



# Birchfield PRIMARY SCHOOL

## Year 2 Curriculum Overview Term 1.1

### Teaching Team:

**Year Group Leader:** Miss Nguyen

**Class Teachers:** Miss Naz and Miss Mazhar

**Teaching Assistant:** Mrs Khan

**SLT:** Mrs Sperrin

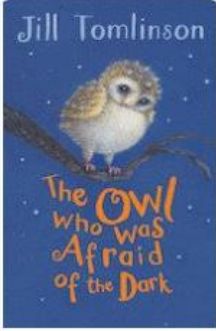
**PE:** PE lessons are on Monday and Wednesday.

On these days, children must be wearing their P.E kits. This includes a white t-shirt, black bottoms and trainers. No jewellery is to be worn on PE days; parents must remove this before bringing their child to school on these days.

**Homework:** Workbooks and reading books must be returned to school by Wednesday.

**Reading books are given to children every Monday. The children will need to bring their books into school on a daily basis.**

**Please see below an overview of the main themes, knowledge, and skills we will be covering this half term.**

Enquiry Question	<b><u>“Can anyone change the world?”</u></b>
Significant People	Florence Nightingale Mary Seacole Samuel Pepys Christopher Wren
Class Texts	<p><b><u>Title: The Owl Who Was Afraid of the Dark</u></b>  <b><u>Author: Jill Tomlinson</u></b>  Themes: Relationships, adventure, and curiosity. love/relationships, bravery, fear, resilience and determination.</p> 
Reading	<p><b>Domain:</b> 1b – Identify and explain key aspects of fiction and non-fiction texts such as characters, events, title and information.  <b>Test technique:</b> Tick box – 1,2,3 – literal / inference.  In Reading we will be focussing on our comprehension skills, and we will explore the themes from the book. We will focus on looking at the choice of language used and the intended effect on the audience.</p>
Writing	<p>This half term, we will be developing our written skills through narrative writing focussing on description. We will be using capital letters and full stops as well as focusing on the use of descriptive language and specifically thinking about word choice to create the desired effect.</p>
Maths	<p><b>Place Value-</b>  This half term, children will revisit learning from Year 1 on numbers to 20. They will focus on independently writing numerals as words and vice versa. Children will then revisit their earlier learning on numbers to 100. They will count objects to 100 by making tens. After, children will begin to recognise tens and ones and start to partition numbers within 100 using a place value chart and part whole models. Children will then learn how to write numbers to 100 in words and numerals. At the end of this unit, children will compare numbers in a more abstract way. The language of “greater than”, “less than” and “equal to” will be used alongside the inequality symbols <math>&lt;</math> <math>&gt;</math> <math>=</math>. Children will use their knowledge of comparing both objects and numbers to help them order objects and numbers. Children will also use their knowledge of counting in multiples of 10 to label number lines to 100. Finally, children will learn how to count both forwards and backwards in 2s, 5s and 10s.</p> <p><b>Addition and Subtraction-</b>  First, children will revisit and consolidate learning on number bonds to 10, with a specific focus on number bonds to 10. Children will then explore number bonds to and within 20. Children will learn how to use their knowledge of number bonds within 10 to identify related facts for both addition and subtraction calculations. Children will build on their previous learning of number bonds to 10 and related facts to find bonds to 100. Then, children will learn how to add and subtract 1's and use their knowledge of number bonds to 10 to add numbers within 20. Children</p>

