

BBC Micro:bit

.hex file	A file type, that carries binary information.
.zip file	Multiple files that are bound together as a single file, to use less digital storage space.
Bluetooth	Device to device connectivity, for example sharing images between two smart phones.
Code blocks	A visual representation for a section of code that performs a certain job. They can be snapped together to build a program.
Decompose	To break something down into smaller chunks.
Emulator	A program or machine that is built to copy the way another computer system works.
Feature	Distinctive characteristics of something.
Loop	A repeated sequence of instructions.
Micro:bit	Created by the BBC, a small compact computer that you can code.
Pedometer	A device used to record the number of steps taken to calculate the distance travelled.
Predict	To make an educated guess, as to what might happen or occur as the result of something in the future.
Systematic	Doing something in an ordered way to achieve a specified goal.
Tinker	To explore and play with something to discover the key functions.
Variable	This could be a number or text, that can change each time the program is run and often in combination with selection to change the end result of the program.

BBC Micro:bit Make code - Code blocks key:

Basic	Input	Music
Led	Radio	Loops
Logic	Variables	Math(s)



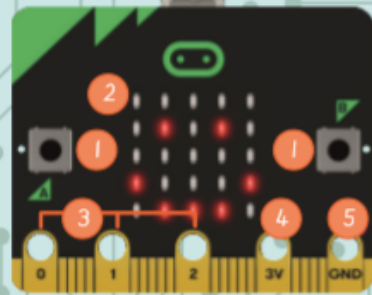
Key facts

BBC Micro:bit

The BBC Micro:bit has a wide-range of features for you to program and experiment with. Each feature can be included as part of an algorithm.

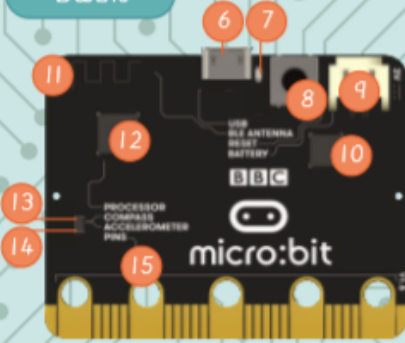
BBC Micro:bit features:

Front



- 1 A and B buttons
- 2 LED display and light sensor
- 3 Pin: GPIO
- 4 Pin: 3 volt power
- 5 Pin: Ground

Back



- 6 Micro USB socket
- 7 Single LED
- 8 Reset button
- 9 Battery socket
- 10 USB interface chip
- 11 Radio and Bluetooth antenna
- 12 Processor and temperature sensor
- 13 Compass
- 14 Accelerometer
- 15 Pins

Knowledge Organiser-Year 5-Abolition of Slavery



Key Vocabulary	Definition
Transatlantic Slave Trade	Responsible for the forced migration of between 12 - 15 million people from Africa to the Western Hemisphere from the middle of the 15th century to the end of the 19th century.
Slave	A slave is a human being classed as property, who is owned by another person and who is forced to work for nothing.
Atlantic Passage	Sometimes known as the 'middle passage', refers to the part of the trade where Africans, densely packed onto ships, were transported across the Atlantic to the West Indies
Plantation	a usually large farm or estate, especially in a tropical or semitropical country, on which cotton, tobacco, coffee, sugarcane, or the like is grown.
Abolitionists	An abolitionist was someone who wanted to end slavery.

Thomas Clarkson	Thomas Clarkson was one of the most prominent eighteenth-century anti-slavery campaigners. In 1787, he helped form the first Abolitionist Committee.
Olaudah Equiano	Equiano was one of the most prominent black campaigners in the anti-slavery campaign. He was an ex-slave who, by the 1780s, lived as a free man in London. He is mostly remembered for his 1789 autobiography.
William Wilberforce	William Wilberforce was the main figurehead in Parliament for the Abolitionist campaign. He was recruited by Thomas Clarkson, who recognised that, in order to get Parliament to change the law, the anti-slavery cause needed a brilliant advocate inside Parliament itself.



