

Y3 Curriculum Overview

Autumn 2

Reading

To access our curriculum, it is essential children can read. Please ensure your child reads daily and complete their reading record. Thank you for your support.

Writing

This term we will be learning to write **Information Texts** and **Retell Stories with Speech**. To support your child's learning, please find the **Knowledge Organiser** attached for English.

Maths

This term we will be learning about **Multiplication** and **Division**. To support your child's learning, please find the **Knowledge Organiser** attached for these units.

Science

This term we will be learning about **Physics: Light**. To support your child's learning, please find the **Knowledge Organiser** attached for this unit.

Geography

This term we will be learning about **Cold Spaces**. To support your child's learning, please find the **Knowledge Organiser** attached for this unit.

DT

This term we will be learning about **Mechanisms**. To support your child's learning, please find the **Knowledge Organiser** attached for this unit.

PSHCE

This term we will be learning about **TEAMwork!** To support your child's learning, please find the **Knowledge Organiser** attached for this unit.

Computing

This term we will be learning about **Digital Literacy**. To support your child's learning, please find the **Knowledge Organiser** attached for this unit.

RE

This term we will be learning about **How do festivals and worship show what matters to Muslims?** To support your child's learning, please find the **Knowledge Organiser** attached for this unit.

Thank you for your continued support. More information can be found on the school website.

If you would like any extra support, please speak to your child's teacher.

Believe – Achieve - Succeed

PUNCTUATION, VOCABULARY & GRAMMAR

YEAR 3 KNOWLEDGE ORGANISER

Year 3 Overview



- By the end of Year 3, you should be able to correctly show direct speech in your writing. This includes using inverted commas correctly alongside other punctuation.
- You should develop the use of a range of prefixes, understanding their meaning, and have a growing understanding of different word families.
- You should correctly use 'a' or 'an' depending upon the opening sound of the following word.
- To show time, place and effect, you should be able to use some conjunctions, adverbs and prepositions.
- You should be structuring your writing using paragraphs, headings, and sub-headings.

Punctuation

Direct Speech

- Inverted commas (also known as speech marks) show when there is direct speech (someone is speaking). The inverted commas should be placed at the beginning and end of the spoken passage, as in the examples below:
 - "You'll never guess what I've just seen!" said Chris, excitedly.
 - "No, they are for our school play," Erica responded.
 - "Where is Mongolia?" asked David, looking at the map.
- Inverted commas are placed outside of other punctuation marks (commas, question marks and exclamation marks – full stops are not used within direct speech).
- Each new character's speech begins on a new line. Each line of speech should begin with a capital letter.
- Reporting clauses (e.g. 'said Daisy', 'sighed Melanie', 'shouted Paul') are often used at the end of the speech. A full stop is used to finish the reporting clause.



Vocabulary and Grammar



- Prefixes:** Prefixes can change the meaning of words.
 - super- means to have more power over other things, e.g. 'superhuman', 'supernatural' and 'supermassive.'
 - anti- means to go against something, e.g. 'anticlockwise', 'antisocial' and 'antidote.'
 - auto- means 'self', e.g. 'automatic', 'automobile', 'autopilot.'
- The Articles 'A' and 'An':** Use 'an' when the next word begins with a vowel sound, e.g. an elephant, an ant.
 - Use 'a' in all other instances, e.g. 'a dog', 'a forest.'
- Word Families:** Word families are grouped together by their meaning and grammar, e.g. help, helpless, helper, helpful

Word Level



Sentence Level



- **Time, Place and Effect:** Conjunctions, adverbs and prepositions can be used to show us the time, place, and cause of events and information, e.g.
 - Conjunctions: 'I wake up before my alarm. I snore when I sleep.'
 - School was cancelled because it was snowing.
 - Adverbs: 'I eat my breakfast, then eventually walk to school.'
 - Prepositions: 'I sleep in my covers, beside my teddy bear.'
 - 'The living room is below my bedroom.'



