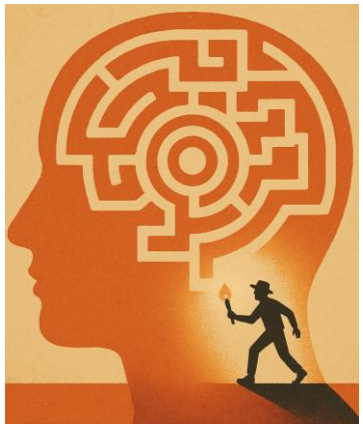
YEAR 7



BHA's Knowledge Quest

Autumn 1
(Sept - Oct)
2026-2027

Bristnall Hall Academy

How to use your

Knowledge Quest Booklet

To support you in making progress in each of your lessons, your teachers have produced Knowledge Organisers which contain all of the main facts, knowledge and information that you need to know to be successful and make progress this half term. There are lots of ways to use these Knowledge Organisers, but the most important thing is that you are revising the knowledge and you are able to recall it in your lessons. Please see below details of how to use this booklet; what your half termly homework looks like and how to secure lots of positive Class Charts points!

English: 30 minutes of Sparx Reader, every week.

Maths: 30 minutes of Sparx Maths, every week.

Science: 30 minutes of Seneca Science, every week.
MFL: 1 list of vocabulary to learn for a test in lesson AND 1 quiz to complete on Language Nut, MFL platform every fortnight.
History: 30 minutes of Seneca revision, every week. Additional revision provided for assessments.
Geography: 1 hour of Seneca per fortnight.
RE: Holistic quiz using Knowledge Organiser and lesson on teams, every 4 weeks.
PSHE: Independent self quizzing from Knowledge Organiser.
DT: Food Studies- Seneca assignment set as part of each 9-week rotation.

Art: To research/find and create resource images for projects when required.

All other subjects: Revise the information in this booklet using the revision sheets included with each subject.

Timetable

Use this page to copy out your lessons and room numbers

	W1 Mon	W1 Tues	W1 Wed	W1 Thurs	W1 Fri	W2 Mon	W2 Tues	W2 Wed	W2 Thurs	W2 Fri
1										
2										
3										
4										
5										
6										

Dates to remember this half term:

September

October

Attendance record

Week	Attendance %
Week 1	
Week 2	
Week 3	
Week 4	
Week 5	
Week 6	
Week 7	
Week 8	

Sparx Check!

Remember to click: 'Login with Microsoft' using your academy email address and password!

In the boxes below, write the XRP score that you achieved for each subject. Your form tutor will award you additional CC points for the more XRP points you achieve in addition to the set points for each weekly homework.

	Sparx Reader Points:	Sparx Maths Points:
Week 1		
Week 2		
Week 3		
Week 4		
Week 5		
Week 6		
Week 7		
Week 8		
Total this half term:		

Seneca Check!

Remember to click: 'Login with Microsoft' using your academy email address and password!

In the boxes below, write the titles of the assignments that you complete for each subject and your overall percentage scores. Your form tutor will award you additional CC points for the highest percentages you achieve in addition to the set points for each weekly homework.

	Science Assignments:	History Assignments:	Geography Assignments:
Week 1			
Week 2			
Week 3			
Week 4			
Week 5			
Week 6			
Week 7			
Week 8			
Total assignments completed this half term:			

Language Nut Check!

Remember to click: 'Login with Microsoft' using your academy email address and password!

In the boxes below, write out what % you have achieved from your weekly homework. Your form tutor will award you additional CC points for the highest scores you achieve in addition to the set points for each weekly homework.

	MFL Homework:
Week 1	
Week 2	
Week 3	
Week 4	
Week 5	
Week 6	
Week 7	
Week 8	
Total assignments completed this half term:	

Independent Study Check!

Your form tutor and your parent/carer will also check that you are completing your independent study within this booklet. Additional positive CC points will be awarded for beautiful presentation and your ability to demonstrate a strong recall of the knowledge within this booklet.

	End of Half term Form Tutor Check:	Parent/Carer Check:
Independent Study Completed?		
Beautiful Presentation?		
Recall of Knowledge?		

Personal Reflection: What are you most proud of within your Independent Study Booklet?

_____

_____

_____

_____

_____

Homework Log

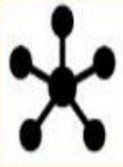
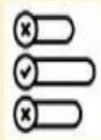
Use this page to record any homework this half term

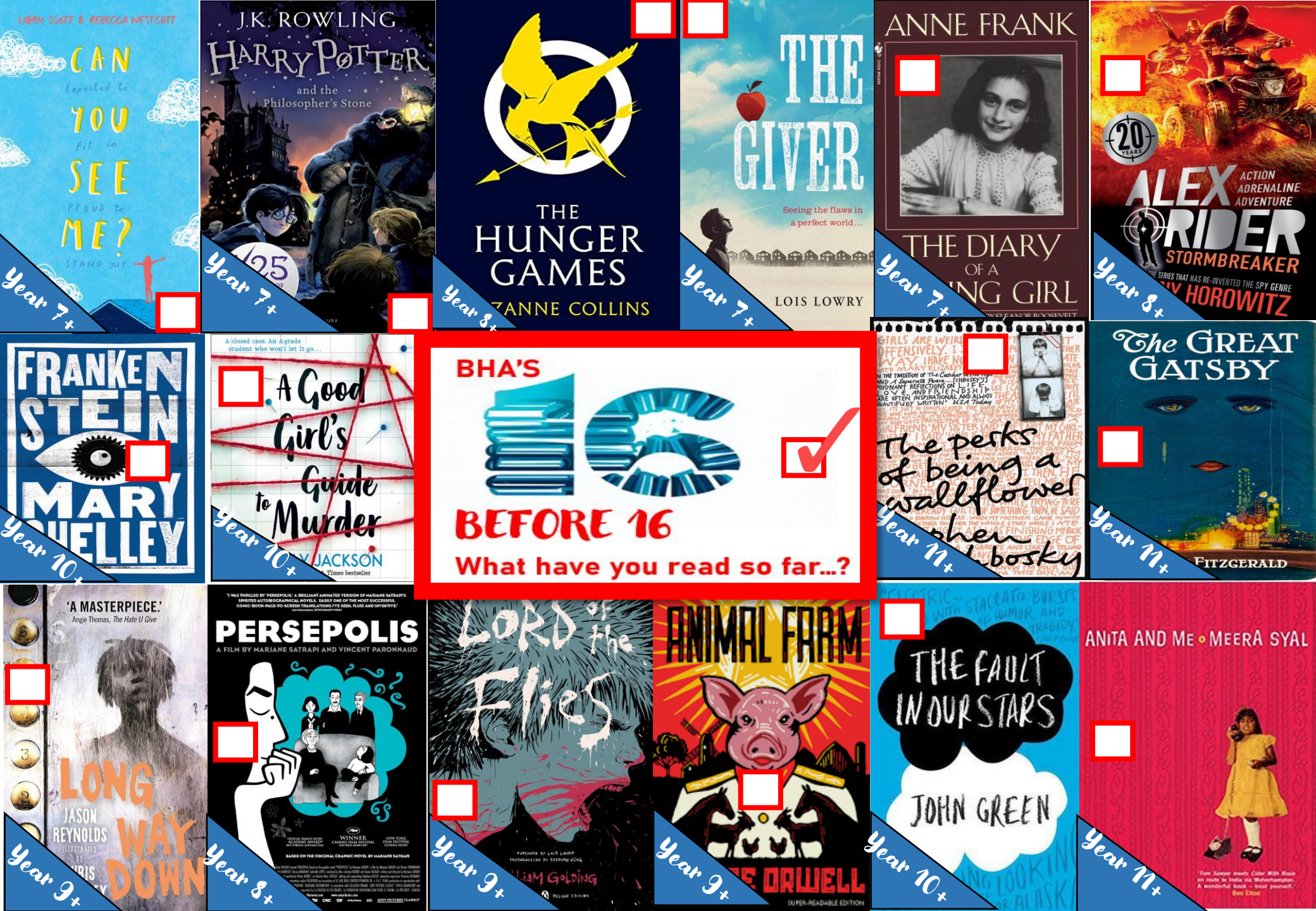
Subject	**Date Due:**	**Additional Notes:**

Homework Log

Use this page to record any homework this half term

Subject	**Date Due:**	**Additional Notes:**

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

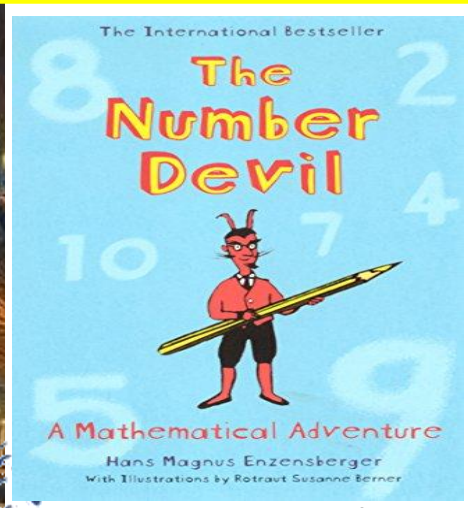

Year 7+
Year 7+
Year 8+
Year 7+
Year 7+
Year 8+
Year 10+
Year 10+
BHA'S
BEFORE 16
What have you read so far...?
Year 11+
Year 11+
Year 9+
Year 8+
Year 9+
Year 9+
Year 10+
Year 11+

Contents page

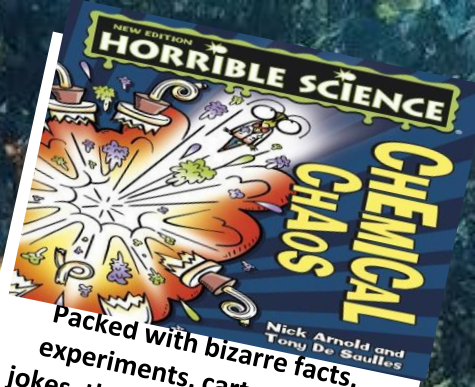
YEAR 7

Recommended Reading

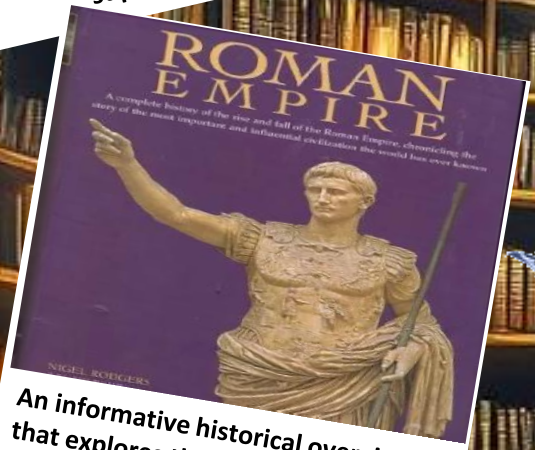
A boy named Michael discovers a mysterious, fragile man living in the crumbling garage of his new home. As Michael befriends this strange figure, who calls himself Skellig, he begins to realise that Skellig may be something supernatural.



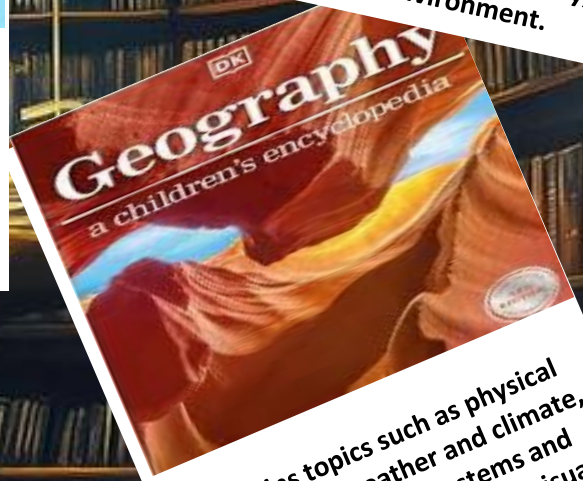
Robert dislikes Maths and finds it confusing. One night, he is visited in his dreams by the mysterious "Number Devil," a quirky character who teaches him about numbers in surprising and engaging ways.



Packed with bizarre facts, experiments, cartoons and jokes, the book introduces you to the basics of chemical reactions, elements, gases and acids. It explains how everyday substances behave, sometimes explosively, and reveals strange and shocking truths about chemicals in food, the body, and the environment.



An informative historical overview that explores the rise, expansion, and decline of one of the greatest empires in history.
The book traces Rome's development from a small city-state into a vast empire that dominated much of Europe, North Africa, and the Middle East.



Explains topics such as physical landscapes, weather and climate, populations, ecosystems and global issues in a simple, visual way. It also teaches important skills like reading maps, analysing graphs and understanding data.

Challenge yourself by reading these topic-related books for this half term!

A Monster Calls

English

In Patrick Ness' short young adult novel, A Monster Calls, young Conor O'Malley deals with the difficult emotions associated with his mother's impending death from cancer. The Monster comes to teach the boy how to deal with his own grief. While exploring themes such as grief, storytelling, fear, courage, and the contradictions of human nature, the Monster and Conor work through his complex feelings, allowing the boy to be able to face his mother's death with courage and peace.