	<p>will learn how to add three 1-digit numbers using cg concrete resources such as counters with tens framers or a Rekenrek. Later, children will use the column method to add and subtract two 2-digit numbers. Finally, children will use their knowledge of place value and addition and subtraction to find missing numbers in calculations.</p> <p><b>Arithmetic:</b> This half term, the children will be introduced to the rekenrek. They will use it regularly to develop their understanding of numbers within 20 and the relationships between them. The rekenreks will also develop the children's fluency. The children will also revisit subitising (saying 'how many' without counting) using simple dot patterns and be introduced to 'making 5' using the rekeknrek and a key stem sentence.</p>
History	<p>In history, we will be exploring the life of Florence Nightingale and how hospitals have changed because of her work. We will also be learning about Mary Seacole who was a Jamaican Nurse during the Crimean War. She built the British Hotel to care for the injured soldiers by providing fresh food and selling medication. We will then compare these significant individuals to Samuel Pepys and Christopher Wren and the impact they have had on today's world.</p>
Science	<p>This half term, we will be exploring the basic needs of humans for survival, including the importance of exercise, nutrition and good hygiene. We will learn how human offspring grow and change over time into adulthood.</p> <p>We will also be learning about habitats and what a habitat needs to provide.</p>
Art	<p>In art, children will explore the work of significant still life artists and still life techniques. They will explore a wide variety of still life's and learn about the use of colour and composition. They will then create still life arrangements and artwork.</p>
Music	<p>In music, we will be learning to play the recorder. We will learn how to hold the recorder correctly and stand in the correct position, to breathe at the correct time when playing and play in time and in tune. We will also learn the names of the notes played and begin to understand how to read a stave and other relevant notations.</p>
Computing	<p>This half term, we will develop our understanding of what information technology (IT) is and will begin to identify examples. We will discuss where we have seen IT in school and beyond, in settings such as shops, hospitals, and libraries. We will then investigate how IT improves our world and learn about the importance of using IT responsibly.</p>
PSHE	<p>In PSHE, we will be exploring the question, 'What is the same and different about us?' We will be learning about ourselves and others; similarities and differences; individuality and our bodies. We will be discussing how our personal features or qualities are unique to us and how we are similar or different to others, and what we have in common. Children will then learn how to show respect to one another.</p>

RE	<p>In RE, we will be discussing the importance of living by rules and self-discipline. We will also be thinking about the differences between right and wrong and the choices we make.</p> <p>This half term, we will be exploring our school value 'Determination'. We will reflect on what this is, who in our lives shows determination, and how we can demonstrate determination.</p>
PE	<p><b>Teambuilding-</b>  In this unit, children will develop their teamwork skills. They will develop key skills of communication and problem solving. Children will also learn to discuss, plan and reflect on ideas and strategies. They will then lead a partner whilst considering safety. Children will have the opportunity to show honesty and fair play and begin to use basic map skills.</p> <p><b>Fundamentals-</b>  In this unit, children will develop the fundamental skills of balancing, running, changing direction, jumping, hopping and skipping. They will be given opportunities to work with a range of different equipment. Children will also be asked to observe and recognise improvements for their own and others' skills and identify areas of strength. Children will then be given the opportunity to work collaboratively with others, taking turns and sharing ideas.</p>

# Knowledge Organisers: Enquiry

## Can anyone change the world?

Key Vocabulary	Definition
Nurse	A person trained to look after people who are ill or injured.
Clerk	a person employed in an office or bank to keep records, accounts, and undertake other routine administrative duties
Change	make (someone or something) different; alter or modify
Historical source	Books, paintings, buildings, diaries and artefacts that help us find out about the past.
Impact	To go on doing something even though it is difficult.
Diary	A book with pages for each day of the year in which to write personal events.
Monument/Memorial	A landmark or structure made to remember people or an event.
Architect	Someone who creates designs for new construction developments.
Significant individual	Someone who is remembered for making a change and contributing to developments or achievements in society.
Training	Give a person instruction or practice so that he or she becomes skilled.
Royal Red Cross	A military decoration awarded in the UK and Commonwealth for exceptional services in military nursing.
Revolutionised	To make a great change in something.
Dawson's Model	is a set of five statements that help historians to decide if a person is historically significant.

### Dawson's Model

A person is historically significant if their actions match most of these statements:

- They made big changes in their lifetime.
- They made a lot of people's lives better or worse.
- They changed the way people think.
- Their ideas are still used today.
- They were a very good or very bad role model.

### People and Places



**Florence Nightingale**  
The woman that revolutionised the nursing profession.



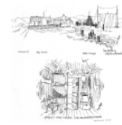
**Mary Seacole**  
A British-Jamaican woman who set up the "British Hotel" during the Crimean War.



