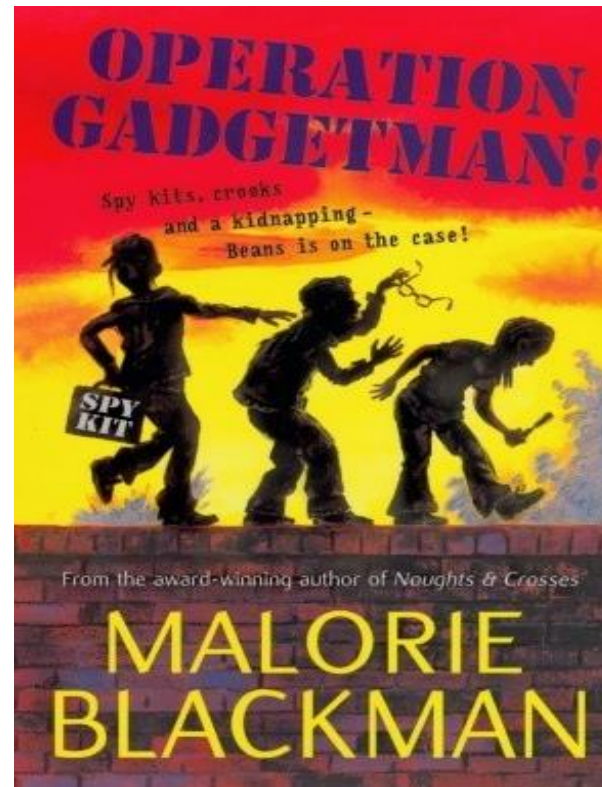


Operation Gadgetman

By Malorie Blackman



Lower Key Stage 2 Autumn 2 term planning

	Week One	Week Two	Week Three	Week Four	Week Five	Week Six	Week Seven
English	To identify key features of a narrative. To plan a narrative To create a first draft of my narrative To edit and improve my narrative. To create a final draft of my narrative. <i>SPaG objectives to be chosen by class teacher based on year group and AfL.</i> Final outcome: To write a mystery narrative				To identify key features of a riddle. To plan a riddle. To create a first draft of a riddle. To edit and improve a riddle. To create a final draft of a riddle. <i>SPaG objectives to be chosen by class teacher based on year group and AfL.</i> Final outcome: To write a riddle.		
	Multiplication and Division (Weeks 1 – 2 Block 3)		Standardised Tests Week 3	Multiplication and Division (Weeks 4-6 Block 4)		Measurement: Money (week 7 Block 5)	
Mathematics (3) <i>White Rose Maths</i>	Multiplication - equal groups Multiply by 3 Divide by 3 The 3 times table Multiply by 4 Divide by 4 The 4 times table	Multiply by 8 Divide by 8 The 8 times table Consolidation	White Rose Maths Hub Arithmetic and Reasoning 2019	Comparing statements Related calculations Multiply 2-digits by 1-digit Multiply 2-digits by 1-digit	Divide 2-digits by 1-digit (1) Divide 2-digits by 1-digit (2) Divide 2-digits by 1-digit (1) Divide 2-digits by 1-digit (2)	Scaling How many ways? Pounds and pence (money) Convert pounds and pence (money)	Add money Subtract money Give change Consolidation
	Multiplication and Division (Weeks 1 – 3 Block 4)			Standardised Tests Week 3	Multiplication and Division (Weeks 4 Block 4)	Block 5 Number: Multiplication and Division (Weeks 5 - 7)	
Mathematics (4) <i>White Rose Maths</i>	Multiply by 10 Multiply by 100 Divide by 10 Divide by 100	Multiply by 1 and 0 Divide by 1 and itself Multiply and divide by 6 6 times tables and division facts	White Rose Maths Hub Arithmetic and Reasoning 2019	Multiply and divide by 9 9 times table and division facts Multiply by 7 7 times table and division facts	11 & 12 times-table Multiply 3 numbers Factor pairs Efficient Multiplication	Written methods Multiply 2-digits by 1-digit Multiply 3-digits by 1-digit Consolidation	Divide 2-digits by 1-digit (1) Divide 2-digits by 1-digit (2) Divide 3-digits by 1-digit Correspondence problems
Science Electricity	To explore electrical resources in the room, at home and in our community	To identify electrical appliances and the types of electricity they use.	To identify a simple circuit and name and name the parts.	To predict and test different circuits (series and parallel) (focus on switches)		Twinkl Assessment	Identify and sort materials into electrical conductors and insulators.
History		To understand crime and punishment today.	To understand crime and punishment today.	To understand crime and punishment in Victorian times.	To understand crime and punishment in Victorian times.	To debate what happens with crime and punishment in the future.	To debate what happens with crime and punishment in the future.