Main Characters – Consider what Ness is trying to explore through his characters

Conor

The protagonist of the book, thirteen-year-old Conor is very responsible for his age, due primarily to the fact that his mother was diagnosed with cancer a year before the start of the book. Conor is her primary caretaker because Conor's mother and father had gotten divorced five years before her diagnosis. At the beginning of the story, Conor refuses to believe that his mother's health is deteriorating and tries to act as though everything is normal. However, different people and events prevent Conor from pretending that everything is normal.

Conor quote:

He'd told no one about the nightmare. Not his mum, obviously, but no one else either, not his dad in their fortnightly (or so) phone call, definitely not his grandma, and no one at school. Absolutely not.

The Monster

A giant creature who takes the shape of a yew tree. Conor's pain, grief, and inability to accept his feelings and his mother's impending death is what calls the monster to him. The monster says that it has been called Herne the Hunter, Cernunnos, and the Green Man in the past—all implying that it is a natural spirit of pagan lore. The monster comes to tell stories to Conor to try and help him heal, and to help him understand that life and human emotions are complex and resist simple answers. The monster appears to be heavily linked to Conor's denial surrounding his mother: the more Conor tries to deny that anything is wrong, the more violent both the monster and Conor get.

Monster quote:

You think I tell you stories to teach you lessons? the monster said. You think I have come walking out of time and earth itself to teach you a lesson in niceness?

Conor's Mum

Though it is only explicitly stated that Conor's mother is sick, details that Ness includes heavily implies that she has cancer: Conor's mother has lost her hair and wears a scarf, goes through rounds of treatments, and is often exhausted and nauseous. As Conor's mother's condition deteriorates over the course of the book, she feels increasingly guilty about the responsibility that Conor has been forced to take on in caring for her. This leads her to ask his grandmother (her mother) to visit and help her and Conor, despite the fact that Conor doesn't like his grandmother very much. When Conor's mother's treatments stop working, she tries to tell Conor that she believes her last option, the one made from yew trees, will work. When she reveals to him later that this treatment is also failing, he becomes angry with his mother for lying to him.

Conor's Mum quote:

"I'm going to be late," Conor said, eyeing the clock.
"Okay, sweetheart," she said, teetering over to kiss him on the forehead. "You're a good boy," she said again. "I wish you didn't have to be quite so good."

Conor's Dad

Conor's father and the ex-husband of Conor's mother. Conor's mother and father divorced when Conor was seven years old, and Conor explains that he barely remembers what it's like to have a father in the house. Conor's father now lives in America with his new wife, Stephanie, and a new baby. Conor's father comes to visit when Conor's mother ends up in the hospital. Conor is happy to see him—he enjoys being with his father and is comforted to have a parental figure to help take care of him and relieve him of some of his responsibility. However, even though it is clear that Conor's father has good intentions, he is rather flaky.

Conor's Dad quote:

His father sighed. "This is what I meant," he said. "This is what I meant when I said you were going to have to be brave."

Lily

Conor's best friend and classmate. Conor's mother and Lily's mother have been friends for a long time, and Conor and Lily grew up together. But at the beginning of the book, Conor is angry with Lily: when she found out about Conor's mother's diagnosis, she told a few friends, who quickly spread the news to the entire school and caused people to avoid him. This sequence of events makes Conor frustrated with her, to the point where he gets her into trouble while she was trying to save Conor from being bullied by Harry.

Lily quote:

I'm sorry for telling everyone about your mum, read the first line.
I miss being your friend, read the second.
Are you okay? read the third.
I see you, read the fourth, with the I underlined about a hundred times.

Conor's Grandma

Conor's maternal grandmother. Conor's grandmother is cold and somewhat strict, and Conor doesn't like her very much. He doesn't understand why she tries to make herself look young and still works. At the beginning of the book, Conor's mother invites Conor's grandmother to visit to help take care of Conor and herself. Conor is disdainful of her visit, both because she treats him like a child (even though he's been taking care of his mother alone up to this point), and because her presence inherently indicates that something is wrong.

Conor's Grandma quote:

She walked right past him, her face twisted in tears, the moaning spilling out of her again. She went to the display cabinet, the only thing remaining upright in the room.

Key Themes (A theme is recurring subject or idea in a piece of literature)

- **Isolation** – being alone or isolated.
- **Trauma** – a deeply distressing or disturbing experience.
- **Morality** – understanding right from wrong (or, good and bad).
- **Denial** – refusing to accept something.

Key Words

- **Symbolism –** The use of objects, characters, colours to convey deeper meanings and themes in a story.
- **Allegory –** a story with a hidden meaning.
- **Trepidation –** a feeling of fear or anxiety about something that may happen.
- **Turmoil –** a state of great disturbance, confusion, or uncertainty.

PEZEL

POINT: Make a clear statement that answers the question.

EVIDENCE: Use a quotation from the book that proves the point you have made, imbed them in and include quotation marks.

ZOOM: Zoom in on a key word/ phrase, identify what TYPE of word it is OR identify any language features and analyse the meaning. Provide at least two interpretations.

EXPLORE: Use your quote explosion/rainbow analysis to explain the effects on the reader. What/ how will it make think, feel, understand?

LINK: Explain why the writer has done this and link back to the context of the novella OR link to another part of the text, how is it developed, emphasised or contrasted

***PEZEL is a structure to ensure you cover all aspects of a mark scheme.**

Page 2

YEAR 7 — PLACE VALUE AND PROPORTION

Maths

Ordering integers and decimals

What do I need to be able to do?

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

- Understand place value and the number system including decimals
- Understand and use place value for decimals, integers and measures of any size
- Order number and use a number line for positive and negative integers, fractions and decimals;
- use the symbols $=, \neq, \leq, \geq$
- Work with terminating decimals and their corresponding fractions
- Round numbers to an appropriate accuracy
- Describe, interpret and compare data distributions using the median and range

Keywords

Approximate: To estimate a number, amount or total often using rounding of numbers to make them easier to calculate with
Integer: a whole number that is positive or negative
Interval between two points or values
Median: A measure of central tendency (middle, average) found by putting all 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 place in a number. In our decimal number system, each place is 10 times bigger than the place to its right
Range: The difference between the largest and smallest numbers in a set
Significant figure: A digit that gives meaning to a number. The most significant digit (figure) in an integer is the number on the left. The most significant digit in a decimal fraction is the first non-zero number after the decimal point

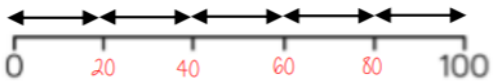
Integer Place Value

Billions			Millions			Thousands			Ones		
H	T	O	H	T	O	H	T	O	H	T	O
		3	1	4	8	0	3	3	0	2	9

Placeholder

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



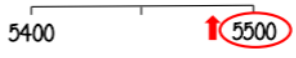
Divide the difference by the number of intervals (gaps).
E.g. 100 ÷ 5 = 20

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

Integer Place Value

Billions			Millions			Thousands			Ones		
H	T	O	H	T	O	H	T	O	H	T	O
		3	1	4	8	0	3	3	0	2	9

Placeholder

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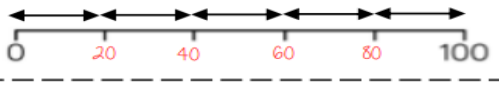
Intervals on a number line

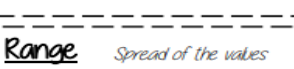


Divide the difference by the number of intervals (gaps).
E.g. 100 ÷ 5 = 20

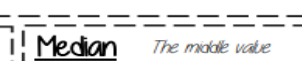
Rounding to the nearest power of ten

If the number is halfway between we "round up"

5495 to the nearest 1000



5475 to the nearest 100



5475 to the nearest 10

Compare integers using $<, >, =, \neq$

$<$ less than
$>$ greater than
$=$ equal to
$\neq$ not equal to

Two and a half million $>$ 300 000 000
2 500 000 $=$ 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

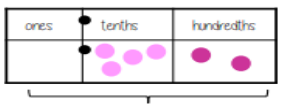
150 154 148
137 160 158

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"

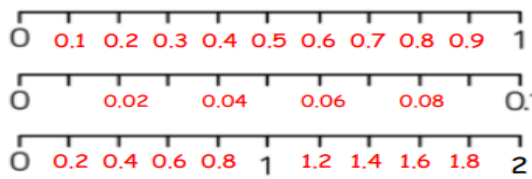
Five tenths and two hundredths

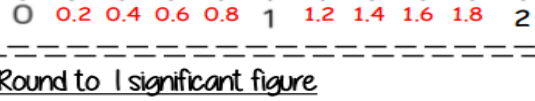


0 ones, 5 tenth and 2 hundredths
0 + 0.1 + 0.1 + 0.1 + 0.1 + 0.1 + 0.001 + 0.001
= 0 + 0.5 + 0.02
= 0.52

Decimal intervals on a number line

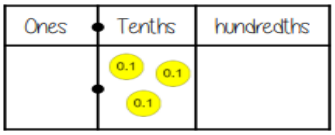
One whole split into 10 parts makes tenths = 0.1
One tenth split into 10 parts makes hundredths = 0.01

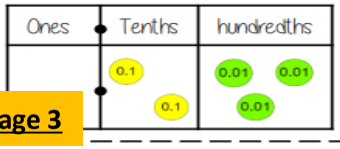




Comparing decimals

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

YEAR 7 — APPLICATION OF NUMBER

Maths

Solving problems with addition and subtraction

What do I need to be able to do?

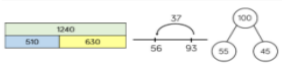
By the end of this unit you should be able to:

- Understand properties of addition/ subtraction
- Use mental strategies for addition/subtraction
- Use formal methods of addition/Subtraction for integers
- Use formal methods of addition/Subtraction for decimals
- Solve problems in context of perimeter
- Solve problems with finance, tables and timetables
- Solve problems with frequency trees
- Solve problems with bar charts and line charts

Keywords

Commutative: changing the order of the operations does not change the result
Associative: when you add or multiply you can do so regardless of how the numbers are grouped
Inverse: the operation that undoes what was done by the previous operation (The opposite operation)
Placeholder: a number that occupies a position to give value
Perimeter: the distance/ length around a 2D object
Polygon: a 2D shape made with straight lines
Balance: in financial questions — the amount of money in a bank account
Credit: money that goes into a bank account
Debit: money that leaves a bank account

Addition/ Subtraction with integers



Modelling methods for addition/ subtraction
- Bar models
- Number lines
- Part/ Whole diagrams

Addition is commutative

6 + 3 = 3 + 6

The order of addition does not change the result

Subtraction the order has to stay the same

$360 - 147 = 360 - 100 - 40 - 7$

- Number lines help for addition and subtraction
- Working in 10's first aids mental addition/ subtraction
- Show your relationships by writing fact families

Formal written methods

	H	T	O
	1	8	7
+	5	4	2

	H	T	O
	4	2	7
−	2	4	9

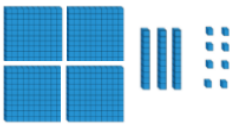
Remember the place value of each column
You may need to move 10 ones to the ones column to be able to subtract

Addition/ Subtraction with decimals

4	.	3	8
7	.	9	0

0 can be used to fill empty places with value

The decimal place acts as the placeholder and aligns the other values



If  represents 1 instead of 100

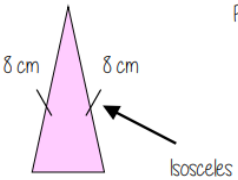
Revisit Fraction — Decimal equivalence

$5.43 + \frac{8}{10}$

5.43 + 0.8

Solve problems with perimeter

Perimeter is the length around the outside of a polygon



Isosceles Triangle notation

The triangle has a perimeter of 25cm
Find the length of x

$8cm + 8cm + xcm = 25cm$
$16cm + xcm = 25cm$
$xcm = 9cm$

Solve problems with finance

Profit= Income - Costs

Credit — Money coming into an account

Debit — Money leaving an account

Money uses a two decimal place system
14.2 on a calculator represents £14.20

Check the units of currency — work in the same unit

Tables and timetables

Distance tables

	London		
211	Cardiff		
556	493	Glasgow	
518	392	177	Belfast

This shows the distance between Glasgow and London
It is where their row and column intersects

Bus/ Train timetables

Harton	1005	1045	1130
Bridge	1024	1106	1147
Aville	1051	1133	1205
Ware	1117	1202	1233

Each column represents a journey, each row represents the time the 'bus' arrives at that location

TIME CALCUALTIONS — use a number line

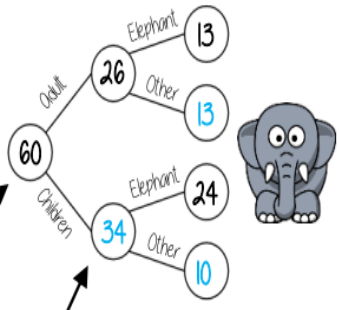
Two-way tables

	H	T
H	HH	HT
T	TH	TT

Where rows and columns intersect is the outcome of that action

Frequency trees

60 people visited the zoo one Saturday morning
26 of them were adults. 13 of the adult's favourite animal was an elephant. 24 of the children's favourite animal was an elephant

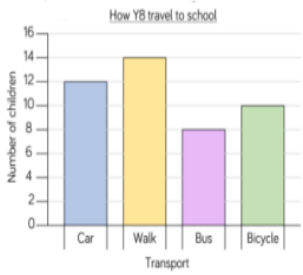


The overall total "60 people"

A frequency tree is made up from part-whole models
One piece of information leads to another

Probabilities or statements can be taken from the completed trees
e.g. 34 children visited the zoo

Bar and line charts



Use addition/ subtraction methods to extract information from bar charts

e.g Difference between the number of students who walked and took the bus.
Walk frequency — bus frequency

When describing changes or making predictions
- Extract information from your data source
- Make comparisons of difference or sum of values
- Put into the context of the scenario

YEAR 7 — APPLICATION OF NUMBER

Maths

Solving problems with multiplication and division

What do I need to be able to do?