**Crimea**  
The location of the war, placed in Ukraine.



**Seacole Memorial**  
A statue of Mary at St. Thomas' Hospital, London.



**British Hotel**  
Set up by Mary Seacole. Located next to the battlefield to help injured soldiers.



**Samuel Pepys**  
A man who recorded the events of the fire in his diary.



**Sir Christopher Wren**  
A man who rebuilt London after the fire.



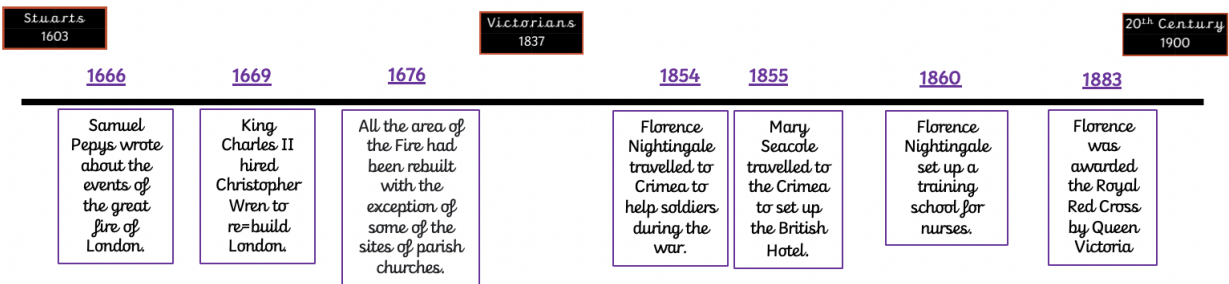
**London**  
Capital of United Kingdom and city where the fire took place.



**Great Fire of London Monument**  
Monument to remember The Great Fire.

### Timelines

A timeline can be used to put important dates and events in chronological order. The numbers are dates that tell you when an event happened.



### Florence Nightingale's impact

Before Florence	After Florence
Dirty	Clean/hygienic
Patient given mouldy food	Patient given fresh, nutritional food
Hospitals had no beds or privacy	Patients have beds and curtains to provide privacy.
Smelly	Nurses wash their hands regularly
Only doctors could care for patients	Nurses could care for patients
Nurses were used to clean	Nurses were trained

### Mary Seacole's impact

When she arrived in the Crimea, she set up the British Hotel with her husband's relative, Tom Day. The hotel was located near the battlefield so she could respond quickly to the injured soldiers and therefore saved more lives. The soldiers used to call her Mother Seacole because of her caring nature. The Mary Seacole Award was created in Mary's honour. It recognises people for their outstanding work in the black and ethnic minority (BME) community. It gives money to health care projects that help and improve the health of people from BME communities.

### Samuel Pepys' impact

Samuel Pepys was a clerk and a very good writer. He was an eye-witness during The Great Fire of London and wrote down what he saw in his diary. This diary he still well preserved and it has taught us what happened during the fire. This is called a primary source because Pepys was there and saw it with his very own eyes! As there were no cameras in 1666 we rely a lot on what is written to know about the past. Without Samuel Pepys, this event may have been lost throughout history. Also, Samuel Pepys was the person who advised King Charles II to pull down the houses to create a fire break as the fire was spreading rapidly due to them being made out of wood. Without this advice, there may have been more damage to the city and more people losing the houses and businesses.

### Sir Christopher Wren's impact

The Great Fire destroyed 13,200 houses and 87 churches. Sir Christopher Wren was responsible for re-building London after the fire. Before the fire, wood, hay and pitch were used to build houses. He understood that these materials were highly flammable and a reason why the fire spread so quickly. When designing the new houses, he changed the material to brick to prevent an event happening like 1666 again. He was also famous for the re-design of St. Paul's Cathedral which was also destroyed by the fire. Christopher Wren also designed the monument in London for people to remember what happened. It is still in London today! Wren also created many inventions that are used today for example, improvements to the telescope and microscope, as well as experimenting with injecting fluids into the veins of animals, laying the groundwork for successful blood transfusion