Text Level

- **Paragraphs:** Paragraphs are a way to group similar ideas in your writing. Change paragraphs by leaving a line, to break up your writing. Change paragraphs when you change the time, place or subject in your writing.
- Also use **headings** and **sub-headings** to clearly present ideas.
- **Present Perfect Verb Form:** This tense shows something that started in the past and continues to the present, e.g. 'he has gone out to play' instead of 'he went out to play.'

Key Terminology

- Preposition
- Conjunction
- Word Family
- Prefix
- Clause
- Subordinate Clause
- Direct Speech
- Consonant
- Vowel
- Comma
- Inverted Comma

Key Vocabulary

times tables

multiply by

divide by

array

fact families

regrouping

Multiplication and Division Facts (3, 4 and 8 multiplication tables)

x	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	55	60
6	6	12	18	24	30	36	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
8	8	16	24	32	40	48	56	64	72	80	88	96
9	9	18	27	36	45	54	63	72	81	90	99	108
10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
12	12	24	36	48	60	72	84	96	108	120	132	144

3 x Tables

$1 \times 3 = 3$
 $2 \times 3 = 6$
 $3 \times 3 = 9$
 $4 \times 3 = 12$
 $5 \times 3 = 15$
 $6 \times 3 = 18$
 $7 \times 3 = 21$
 $8 \times 3 = 24$
 $9 \times 3 = 27$
 $10 \times 3 = 30$
 $11 \times 3 = 33$
 $12 \times 3 = 36$
 $3 \div 3 = 1$
 $6 \div 3 = 2$
 $9 \div 3 = 3$
 $12 \div 3 = 4$
 $15 \div 3 = 5$
 $18 \div 3 = 6$
 $21 \div 3 = 7$
 $24 \div 3 = 8$
 $27 \div 3 = 9$
 $30 \div 3 = 10$
 $33 \div 3 = 11$
 $36 \div 3 = 12$

4 x Tables

$1 \times 4 = 4$
 $2 \times 4 = 8$
 $3 \times 4 = 12$
 $4 \times 4 = 16$
 $5 \times 4 = 20$
 $6 \times 4 = 24$
 $7 \times 4 = 28$
 $8 \times 4 = 32$
 $9 \times 4 = 36$
 $10 \times 4 = 40$
 $11 \times 4 = 44$
 $12 \times 4 = 48$
 $4 \div 4 = 1$
 $8 \div 4 = 2$
 $12 \div 4 = 3$
 $16 \div 4 = 4$
 $20 \div 4 = 5$
 $24 \div 4 = 6$
 $28 \div 4 = 7$
 $32 \div 4 = 8$
 $36 \div 4 = 9$
 $40 \div 4 = 10$
 $44 \div 4 = 11$
 $48 \div 4 = 12$

8 x Tables

$1 \times 8 = 8$
 $2 \times 8 = 16$
 $3 \times 8 = 24$
 $4 \times 8 = 32$
 $5 \times 8 = 40$
 $6 \times 8 = 48$
 $7 \times 8 = 56$
 $8 \times 8 = 64$
 $9 \times 8 = 72$
 $10 \times 8 = 80$
 $11 \times 8 = 88$
 $12 \times 8 = 96$
 $8 \div 8 = 1$
 $16 \div 8 = 2$
 $24 \div 8 = 3$
 $32 \div 8 = 4$
 $40 \div 8 = 5$
 $48 \div 8 = 6$
 $56 \div 8 = 7$
 $64 \div 8 = 8$
 $72 \div 8 = 9$
 $80 \div 8 = 10$
 $88 \div 8 = 11$
 $96 \div 8 = 12$