Geography	To understand and use 8 points of a compass – part 1	To understand and use 8 points of a compass – part 2	To use 4 and 6 figure grid references.	To use 4 and 6 figure grid references.	To create a map using a key.	To create a map using a key.	
Art	LO: To use different pencil techniques to create a cross hatch effect.		LO: To use different pencil techniques to create movement and facial expressions.		LO: To create a pencil sketch of a scene from Operation Gadgetman		LO: To master our pencil techniques by creating a Christmas card.
D+T		To design a burglar alarm.		To create a burglar alarm.		To evaluate a burglar alarm.	
Music	To explore the different sounds instruments make.		To create a graphic score for different instruments.		To create and rehearse a graphic score.		To perform a graphic score.
RE		To understand how Christians pray and the importance of it.		To understand how Muslims pray and the importance of it.		To understand how Hindus pray and the importance of it.	
Computing	To describe early forms of animation, before computers.		To create a short computer animation using one or more moving stick figures.		To create a recorded animation involving a number of moving characters on a background.		To structure specific timing of animations using a time slider.
MFL Year 3 Spanish Year 4 French		Y3 – To name colours Y4 – To recall family members		Y3 – To name fruits Y4 – To recall pet animal names		Y3 – To name vegetables Y4 – To recall items of clothing	
PE	OAA To develop cooperation and teamwork skills.	OAA To work effectively with a partner.	OAA To develop and trust teamwork.	Yoga To develop an understanding of yoga.	Yoga To develop flexibility through yoga.	Yoga To develop strength in yoga poses.	Yoga To work collaboratively and create a paired yoga flow.
PSHE Getting on and Falling Out		To appreciate that people have different points of view.		To explore feelings of anger and frustration.		To consider different ways to solve conflict.	

Key Vocabulary

Circuit – A complete route which an electric current can flow around.

Current – A flow of electricity.

Battery – A small device that provides power for electrical items.

Cell – A device used to generate electricity. A battery is an example of a cell.

Conductor – Any material that electricity can pass through or along.

Insulator – Any material that electricity cannot pass through or along.

Buzzer – An electrical device that makes a buzzing sound.

Lamp/Bulb – A device that lights up when electricity is passed through it.

Motor – A device that changes electrical energy into movement.

Wire – A long, thin piece of metal that carries an electrical current often covered in plastic for safety.

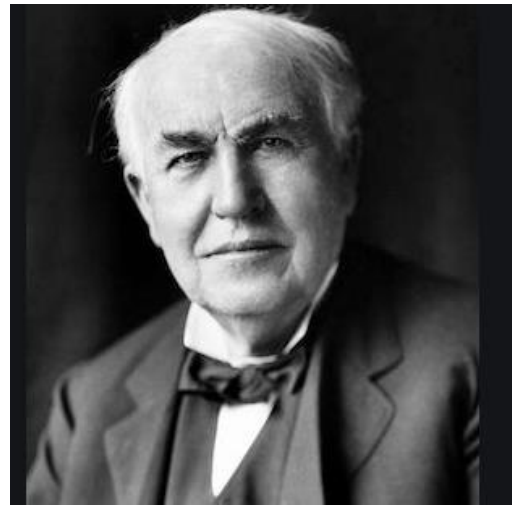
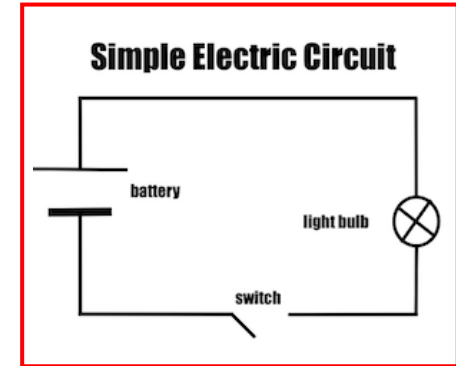
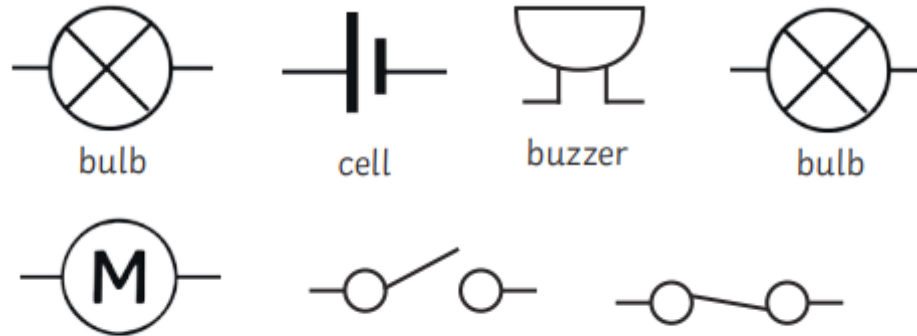
Voltage – An electrical force that makes electricity move through a wire, measure in volts (V).