# Knowledge Organisers: Science

## Human Survival

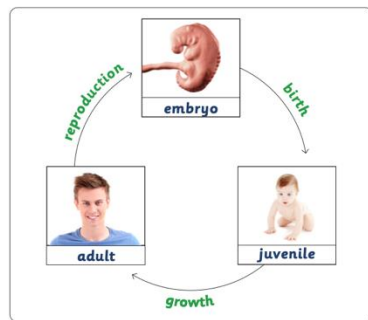
### Stages of human life

All humans are born and they grow and change over time to become an adult. At the end of their lives, all humans die. We can show the six stages of life as a timeline.

baby   toddler   child   teenager   adult   elderly

### Human life cycle

A human life cycle is different from a timeline because it is a circular diagram. It starts when a baby is an embryo inside the female's body. Following birth it is a juvenile. It grows over time to become an adult. An adult is a fully grown human and can reproduce and have offspring of its own, starting the life cycle again.



## Human needs

Humans need different things to keep them alive and healthy. Without one or more of these things, we cannot survive. The most important human needs are:



food



water



air



shelter



space



sleep

## Nutrition and hydration

To stay healthy, humans need a balanced diet, plenty of water, exercise and enough sleep. To eat healthily, we must eat the right amounts of food from all five main food groups. This is called a balanced diet. These are the five main food groups:

Food group	Portions
fruit and vegetables	5+
carbohydrates	3-4
proteins	2-3
dairy and alternatives	2-3
oils and spreads	1

The Eatwell guide shows which food is in each group and how much of each type of food we should eat each day. Sugary and fatty foods are not needed for a balanced diet.



We should also drink six to eight glasses of water every day to stay hydrated. Water carries the nutrients from food around our bodies and helps us to concentrate.

## Exercise

Regular exercise keeps our bodies strong and healthy. It also improves our mood. We should exercise for one hour every day. There are four main types of exercise:

**Aerobic** exercises like running make the heart beat faster to keep it healthy for pumping blood around the body.



**Strengthening** exercises like push-ups make our bones and muscles stronger and helps our balance.



**Stretching** exercises like the cobra stretch make our bodies more flexible, to help prevent sprains and injuries.



**Balancing** exercises like gymnastics improve our balance and coordination. This makes us less likely to fall and improves our sporting performance.



## Bodily hygiene

Bodily hygiene is the way we keep our bodies clean and get rid of germs. Germs are tiny living things, such as bacteria, that can cause illness in humans. There are germs on most surfaces we touch, so keeping ourselves clean helps us stay healthy.

Wash your hands with soap and running water frequently.



Brush your teeth twice a day.



Wipe your bottom and wash your hands after using the toilet.



Have a bath or shower at least twice a week and also after playing sport or getting dirty.



Wash your hair with shampoo at least once or twice a week.



Trim your fingernails and toenails every week and clean them every day.



Wear clean clothes. Change your underwear and socks every day.



Cough and sneeze into a tissue before throwing it in the bin and then washing your hands.



## How germs spread

Germs can spread onto our hands and surfaces we touch. Sneezing, coughing, using the toilet, handling pets and dirt from playing outside can all spread germs. Washing with soap and water removes germs.



## Glossary

**carbohydrates** A food group containing nutrients that gives the body energy, such as wheat and potatoes.

**juvenile** A stage in the life cycle of animals. In humans, it includes the baby, toddler, child and teenager stages.

**proteins** A food group containing nutrients that helps build muscle, such as meat or beans.

# Knowledge Organisers: Maths

## Maths Knowledge Organiser – Place Value

### Topic Coverage

#### Place Value

- Read and write numbers to at least 100 in numerals and words.
- Recognise the place value of each digit in a two digit number (tens, ones).
- Identify and represent and estimate numbers.
- Compare and order numbers from 0-100, use inequality signs.
- Count in steps of 2, 3, 5 from 0 and in tens from any given number, forwards and backwards.

### Key Vocabulary

Place value	The value represented by a digit.
Tens	10 ones.
Ones	Value of 1.
Digit	A number
Inequality symbol	Symbols used when comparing numbers (< > +).
Greater than	A number that is bigger than another.
Less than	A number that is smaller than another.
Equal	When two numbers are the same value.

