first-hand account, or other source that constitutes direct evidence of an object of study.	
Secondary Source	A book, article, or other source that provides information about an object of study created after an event or period of time.	
BC	Before Christ (used to indicate that a date is before the Christian era).	
AD	Stands for the Latin phrase anno domini, which means "in the year of our Lord."	

Anglo Saxon's in Britain

The Anglo-Saxons were pagans when they came to Britain, but, as time passed, they gradually converted to Christianity. Many of the customs we have in England today come from pagan festivals.

Pagans worshiped lots of different gods. Each pagan god controlled a particular part of everyday life: the family, growing crops, love, healing, wisdom, metalworking, the weather, war, day & night and so on.

During their reign, Anglo Saxon Kings were advised by a council of nobles and church leaders. This council was called the Witan.

Key individuals... King of Anglo Saxons between 886-899AD. To help protect his kingdom Alfred the from Viking attacks, Alfred Great built forts and walled towns known as 'burhs'. Introduced Christianity to England in the year 597. He is given land to build a Augustine of church in Canterbury. Canterbury Became the first Archbishop of Canterbury. Alfred the Great's grandson, he is regarded as **AEthelstan** the first King of 'all of England'. He never married and had no children.

Always Remember...

Once the Romans left and the Anglo-Saxons (made up tribes from across what is now Germany, Holland and Denmark) invaded. England was split up into many kingdoms. The Anglo-Saxons never managed to take control of Cornwall, Wales and Scotland.



Picture this...

Tollund Man: Found in 1950, preserved as a bog body, in Jutland, Denmark



Anglo Saxon helmet found at Sutton Hoo in Suffolk.



The BIG questions.

- 1. Explain why we think Tollund Man may have been killed as a sacrifice? Use evidence to back up your argument.
- 2. The helmet found at Sutton Hoo belonged to a great Anglo-Saxon warrior. How do we know this? Use your knowledge of sources to help.

Deeper Learning...

Why did the Vikings travel to Britain?
Better land: Most Vikings were simply searching for better land for their farms.

More Land: Some historians believe there was not enough good land for everyone to share. In a Viking family only the eldest son inherited the family land so younger brothers had to make their living elsewhere.

Treasures: The Vikings searched for treasures to make them rich

Activity - Create a time line from 55 B.C. to A.D. 900 showing the different groups of people that invaded Britain during that time

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Key Vocabulary		Key individuals		
Gladiator	A slave trained to fight other gladiators or animals in amphitheatres.	Julius Caesar		First Roman leader to attempt to invade England. His invasions fail on two separate occasions in 55 and 54 BC
Aqueduct	A system of pipes and channels which brings clean			oo ana on bo
	water into towns		TO THE	The nephew of Julius Caesar and the first Emperor of Rome
Barbarian	A person who lived outside the Roman Empire, seen as having a violent nature.	Augustus		from 27 BC until his death in AD 14.
	The same of a Bassac Assess		a mener	The first Roman emperor to order a successful invasion of
Forum	The area of a Roman town that was the centre of Roman life. Government meetings, public speeches,	Claudius	C Sur	England in AD 43/44.
	and business all took place in the forum.		1000	Hadrian became emperor in AD 117, when the empire was at its largest. Ordered the building of
Coccium	The Roman name for the town of Wigan	Hadrian	drian	a wall to separate the Romans from the Barbarians.

Picture this...

Roman Fort Roman Road

Roman Coin



The BIG questions..

- 1. In what ways were the lives of native Britons affected the Roman occupation of Britain?
- 2. Write an account of the Romans departure from Britain in 410AD

Roman Ideas

The Romans were known for their great engineering works (building projects). One of these were roads. The Romans relied on well built, often very straight roads for quick and effective communication across the whole of their empire. The roads also got their armies and supplies across the empire quickly.

Roman roads were built with a camber in the middle, allowing rain water to run to the edges so that the roads didn't flood. In the ancient city of Pompeii there is also evidence that Roman roads had speed bumps to slow down fast moving horse and carts!

Always Remember...