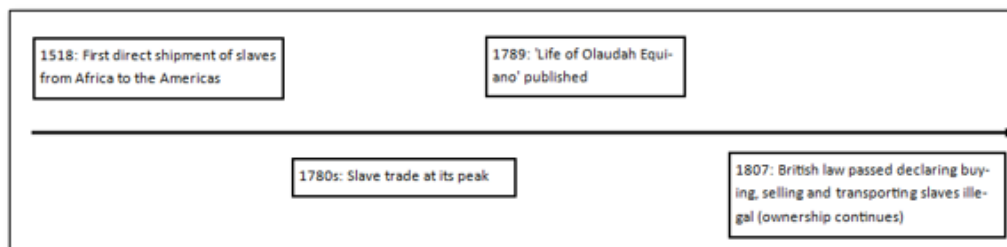
Thomas Clarkson

The Transatlantic Slave Trade



The transatlantic slave trade is sometimes known as the 'Triangular Trade', since it was three-sided, involving voyages: from Europe to Africa, from Africa to the Americas, from the Americas back to Europe.

Timeline of key events





Knowledge Organiser-RE-Year 5-What does it mean to be a Muslim in Britain today?

Key Vocabulary	
Islam	Islam is the second most popular religion in the world.
Muslim	A follower of the religion of Islam .
Allah	The Arabic name that Muslims use for God.
Five Pillars of Islam	The five things that Muslims are expected to do.
Prophets	Special messengers sent from Allah .
Muhammad	The last prophet and the key prophet in Islam .



Key Beliefs

Muslims believe that there is only one God called **Allah**. They believe **Allah** is the only ruler of the universe. The word '**Islam**' means submission and obedience to **Allah**.

Muhammad is so highly respected by **Muslims** that they will say "peace be upon him" after his name is spoken.

The Six Main Beliefs

1. Belief in **Allah** as the one and only God.
2. Belief in angels.
3. Belief in the holy books.
4. Belief in the **prophets** and that **Muhammad** was the final **prophet**.
5. Belief in the Day of Judgement (the day when **Allah** decides if a person goes to heaven or hell).
6. Belief in predestination (the belief that **Allah** has already planned out what will happen).

The Five Pillars of Islam

As well as the six main beliefs, there are **Five Pillars of Islam**.

Shahadah: **Muslims** say a declaration of faith.

Salah: **Muslims** pray five times a day. Before prayer, they must wash themselves and then face **Mecca** whilst praying.

Zakat: **Muslims** must donate to charities.

Sawm: **Muslims** fast for one month during a time called **Ramadan**.

Hajj: **Muslims** have to travel to **Mecca** once in their lifetime, if they can afford to.





Year 5 - Rounders

Knowledge Organiser

Prior Learning

Developed a range of skills in a competitive context. Chosen and used a range of simple tactics in isolation and a game context. Identified different roles in rounders.

Unit Focus

Link together a range of skills and use in combination. Collaborate with a team to choose, use and adapt rules in games. Recognise how some aspects of fitness apply to rounders.

We are learning...

1. to judge how far you can run based on the distance of a hit.
2. to throw over short distances with power and accuracy to get batters out.
3. to follow the path of the ball to make sure it is fielded consistently.
4. the backwards hit rule and using it tactically as the backstop.
5. to hit the ball into gaps to maximise the chance of scoring.
6. to set a field in a game to limit the scoring of a batter.

Key Questions

1. What's the difference between close and deep fielding?
2. If the backstop threw the ball to 2nd base and 2nd base misfielded the ball, what could the batter do?
3. Why would a batter purposely hit the ball backwards?

Equipment

Range of balls, range of bats and striking equipment, posts, button cones, batting cone.

Vocabulary

Power, consistently, accuracy, stump, conditioned, fitness, miss hit, strength, encouragement, defensive, offensive.