Write and Calculate Mathematical Statements

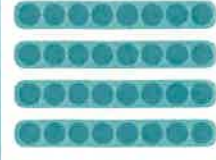
$4 \times 8 = 32$

$32 \div 8 = 4$



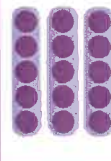
$8 \times 4 = 32$

$32 \div 4 = 8$



$5 \times 3 = 15$

$15 \div 3 = 5$



$3 \times 5 = 15$

$15 \div 5 = 3$



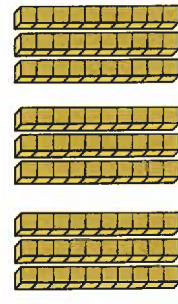
Related Calculations

$3 \times 4 = 12$

$4 \times 3 = 12$



$30 \times 4 = 120$



$4 \times 3 = 12$

$40 \times 3 = 120$



Written Multiplication Methods - No Regrouping

Tens	Ones

$23 \times 3 = 69$

	T	O
	2	3
x		3
	6	9

Written Multiplication Methods - With Regrouping

Tens	Ones

Diagram showing the regrouping process: 4 ones cubes are grouped into 1 ten rod, which is then added to the tens column. This process repeats for the next two rows, resulting in 3 tens rods in the tens column and 4 ones cubes in the ones column.

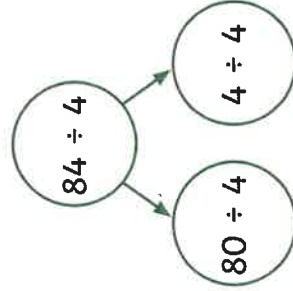
$24 \times 4 = 96$

	T	O
	2	4
x		4
	9	6

Written Division Methods - No Regrouping

Tens	Ones

	2	1
4	8	4

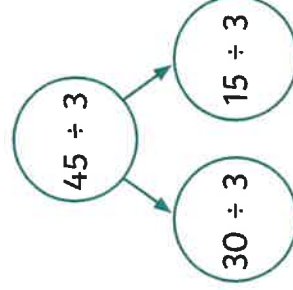


Written Division Methods - With Regrouping

Tens	Ones

Diagram showing the regrouping process: 5 ones cubes are regrouped into 1 ten rod and 5 ones cubes. This process repeats for the next two rows, resulting in 3 tens rods in the tens column and 5 ones cubes in the ones column.

	1	5
3	4	15



Sticky Knowledge

- ✓ Know that light is a form of energy.
- ✓ There are natural and manmade sources of light.
- ✓ Light is reflected from surfaces and enters our eyes.
- ✓ White light is made up of many different colours, and when it is split, it create a rainbow.
- ✓ Shadows are formed when an opaque object blocks light from passing through.



Big Idea

Light allows us to see. It is created by primary sources of light such as the Sun. These primary sources can be natural or man-made. When light travels, it travels in straight lines. If it hits an object, light is reflected back, enabling us to see it. Opaque objects block light, causing shadows to form behind them. Shadow length changes depending on the distances between the source and object.

Light Sources:

Sources of Light



Primary Sources: The Sun (a star), candle, light bulb, lightning, TV screen

Secondary Sources: The Moon, mirror, rainbow

Learning Components

- ✓ I know that light is produced by primary sources of light and I can identify examples of these.
- ✓ I know that light can be reflected off of surfaces, creating secondary sources of light.
- ✓ I know and can describe the light properties of materials, using the terms opaque, transparent and translucent.
- ✓ I know that shadows are formed when light is blocked and that the position of the light source (e.g. the Sun) changes the length and direction of the shadows.
- ✓ I know that looking at direct sunlight can be dangerous, damaging our eyesight.

Vocabulary

Light: Visible radiation which travels in waves, originating from primary light sources and reflecting off of secondary sources.

Light Source: An object that gives off light. The main light source for the Earth is the Sun. Some other sources of light include torches, candles and lamps. Primary sources create light; Secondary sources reflect it.

Shadow: A shadow is formed when an object blocks out the light. The object must be opaque or translucent to make a shadow.