The Romans first invaded Britain in 55 B.C and again in 54 B.C

One hundred years later (43 A.D.) the Romans invaded again and stayed for almost 400 years until 410A.D.



Deeper Learning...

Roman armies were well trained and organised. They were hard to beat, which helped the Roman Empire expand so quickly and conquer more lands.

Roman soldiers had to be at least 20 years old when they joined the army, and they had to stay in the army for 25 years. After that, they were rewarded well with some money or land that they could farm.

Activity Write a diary entry about a day in the life of a Roman soldier. Try to include what they would have eaten and had to drink. What did they think about the land and the weather? What was their training like? Page 25

	Key Vocabulary	1	Picture	Thic
	key vocabolary		ricture	mis
Christianity	The world's biggest religion, with over 2 billion followers worldwide. It is based on the teachings of Jesus Christ who lived in the Holy Land over 2,000 years ago.		Christmas	Christmas is an annual festival commemorating the birth of Jesus Christ, observed primarily
Denominations	A branch of a religion.			on December 25 as a religious and cultural celebration among
Community	A group of people living in the same place or having a characteristic such as religion in common.	1		billions of people around the world. It is preceded by the season of Advent
Worship	The feeling or expression of great respect and adoration for a God.		Easter	Easter is a festival and holiday
Holy Communion	The Christian service, ceremony, or sacrament commemorating the Last Supper, in which bread and wine are consecrated and consumed	acrament hich bread and wine		commemorating the resurrection of Jesus from the dead, described in the New Testament as having occurred on the third
Prayer	A request for help or expression of thanks addressed to God.			day after his burial following his crucifixion by the Romans at
Bible	The Christian scriptures, consisting of the Old and New Testaments.		Church	Calvary c. 30 AD A building for the public, often
Baptism	The Christian religious rite (act) of sprinkling water on to a person's forehead or of immersing them in water, symbolising purification and admission to the Christian Church			used for Christian worship. In Atherton alone there are 9 churches. Can you name them and do you know where they
Parable	A simple story used to illustrate a moral or spiritual lesson,			are?
•	as told by Jesus in the Gospels	Ex	amples o	of Parables
Resurrection	The belief that Jesus rose from the dead on Easter Sunday.	the sales	The second secon	to the second project of the second second second second
Crucifixion The belief Jesus died on a cross and suffered as he was human, he was the incarnation. Christians believe he died to		A parable is short story that aims to teach a lesson. Jesus used to parables to teach lessons to his followers often using objects that were familiar to people, like sheep, birds and goats, so that could understand his teachings more easily.		
bring salvation to humans.		DID DIE		

Roman Catholic
Anglican
Uniting Church in Australia
Other Protestant
Presbyterian and Reformed
Orthodox
Baptist
Lutheran
Pentecostal

Different denominations of Christianity

Christian Denominations

The Good Samaritan

Always Remember...

Christians believe in one God who is understood in three parts or persons: God the Father, Jesus the son and the Holy Spirit. This is called the Trinity.

Miracles

What is a miracle?

A miracle is an extraordinary event that goes against nature, cannot be explained by science and is caused

What do we learn about Jesus through the miracles?

We learn a lot about the person of Jesus through the miracles he worked.

You can remember these through the acronym CERT compassion, examples, relationship and teachings:
Miracles showed the compassion Jesus had for people. He did not want to see them suffering unnecessarily. For example, when he healed a leper.

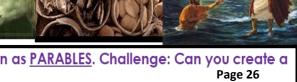
Miracles provided examples for people to follow. This can be seen when Jesus healed the paralysed man because of the faith of his friends. This teaches us to have faith.

Miracles demonstrated the close relationship Jesus had with God, his Father. It is through the power of God that Jesus is able to perform miracles. Miracles proved that Jesus' teachings were true.

Jesus was who he said he was.

Other miracles include: The feeding of the 5,000

The resurrection The stilling of the sto



Activity – Create a storyboard/cartoon strip of one of Jesus' teachings known as PARABLES. Challenge: Can you create a modern version of a parable?