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

- Understand and use factors
- Understand and use multiples
- Multiply/ Divide integers and decimals by powers of 10
- Use formal methods to multiply
- Use formal methods to divide
- Understand and use order of operations
- Solve area problems
- Solve problems using the mean

Keywords

Array: an arrangement of items to represent concepts in rows or columns
Multiples: found by multiplying any number by positive integers
Factor: integers that multiply together to get another number
Milli: prefix meaning one thousandth
Centi: prefix meaning one hundredth
Kilo: prefix meaning multiply by 1000
Quotient: the result of a division
Dividend: the number being divided
Divisor: the number we divide by

Factors

Arrays can help represent factors

5 x 2 or 2 x 5

Factors of 10
1, 2, 5, 10

10 x 1 or 1 x 10

The number itself is always a factor

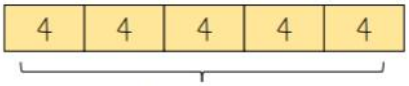
Square numbers have an **ODD number** of factors

Factors of 4
1, 2, 4

Factors of 36
1, 2, 3, 4, 6, 9, 12, 18, 36

Be strategic - Lay factors out in pairs can help you not to miss any

Multiples



Bar models can represent by something is a multiple. E.g. 20 is a multiple of 4

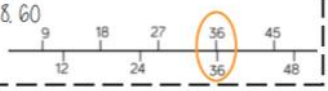
Lowest Common Multiples — **LCM of 9 and 12**

The first time their multiples match

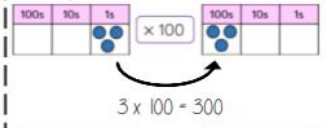
LCM = 36

9: 9, 18, 27, 36, 45, 54

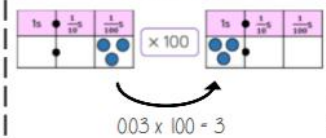
12: 12, 24, 36, 48, 60



Multiply/ Divide by powers of 10



3 x 100 = 300



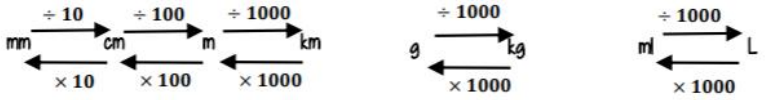
0.03 x 100 = 3

Repeated multiplication and division by powers of 10 is commutative

÷ 10 then ÷ 10 ⟶ ÷ 100

Metric conversions

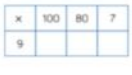
Useful Conversions



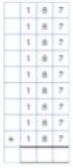
Multiplication methods

Less effective method especially for bigger multiplication

Long multiplication (column)



Grid method



Repeated addition

Multiplication with decimals

Perform multiplications as integers
e.g. 0.2 x 0.3 ⟶ 2 x 3

Make **adjustments** to your answer to match the question: 0.2 x 10 = 2
0.3 x 10 = 3
Therefore 6 ÷ 100 = **0.06**

Estimations: Using estimations allows a 'check' if your answer is reasonable

Division methods

3584 ÷ 7 = 512

Short division

Complex division

÷ 24 = ÷ 6 ÷ 4

Break up the divisor using factors

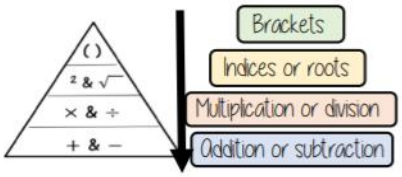
Division with decimals

The placeholder in division methods is essential — the decimal lines up on the dividend and the quotient

24 ÷ 0.02 ⟶ 24 ÷ 0.2 ⟶ 240 ÷ 2

All give the same solution as represent the same proportion
Multiply the values in proportion until the divisor becomes an integer

Order of operations



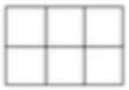
If you have multiple operations from the same tier work from left to right

e.g. 10 − 3 + 5 ⟶ 10 − 3 ⟶ 7 + 5

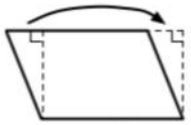
6 x 4 + 8 x 2
24 + 16 = 40

Area problems

Rectangle
Base x Perpendicular height

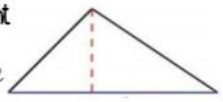


Parallelogram/ Rhombus
Base x Perpendicular height



Triangle
½ x Base x Perpendicular height

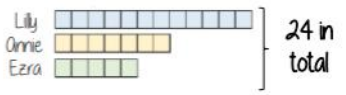
A triangle is half the size of the rectangle it would fit in



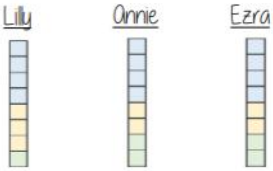
Mean problems

Mean — a measure of average
It gives an idea of the central value

Lilly, Annie and Ezra have the following cubes



Finding the mean amount is the average amount each person would have if shared out equally



The mean number of blocks would be 8 each

Within the 'brain dump', add all the knowledge you can remember from ***English*** and ***Maths*** without looking back at the sheets. Once you have added everything you can remember, look at these pages again and using a different colour pen, add in the knowledge that you missed out. This is the knowledge you should now continue to revise. Continue this process until you can remember everything on the page.

BRAIN DUMP

Energy

Energy

- **Energy** is needed to make things happen.
- It is measured in **joules** or **kilojoules**.

- The **law of conservation of energy** says that energy cannot be created or destroyed, only transferred.
- This means that the total energy before a change if always equal to the total energy after a change.

Energy can be in different energy **stores**, including:

- **Chemical** – to do with food, fuels and batteries;
- **Thermal** – to do with hot objects;
- **Kinetic** – to do with moving objects;
- **Gravitational potential** – to do with the position in a gravitational field;
- **Elastic potential** – to do with changing shape, squashing and stretching.

Non-renewable energy

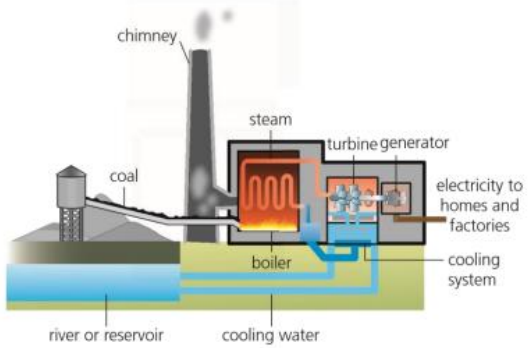
- **Non-renewable** energy cannot be replaced within your lifetime
- Non-renewable **energy resources** include coal, oil, natural gas and nuclear resources
- Coal, oil and natural gas are also known as **fossil fuels**, they release carbon dioxide when burned which contributes to global warming

Renewable energy

- **Renewable** energy can be replaced within your lifetime
- Renewable energy resources include wind, tidal, wave, biomass, solar, hydroelectric and geothermal
- Renewable energy resources do not produce much carbon dioxide, meaning that they have a smaller effect on global warming

Power stations

Thermal power stations burn coal, oil and natural gas, which are all non-renewable energy resources



Fuel is burned underneath water → Water is heated and turns into steam → The steam turns a turbine which turns a generator → Electricity is generated

Food and energy

- Food has energy in a chemical energy store
- Different foods contain different amounts of energy
- Different activities require different amounts of energy
- Different people need different amounts of energy depending on what they do each day

Power and energy

- **Power** is a measure of how much energy is transferred per second
- Power is measured in **watts** (W)
- Each appliance has it's own power rating to tell us how

One kWh is the same as the amount of energy used by a 1 kW appliance for 1 hour:

energy in kWh = power in kW × time in hours

cost = energy used in kWh × cost of 1 kWh

Dissipation of energy

- We say that energy is **dissipated** when it is transferred to a nonuseful store, it cannot be used for what it was intended for
- Energy can be wasted through friction, heating up components or heating the surroundings
- **Efficiency** is a measure of how much of the energy has been used in a useful way.

Key terms Make sure you can write definitions for these key terms.

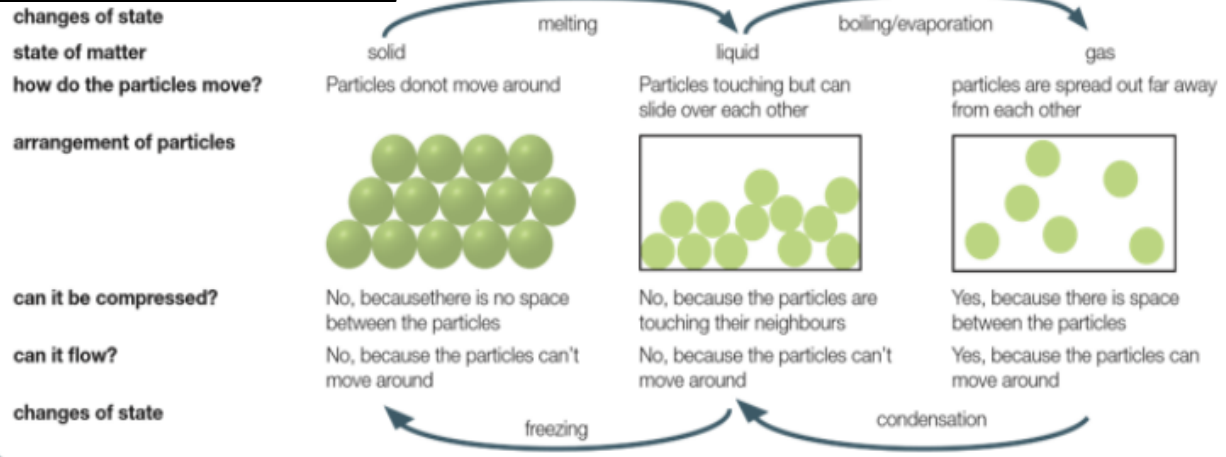
chemical dissipated efficiency elastic potential energy energy resources fossil fuels graviational potential joules kinetic kilojoules law of conservation of energy non-renewable power renewable thermal watts

Matter and particle theory

Particle Theory of Matter

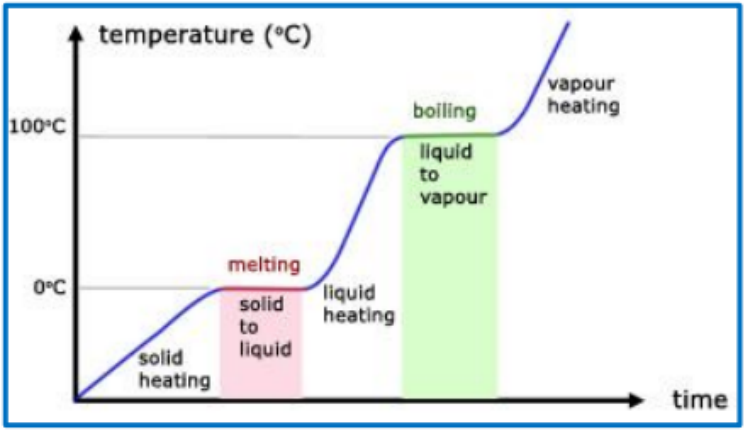
1. All matter is made of extremely tiny particles.
2. All pure substances are made of their own kind of particle.
3. All particles have energy to either move or vibrate.