Socket – A device on a wall that you can plug electrical equipment into.

Switch – A device used for making (closed) and breaking (open) the connection in an electric circuit.

Electrical appliance – A device that uses electricity to perform a function. E.g. toasters, lamps. Microwaves, dishwasher, refrigerator.

Electrical Circuit Symbols



Examples of Conductors:

- Copper
- Iron
- Steel
- Silver
- Gold
- Water

Examples of Insulators:

- Rubber
- Wood
- Plastic
- Paper
- Glass

ELECTRICAL SAFETY!

- Obey warning signs and never put yourself or others in danger.
- Never put your fingers or anything into a plug socket.
- If you see a broken wire, do not touch it and tell an adult.
- Do not leave anything plugged in and charging while you sleep.
- Keep all metal objects such as cutlery out of toasters.
- Keep water away from any electricals.

Thomas Edison (1847 – 1931)

- Known for being one of the greatest inventors in history.
- Lived in New Jersey in the United States of America (USA).
- He invented the light bulb.
- He lost most of his hearing when he was 12 years old.
- In 1881, he received the 'French Legion of Honour' for his electric power system.
- In 1925, 50% of American households had power because of his inventions.
- In 1928, he was awarded a 'Congressional Gold Medal' for all of his work.



Key Vocabulary

Arctic and Antarctic Circle – the Arctic and Antarctic Circles are located at ± 66.5 degrees latitude

Atlas – a collection of maps of Earth or a region of Earth

Cartographer – a person who draws or produces maps

Circumference – the distance around the equator

Co-ordinates - enables every location on Earth to be specified by a set of numbers, letters or symbols

Direction – the point or region

Equator – an imaginary line around the middle of a planet, divides the planet into a Northern Hemisphere and a Southern Hemisphere

Four Cardinal Points – north, south, east, west

GPS – Global Positioning System

Hemisphere – half of a sphere; Northern Hemisphere, Southern Hemisphere

International Date Line – an imaginary line of demarcation on the surface of Earth that runs from the North Pole to the South Pole and demarcates the change of one calendar day to the next

Latitude - the north-south position of a point on the Earth's surface

Longitude - a geographic coordinate that specifies the east-west position of a point on the Earth's surface

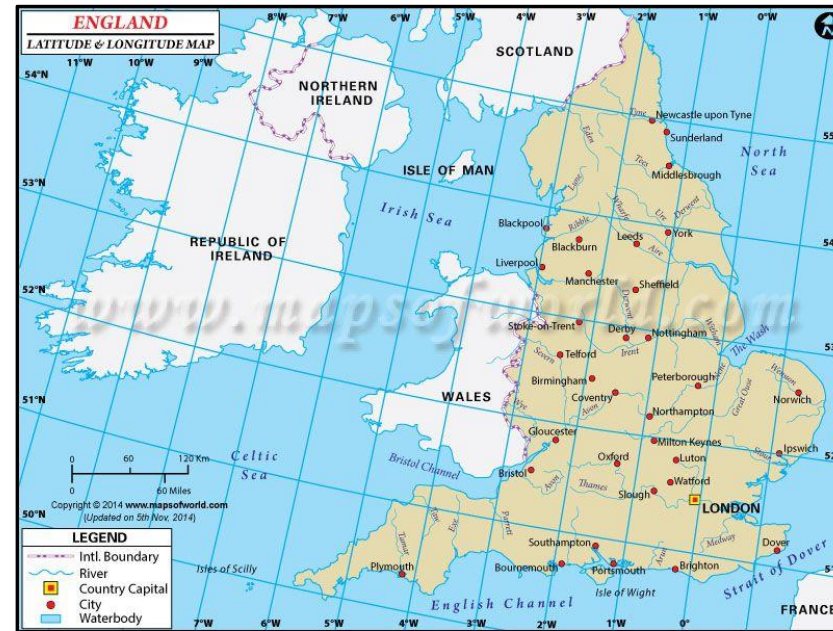
Map – a representation of an area of land or sea