YEAR 7- TERM ONE- KNOWLEDGE ORGANISER - MUSIC

Key Vocabulary			
Term	Definition		
Theme	The main idea in a piece of music. This is the most recognisable part of the music.		
Variation	The theme but slightly changed. This could be changed through tempo, dynamics, timbre etc.		
Motif	A small idea of music, often catchy and memorable.		
Timbre	The sound quality from an instrument/group of instruments.		
Structure	The layout of a piece of music.		
Tempo	The speed of a piece of music.		
Pitch	How high or low an instrument sounds.		

Always Remember



Take your time when composing - your first idea might not be the best!



Your music must match the brief that you have set!

Your work can always be improved







COMPOSITION

Make sure you have

headphones in when using the keyboard

> Always listen to the ideas of others as well as voicing your own



Focus, focus, focus!



Deeper Learning

Theme and Variation is a structure that has been used in music which dates back to 1538! This is the first known published music in the format of theme and variation.

Video Game music often uses this kind of structure as composers need to write music for hours and hours to go alongside the game.

ACTIVITY

Whilst playing a video game, whether this be on Xbox, PlayStation, PC or on your Phone, listen for a motif (See Vocabulary Section) how many times does this repeat? Why do you think that is? Does this motif change?

Meta Cognition

The process followed to create a piece of music.

Improvisation or Devised

PERFORMING

LINKING IMAGES How can these images represent a musical feature?

CHARACTER BUILDING

Composing, Performing and collaborative work.

FEEDBACK

Positive and Developmental

"I liked their use of..." "They could improve their work by..."

YEAR 7- TERM ONE- KNOWLEDGE ORGANISER

Key Vocabulary					
Term	Definition				
Still Image	When you freeze on the spot using actions and facial expressions to tell a story				
Spoken Thought	When a character speaks directly to the audience telling them their most inner thoughts				
Mime	When an actor uses exaggerated movement and expression to tell a story in silence				
Spontaneous	To create something on the spot				
Devised	To prepare something through discussion and rehearsal				
Improvisation	A piece of drama based on a theme, topic or issue				
Vocal Expression	To change aspects of your voice to show emotion				
Facial Expression	n To change aspects of your face to show your emotion				
Sequence	A number of parts or sections where the story develops				
Reaction	To use a variety of expressions to show how you feel about something				

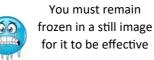
Always Remember

Never perform with your back to the audience

Make sure



Your expressions and your emotions must match!



9 9 9

Your work can always be improved



Focus, focus, focus!

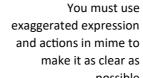
your voice is loud and

Always listen

own

to the ideas of others

as well as voicing your



and actions in mime to make it as clear as possible

experiment

with your voice

Always

A spoken thought must be the true inner thoughts of a character not just a comment said out loud.

When reacting to another performer always make sure your reaction is in role so the context stays accurate



Deeper Learning

Actors will often use their own experiences to help them play a role more effectively, especially if it is an emotional one.

Most actors will say that they are never happy with their performance, that there is always something that they could change or do better. This is why they will rehearse a piece of drama over and

Progress Check

I can co-operate and communicate effectively with others.

I can remember some of the key features of each technique.

I can apply the features that are appropriate to the work.

I can adapt my character to suit the context.

Dual Coding

Devised

SPOKEN **THOUGHTS** The inner thoughts of the character said out loud to the audience

CHARACTER BUILDING Voice, Movement, Actions, Believability, Mannerisms, Appropriate Language



IMPROVISATON/ **ROLE PLAY** Spontaneous or

STILL IMAGES Focus, Facial Expressions Gesture & Levels

FEEDBACK Positive and Developmental

"I liked their use of..."

"They could improve their work by..."





Subject Knowledge Organiser HRF – Health, Fitness and Exercise, Consequences of a SL, Lifestyle choices & CoF

Health, Fitness and Exercise

Health can be defined as 'complete physical, mental and social wellbeing and not only the absence of illness or infirmity'. Fitness can be defined as 'the ability to meet the demands of the environment'. Exercise can be defined as 'a form of physical exercise done to improve health or fitness or both'. *Adults* - five sessions of thirty minutes activity per week. The activity should be physical enough to cause the adult to breathe more deeply and to begin to sweat. *Children and young people* - seven sessions of sixty minutes per week. At least two of these sessions should be of high intensity exercise such as running, jumping or cardiovascular based sports.