Rules

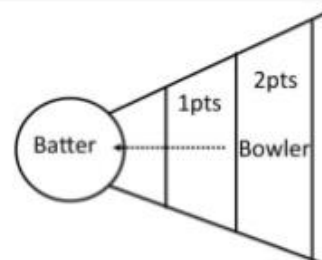
- Batters waiting should be stood in the backward area, well away from the 4th post.
- A 'No Ball' is awarded when the ball is bowled above the head or below the knee if it is too wide, it bounces before it gets to the batter or if the bowler's foot is outside of the bowling square.

Assessment Overview

Head - Apply the backward hitting rules.

Hand - Play more attacking shots, looking for gaps in the field.

Heart - Show commitment towards their team and perseverance during gameplay.



Writing Mat

Expected Year 5

Use a mixture of simple, compound and complex sentences. Use a thesaurus to up-level your vocabulary choices.

Check for tense, subject/verb agreement, person, paragraphs and genre features!

Marvellous Modals!
Include modal verbs to show possibility:

can could should
might must may
would will ought

(and their negative versions)

Could you pop in an adverb of possibility?

surely possibly
certainly perhaps

Super Suffixes!

-ation preparation sensation
-ous courageous curious serious
-ly gently angrily frantically

Super Subordination!

Use these conjunctions to create super complex sentences:

if because as
before after until
that since when

Front it Out!

Link your sentences and paragraphs:

Time

At that moment, On Saturday,
Finally,

Place

Over the bridge, Inside the chest,
Beyond the clouds,

Frequency

Every few weeks, Never before,
Occasionally, Often,

Manner/ Behaviour

Breathing heavily, Waiting
anxiously, Without warning,

It's All Relative!

Use a 'which', 'who' or 'that' relative clause to add extra information:

The Queen, who has reigned for 60 years, has four children.

Hedgehogs eat garden snails, which is important within the food chain.

The stench was so putrid that it made her eyes water.

Spellings... I need to know most of these:

accommodate	correspond	hindrance	recognise
accompany	criticise	individual	recommend
according	curiosity	interfere	relevant
achieve	definite	interrupt	restaurant
aggressive	desperate	language	rhyme
amateur	determined	leisure	rhythm
ancient	develop	lightning	sacrifice
apparent	dictionary	marvellous	secretary
appreciate	embarrass	mischievous	shoulder
attached	environment	muscle	sincere
available	equip(-ped)	necessary	sincerely
average	equipment	neighbour	soldier
awkward	especially	nuisance	stomach
bargain	exaggerate	occupy	sufficient
bruise	excellent	occur	suggest
category	existence	opportunity	symbol
committee	explanation	parliament	system
communicate	familiar	physical	temperature
community	foreign	prejudice	thorough
competition	forty	privilege	twelfth
conscience	frequently	profession	variety
conscious	government	programme	vegetable
controversy	guarantee	pronunciation	vehicle
convenience	harass	queue	yacht

Expanded Noun Phrases:

Get Descriptive!
the ferocious, snarling beast
inside the cage
the breath-taking, scenic
view beyond the valley

Punctuation Reminders:

A	Capital letters for sentences, initials and proper nouns.
.	Full stops.
!	Exclamation marks for exclamations or surprise.
?	Question marks.
'	Apostrophes for possession and missing letters and to mark missing letters in contracted words, e.g. didn't.
,	Commas in lists, and to mark parenthesis, fronted adverbials and clauses.
" "	Inverted commas for speech. (Don't forget the commas too!)
-	Hyphen to connect words together.
-	Dashes to show longer pauses or parenthesis.
()	Brackets for parenthesis.

Properties of Shape

Knowledge Organiser

Identifying Angles

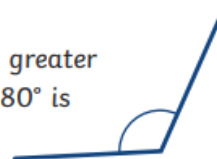
Acute Angles

Any angle that measures less than 90° is called an **acute** angle.



Obtuse Angles

Any angle that measures greater than 90° and less than 180° is called an **obtuse** angle.

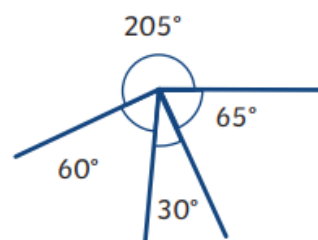


Reflex Angles

Any angle that measures greater than 180° is called a **reflex** angle.