Meridian – an imaginary line connecting the North Pole to the South Pole. Prime meridian is 0°

Ordnance Survey – the national mapping agency for Great Britain

Pole - the places on Earth's surface that Earth's imaginary spin axis passes through; North Pole, South Pole

Scale – the ratio of a distance on the map to the corresponding distance on the ground



Grid References

Give the latitude first (North/South), then longitude (East/West).

4 Figure Grid Reference

Give the nearest latitude and longitude position:

Pontrifact is Lat/Long: 54,-1 (54N, 1W).

6 Figure Grid Reference

The divisions between the lines of latitude and longitude are divided into 10 spaces to give more accurate positions.

Pontrifact is Lat/Long: 53.6,-1.3 (53.6N, 1.3W).

Greenwich Mean Time

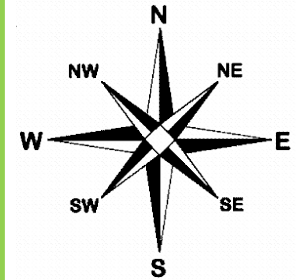
As the **prime meridian**, the north-south line at **Greenwich** is used as the reference for all other **meridians** of longitude, which are numbered east or west of it. The **Greenwich meridian** also serves as the basis for the world's standard time zone system.

Compass Points

North
 North east
 East
 South east
 South
 South west
 West
 North west

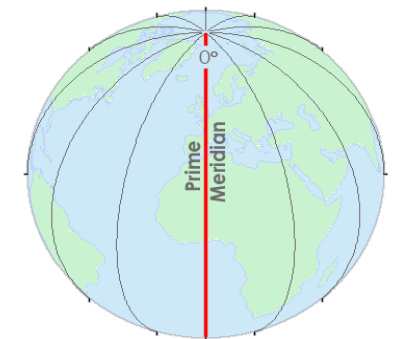
Turns

Quarter turn 90°
 Half turn 180°
 Three-quarters turn 270°
 Full turn 360°
 Clockwise
 Anti-clockwise



Key/Legend

A **map key** or **legend** is included with a **map** to unlock it. It gives you the information needed for the **map** to make sense. **Maps** often use symbols or colours to represent things, and the **map key** explains what they mean.



Key Vocabulary

- Police Force
- Public law
- Bobbie
- Peelers
- Truncheon
- Uniform
- Prison
- Prisoners
- Punishment
- Criminal
- Crime
- Labour
- Treadwheel
- Shot drill
- Picking oakum
- The crank
- Prevention
- Rules
- Rights
- Government
- Judge
- Jury
- Legal System
- Court
- Crown court
- Sentence
- Trial
- Guilt
- Evidence
- Innocence

Sir Robert Peel

Born 5th Feb 1788

Politician

Created the Metropolitan Police 29th September 1829

Created the terms 'Peelers' and 'Bobbies'

He became Prime Minister in 1841

Peel was badly injured after falling from his horse and died 2nd July 1850

Mary Hinnigan, an innocent-looking 13 year old, was given a week of hard labour for stealing iron.



Modern Day Police Force

There are 43 police forces in England and Wales. Ponterfract has the West Yorkshire Police to protect and serve them.

Their duties are to protect life and property, to keep peace and to detect and prevent crime.

The Metropolitan Police is the largest force in the UK and one of the biggest in the world.

Police in the UK have to patrol and respond to emergencies as quickly as possible.

London has the highest crime rate.

North Yorkshire has the lowest crime rate



Examples of Crimes in Victorian Times

Stealing

Pick pocketing

Causing a disturbance

Examples of Punishment

Prison

Hard Labour

Examples of Crimes Today

Robbery is the most reported crime in the UK.