Consequences of a sedentary lifestyle

If a person does not take part in regular physical activity, exercise or sport then they are at risk of a number of illnesses and negative effects such as weight gain or obesity; heart disease; hypertension (high blood pressure); diabetes; depression; increased risk of osteoporosis and loss of muscle tone.

Lifestyle choices

Other lifestyle choices can affect a person's health in either a positive or negative way. For example, eating a balanced diet means a person is less likely to become ill or put on excess body fat; getting enough sleep is important for the body to rest and brain to function optimally; not smoking as this causes illnesses such as bronchitis and lung cancer and not taking recreational drugs such as alcohol as in the short term it can lead to disorientation and poor decision-making and in the long term can lead to disease.

Component of Fitness							
		Definition	Example				
	Body composition	The percentage of body weight which is fat, muscle and bone	The gymnast has a lean body composition to allow them to propel themself through the air when performing on the asymmetrical bars				
	Cardiovascular fitness	The ability of the heart, lungs and blood to transport oxygen	Completing a half marathon with consistent split times across all parts of the run				
	Flexibility	The range of motion (ROM) at a joint	A gymnast training to increase hip mobility to improve the quality of their split leap on the bean				
	Muscular endurance	The ability to use voluntary muscles repeatedly without tiring		r repeatedly pulling their oar against the water bel the boat towards the line			
	Strength	The amount of force a muscle can exert against a resistance	Pushing with all one's force in a rugby scrum against the resistance of the opposition pack				
	Agility	The ability to change the position of the body quickly and control the movement		A badminton player moving around the court from back to front and side to side at high speed and efficiency			
	Balance	The ability to maintain the body's centre of mass above the base of support		A sprinter holds a perfectly still sprint start position and is ready to go into action as soon as the gun sounds			
(The ability to use two or more body parts together		A trampolinist timing their arm and leg movements to perform the perfect tuck somersault			
		The ability to perform strength performances quickly		A javelin thrower applies great force to the spear while moving their arm rapidly forward			
		The time taken to respond to a stimulus		A boxer perceives a punch from their left and rapidly moves their head to avoid being struck			
	Sheed	The ability to put body parts into motion quickly		A tennis player moving forward from the baseline quickly to reach a drop shot close to the net Page 29			

Subject Knowledge Organiser HRF – Training Methods, Advantages/Disadvantages of TM & Training Zones

Training Methods

Training can be aerobic or anaerobic. 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. 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.

Specific training methods can be used to improve each fitness factor. Circuit training involves performing a series of exercises in a special order called a circuit. Each activity takes place at a 'station'. It can be designed to improve speed, agility, coordination, balance and muscular endurance. Continuous training involves working for a sustained period of time without rest. It improves cardiovascular fitness. Cross training involves using another sport or activity to improve your fitness. It happens when an athlete trains in a different environment. For example a volleyball player uses the power training for that sport to help with fitness for long jump. Fartlek training or 'speed play' training involves varying your speed and the type of terrain over which you run, walk, cycle or ski. It improves aerobic and anaerobic fitness. Interval training involves alternating between periods of hard exercise and rest. It improves speed and muscular endurance.

<u>Progress Vocabulary:</u> <u>Identify, Define, describe, explain, compare and contrast, sporting links, analyse, evaluate</u>

Advantages and Disadvantages of Training Methods

Continuous Training

Good for aerobic fitness, lose weight accessible, health benefits, good for beginners of all ages, little equipment Boring, not always sport specific, risk of injury does not improve anaerobic fitness

Fartlek Training

Good for team sports, less boredom, easy to use, can mimic the sport, god for team sports

Too easy to cheat, can be difficult

Circuit Training

Less boring, easily adapted for fitness/skill, easily adapted to sports, stations can target specific muscle groups

Take time to set up, requires equipment

Interval Training

Can be both aerobic and anaerobic, less technical, can mimic a sport, good for sports that require a change of pace

Can be boring, easy to cheat hard aspects,

Free weights

Full range of sporting movement, large muscle groups can be worked Risk of injury, need a spotter, more suitable for advance performers, requires good knowledge

Resistance machines

Safer, good for beginners, good for injury rehabilitation
Expensive, no functional everyday movements, only focuses on one muscle group

Always remember: To work out your maximum heart rate you take your age from 220. So a 12 year old has a maximum heart rate of 208 beats per minute.