Changes of state

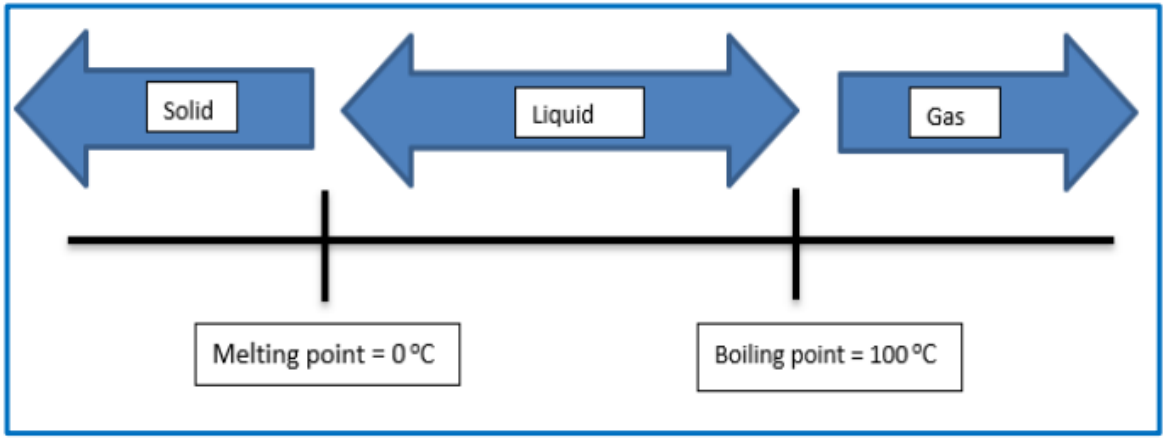


Melting and boiling points

- The **melting point** of a substance is the temperature at which it turns from a solid to a liquid, or a liquid to a solid
- The **boiling point** of a substance is the temperature at which it turns from a liquid to a gas or a gas to a liquid



This diagram can be used to predict the state that a substance is in, if the boiling point and melting point are known:



Substance – A material that is not a not a mixture. It has the same properties all the way through.
Changes of state – The process by which a substance changes from one state to another.
Boiling – the change of state from a liquid to a gas. Boiling occurs at he boiling point of a substance.
Melting – the change of state from a solid to liquid at the melting point.
Condensation – The change of state from a gas to a liquid. It can happen at any temperature below the boiling point.
Sublimation – the change of state from a solid directly to a gas.

Solid – In a solid state, a substance can cannot be compressed.
Gas – in the gas state, a substance can flow and compressed
Liquid - in liquid state, a substance can flow but cannot be compressed

COPS AND ROBBERS

This **retrieval practice tool** will help you test and build your memory of a specific topic in ***Science.***

Cops: Write down everything you can remember about the topic from your long-term memory, without looking at notes.	**Robbers:** Now *"Steal"* missing facts or ideas from the KO you have been studying. This will give you information about the points you need to develop.

MFL

Opinions

j'adore – *I love*

j'aime bien – *I really like*

j'aime – *I like*

je n'aime pas – *I don't like*

je déteste – *I hate*

Justifications

car c'est – *because it's*
parce que c'est – *because it's*
car ce n'est pas – *because it's not*
*ce sera – *it will be*
*c'était – *it was*

Intensifiers

très – *very*
assez – *quite*
trop - *too*
vraiment - *very*

Connectives

et - *and*
aussi – *also*
mais – *but*
cependant - *however*

Reasons

amusant – *fun*
intéressant – *interesting*
fantastique – *fantastic*
excellent – *excellent*
chouette – *great*

nul – *rubbish*
horrible – *horrible*
ennuyeux – *boring*
affreux – *awful*
terrible - *terrible*

Instructions Ecrivez – *Write!* Ecoutez – *Listen!* Regardez – *Look!* Lisez – *Read!*
Faites correspondre – *Match up!* Traduisez – *Translate!* Répétez – *Repeat!* Copiez – *Copy!*

Questions Qu'est-ce que c'est…? *What is it…?*
Comment dit-on.. En anglais/français? *How do we say… in English/French?*

Classroom language

Bonjour monsieur / madame – *Hello Sir / Miss*
Oui / non – *Yes / No*
S'il vous plaît – *Please*
Merci – *Thank you*
J'ai besoin de… – *I need a/some…*
- stylo (vert) – *(green) pen*
- papier – *paper*
- dictionnaire – *dictionary*
- règle – *ruler*
- cahier – *exercise book*

Est-ce que vous pouvez répéter?
– *Can you repeat?*
Je ne comprends pas – *I don't understand*
Est-ce que vous pouvez m'aider?
– *Can you help me?*
Puis-je aller aux toilettes?
– *Can I go to the toilets?*
J'ai fini – *I have finished*
Puis-je enlever ma veste?
– *Can I take off my blazer?*
Qu'est-ce que c'est …. en francais / anglais?
– *What is … in French / English?*

Les numéros

0 Zero	11 Onze	30 Trente
1 Un	12 Douze	40 Quarente
2 Deux	13 Treize	50 Cinquante
3 Trois	14 Quatroze	60 Soixante
4 Quatre	15 Quinze	70 Soixante-dix
5 Cinq	16 Seize	80 Quatre-vingts
6 Six	17 Dix-sept	90 Quatre-vingt-dix
7 Sept	18 Dix-huit	100 Cent
8 Huit	19 Dix-neuf	
9 Neuf	20 Vingt	
10 Dix		

Year 7 French: Unit 1 My Life Knowledge Organiser

Ways to practise vocabulary: *1. Look cover, write check 2. Getting people at home to test you 3. Log onto Memrise/Quizlet*

Key phrases	
bonjour / bonsoir / salut	hello / good evening / hi
au revoir	goodbye
ça va (très) bien / mal	I'm (very) good / not good
je m'appelle _____	my name is…
ça s'écrit….	it's spelt…
j'ai _____ ans	I am ____ years old
mon anniversaire c'est le…	my birthday is the…

Dans mon sac– in my bag	
dans mon sac	**in my bag**
dans ma trousse	**in my pencil case**
J'ai/il y a	**I have / there is**
un stylo	**a pen**
un crayon	**a pencil**
un livre	**a book**
un cahier	**an exercise book**
un portable	**a mobile**
une taille-crayon	**a pencil sharpener**
une agenda	**a diary**
une règle	**a ruler**
une gomme	**a rubber**

les mois de l'année – months	
janvier	January
février	February
mars	March
avril	April
mai	May
juin	June
juillet	July
août	August
septembre	September
octobre	October
novembre	November
décembre	December
c'est quand ton anniversaire?	When is your birthday?
mon anniversaire c'est le	My birthday is the…

Big Questions

How do I talk about myself?
How do I greet people?
What's in my pencil case?
How do I say how I'm feeling?
How do I discuss age?
How do I use a dictionary and the alphabet?

les jours – days of the week	
lundi	Monday
mardi	Tuesday
mercredi	Wednesday
jeudi	Thursday
vendredi	Friday
samedi	Saturday
dimanche	Sunday

les opinions – opinions	
j'adore	I love
j'aime	I like
je n'aime pas	I don't like
je déteste	I hate

Les numeros	
un	1
deux	2
trois	3
quatre	4
cinq	5
six	6
sept	7
huit	8
neuf	9
dix	10
onze	11
douze	12
treize	13
quatorze	14
quinze	15
seize	16
dix-sept	17
dix-huit	18
dix-neuf	19
vingt	20
vingt-et-un	21
vingt-deux	22
vingt-trois	23
vingt-quatre	24
vingt-cinq	25
vingt-six	26
vingt-sept	27
vingt-huit	28
vingt-neuf	29
trente	30
trente-et-un	31

Key Questions	
(comment) ça va?	how are you?
comment t'appelles-tu?	what's your name?
comment ça s'écrit?	how is it spelt?
quel âge as-tu?	how old are you?
c'est quand, ton anniversaire?	when is your birthday?

dans la salle de classe – in the classroom	
dans la salle de classeq	in the classroom
il y a /il n'y a pas de	there is/isn't
une table	a table
une chaise	a chair
un tableau	a whiteboard
un ordinateur	a computer
une porte	a door
une fenêtre	a window
des étudiants	some students
des profs	some teachers

Useful Grammar

Key Verbs

'avoir' = to have

J'ai	I have
tu as	you have
il a	he has
elle a	she has
nous avons	we have
vous avez	you (pl) have
ils/elles ont	they have

False Friends

sac	**bag**
monnaie	**loose change**
anniversaire	**birthday**
crayon	**pencil**

Tricky Spellings

Je m'appelle	two l's /two p's
Il y a	3 seperate words
ça s'écrit….	accents!

Grammatical Terminology

Noun – an object, place or thing.
Adjective – describes something.
Verb – an action or state of being.
Pronoun - tells us who is doing the action.

Gender of nouns

– in French nouns are masculine or feminine.
•A *masculine* noun starts with 'un' or 'le'
•A *feminine* noun starts with 'une' or 'la'

Making nouns plural

Usually in French to show a noun is plural (more than 1)
you add an 's' to the end of the word.
You can see it but you can't hear it.
Example: un stylo > des stylos
BUT if the noun already ends in 's' you add nothing.

Exceptions!

Nouns that end in '***al***' become '***aux***'
Nouns that end in '***eau***' become '***eaux***'

Tricky Pronunciation – type into google translate, listen, practice

bonsoir / au revoir	the 'oi' is a 'wa' sound
feutre / professeur / ordinateur	the 'eu' is an 'uh' sound
c'est / très / cahier	these all have an 'ay' sound at the end
ça va? / ça s'écrit…	the 'ç' is an 's' sound

Knowledge Organiser: How far did Roman rule improve life in Britain?

Key Words	Definition
Myth	*A widely held but false belief or idea.*
Legend	*A traditional story about a person or place.*
Empire	*A group of countries controlled by one country.*
Conquer	*To take control of somewhere or something.*
Invade	*To take over another country using force.*
Soldier	*A person who serves in an army.*

Romulus and Remus: The legend about two brothers who were raised by wolves and created the city of Rome.

256 BC: Rome ruled most of Italy.

55 BC: Julius Caesar attempted to invade Britain but had to stop due to bad weather.

54 BC: Caesar attempted to invade Britain for a second time, but hade to leave to deal with unrest in France.

43 AD: Romans invaded Britain, led by Emperor Claudius.

47-50 AD: London was created, called Londinium.

60-61 AD: Boudica, Queen of the Iceni tribe, led a revolt against the Romans but was unsuccessful.

120 AD: The Roman Empire was at it's biggest. Rome was very rich.

Life in Roman Britain

Roman towns were neatly laid out with a meeting area (forum), an amphitheatre and public baths.

Most children in Roman times did not go to school, only rich families could afford a teacher.

Roman games were bloody and deadly. Crowds would watch gladiator fights.

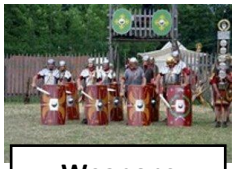
Romans ate bread, vegetable soup and porridge. Meat was a luxury.

The Roman Army was made up of Legions of 4,800 men. They were well disciplined, organised and well trained.

What have the Romans done for us?

Public baths

Latrines



Weapons

Three course meals

Roads

Ampitheatres

Introduction to the UK/Skills revision – Year 7

Key terms:

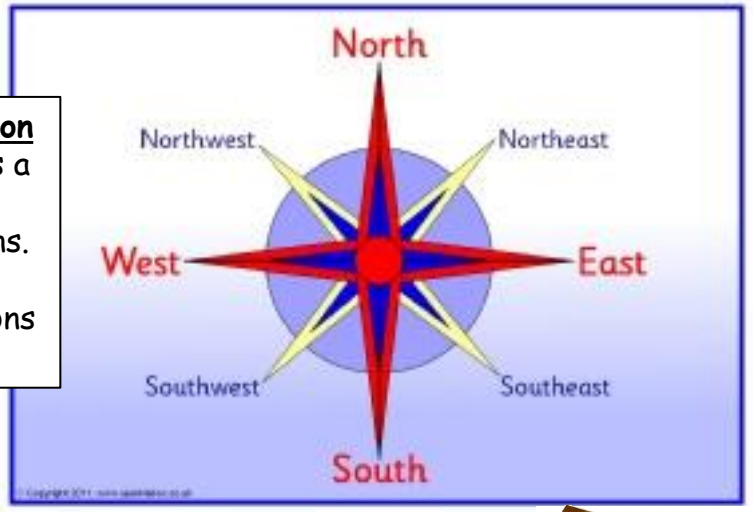
Physical: The branch of geography dealing with **natural features**.