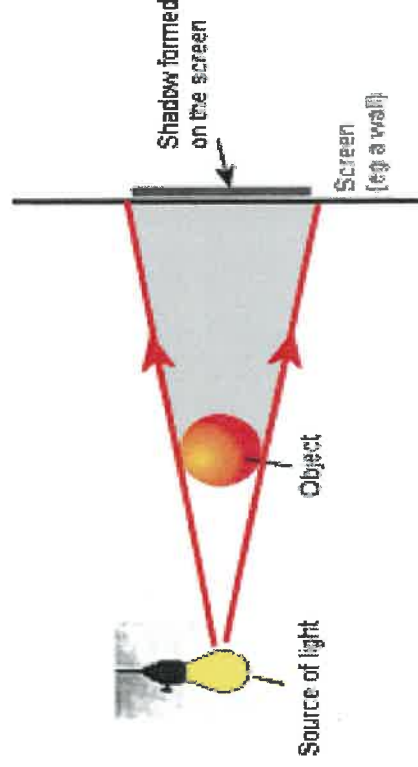
Sunlight: Light created by the Sun (Our nearest star).

Reflection of light: When we can see the light on another surface.

Transparent: A property of a material where all lights passes through.



Shadow Formation:



Year 3: Cold Spaces: Polar, Taiga and Tundra



Key Knowledge

- ✓ Know what the polar, tundra and taiga biomes are;
- ✓ Describe and explain the key physical and human features of the polar, tundra and taiga biomes;
- ✓ Know that the melting of sea ice around the Arctic and the permafrost within the tundra is having significant consequences for native peoples and wildlife;
- ✓ Know that Russia is the largest country on Earth (land size) and that it is located in the continents of both Europe and Asia;
- ✓ Know that Russia is home to 145 million people. Its capital city is Moscow.
- ✓ Know the key human and physical features of Russia, including that Russia is a major exporter of natural resources, including fossil fuels, that when burned to generate energy contribute to global climate change.

Maps



Big Idea

The cold spaces of our planet can either be found in the high-altitude mountainous areas or encircling the North and South Poles. In the northern hemisphere, Russia, being the largest country on Earth, according to land mass, dominates the Arctic Circle. The Arctic Circle is home to the taiga, tundra and polar biomes, where uniquely adapted flora and fauna thrive in the harsh conditions. Likewise, these vast expanses contain many of the world's natural resources. However, some of these contribute to global climate change, which is having significant consequences for these delicately balanced biomes.

Key Studies



Concepts



Place



Scale



Environment



Human and Physical Processes
Interconnection

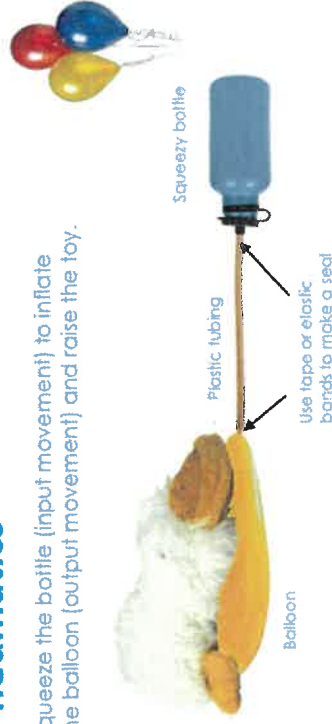
Vocabulary

- polar biome:** the large areas of permanent ice caps that cover the North and South Poles. Antarctica is colder than the Arctic.
- taiga biome:** the large regions of northern coniferous forests found especially in Russia and Canada. The Taiga is the world's largest biome.
- tundra biome:** frozen lands, found especially in the Arctic, which support shrubs, mosses and lichens.
- permafrost:** frozen layer of soil, gravel and sand.
- North Pole:** the point at the Northern end of the Earth's axis.
- Arctic Circle:** the line of latitude north of which places continual sunlight in Summer (March – September) and continual darkness in Winter (October – February);
- climate:** a long-term weather pattern set over a period of time (+30 years).
- Global Climate Change:** any changes to the climate around the world, but especially the recent changes caused by human beings.