Anaerobic Threshold
80-100%
Peak Performance
80-90%
Aerobic Fitness
70-80%
Aerobic
60-80%
Fat Burning
60-70%
Active Recovery
60%
Warm-up Cool-down
50%

Training Zones

age 30

Subject Knowledge Organiser Gymnastics - Key Components of Fitness, Key Terms & Chronology

Key Components of Fitness for Gymnasts

A gymnast requires **flexibility** at the joints to allow for a larger range of motion around a joint.

A gymnast requires muscular strength to be able to balance on certain body parts. This is exerting their body against a given force.

A gymnast requires **power** in their arms and legs, which is speed x strength.

A gymnast requires **agility** to change direction at speed.

A gymnast requires muscular endurance to keep using the same muscle groups over and over again when performing a skill such as a forward roll.

A gymnast requires a certain levels of **speed** as they slow down their speed and increase their speed depending on the sequence they are performing.

Gymnastics Key Terms

Apparatus The equipment used in gymnastics.

Balance Position A static position, holding a distinct shape.

Dismount To leave an apparatus at the end of a routine.

Equilateral Triangle A triangle in which all three sides have equal length.

Jeté A move where the gymnast springs from one foot to the other.

Pike Body position where the body is bent forward 90 degrees at the waist with the legs kept straight.

Pivot A turn on the ball of the foot.

Plié Feet angled at 90 degrees.

Routine A combination of moves and sequences performed on one apparatus.

Spotting Spotting a landing before take off.

Supporting When a second person assists the gymnast through a move and prepares to cushion them to avoid injury in the event of a fall.

Tuck A position where the knees are bent into the chest, with the body folded at the waist.

Walkovers A move where a gymnast transfers from a standing position to a handstand to a standing position.



Subject Knowledge Organiser Gymnastics – Travelling, Jump, Roll, Weight on Hands, Balance & Vault

Travelling

Travelling in floor gymnastics is being able to move around the mat using different movements such as rolls, steps, turns, jumps, cartwheels, walkovers, handsprings, and being as creative as possible.

Standing Upward Jump

Bending your legs slightly, jump up while raising your arms forwards and upwards above your head. Keep your arms slightly in front of your body. As you land, it is important to keep your arms raised above your head, and place your feet slightly apart in the 'plie' position at an angle of 45 degrees, with your knees bent. As you make contact with the floor continue to bend the knees to absorb the downward force of landing. Bring your arms down sideways to stabilise the landing, without taking a step.

Forward Roll

From standing, crouch down. Place your hands on the floor in front of you, shoulder-width apart with your fingers facing forwards, while simultaneously placing your chin on your chest. This will ensure your hips of raised high enough and your spine is rounded so you can roll on to your back. Bend your arms as you place your neck on the floor, slightly extending the legs and pushing on the floor with your feet until the roll commences and you roll on to your back. Try to keep your legs straight as you commence the roll forwards. In the last part of the roll, bend your legs tightly so that your heels are close to your bottom. At the point where your feet contact the floor, stretch forwards with your arms so that your head and chest move over your feet. Once your body weight is in a position of balance you will be able to stand.

Cartwheel

Raise your hands above your head and place your leading leg forward. Reach forward to place the first hand (the hand on the same side as the leading leg) on the floor by bending your front leg and bending at the waist. When the first hand contacts the floor, straighten your front leg while kicking upward with your back leg over your head. Continue the movement by rocking over from your first to your second hand (which is still extended above your head). To do this, push strongly against the floor with your first hand, keeping your arms stretched up over your head. As your body rocks over your second hand, bring your second leg down to the ground and place it close to your second hand.