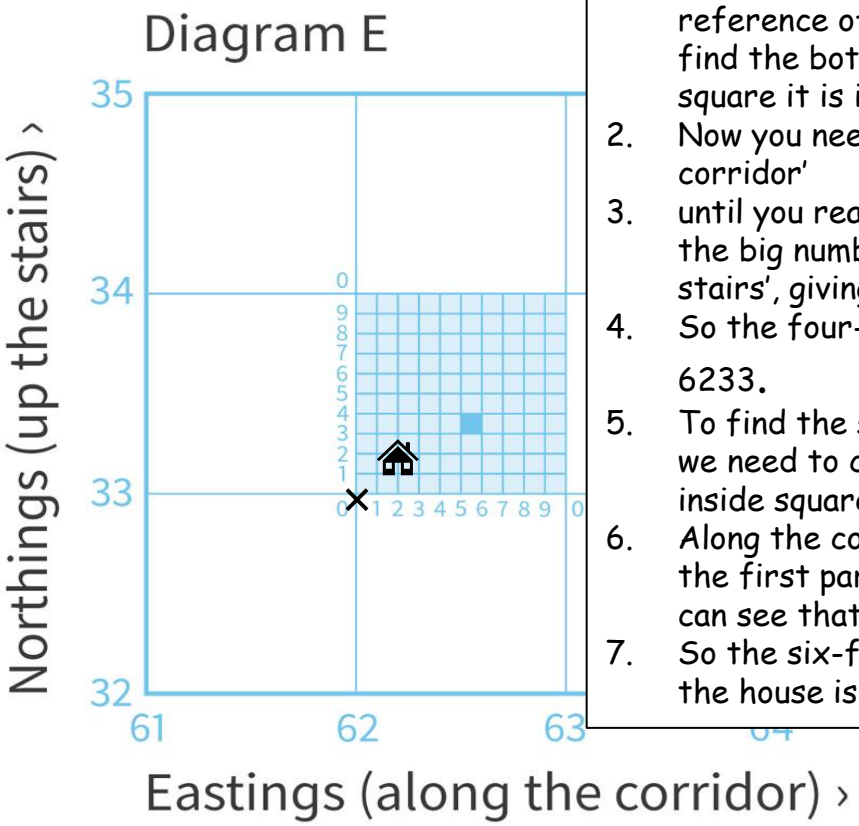
Human: The branch of geography dealing with how **human activity** affects or is influenced by the earth's surface.

United Kingdom: a **group of Islands separated** from the rest of **Europe** by the sea.

Compass Direction

A compass helps a Geographer give precise directions. There are 8 compass directions in total.

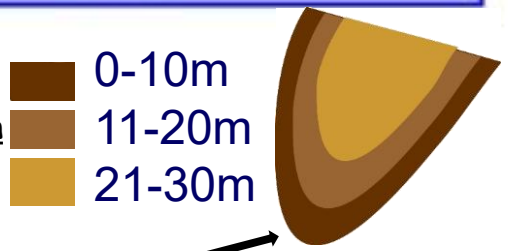




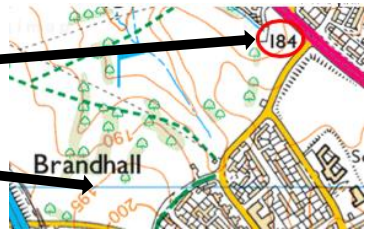
Grid references

1. To find the four-figure grid reference of the house, you need to find the bottom left corner of the square it is in. It is marked with an X.
2. Now you need to go 'along the corridor'
3. until you reach the X which gives you the big number 62 and then 'up the stairs', giving you the number 33.
4. So the four-figure grid reference is 6233.
5. To find the six-figure grid references we need to count the small squares inside square 6233.
6. Along the corridor we can see that the first part is 622. Up the stairs we can see that the second part is 332.
7. So the six-figure grid reference for the house is 622332.

How can we show relief on a map?



1. **Colour shading**
2. **Spot heights**
3. **Contours**



How is scale shown on a map?

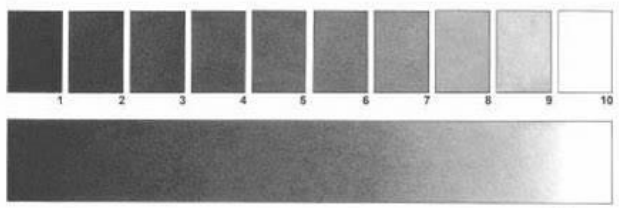
1. A scale line

2. Use ':' which means 'represents' 1 : 25000

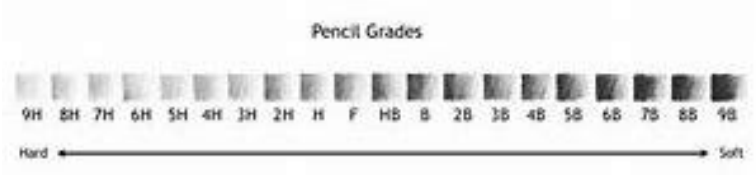
This means 1 centimetre/metre/kilometre on the map represents 25,000 centimetres/metres/kilometres on land.

Geog your memory/ Hi-story Lane

Use the LANES to recall key information about a particular topic, in ***History*** and ***Geography*** without looking at the sheets. Once you have added everything you can remember, look at these pages again and using a different colour pen, add in the knowledge that you missed out. This is the knowledge you should now continue to revise. Continue this process until you can remember everything on the page.



Each pencil has a grade and can be used to create lighter or darker tones.

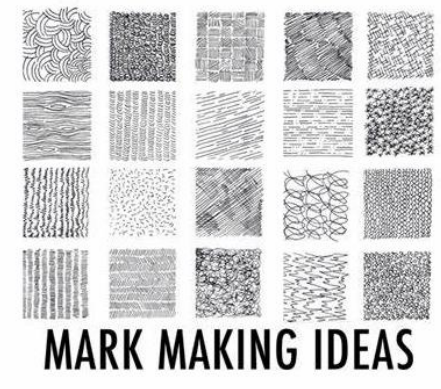


Basic Drawing Skills

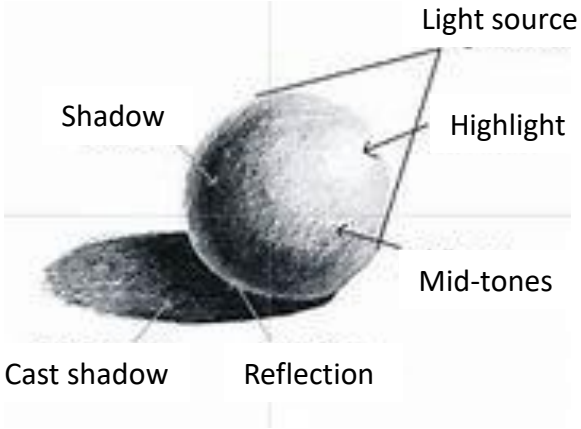
Universal shapes can be shaded to create 3D form

Universal Shapes are used as a starting point for all drawings.

Mark-making techniques can be used to create texture.



Describes the **different lines, dots, marks, patterns, and textures we create** in an artwork. It can be loose and gestural or controlled and neat.



DT: Engineering

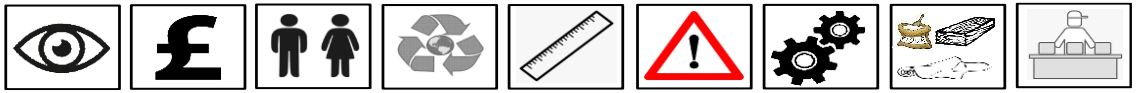
Year 7 Steady Hand Game: Linear Design

Workshop Safety
Eye to hand co-ordination
Electronics
Jigs and Templates

Safety symbols are a part of the safety rules . Symbols are used because they are easy to read and understand. The colours and shapes also make them noticeable and help communicate meaning. For example, blue signs are instructions telling you, you must do something, such as wear PPE. Red infers danger and yellow caution. Even if you cannot read, the colour and symbols are clear and can be understood. **These signs are required by law to prevent injury.**

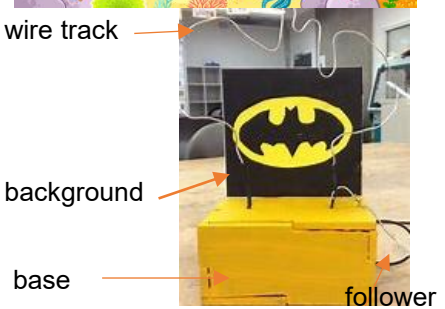
RED	DANGER	STOP/NO ACCESS/EMERGENCY STOP
YELLOW	CAUTION	BE CAREFUL/BE AWARE OF RISK/TAKE PRECAUTIONS
GREEN	SAFE	EMERGENCY EXIT/FIRST AID
BLUE	INSTRUCTION	INSTRUCTION ON ACTIONS E.G. WASH HANDS OR WEAR GOGGLES

Shape	Meaning	Color	Examples
Circle with diagonal bar	Prohibition	RED (contrast: white)	No smoking
Circle	Mandatory Action	BLUE (contrast: white)	Wear Eye protection
Equilateral Triangle	Warning	YELLOW (contrast: black)	Danger Flammable material
Square / Rectangle	Information about safe condition	GREEN (contrast: white)	Escape Route – Left
Square / Rectangle	Fire Safety	RED (contrast: white)	Fire Extinguisher

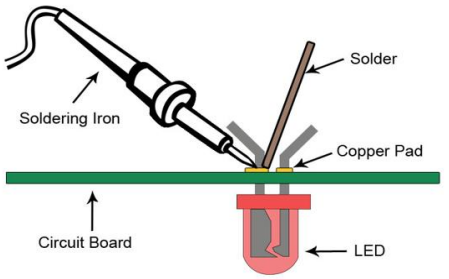


Vocabulary

Tri-Square is for marking out parallel lines to a straight edge, not measuring
Coping saw cuts curves and is used for thin wood or plastic material, teeth point to wooden handle and cuts on downward pull
Tenon saw cuts straight edges on wood, guide the saw in a straight line
Jigs and Templates enable more than one part to be made several times, quality control in batch production
Bench Hook is for steadying and supporting work, it hooks into the bench vice
Vice Used to clamp work to the bench to keep it steady
Glass Paper is for smoothing work
Flat Files are also use for smoothing
M.D.F. Medium Density Fibreboard (Manufactured wood made from wood fibres and glue)
Pine: A natural softwood
Acrylic: A type of plastic
Copper: A conductive metal wire used for electronic circuits.
Conductive: allows electrical current to travel or 'flow' through it
Risk Assessment a process of evaluating the potential risks that may be involved in a projected activity or undertaking.
L.E.D: Light Emitting Diode (a small light to indicate power in a circuit)
Design Situation: A problem that has been identified.
Design Brief: A statement to explain how you will solve the problem (design situation)
Design Specification: A list of requirements your product must have or include to be successful and solve the design situation.

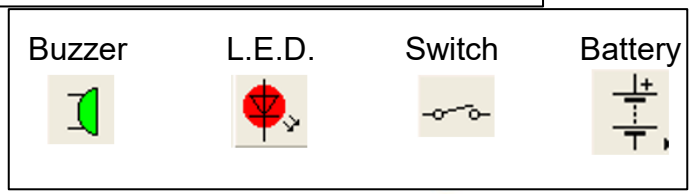


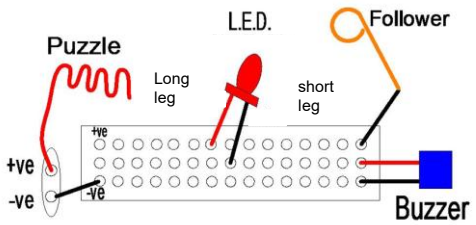
How To Solder



Health and Safety Basics for a school workshop:

- No eating/drinking;
- No running;
- Never use a tool/piece of equipment until instruction/permission is given;
- Always walk;
- Wear PPE;
- Long hair tied back;
- Remove jewellery;
- Sturdy shoes.





Soldering safety

Always wear safety goggles and an apron.
Always wash your hands after soldering.
Always keep your head to the side of your work, not above.
Always work in a ventilated area.
Always replace the soldering Irons into the stand when you are not using them.

Aesthetic Cost Manufacture Client Environment Size Safety Function Material

Year 7 Rotation Textiles Knowledge Organiser: Learning how to use a sewing machine.

Appliqué – is a Method of fabric decoration created by cutting out shapes of fabric and stitching onto a background either by machine or hand. Here are examples of both – using different types of hand and machine stitching.

Machine zig-zag stitch.

Machined using a straight stitch.

Hand stitched using a Blanket stitch.

Equipment you will be using this term

Fabric scissors

Needle and thread

Pins

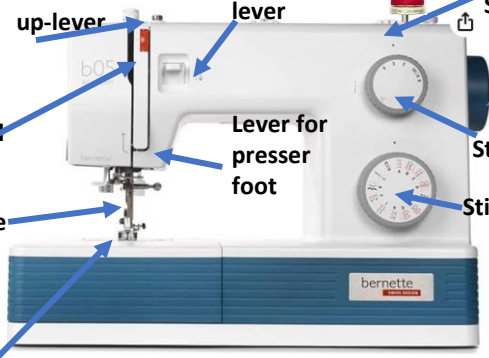
Tape measure

Stitch cutter

Parts of a Sewing machine

Bobbin

Foot peddle



Presser foot

When using a sewing machine there are some important safety rules you need to consider:

1. Only have 1 person using the machine at a time.
2. Always keep fingers away from the needle.
3. Always make sure long hair is tied back.
4. Make sure the power cable is not in front of the machine.
5. Keep loose clothing/tie out of the way of the needle.
6. Always turn the machine off when you have finished using it.

Step by step - how to carry out the stages of Appliqué

Step 1:
Create a paper template of the appliqué shape.

Step 2:
Trace around the appliqué shape and cut out.

Step 3:
Pin the appliqué shape onto a background fabric.

Step 4:
Tack the shape into place ready for machining.

Step 5:
Machine into place using a straight stitch or zig-zag stitch.