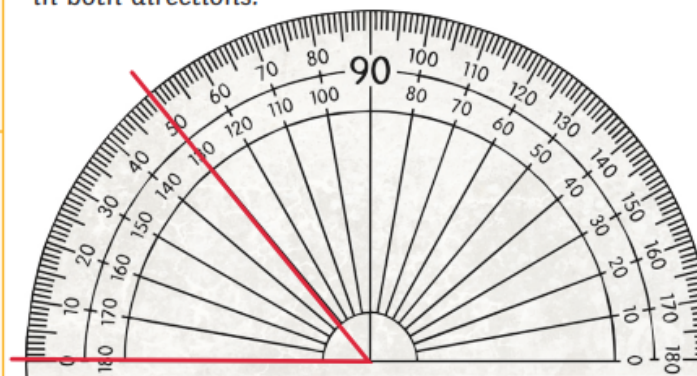
Angles on a straight line always total 180° .



Angles around a point always total 360° .

Measuring and Drawing Angles

To measure angles, we use a protractor. Look carefully at how the numbers on the scale count from 0° to 180° in both directions.



Multiples of 90° can be used as descriptions of a turn.



$\frac{1}{4}$ turn - 90°



$\frac{1}{2}$ turn - 180°

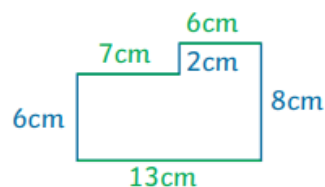


$\frac{3}{4}$ turn - 270°



1 turn - 360°

Using Properties of Rectangles



$$6\text{cm} + 2\text{cm} = 8\text{cm}$$

$$7\text{cm} + 6\text{cm} = 13\text{cm}$$



Key Vocabulary	
asexual reproduction	One parent is needed to create an offspring, which is an exact copy of the parent.
fertilise	The action of fusing the male and female sex cells in order to develop an egg.
gestation	The length of a pregnancy.
life cycle	The journey of changes that take place throughout the life of a living thing including birth, growing up and reproduction.
metamorphosis	An abrupt and obvious change in the structure of an animal's body and their behaviour.
pollination	The transfer of pollen to a stigma to allow fertilisation.
reproduction	The process of new living things being made.
sexual reproduction	Two parents are needed to make offspring which are similar but not identical to either parent.

Humans develop inside their mothers and are dependent on their parents for many years until they are old enough to look after themselves.



Amphibians such as frogs are laid in eggs then, once hatched, go through many changes until they become an adult.



Some animals, such as butterflies, go through metamorphosis to become an adult.



Birds are hatched from eggs and are looked after by their parents until they are able to live independently.





Some living things, such as plants, contain both the male and female sex cells. In others, such as humans, they contain either the male or female sex cell.

Reproduction in mammals

Mammals use **sexual reproduction** to produce their offspring.

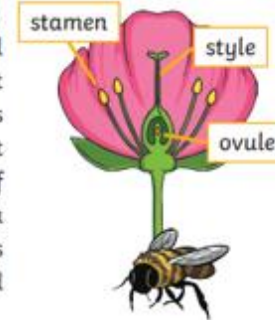
- The male sex cell, called the sperm, **fertilises** the female sex cells.
- The **fertilised** cell divides into different cells and will form a baby with a beating heart.
- The baby will grow inside the female until the end of the **gestation** period when the baby is born.



Echidnas and platypus are mammals but they lay eggs rather than giving birth to live young.

Plants

Most plants contain both the male sex cell (pollen) and female sex cell (ovules), but most plants can't **fertilise** themselves. Wind and insects help to transfer pollen to a different plant. The pollen from the stamen of one plant is transferred to the stigma of another. The pollen then travels down a tube through the style and fuses with an ovule.



Some plants, such as strawberry plants, potatoes, spider plants and daffodils use **asexual reproduction** to create a new plant. They are identical to the parent plant.