Headstand

Crouch down and place your hands and forehand on the floor to form and equilateral triangle. Your head should be approximately 30cm in from of your hands and your arms bent at an angle of 90 degrees. Extend your legs so that your pointed toes are resting on the floor. By pressing with your hands, slowly move your bottom over your forehead into a balanced position. Maintain the equilibrium by continually pressing with your hands. By exerting more pressure you will reach a point at which you can lift your feet from the floor. Continue to raise your legs above your head by pressing constantly against the floor with your hands. Make sure that your back is kept straight at all times by tightening your bottom and stomach muscles.

Headspring

To obtain the necessary height and rotation, a fast but controlled approached run is required. On take-off, drive your arms upwards and extend the body. Think of the lower body rotating over the upper body. You must still be moving upwards at the point when your hands strike the vault. In the strike phase, the angle of the body and the vault should be between 60 and 80 degrees to the vertical. Your hands should leave the box just before your body reaches the vertical. To achieve this the strike phase must be short and extremely powerful. During post-flight, keep the body as straight as possible. Just before landing, bend the knees.

Always remember: You need to make sure you show aesthetic appreciation when performing making sure arms and legs are kept as straight as possible where possible and your moves are controlled, smooth and balanced.

<u>Progress Vocabulary:</u> <u>Identify, Define, describe, explain, compare and contrast, sporting links, analyse, evaluate

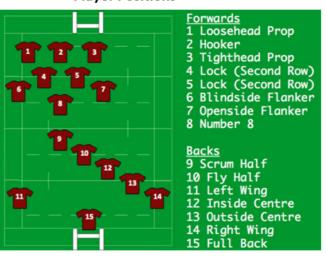
Page 32</u>

Subject Knowledge Organiser Rugby – Laws, Player Positions & Pitch Dimensions

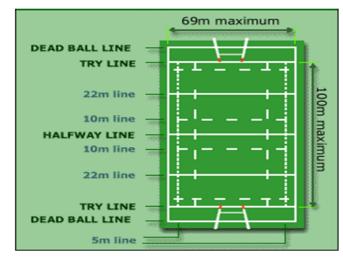
Laws

- ☐ The rugby game is broken down into two 40-minute halves with a 10-minute rest period in between.
- ☐ The time during a game can be stopped for an incident. Therefore, the game stops on exactly 80 minutes.
- ☐ The game must have one referee and two touch judges.
- ☐ The game is stopped if a player is fouled and there is no subsequent advantage. Unlike most sports, a referee can wait to see how an incident unfolds before deciding whether the attacking had an advantage.
- ☐ A tackle cannot be made above the nipple line or by tripping a player with your feet.
- ☐ A lineout is called if the ball travels past the side-line.
- ☐ A lineout consists of up to seven players and players can be lifted in order to catch the ball.
- At a lineout, both teams can compete to win the ball.
 To successfully covert a kick, the ball must travel the top section of the goal.
- ☐ If a ball, when kicked, hits the post and bounces in field, then play can continue.
- ☐ In order to stay onside in rugby, the attacking players must remain behind the ball of the player passing to them
- □ A referee may award a foul if they believe an unfair act is committed by a player. A foul contravenes the laws of the game and can be for a range of offences (kicking the player, offside, dropping the ball).
- □ In cases of foul play, a referee can award players with either a yellow or red card. A yellow card provides a player with a warning about their conduct (sin binned for 10 minutes) and a red card requires them to leave the pitch immediately.