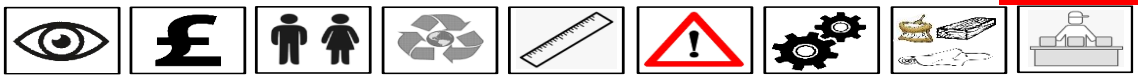
Important points to remember when using a sewing machine:

1. Put both threads under the **presser foot** and to the back of the machine.
2. Always lower the **presser foot** down onto your work before putting you foot onto the foot peddle.
3. When lowering the needle and taking it out of your work always turn the **hand wheel towards you.**
4. When taking your work out the machine make sure the **take-up-lever** is at the **top** and you can see it.

Key Vocabulary:

Aesthetics – what something looks like or feels like.
Colours – Primary, secondary, tertiary, analogous, harmonious, complementary, vibrant.
Fibre - a thread or filament from which a vegetable tissue, mineral substance, or textile is formed.
Lettering – easy to read, bold, colourful, stand out.
Materials – fabrics like Felt, cotton, fleece.
Performance qualities of materials – what/ how do you expect them to perform – soft, stretchy, washable, easy to use, hardwearing.

Food Studies Rotation Knowledge Organiser Year 7
Importance of a healthy diet and cooking with colour



Food Hygiene and Safety in the kitchen. Cross Contamination- when raw meat juices touch foods that are ready to eat. Wash hands in hot soapy water. Rinse and dry with blue paper towels. Have clean short nails. Keep work area clean and tidy. Wash up in hot soapy water. Dry with a clean tea towel.

Food Safety and Hygiene

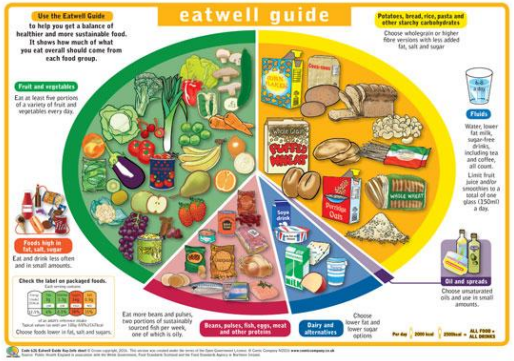
Food safety and hygiene is about protecting people and minimising the risk.

You must understand the basics of

- Cleaning – i.e. following routines, meeting standards using correct materials, cloths and clean uniforms
- Chilling – storing food at appropriate temperatures
- Cooking – making sure food is cooked and served at correct safe temperatures
- Cross-contamination – avoiding food poisoning

access apprenticeships

Induction



Eatwell- The Eatwell Guide shows how much of what we eat overall should come from each food group to achieve a healthy, balanced diet. You do not need to achieve this balance with every meal but try to get the balance right over a day or even a week. ***Five a day***- The World Health Organisation (WHO) advises that we eat a minimum of 400g of fruit and veg every day (five portions). This recommended daily amount is thought to help reduce risk of serious health conditions including stroke, heart disease and type 2 diabetes.

The two major micronutrients are vitamins and minerals. There are 13 essential vitamins and they can be grouped into 2 categories – fat and water-soluble. There are 4 fat-soluble vitamins and 9 water-soluble vitamins. All of these vitamins play different roles in the functioning of your body.

Nutrient	Function
Carbohydrates	Provide energy
Fats	Provide energy and insulation, often stored under the skin
Proteins	Needed for growth, the building and repair of body cells
Vitamins	Help in the formation of bodily tissues (hair, teeth, skin and nails) and are necessary for all chemical reactions in the body
Minerals	Essential for the uptake of vitamins, the formation of bodily tissues and the carrying out of chemical reactions

Traffic light labelling Using the government scheme, a combination of colour coding (traffic lights) and nutritional information is used to show, at a glance, whether a product is **high (red)**, **medium (amber)** or **low (green)** in fat, saturated fat, salt and sugars, and how much energy (calories and kilojoules) it provides. This can help you make comparisons between foods to allow you to make a healthier choice; for example, selecting a sandwich for lunch.

Page 19

Benefits of eating seasonal food

When fruits and vegetables are out of season in your area, they either have to be grown in managed conditions or transported from the other side of the world. Both of these processes cost lots of money, and that cost gets passed on to you – the consumer.

When you eat seasonally, local produce can be grown in natural conditions and easily transported to the point of sale, making it much more affordable and it tastes better.

You'd be surprised how far some foods have to travel to ensure they're on the shelves 365 days a year. Out of season fruit and veg can spend days and weeks travelling to get to you, and this comes with a price.

Either they're picked earlier than they should be so that they're ready on arrival, or they spoil a little on the way. Seasonal produce comes such a short distance that it doesn't spoil on the way to you. It's harvested at the very best time, so taste is maximised.

It's healthier. For the same reason, seasonal fruit and veg taste better, it's also healthier as the vitamins and minerals are fresher.

It's no surprise that being locked in cargo holds and shipping containers for days, in order to reach us, does nothing for the nutritional content of the food. It supports your local community. When you buy foods out of season, the profits are swallowed up by the grower, the transporter and the retailer – and it's a safe bet that none of these are based in your local area. Growers in your region don't down tools out of season; they'll be churning out fruit and veg all year round. By buying what they produce, you'll constantly be feeding the profits back into your own community.

Using Explore Food- Explore Food - Main Menu (foodafactoflife.org.uk)

Creating a label

Follow the stages in the example below to create a label on Explore food http://explorefood.foodafactoflife.org.uk/.

1. Open Explore food. Click 'Go' under 'Calculate a recipe'.
2. Enter the name 'Croque Monsieur'. Click 'Start'.
3. Enter the following ingredients and quantities: 100g sliced bread, 60g grated cheese, 50g ham, add your extra ingredients.
4. Click 'View summary'.
5. Click 'Calculate' to recalculate the nutritional information based on the number of portions. Then click 'Create label' to create a front and back of pack nutrition label.
6. Enter a title for the front of pack label. This should state the portion size that the nutrition information relates to. Enter the title '1/4 carton of soup contains'. Choose whether the recipe is for a food or drink. Click 'Create label'.
7. Copy label into your booklet

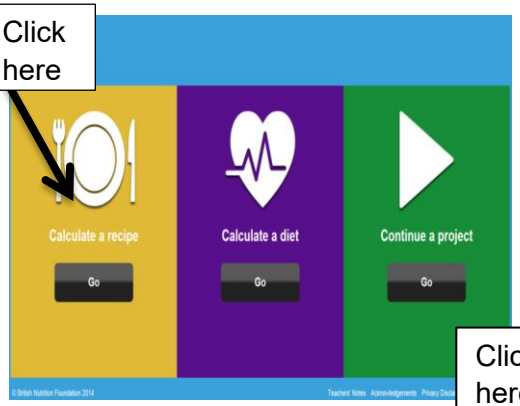
Croque Monsieur

The dish originated in French cafes and bars as a quick snack. The name comes from the French words *croque* ("bite") and *monsieur* ("mister").

Options for fillings

Cheeses- mozzarella, parmesan, red Leicester, gruyere, brie.
Vegetables- sweetcorn, red pepper, tomato, spinach.
Meats- halal chicken, ham, turkey, roast beef.
Seasonings- Worcestershire sauce, paprika, mixed herbs.

Click here



Click here

Click create label

Copy your label into your booklet and analysis the results.

Look at the levels of energy, fat, saturated fat, sugar and salt.
Compare your results with the traffic light guidance. If you have a lot of red for salt and fat, think of ways you could reduce these. Maybe by using a lower fat cheese.
Look at other nutrients such as fibre, iron, calcium and the different vitamins.

Based on the DT subject you are studying, pick 7 words; draw the dual code for it; write a simple definition then an example sentence in the table provided.

Year 7 Subject specific Vocabulary in Technology

Engineering	Food	Textiles
•Aesthetics •Client •Safety •Hazard •Function •Risk assessment •Analyse •Design context •Design brief •Design specification	•Cross Contamination •Vitamins •Minerals •Fibre •Balanced	•Applique •Aesthetics •Inspirational •Fleece •Sculpture •Evaluate

Dual code/ definition	Example sentence

Notation

Exploring Rhythm and Pulse

A. Key Words

PULSE – A regular **BEAT** that is felt throughout much music. Certain beats of the pulse can be emphasised to establish regular pulse patterns *e.g.* ***1*** *2 3 4,* ***1*** *2 3 4 = a 4-beat pulse.*
1 *2 3,* ***1*** *2 3 = a 3-beat pulse (often called a* ***WALTZ****).*
1 *2,* ***1*** *2,* ***1*** *2 = a 2-beat pulse (often called a* ***MARCH****).*
RHYTHM – A series of sounds or notes of different lengths that create a pattern. A rhythm usually fits with a regular pulse. Everyday sentences can be used to create rhythms. The patterns made by words create rhythms and this rhythm has a 4beat pulse:

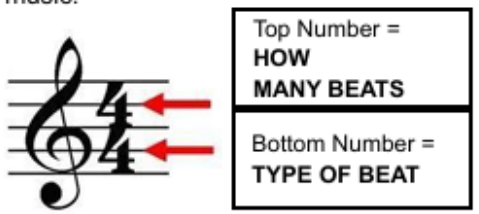
Music is my favourite

ACCENT – Emphasising or stressing a particular note or notes. Accents affect the **ARTICULATION** and are shown with this symbol >
DURATION – The length of a sound – *long/short*
TEMPO – The speed of a sound or piece of music – *fast/slow*
TEXTURE – Layers of sound or how much sound is heard – *thick/thin*
STRUCTURE – The organisation of sound or how sounds are ordered
SILENCE – The absence of sound or no sound, shown in music by **RESTS**.
RHYTHM GRID NOTATION – A way of writing down and recording rhythms using boxes

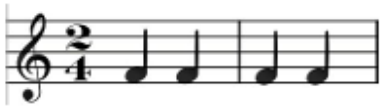
HOMEWORK: Create an information leaflet on note values, note names, symbols and durations.

B. Time Signatures

A **TIME SIGNATURE** tells us how many beats
(and what type of beats) there are in each **BAR** of music and is made up of two numbers at the beginning of a piece of music.

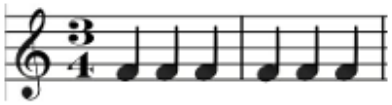


2/4 =



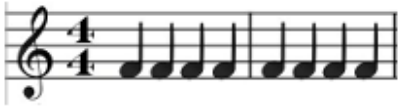
TWO CROTCHET beats per **BAR**

e.g. a ***MARCH*** 3/4 = **THREE CROTCHET**



beats per **BAR**

e.g. a ***WALTZ*** 4/4 = **FOUR CROTCHET**



beats per **BAR**

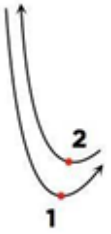
C. Ostinatos, Cyclic and Polyrhythms

RHYTHMIC OSTINATO – a short repeated pattern made up of notes of different lengths but without a particular pitch.
CYCLIC RHYTHM – a rhythm which is repeated over and over again (in a cycle) many times. **POLYRHYTHM** - the use of several rhythms performed simultaneously, often overlapping to create a thick.
POLYRHYTHMIC TEXTURE. A common polyrhythm often used in Latin-American and African Music is to play a 3-beat and 2-beat rhythm simultaneously as shown below. This is called a "3 against 2 Polyrhythm".

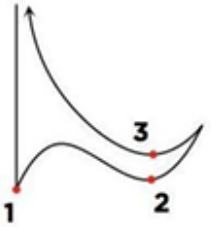
3 beat rhythm	X		X		X		X		X		X	
2 beat rhythm	X			X			X			X		

D. Conducting Pulses and Beats

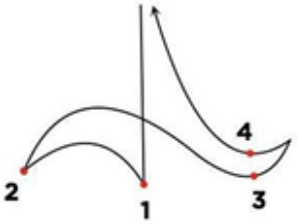
Conducting a 2-beat Pulse/Beat *(e.g. a March)*



Conducting a 3-beat Pulse/Beat *(e.g. a Waltz)*



Conducting a 4-beat Pulse/Beat



E. Note Values - Note Names, Symbols and Duration

Note Name	Note Symbol	Note Value
Semibreve		4 beats
Minim		2 beats
Crotchet		1 beat
Quaver		½ of a beat
Pair of Quavers		2 x ½ beats = 1

YEAR 7 DANCE

PERFORMANCE SKILLS (RADS) & MOTIFS IN DANCE

Developing confident performers and creative choreographers.

PERFORMANCE SKILLS – RADS

RADS is a reminder of the key skills you need to show as a performer. Use it to help you improve and perform with confidence.

R – RELATIONSHIP
Be aware of others when you dance. Show you are connected to your dance partners, group and audience. Use spacing, timing and contact sensitively.

A – ACTION
Dance with commitment and clarity. Make your movements purposeful and show a clear intention behind what you do.

D – DYNAMICS
Use changes in energy, force and quality in your movement. Explore variations in speed, levels, accents and flow to keep your performance interesting.

S – SPACE
Use the space around you effectively. Think about levels (high, medium, low), directions, pathways and how you use different areas of the stage.