#### Read and write numbers to at least 100 in numerals and words.

1	2	3	4	5	6	7	8	9	10
one	two	three	four	five	six	seven	eight	nine	ten
11	12	13	14	15	16	17	18	19	20
eleven	twelve	thirteen	fourteen	fifteen	sixteen	seventeen	eighteen	nineteen	twenty
21	22	23	24	25	26	27	28	29	30
twenty-one	twenty-two	twenty-three	twenty-four	twenty-five	twenty-six	twenty-seven	twenty-eight	twenty-nine	thirty
31	32	33	34	35	36	37	38	39	40
thirty-one	thirty-two	thirty-three	thirty-four	thirty-five	thirty-six	thirty-seven	thirty-eight	thirty-nine	forty
41	42	43	44	45	46	47	48	49	50
forty-one	forty-two	forty-three	forty-four	forty-five	forty-six	forty-seven	forty-eight	forty-nine	fifty
51	52	53	54	55	56	57	58	59	60
fifty-one	fifty-two	fifty-three	fifty-four	fifty-five	fifty-six	fifty-seven	fifty-eight	fifty-nine	sixty
61	62	63	64	65	66	67	68	69	70
sixty-one	sixty-two	sixty-three	sixty-four	sixty-five	sixty-six	sixty-seven	sixty-eight	sixty-nine	seventy
71	72	73	74	75	76	77	78	79	80
seventy-one	seventy-two	seventy-three	seventy-four	seventy-five	seventy-six	seventy-seven	seventy-eight	seventy-nine	eighty
81	82	83	84	85	86	87	88	89	90
eighty-one	eighty-two	eighty-three	eighty-four	eighty-five	eighty-six	eighty-seven	eighty-eight	eighty-nine	ninety
91	92	93	94	95	96	97	98	99	100
ninety-one	ninety-two	ninety-three	ninety-four	ninety-five	ninety-six	ninety-seven	ninety-eight	ninety-nine	one hundred

#### Compare and order numbers from 0-100, use inequality signs.

Inequality symbols help compare the value of numbers. Here are the symbols below:



Greater than      Less than



Equal

$$34 < 66$$

34 is less than 66 because it has less tens.

$$98 > 12$$

98 is greater than 12 because it has more tens.

$$30 = 30$$

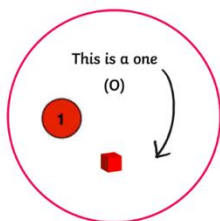
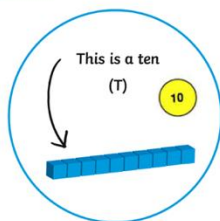
30 is equal to 30 because they are the same number.

$$68 > 64$$

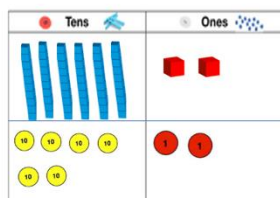
68 is greater than 64 because even though they have the same number of tens, it has more ones.

#### Recognise the place value of each digit in a two digit number (tens, ones).

A 2 digit number means that it contains 2 numbers such as 45, 67 and 88. 2 digit numbers contain tens and ones.



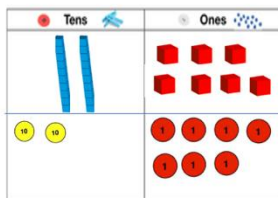
62 - 6 tens and 2 ones



6

2

27 - 2 tens and 7 ones



2

7

#### Count in steps of 2, 3, 5 from 0 and in tens from any given number, forwards and backwards.

##### Counting in 2s



##### Counting in 3s



##### Counting in 5s



##### Counting 10s



# Maths Knowledge Organiser – Addition & Subtraction


## Topic Coverage

### Addition & Subtraction

- Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts to 100.
- Add and subtract using concrete objects, pictorially and mentally, including 2 digit numbers and ones, a two digit number and tens, two two digits numbers, adding 3 digit numbers.
- Develop understanding of how two numbers can be added in any order (commutative) and subtraction of one number cannot.
- Solve problems with addition and subtraction (with concrete objects, pictorially).
- Recognise and use the inverse relationship between addition and subtraction.

### Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts to 100.

### Rainbow to 20




$0 + 20 = 20$	$10 + 10 = 20$
$1 + 19 = 20$	$11 + 9 = 20$
$2 + 18 = 20$	$12 + 8 = 20$
$3 + 17 = 20$	$13 + 7 = 20$
$4 + 16 = 20$	$14 + 6 = 20$
$5 + 15 = 20$	$15 + 5 = 20$
$6 + 14 = 20$	$16 + 4 = 20$
$7 + 13 = 20$	$17 + 3 = 20$
$8 + 12 = 20$	$18 + 2 = 20$
$9 + 11 = 20$	$19 + 1 = 20$

#### Related facts


- If  $2 + 7 = 9$   
Then  $20 + 70 = 90$
- If  $4 + 6 = 10$   
Then  $40 + 60 = 100$
- If  $1 + 5 = 6$   
Then  $10 + 50 = 60$
- If  $3 + 5 = 8$   
Then  $30 + 50 = 80$
- If  $2 + 1 = 3$   
Then  $20 + 10 = 30$
- If  $2 + 2 = 4$   
Then  $20 + 20 = 40$
- If  $3 + 2 = 5$   
Then  $30 + 20 = 50$

### Adding 3 numbers

$9 + 5 + 3 = 17$




$4 + 5 + 9 = 18$



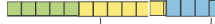
When adding 3 numbers always look for number bonds to make it easier.

$3 + 2 + 7 = 12$



$3 + 7 = 10$  &  $10 + 2 = 12$

$5 + 6 + 4 = 15$



$6 + 4 = 10$  &  $10 + 5 = 15$

Remember your number bonds!

### Commutative Law

Addition can be solved in ANY order. You are able to swap the numbers around.

Examples:

- $5 + 9 = 14$   
 $9 + 5 = 14$
- $7 + 8 = 15$   
 $8 + 7 = 15$
- $2 + 7 = 9$   
 $7 + 2 = 9$
- $9 + 1 = 10$   
 $1 + 9 = 10$
- $4 + 3 = 7$   
 $3 + 4 = 7$

## Key Vocabulary

Add	To bring 2 or more numbers together to make a new total.
Plus	
Sum	The calculation/number sentence of 2 or more numbers.
Solve	To find a solution (to work out something)
Altogether	
Total	The answer of adding numbers.
Subtract	
Minus	Finding the difference between numbers. (What is left)
Take away	
Difference between	
Inverse operation	The opposite operation (inverse of + is - and inverse of - is +).
Column addition	Writing one number below another and then adding one column at a time.
Column subtraction	Writing one number below another and then subtracting one column at a time.
Number facts	Simple calculations with 2 numbers (number bonds/fact families)
Commutative	Solving a number sentence in any order (only with addition e.g. $3+7 = 10$ and $7+3=10$ ).



## Home Learning and Useful Links:

This half term our school value will be '**Determination**'. Please discuss what this means with your child.

Please talk to your children about the Knowledge Organisers and the key information and vocabulary.

Please ensure that your child reads to an adult at home every day. We would like an adult to make a comment in the reading diary. Please return the reading books by **Wednesday** so they can be changed.

- Research the Crimean War and who was involved.
- Read information books and use the internet to research Mary Seacole to create a project on her (Who is she? What did she do? How did she demonstrate determination?)
- Create a diorama of a street in present day to describe the impact Christopher Wren had after the Great Fire.

### **Maths interactive games-**

<https://www.topmarks.co.uk/maths-games/hit-the-button>

<https://www.ictgames.com/mobilePage/hundredSq/index.html>

<https://play.trockstars.com/auth> - Timetables Rockstars

### **Phonics interactive games-**

<https://www.phonicsplay.co.uk/>

<https://www.topmarks.co.uk/Search.aspx?q=phonics%20games%20year%201>

<https://www.oxfordowl.co.uk/please-log-in> - Oxford Reading Tree

<https://www.spellingshed.com/en-gb/> - Spelling Shed