Player Positions



Pitch Dimensions



<u>Progress Vocabulary:</u> <u>Identify, Define, describe, explain, compare and contrast, sporting links, analyse, evaluate

Page 3:</u>

Subject Knowledge Organiser Rugby – Tackle, Grubber Kick, Spin Pass & High Ball Catch

Rugby – Tackle, Grubber Kick, Spin Pass & High Ball Catch					
 Tackle □ The tackle is an essential skill for winning the ball back in rugby or stopping an attacking player. It is very important to complete it with good timing and technique to prevent injury or accidents. □ Position your body to the opponent's right-hand side (safe side). □ Position your left foot forward into a slight opposition. □ Make contact by putting your right shoulder into the opponent's midright thigh. □ Make sure your head is on the other side of the ball carrier so their body is between your shoulder and head. □ Bring your arms up and wrap them around the ball carrier, just above their knees (do not lock your hands together). □ Squeeze your arms and pull the ball carrier into your body. □ As you squeeze, push your shoulder into the ball carrier, as though you are trying to push him away with your head. □ Continue pushing until both you and the ball carrier fall to the ground. □ Keep your head as close as you can to their thigh throughout. 	 Spin pass □ A spin pass enables a team to quickly pass a ball and help maintain possession. □ Stand on balls of feet in opposition (left foot forward), knees slightly bent with body facing forward. □ Hold the ball out in front of you with extended arms. □ Put the right hand on the bottom half of the right hand side of the ball. □ Point the thumb up along the seam of the ball and spread the fingers around the side of the ball. □ Put the left hand on the top half of the left hand side of the ball. □ Point the thumb up along the seam of the ball and spread the fingers around the side of the ball. □ Bring the ball in towards your waist and flex your elbows at a 90° angle. □ Rotate your shoulders round until your left shoulder is pointing forward. □ Draw the ball back across to the right hip, keeping your elbows slightly bent. □ Sweep the ball across your body, keeping the elbows close to your body and shift your weight from your back leg to your front foot. □ Release the ball when arms are nearly fully extended with a flick of the wrists and fingers. □ Follow through with your fingers pointing to the target. 				
Grubber Kick ☐ The grubber kick is a simple low kick that aims to move the ball past defences for attacking players to try and retrieve. It is very good at breaking defensive positions and forces defenders to turn around and chase. ☐ Stand in opposition on the balls of your feet, with the non-kicking foot in front. ☐ Lean forward so the head and chest should be comfortably over the ball. ☐ Hold the ball vertically at waist height, with hands either side of the ball. ☐ Extend arms fully so the ball is half a metre out in front. ☐ Drop the ball and point toes towards the ground. ☐ Keep the knee bent and over the ball. ☐ Strike the upper half of the ball with the laces, just before it bounces. ☐ Extend the leg through so it is straight, with toes pointing at the target.	High ball catch A high ball catch is an attacking and defending skill. It is useful for attackers when completing an up and under kick or as a defender to stop an attacking team's momentum by safely winning possession back. Call for the ball. Get in line with the ball's path and keep your eyes on the ball at all times. Move towards the ball and extend your arms out in front of you at chest height. Slightly bend your elbows and have your palms facing up and fingers spread. Jump up off one foot. As you are about to catch the ball, turn slightly to one side, so the side of the body is pointing downfield. Raise the other knee up towards the waist to generate additional upward momentum. Catch the ball with the hands at or above eye level. Bring the ball into your body. Secure the ball against your body as you land on the ground.				
Key Words: pop pass, pocket pass, spin pass, grubber, spiral, tackle, bind, maul, ruck, scrum, hooker, prop, scrum half, line out, thigh, drive, squeeze, knock on, forward pass, high tackle.	Always Remember: When tackling, bind you arms around your opponents knees, shoulder to thigh, cheek to cheek. squeeze and drive with your shoulder. Page 34				

Subject Knowledge Organiser - Dance

Keywords

<u>Canon-</u>This is where a group of performers repeats the same action one after another. A good example of this is the Mexican wave.

Choreography- Being able to create a dance or set of dance moves.

Control- The power to direct your body and body parts to master dance moves.

Co-ordination- Being able to move different body parts at the same time.

Dynamics- Being able to change the way your body moves- fast, slow, jerky, smooth etc.

<u>Expression-</u> Being able to show a story or a feeling through the medium of dance, also, being able to use your face to show the meaning of the dance.

Extension- To be able to stretch parts of the body to their upper limits, usually your arms, legs and fingers.

<u>Flexibility-</u> The ability of your joints to move through a full range of motion. Having flexibility in your muscles allows for more movement around a joint.