Top Tips for Using RADS

- Think RADS in rehearsal and performance.
- Watch others and give feedback using RADS.
- Set targets for each skill to help you improve.
- The more you practise, the more natural it becomes!

MOTIFS IN DANCE

A motif is a short, memorable movement idea or phrase. Motifs are the **building blocks** of choreography.

1. **CREATE**
   Think of a short movement idea (a motif). It could be 1–8 counts long. Be creative!
2. **DEVELOP**
   Change the motif using the elements of dance. E.g. make it bigger, smaller, faster, use a different level or direction.
3. **REPEAT**
   Repeat the motif exactly the same. This helps to make your dance clear and memorable.
4. **VARIATION**
   Vary the motif in different ways. Change 1 or more elements of dance to create contrast and interest.
5. **STRUCTURE**
   Put your motifs together in an order (structure) to create your dance. Plan a beginning, middle and end.

Remember: Good choreography is built from strong motifs that are developed and linked clearly.

EXAMPLE: USING A MOTIF

Motif: Step forward, swing arms across, turn.

Create	Step forward, swing arms across, turn.
Develop	Make it bigger, add a jump, turn the other way.
Repeat	Do the same movement again.
Variation	Do it lower to the floor, or faster.
Structure	Use the motif and its developments to build a short dance.

KEY REMINDERS

- ✓ Use RADS to improve your performance skills.
- ✓ Use motifs to help you choreograph with structure and creativity.
- ✓ Be confident, expressive and aware as a performer.
- ✓ Keep practising, reflecting and refining!

KEY VOCABULARY

Motif	Choreography	Dynamics	Space	Expression	Timing	Unison	Contrast	Structure
A short movement idea or phrase that is repeated and developed.	The art of creating and arranging movement.	The range of energy, force and quality in movement.	The area around the dancer and how it is used.	Showing feelings and ideas through movement and performance.	The use of time in dance (speed, rhythm, duration, pauses).	Dancers moving at the same time and in the same way.	Using differences in movement, dynamics, levels or speed.	The order and organisation of motifs to form a dance.

YEAR 7 DANCE

Performance Skills, Cultural Dance (Capoeira), & Group Choreography Skills / Choreographic Devices

Developing confident performers, understanding dance from around the world, and creating original choreography together.

PERFORMANCE SKILLS

The key skills you need to develop as a dancer.
Use R.A.D.S. to help you remember!

R – RELATIONSHIP
Be aware of others when you dance. Show you are connected to your dance partners, group and audience. Use spacing, timing and contact sensitively.

A – ACTION
Dance with commitment and clarity. Make your movements purposeful and show a clear intention behind what you do.

D – DYNAMICS
Use changes in energy, force and quality in your movement. Explore variations in speed, levels, accents and flow to keep your performance interesting.

S – SPACE
Use the space around you effectively. Think about levels (high, medium, low), directions, pathways and how you use different areas of the stage.

TOP TIPS FOR USING R.A.D.S.

- Think R.A.D.S. in rehearsal and performance.
- Watch others and give feedback using R.A.D.S.
- Set targets for each skill to help you improve.
- The more you practise, the more natural it becomes!

CULTURAL DANCE: CAPOEIRA

Capoeira is a Brazilian martial art that combines dance, acrobatics, music and play. It is often performed in a circle called a 'roda'.

ORIGINS
Capoeira was created in Brazil by enslaved Africans as a way to stay fit, protect themselves and preserve their culture.

MOVEMENT STYLE
It includes low grounded movements, kicks, spins, dodges, sweeps, handstands and acrobatics.

CHARACTERISTICS
- Flowing and circular
- Playful and controlled
- Uses levels, directions and pathways
- Movement is often in response to a partner

MUSIC
Capoeira is accompanied by live music including instruments like the berimbau, atabaque and pandeiro, and call and response singing.

VALUES
- Respect
- Discipline
- Community
- Creativity

KEY CAPOEIRA MOVES

Ginga (basic step) · Au (cartwheel) · Meia Lua de Compasso (spinning kick) · Esquiva (dodge)

GROUP CHOREOGRAPHY SKILLS

Working together to create and perform effective choreography.

COMMUNICATION
Share ideas, listen carefully and give respectful feedback.

COLLABORATION
Work as a team, support each other and value everyone's ideas.

ROLES & RESPONSIBILITIES
Take on different roles (e.g. leader, performer, choreographer, time keeper) and help the group.

REFLECTION
Watch, evaluate and refine your work to make it even better.

CHOREOGRAPHIC DEVICES

Tools you can use to create interesting and effective choreography.

ACTION
The type of movement (e.g. jump, turn, stretch).

DYNAMICS
How the movement is performed (e.g. fast, slow, strong, light, sharp, smooth).

SPACE
Where the movement happens (e.g. levels, directions, pathways, formations).

RELATIONSHIP
How dancers relate to each other (e.g. unison, canon, mirroring, lead and follow).

STRUCTURE
The order and organisation of movement (e.g. beginning, build, climax, ending).

EXAMPLE: USING A DEVICE

Action: Travel, turn, jump

Dynamics: Fast, slow, sharp, smooth

Space: High level, low level, diagonal pathways

Relationship: Canon (one after another)

Structure: Intro – develop – climax – ending

EXAMPLE SEQUENCE

1 Intro (slow low level) · 2 Build (travel, medium level) · 3 Climax (jumps, high level, fast) · 4 Develop (turns, partner work) · 5 Ending (still, low level)

KEY REMINDERS

- ✓ Use R.A.D.S. to improve your performance.
- ✓ Be inspired by other cultures and respect their traditions.
- ✓ Use choreography skills and devices to create original and exciting dances.
- ✓ Work together, be creative and have fun!
- ✓ Keep practising, reflecting and refining!

KEY VOCABULARY

R.A.D.S.	Capoeira	Ginga	Roda	Choreography	Choreographic Device	Canon	Unison	Formation	Dynamics
The key performance skills: Relationship, Action, Dynamics, Space.	A Brazilian martial art that combines dance, acrobatic moves, music and culture.	The basic step in Capoeira; a flowing rocking movement from side to side.	The circle formed by players and musicians in a Capoeira performance.	The art of creating and arranging movement.	A tool used to make choreography more interesting and effective.	When groups or dancers perform the same movement, one after another.	When all dancers perform the same movement at the same time.	The shape or pattern made by dancers in the space.	The energy, force and quality of movement.

PE

Physical Education Year 7 Football

Goalkeeper	Main role is stop the opposition from scoring goals. They are the only players who are allowed to use their hands on the pitch.
Defender	Main responsibility is to stop the opposition attacking their goal. Can be useful at set pieces as they are usually the tallest players on the pitch.
Midfielder	Needs to be good at all areas of the game as they are involved in attacking and defensive situations.
Forward	Main role is attacking the opposition's goal and scoring goals.

Scoring System:

- To score a goal, the ball must be put over the line into the goal.
- The team with the most goals at the end of the game wins.

Infringement	Description
Throw in	When the ball goes out of play on the touchline, the team who didn't touch it last are awarded the ball and restart play with a throw in.
Substitution	When one player is swapped for another, usually because of an injury or tactical reasons.
Offside	A player is in an offside position if they are nearer to their opponents' goal line than both the ball and the second last opponent when the ball is played towards them.
Free kick	Awarded when a player is fouled outside of the opponent's penalty box.
Penalty	An uncontested shot at goal from taken from the penalty spot when a player is fouled in the opponent's penalty box.
Goal kick	Usually taken by a goalkeeper when the ball has crossed the by-line and was last touched by an opposition player.
Corner kick	Taken from the corner arc when the ball has crossed the by-line and was last touched by a defending player.

Skills and Techniques:

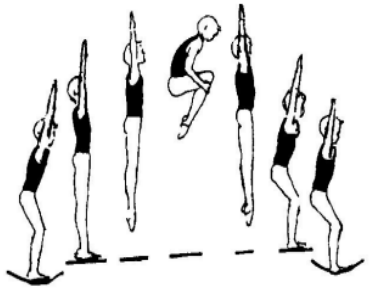
- **Passing / receiving** - the idea is to play the ball to your team using different types of passes and then control the ball with different parts of your body.
- **Dribbling / moving with the ball** - You can use different parts of your foot to dribble with the ball.
- **Shooting & Attacking play** - You can take aim at the goal, you can cross the ball towards the attackers or you can play a through ball forward to the attackers.
- **Heading** - this can be attacking to score a goal or defending to clear the ball away from the goal.
- **Defensive play** - you can tackle, jockey, close down and mark a player.

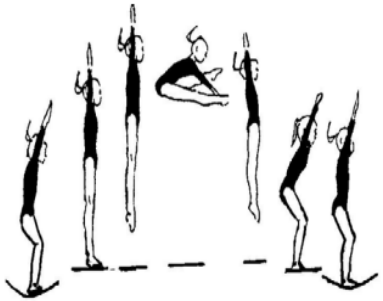
Physical Education Trampolining – Year7

Basic Jumps

TUCK

- Legs together, knees and hips bent to 90 degrees or less.
- Hands grasp shins.
- Ankles remain straight.
- Toes pointed.



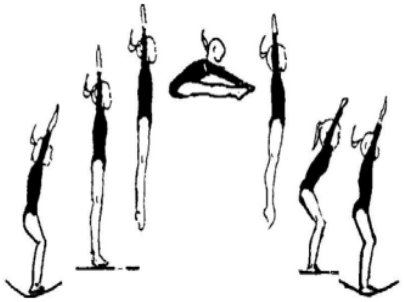


STRADDLE

- Legs are apart, at least shoulder width but ideally 90 degrees.
- Knees and ankles extended.
- Toes pointed.

PIKE

- Legs remain straight at knees.
- Ideally hands reach out to toes.
- Toes pointed.



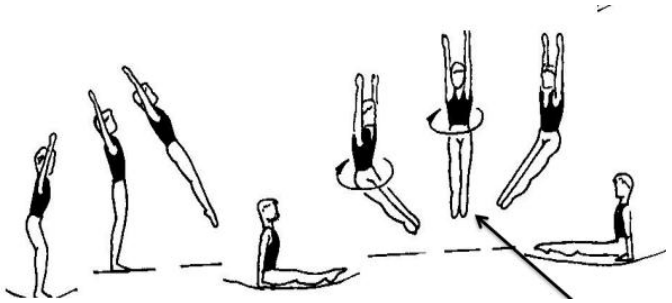
Landings

SEAT LANDING

- Gain height while jumping and remain on the red cross.
- When ready to perform your legs stay straight and come out in front of you in to pike position.
- Your hands are flat on the bed and pointing the direction of your legs, just behind your bum.
- Push off the trampoline with your arms and jump back up to feet.

Seat landing

Swivel Hips



TEACHING POINTS

- Attempt to stand up straight between the 2 seat landings by straightening hips after take off.
- Push with hands so arms are up between landings.
- Look from front end to the mat behind you.
- Keep legs tight and straight.

Computing

Knowledge Organiser: Functional IT Skills & E-Safety

Summary

Behaviours such as **altering computer data without permission**, **hacking**, **cyberbullying** and **trolling** are considered unethical and harmful in relation to **computer systems**.

Stay safe from **phishing** by deleting unknown email immediately. Do not follow any links contained in the **email**. Instead, **go to the website directly**, and try to log in there.

There are a number of ways to protect against **malware**: install antivirus software and use firewall. Show caution by not opening emails from senders who you do not recognise and not installing **programs downloaded illegally.**

The easiest way to stay safe online is to stay in control of **personal information** given out.

Resizing images and **compressing files** reduces the upload and download time when sending email.

File Explorer is a software application for managing your files, searching them and navigating around them.

Always choose a **password** that's difficult for someone else to guess. Use a mixture of UPPERCASE and lowercase letters, numbers and symbols.

Key Vocabulary

Attachment	A file that is sent with an email.
Anti-virus	Anti-virus software scans all forms of storage devices for viruses and, if found, attempts to remove them.
Computer system	Computer system is one that is able to take a set of inputs, process them and create a set of outputs.
Cyberbullying	Cyberbullying involves sending offensive texts or emails, posting lies or insults on social networking sites and sharing embarrassing videos or photos online.
File sharing	The act of sharing files over the internet.
Hack	Gaining unauthorised access to a computer.
Malware	Malicious software created to damage or gain illegal access to computer systems.
Phishing	Trying to trick someone into giving out information over email is called 'phishing'.
Troll	A derogatory name used as a term for a person who posts offensive messages online.