Cyber crime

Fraud

Car theft/crime

Examples of Punishment

Prison

Suspended sentence

Community service

Fine

Criminal record



Computing

Children will start to understand the concept of animations and how they have developed over time. They will use their learning to apply it to key programmes that will support them creating their own animation.

D & T – burglar alarm

Children will design, create and evaluate a burglar alarm drawing on their scientific investigations.

Children will investigate different materials and their effectiveness in their design.

R.E

Children will understand the importance of prayer in different religions including: Christianity, Hinduism and Islam

MFL

Children will build on their prior knowledge and continue to use the skill of speaking and listening. During this half term, they will learn to speak about their family, pets and a variety of different foods.

Music – graphic scores

Children will understand graphics scores and create one for different instruments.in order to perform.

Operation Gadget man

History – crime and punishment

Children will be able to understand the history of crime and punishment between now and the Victorian times.

Children will debate about crime and punishment in the future.

Art – pencil techniques

Children are going to use different pencil techniques including cross hatching in order to create movement and facial expressions as well as a scene for operation gadget man

Science - Electricity

Children will be able to explore different electrical resources and appliances. They will be able to name the different components as well as their functions in simple, series and parallel circuits.

Children will construct, predict and test different circuits for their effectiveness

Children will be able to sort materials into electrical conductors and insulators.


Geography – maps and compass

Children will be able to name 8 compass points and use them to locate places and locations.

Children will use 4 and 6 figure grid references to locate key features of a landscape or country

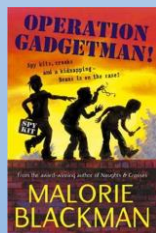
Children will create their own map with a key

Year 3/4 - Assessment Calendar 2019/20 (Cycle A)

	Maths		English		Science
	<u>Arithmetic</u>	<u>Reasoning</u>	<u>Reading</u>	<u>SpaG</u>	
Autumn 1	White Rose Maths Hub 2018	White Rose Maths Hub 2018	Cornerstones Autumn 2018	Twinkl Autumn 1 2019	Twinkl end of topic –Animals and humans (year 3 & 4)
Autumn 2	White Rose Maths Hub 2019	White Rose Maths Hub 2019	Cornerstones Autumn 2019	Twinkl Autumn 2 2019	Twinkl end of topic – Electricity (year 4)
Spring 1	White Rose Maths Hub 2018	White Rose Maths Hub 2018	Cornerstones Spring 2018	Twinkl Spring 1 2020	Twinkl end of topic –Plants (year 3)
Spring 2	White Rose Maths Hub 2019	White Rose Maths Hub 2019	Cornerstones Spring 2019	Twinkl Spring 2 2020	Twinkl end of topic –States of matter (year 4)
Summer 1	White Rose Maths Hub 2018	White Rose Maths Hub 2018	Cornerstones Summer 2018	Twinkl Summer 1 2020	Twinkl end of topic –Sound (year 4)
Summer 2	White Rose Maths Hub 2019	White Rose Maths Hub 2019	Cornerstones Summer 2019	Twinkl Summer 2 2020	Twinkl end of topic – Living things (year 4)

Thematic Mind Mapping – National Curriculum Statements

TEXT – Operation Gadgetman



History / Geography

Geography - use the eight points of a compass, four and six-figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world.

Other Foundation Subjects

ICT- Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

Music- Produce a graphic score

PSHCE- Safety

-To differentiate between the terms risk, danger and hazard.

-To recognise, predict and assess risk in different situations and decide how to manage them responsibly including road safety.

-To recognise how their increasing independence brings increased responsibility to keep themselves and others safe.

RE- Wakefield curriculum

Science

Electricity

Identify common appliances that run on electricity.

Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers

Identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery

Recognise that a switch opens and closes a circuit and associate this with whether a lamp lights in a simple series circuit

Recognise some common conductors and insulators, and associate metals with being good conductors.

English

Mystery/ detective (fiction)

Riddle (code breaking)

Art / DT

Printing- rubbings (prints – DNA, fingerprints.) – improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials [for example, pencil, charcoal, paint, clay]

D & T- Electrical systems – product to include series circuits including switches, bulb, buzzers & motor (linked to electricity science topic)

Experiences

Police talk

Ripon Museum – Crime and Punishment