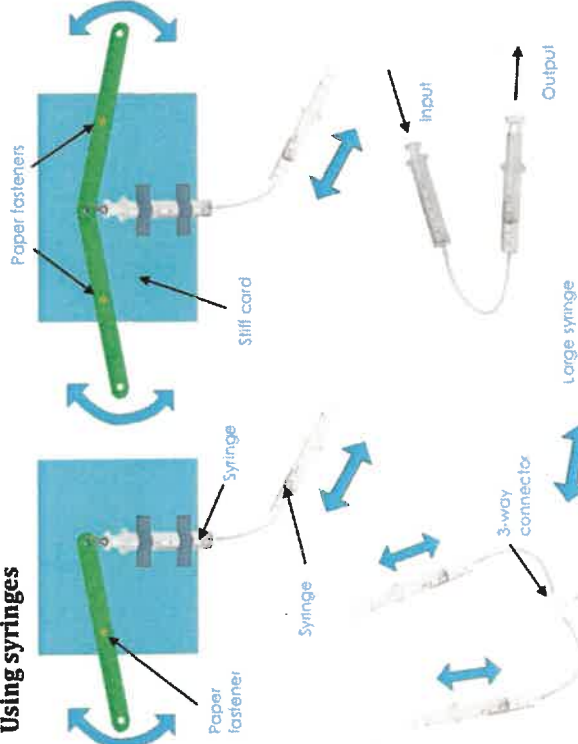
'You can travel the seas, poles and deserts and see nothing. To really understand the world, you need to get under the skin of the people and places. In other words, learn about geography.' Michael Palin.

Pneumatics

Squeeze the bottle (input movement) to inflate the balloon (output movement) and raise the toy.



Using syringes



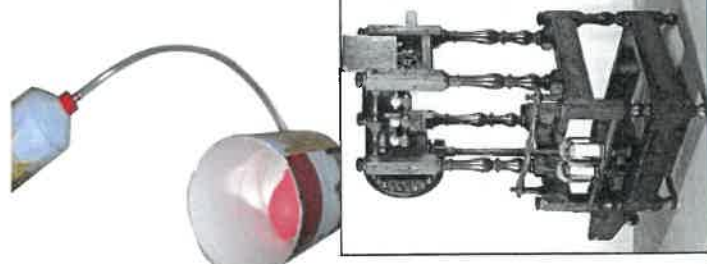
Design decisions

- You might use a squeezable bottle and a balloon in a container to raise or lower an object or a lever.
- You might choose to use three syringes connected by a T-connector so that two objects move backwards and forwards.
- You might add levers and linkages to design and make more complex mechanical systems.

Engineer Study

Richard Arkwright

- ✓ Richard Arkwright was born in Preston, England on 23 December 1732.
- ✓ In 1769 Richard Arkwright patented the spinning frame (later called the water-frame), a machine to produce inexpensive spun cotton.
- ✓ In 1771, Arkwright and his business partners built the first water-powered cotton mill at Cromford in Derbyshire.



Vocabulary

System – a set of related parts used to create an outcome. Systems have an input, process and an output. In a pneumatic system, the ‘input movement’ is where the user pushes or pulls a syringe or pump. The ‘output movement’ is where the object at the end of the tube moves.

Compressed – something that is squashed, such as air in a tube.

Pneumatic – a system that works using gases (air).

Inflate – fill something with air or a gas to make it swell up.

Deflate – remove the pressurised air to allow an object like a balloon to shrink.

Syringe – a tube with a nozzle and plunger for sucking and blowing air or liquids.

Sticky Knowledge:

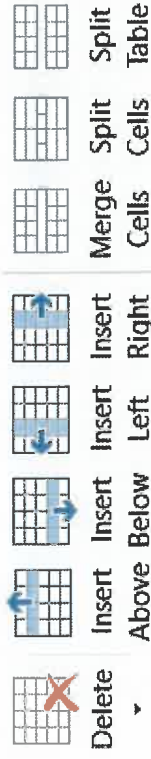
- ✓ I can type a number of sentences using the keyboard.
- ✓ I can use tab to indent paragraphs.
- ✓ I can use cut, copy and paste to re-order text.
- ✓ I can use keyboard shortcuts to re-order text.
- ✓ I can use bullet points, speech bubbles, auto shapes and text boxes.
- ✓ I can format wrapping/layout of text boxes and images in Word.
- ✓ I can format images and re-size shapes.
- ✓ I can use the format tab to alter word art to enhance my work.
- ✓ I can use a variety of table tools.
- ✓ I can explain the difference between save and save as.
- ✓ I can create a folder to save my work in.
- ✓ I can give a file a name to identify it.
- ✓ I can transfer these skills into PowerPoint.