Email is short for 'electronic mail'

Advantages of using email

- Can send to multiple recipients at once
- Can send attachments
- Sent instantly at any time
- Can request a receipt that the email has been read
- Can send and receive email from any web enabled device

Disadvantages

- Spam Viruses Phishing
- Need an Internet connection
- Your message can only be read when the recipient next logs in and checks their mail

Staying safe online

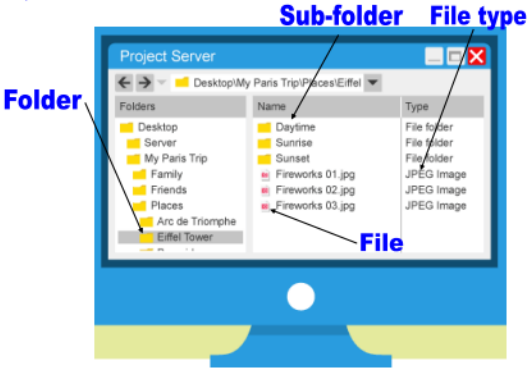
Never disclose

your name telephone number address or school

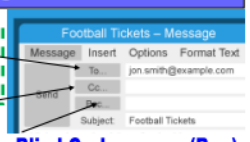
Never accept someone as a 'friend' on social media simply because they claim to know another friend of yours. **Always be cautious about what you say online.**

Never agree to meet anyone in person that you've only known online. If somebody does start sending you messages that offend or upset you, tell an adult that you trust.

Folders, sub-folders & files



Sending an email



To
– enter it here if this email is directly addressed to this person.

Carbon copy (Cc)
- enter it here if the email needs to be seen by this person but is not addressed to them.

Blind Carbon copy (Bcc)
— enter it here to prevent other recipients knowing you've sent it to this person.

Visit these websites for advice

Webwise
THINK U KNOW
UK Safer Internet Centre
ChildLine 0800 1111

Knowledge Organiser: E – Safety

Malware

This is malicious software which is often installed on a computer without the users knowledge. The **Malware** is often downloaded form an unknown email attachment or form poorly protected websites. Once a computer is infected with Malware is can cause harm by deleting or sharing data and gaining unauthorised access to personal data. There are different types of Malware:

Virus—This is designed to copy and spread itself to oth-

Phishing

Phishing is when you are tricked into doing something online. Perhaps giving away user names and passwords, bank details. These are usually emails or links to fake websites and they can be very convincing and hard to spot that the site is fake.

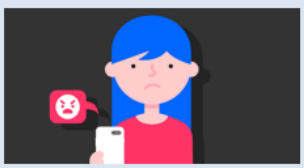
Criminals are becoming increasingly sophisticated and their websites and emails can seem very realistic, especially to the elderly or to someone who is a less experi-

Key Vocabulary

Anti-virus	Anti-virus software scans all forms of storage devices for viruses (programs harmful to computers) and, if found, attempts to remove them.
Cyberbullying	The bullying of another person using the internet, mobile phones and other digital devices.
Downloading	To copy a file from the internet onto your computer or device.
Firewall	An application that prevents unauthorised connections to and from the Internet.
Malware	Software that is designed to cause harm or damage to a computer. This includes viruses that might damage files, adware that causes pop-ups, and spyware that collects and shares login details.
Phishing	An attempt to gain personal information about someone by way of deception, eg sending an email pretending to be from their bank asking them for their bank details.
Program	Sequences of instructions for a computer.
Trojan	Malware that appears legitimate, but performs some malicious activity when it is run.
Troll	A derogatory name taken from the troll character in folklore and now used as a term for a person who posts offensive messages online.
Zombie	Malware that takes over a computer in order to perform some malicious task.

Trolling

Its not always easy to find out who has left a message or comment on a social media post. Sometimes people pretend to be someone they are not. Some who does this is called a Troll and this activity of leaving nasty mes-



Cyber bullying

Those who use technology to intimidate and bully others online. This can be on a computer, a laptop, a tablet computer or a smartphone.

There are many different forms that Cyberbullying can take. This could be posts on a social media site or messages directly to the victim on email or text. T

he **Cyber bully** aims to cause harm, distress and wants

Firewall

A **Firewall** monitors communications going into and out of a computer through the internet. It looks for Malware, any of these communications are blocked by the firewall

Anti-Virus Software

and prevents the Malware from infecting the computer.

Anti-Virus Software protects the computer from **Malware** such are viruses and spyware. The Antivirus software will scan the computer foe Malware.

If any Malware is found the **Anti-Virus** software will safely

Staying Safe

Its important to be I control of the information they give out online. This is the best way to stay safe online.

You should never give out your telephone number, address, school, or accept a friend request from someone who says they know one of your friends, as this may not be true.

Also always be cautious about what you say when you're online. Never agree to meet someone you've only known online.

You can get help from:

BBC Website

Childline

Have a read through the information on your ***PE/ Dance*** and ***Music*** pages and then use the information below to help you create knowledge maps.

THE KNOWLEDGE MAP

Visualise what you know

1. KEY VOCABULARY

2. KEY IDEAS

TOPIC

3. IMPORTANT FACTS

4. EXAMPLES

THE KNOWLEDGE MAP

Visualise what you know

1. KEY VOCABULARY

2. KEY IDEAS

TOPIC

3. IMPORTANT FACTS

4. EXAMPLES

Knowledge organiser

Key vocabulary

Ark a cupboard in a synagogue where Torah scrolls are stored

Ark of the Covenant The box that housed the two tablets of stone on which the original Ten Commandments were written

Babylonian exile The period from 597 to 538 BCE when Jews were forced to live outside Jerusalem under Babylonian rule

bimah The platform from where Torah scrolls are read

circumcision The removal of a baby boy's foreskin at the age of eight days in Judaism

congregation People who attend a religious service

Conservative Jews Jews who preserve Jewish rituals and traditions but are more flexible in interpreting Jewish laws than Orthodox Jews

covenant An agreement between God and people

Gemara Part of the Talmud, a commentary on the Mishnah

Hasidic Jews A group within Orthodox Judaism who follow a strict religious lifestyle and have a distinctive appearance

High Priest Historically, the highest rank of Jewish leader

idols Statues that are worshipped

kashrut Jewish food laws

kippah A head covering worn during prayer

kosher Food that is acceptable for Jews to eat; the word literally means 'fit'

menorah A seven-branched candlestick and a symbol of divine light in the world

Messiah Anointed one

mezuzah A small box attached to doorposts in Jewish homes, containing the Shema

Midrash Jewish writings that include rabbis' interpretations of and further information about the Torah, Jewish law and moral issues

Mishnah The early teachings of rabbis, which were passed on orally

mitzvot Jewish laws (there are 613 in total); the singular is mitzvah

monotheist Someone who believes in just one God

ner tamid The light in front of, or above, the Ark

Orthodox Jews Jews who believe in maintaining the traditional beliefs and practices of Judaism and the laws given by God

Pharaoh An Egyptian king

pilgrimage A journey taken for religious reasons

Pilgrimage A journey taken to a place of religious importance

polytheist Someone who believes in more than one god

Promised Land An area of land in the Middle East given to Jews by God

prophet A messenger of God

rabbi The leader of a synagogue

Reform Jews and **Liberal Jews** Jews who believe that Judaism can change or modernise over time

sacrificial altar A place where animals were killed as offerings to God

secular Non-religious

Shema The most important prayer in Judaism

siddur A Jewish prayer book

synagogue The Jewish place of worship

tallit A symbolic shawl worn during prayer

Talmud A collection of teachings from rabbis giving more information about the Torah

Tanakh The main Jewish scripture, which includes the Torah

tefillin Two boxes worn during prayer, which contain verses from the Torah

Torah The most important holy text for Jews

trefah Food that Jews are forbidden to eat

Twelve Tribes of Israel The families of the sons of Jacob

yad A pointer used to read the Torah in the synagogue

Key facts

- The origins of Judaism go back about 4000 years, when God made a covenant with Abraham to make him leader of God's chosen people. They were known originally as Israelites, but were later called Jews.
- God tested Abraham's faith by asking him to sacrifice his son Isaac. Abraham was willing to do so and God spared Isaac.
- Jews view Abraham as the first patriarch. Isaac was the second patriarch and his son Jacob was the third. Moses is also an important figure for Jews.
- The Temple was the most important place for Jews. Built by King Solomon, it was destroyed by the Babylonians, but later rebuilt. The Romans destroyed the Second Temple. One wall remains, known as the Western Wall.
- There are different types of Jews, including Orthodox, Reform and Liberal Jews, who believe slightly different things and practise Judaism in different ways.
- Jews believe that the coming of a Messiah, or saviour, will mark the start of a new age when people will live in peace and harmony. Unlike Christians, Jews do not believe that Jesus was the Messiah.
- The two most important scriptures for Jews are the Torah (part of the Tanakh) and the Talmud (a collection of writings by rabbis).
- Jewish law is known as the mitzvot – a collection of 613 rules and instructions on how Jews should live their lives.
- There are strict laws about what Jews can eat. Permitted food is called kosher ('fit'). Food that is banned is known as trefah ('torn').
- Jews worship in buildings called synagogues. The most important part of the synagogue is the Ark – a special cupboard where the Torah is kept.
- When Jews pray, they may wear particular items of clothing that have special meaning: a kippah (head covering), tallit (shawl) and tefillin (two small boxes strapped to the forehead and arm).

Key people

Abraham A man who God made a covenant with that he would have many descendants who would be a great nation

Herod A Roman governor who built an extension to the Second Temple

Isaac The son of Abraham and the second patriarch

Jacob The son of Isaac and the third patriarch

Moses A man who received the laws including the Ten Commandments from God

Solomon The king of Israel who built the first Temple in Jerusalem

Jews praying together publicly.

KEYWORD REVISION

Copy some of the definitions of the ***RE*** key vocabulary into the boxes below from your knowledge sheet and then see if you can add in the keywords without looking back at your work. Alternatively, you can do it the other way round and see if you can add in the correct definitions without looking.

Keyword:	Definition:

Fancy some additional Class Charts points? Impress your teachers with any of these BHAmazing pieces of vocabulary, and they will award you extra CC points. Challenge: Can you use them in any sentences and show a member of the Senior Leadership Team?

Word List 1	Word List 2	Word List 3	Word List 4	Word List 5	Word List 6	Word List 7
Myriad (adjective) – many	**Caustic** (adjective) – mean / harsh	**Tension** (noun) – feeling of anxiety or nervousness	**Omniscient** (adjective) – all-knowing	**Sentimental** (adjective) – emotional	**Oppressed** (adjective) – subjected to cruel mistreatment	**Metamorphosis** (noun) – a change / transformation
Assert (verb) – state a fact confidently or forcefully	**Elucidate** (verb) – to make clear	**Oblivious** (adjective) – unaware	**Gullible** (adjective) – believes things easily	**Bawdy** (adjective) – rude or vulgar	**Subservient** (adjective) – obedient / submissive	**Abhorrent** (adjective) – repulsive
Egregious (adjective) - outstandingly bad	**Esoteric** (adjective) – likely to only be understood by a small number or people / obscure	**Naïve** (adjective) – Inexperienced / unaware	**Supercilious** (adjective) – arrogant	**Hypermasculine** (adjective) – overly masculine	**Exploit** (verb) – to use someone for your own good	**Abhor** (verb) – to hate
Erroneous (adjective)- wrong	**Tenuous** (adjective) – weak or fragile	**Pretentious** (adjective) – arrogant	**Tyrannical** (adjective) – a cruel dictator	**Atavistic** (adjective) – has characteristics of an earlier generation	**Epiphany** (noun) – a sudden realization	**Fate** (adjective) – destiny
Engender (verb) – to cause	**Perfunctory** (adjective) – carried out with minimal effort	**Pompous** (adjective) – arrogant	**Brazen** (adjective) – bold, shameless	**Troglodytic** (adjective) – like a caveman	**Façade** (noun) – a front (to 'wear a façade' means you wear a metaphorical mask, covering your true emotions or character)	**Integral** (adjective) – important
Employ (verb) – to make use of	**Moral** (noun) – a lesson	**Privileged** (adjective) – having an advantage over other, usually wealth	**Elusive** (adjective) – mysterious	**Apathetic** (adjective) – indifferent / lazy	**Microcosm** (noun) – a smaller community which represents a larger one	**Demise** (noun) – a person's downfall or death
Salient (adjective) – most noticeable and important	**Autonomy** (noun) – independence	**Compassionate** (adjective) – sympathetic	**Chauvinistic** (adjective) – has an attitude of superiority to opposite sex	**Segregated** (adjective) - separated	**Aloof** (adjective) – stand-offish	**Ridicule** (verb) – to make fun of
Advantageous (adjective) – providing an advantage / beneficial	**Assertive** (adjective) – confidence	**Vindictive** (adjective) – spiteful, cruel	**Materialistic** (adjective) – cares for objects and commodities	**Misogynistic** (adjective) – hateful towards women	**Degenerate** (adjective) – disgusting	**Deride** (verb) – to mock
Galvanize (verb) – to shock or excite someone into action	**Conceited** (adjective) – excessively proud / vain	**Duplicitous** (adjective) – having two sides	**Prophetic** (adjective) – able to accurately predict	**Choleric** (adjective) – quick-tempered, angry	**Depraved** (adjective) – immoral / evil	**Contempt** (noun) – hate
Substantiate (verb) – to provide evidence	**Superior** (adjective) – better than	**Narcissistic** (adjective) – self-obsessed	**Impulsive** (adjective) – rash / careless	**Secular** (adjective) – not religious	Feral (adjective) – wild	**Hysterical** (adjective) – uncontrolled emotion

My BHAmazing vocabulary, written in sentences:

1.

2.

3.

4.

5.

6.

7.