Isolation- Moving one body part on its own whilst the rest of the body is still.

<u>Mirroring-</u> This is where a pair or group of people complete the same movement but the opposite side of the body- as if they were looking in a mirror.

Dual Coding









Styles of Dance

<u>Ballet-</u> This dance style is over 500 years old and it is all about telling a story through dance and music. A famous ballet move is going onto pointe toes, this is where the shoes allow dancers to go onto the very tip of their toes which creates a sense of light and airiness.

<u>Street/Hip-hop-</u> This is a very quick style of dance which requires music with a heavy beat, dancers move around quickly creating moves on the floor and tricks such as head spins and flips. This style has derived from a variety of other dance styles yet only became popular in the early 90's.

<u>Modern-</u> This is dance that follows no rules and is focused on expressing inner feelings through music and movement. This style of dance was created in a rebellion against classical ballet due to the limitations. Modern dance became famous in the 1900's. Modern dancers usually dance barefooted and wear costumes' that reveal a story.

<u>Cultural</u>- Cultural dances are those that originate from a certain country, culture or religion and these are very famous within that culture. For example, Irish dancing originates from Ireland, Bollywood originates from India and Rock n Roll originates from America.

Progress Vocabulary: Identify, Define, describe, explain, compare and contrast, sporting links, analyse, evaluate

Key Vocabulary		The British Values and Some Other Rights		
Laws	Rules which are set by the government that every single person must follow.	Democracy	The idea that the people should be able to collectively choose their leaders.	
Election	The event at which people vote to choose the government.	The Rule of Law	The idea that all people should follow the law and be treated equally by the law.	
Respect	Giving consideration to the feelings, wishes, needs or abilities of another person.	Individual Liberty	The idea that people should be free to choose their own path in life.	
Racism	Prejudice or discrimination based on someone's skin colour or place of origin.	Mutual Respect and	The idea that no one should be mistreated based on their race, gender, religion, disability or any other difference.	
Sexism	Prejudice or discrimination based on someone's gender or biological sex.	Tolerance		
Prejudice	Making judgements about someone based on their gender, race, sexual orientation or religion.	Freedom of Speech	The idea that people should be free to express themselves and their views without fear of punishment.	
Discrimination	Mistreatment of someone based on their gender, race, sexual orientation or religion.	The Right to Protest unfair Treatment	Within certain rules, UK citizens are legally allowed to protest against treatment or rules that they deem unfair.	
Protest	A public demonstration of dissasitisafaction with the rules.			
Liberty	Freedom, the right to make decisions about one's own life.	Human Rights	The basic rights which are considered to be common to all people rather than having to be earned.	

The Big Idea

In many countries the rights and freedoms of the people are not guaranteed and protected by law. We are very lucky in Britain to be living in a country which protects us in this way and allows us to live our lives as we choose, as long as we don't have a negative affect on others. It has been a long journey through history to gain these rights and freedoms. Democracy, for example, has developed over more than 800 years, beginning with King John being forced by his barons to grant them some basic rights in a document which we now call Magna Carta, signed in the year 1215. Over this period, there have been many people how have fought for the rights of the British people, brave campaigners such as Annie Besant and William Wilberforce, who both worked hard to make sure that eventually all British people would be free and have a say in how the country is governed.

Without these rights and freedoms there would be nothing to stop us being put on trial or in prison for voicing an unpopular opinion, and nothing to stop a dictator such as Adolf Hitler or Josef Stalin taking over the government, and making laws which are cruel and ruin people's lives. These rights and freedoms essentially give us the chance to lead a happy life. They don't guarantee a happy life, they just give us the opportunity, as there are many more ingredients to leading a happy life and these will be different for each person. However they give us the opportunity to have an education, to learn all that we can about the world and try to find our place in it, and they give us the freedom to campaign for change in our society, where we see injustice such as racism or gender discrimination. These rights and freedoms give us the opportunity to chose our own path and attempt to follow it.

Activity - Research the five key British Values of democracy, the rule of law, individual liberty, mutual respect and freedom of speech. Create a fact-file explaining how these rights and values are protected in Britain.