Creating folders



Open file explorer Click the 'New Folder' icon Give your folder a name and press enter

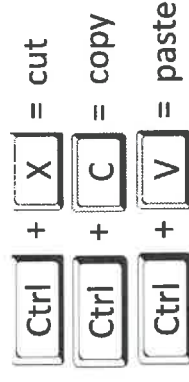
Table tools



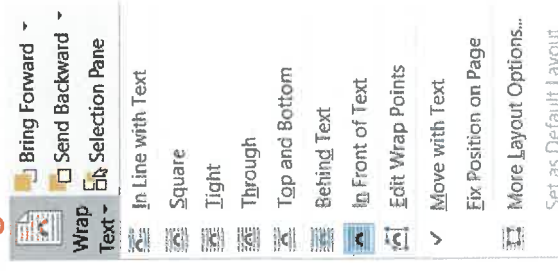
Big Idea:

I can select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.

Keyboard shortcuts



Formatting text boxes and images



Vocabulary

Layout:

The overall appearance of a document, image or text.

Audience:

The person who will read the document.

Background:

Colours, patterns and images that sit behind the text in a document or PowerPoint slide.

Shortcut:

One or more keys providing quick access to a function.

Formatting:

Changing the appearance of a text, image or table.

Sticky Knowledge

- We go through lots of different changes, e.g. transition from classes in school and these may make me feel nervous.
- When we work together, we can achieve more.
- We may have to compromise when having a dispute or argument.

Key Questions

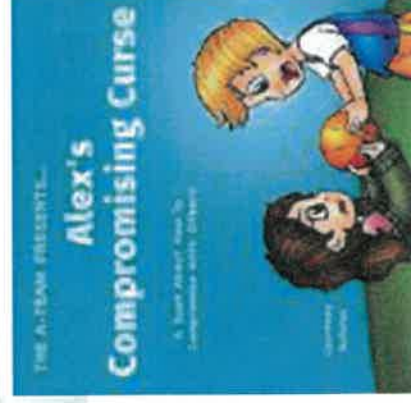
- When you have changed class/teacher, how has this made you feel?
- Tell me about a time you have worked in a team?
- Have you ever had to resolve a problem?

Vocabulary

- Team** A group of people who work or play together.
- Conflict**- have a disagreement/difference with someone else.
- Resolution**- The solution of a problem, to fix a problem.
- Transition**- A time of change as you progress through through different times of your life.
- Collaboratively**- Working together to do a task and achieve shared goals.
- Compromise**- A settlement of a disagreement.



Exciting Books





Unit L2.9 How do festivals and worship show what matters to a Muslim?

Sticky Knowledge

- ✓ Making links between beliefs about God and living an Islamic life, such as: Wudhu (washing before worship).
- ✓ Praying 5 times a day.
- ✓ Using 99 names for Allah.

Big Idea

Muslims show what matters about their faith through their festivals and worship.



Important facts to know by the end of this topic:

- Muslim means one who willingly submits to God's will.
- Ibadah means worship and belief in action
- The Qur'an is the Muslim holy book.
- Muslims worship in a mosque.
- One of the five pillars of faith is fasting.

Vocabulary

Muslim: A follower of Mohamed.

Ibadah: belief in action.

Qur'an: Islam's sacred book.

Salat: Prayer: a person of faith speaking to God.

Sawm: fasting: abstain from all or some kinds of food or drink, especially as a religious observance.

