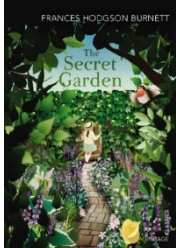




**Birchfield**  
PRIMARY SCHOOL

Year 5 Curriculum Overview  
Term 2.2

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

|                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Enquiry Question   | What is the importance of agriculture in the United Kingdom?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Significant People | Abdul Karim (Linked to the value of ambition)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Class Texts        | <p>The Secret Garden by Frances Hodgson Burnett</p> <p><b>Themes: Friendship, happiness. Nature, self-awareness, secrets, childhood and belief and class differences</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Reading            | <p>2a: Give/explain the meaning of words in context</p> <p>2b: Retrieve and record information/identify key details from fiction and non-fiction</p> <p>2d: Make inferences from the text / explain and justify inferences with evidence from the text.</p> <p>2e: Predict what might happen from details stated and implied</p> <p>2c: Summarise main ideas from more than one paragraph.</p> <p>This half term, Year 5 will focus on enhancing their reading comprehension and analytical skills. They will start by explaining words in context to enhance their understanding of the text.</p> <p>Following this, children will move onto their retrieval skills further assessing their understanding of the text.</p> <p>After retrieving, students will develop their inference skills by justifying their interpretations</p> |

|         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|         | <p>using relevant information from the text. They will practice the Point, Evidence (P.E) method to construct well-supported responses.</p> <p>Year 5 will end this term by summarising various texts, which helps improve their memory retention and ensures they understand the main ideas by recalling the most critical elements of the text.</p>                                                                                                                                                                                                                                                                                                  |
| Writing | <p>This half term, children will explore various genres, enhancing their understanding of purpose and audience while applying relevant skills. They will analyse the organizational and language features of newspaper reports, and then compose their own articles, incorporating the 5Ws (who, what, where, when, why), structured paragraphs, headlines, bylines, as well as pictures and captions.</p> <p>Following this, Year 5 will focus on informative writing by creating non-chronological reports. Students will learn to integrate appropriate language and organizational elements to produce well-structured and informative pieces.</p> |
| Maths   | <p>This term Year 5 will begin to focus on decimals and percentages. Children will learn about how decimals are represented, ordering and comparing decimals, rounding decimals and decimals in relation to percentages. Children will be learning formal methods for rounding and using their understanding in a variety of ways. Children will then move onto perimeter and area and calculating these using shapes.</p> <p>In Year 5, children will then move onto statistics. They will learn to draw a line graph, read and interpret data from a line graph, gather information and interpret information.</p>                                   |

|         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|         | <p>Additionally, children will practice reading and interpreting a timetable to find specific information.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| History | <p>During History this term, children will be researching 'Birmingham and the Industrial Revolution'. In this unit, pupils will learn essential historical vocabulary like "industry" and "revolution," place the Industrial Revolution within a historical timeline, and understand its transformative impact on society. They will explore the development of factories and advancements in transportation, and describe the effects on Birmingham, such as jobs, lifestyle, migration, and pollution.</p> <p>Additionally, pupils will identify different interpretations of events during the Industrial Revolution, recognise bias in sources, and evaluate the reliability of information. They will explain different viewpoints and present their historical findings clearly, using key vocabulary and articulating the impact of the Industrial Revolution on Birmingham.</p> |
| Science | <p>During this unit of work, children will learn that the Earth is part of the solar system and that the Sun is at the centre of that system. They will learn the names of the other planets (based on their distance from the Sun) and be able to describe the movement of Earth (and other planets) in relation to the Sun. Children will discover why there is day and night on Earth and relate this to time. They will plan an investigation to answer the question - what happens to the Sun during the daytime?</p> <p>Children will also gain an understanding of the phases of the Moon and be able to describe the Moon's movement in relation to the Earth.</p>                                                                                                                                                                                                              |
| DT      | <p>In this unit, pupils will gain a comprehensive understanding of how various mechanisms</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

|           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|           | <p>create movement and their practical applications in everyday life. They will learn to identify a range of mechanisms, explain their input and output systems, and explore the main changes that occurred during the Industrial Revolution. Pupils will also delve into pulley systems, creating models with one or more pulleys, comparing their functionality, and understanding their use in designs. Additionally, they will create a design brief, identify the intended use and purpose of their product, and construct a strong structure that incorporates a pulley mechanism.</p> <p>Finally, pupils will evaluate their product by testing it, identifying strengths and areas for improvement, and considering the views of others to enhance their work.</p>                                          |
| Music     | <p>For our music lessons this term, the children will continue their keyboard lessons – that they started last half term. The children will be taught by Miss Callagan.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Computing | <p>This unit delves into the practical applications of flat-file databases for organising data within records. Students will explore the fundamental concepts of databases and learn to utilise various tools within the database to efficiently order data and respond to data-related inquiries. By engaging with these tools, learners will develop the skills to create and interpret graphs and charts derived from their data, aiding them in visualising and solving complex problems.</p> <p>In addition, the unit includes a hands-on component where students will interact with a real-life database to investigate and answer a specific question. This unit will not only enhance their understanding of database functionality, but also provide them with practical experience in data analysis.</p> |

|      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RE   | In RE, the topic is 'participating and willing to lead' and 'being modest and listening to others. Children will be exploring how different religions show willingness to lead and why being modest and listening to others is important.                                                                                                                                                                                                                                                                                                                                                                                          |
| PSHE | Our unit this half term is called 'How can friends communicate safely?' This unit looks at how children can communicate safely to build respectful relationships. Children will learn about online relationships and how to stay safe online (link to computing).                                                                                                                                                                                                                                                                                                                                                                  |
| PE   | This half term the children will be taking part in yoga, volleyball and football. In yoga children will learn about mindfulness and body awareness. They will learn yoga poses and techniques that will help them to connect their mind and body. In volleyball, the children will develop their understanding of the principles of net and wall games. They will think about how they use their skills, strategies and tactics to outwit the opposition. They will learn the skills, rules and different positions. In football, the children will learn about communication, co-operation and the skills and rules of the sport. |

Teaching Team:

Miss Rehman, Miss Nur, Miss Levy, Mrs Patel, and Mrs Sayed

SLT: Mr Mazar

## PE Day: Tuesday

Homework: Homework is set on Friday and returned by Wednesday.

### Home Learning and Useful Links:

#### **Homework Books**

At the end of each week, your child will return home with their homework books in both English and Maths. They will be given two pages to complete based on the learning they have completed that week or the learning they will be doing the following week.

Please encourage your child to complete these to the best of their ability and return to school by Wednesday for them to be marked and any issues to be addressed.

#### **Spellings**

These are words your child will be using daily and will need to be familiar with. We will also be sending home words with your children that are key in Year 5 and 6.

Please encourage your child to practise their spellings at the weekend and across the course of the week, as they will be tested on these at the end of each week.

#### **Reading:**

At the end of each week, your child will also come home with a reading book.

Please encourage your child to read this book regularly and listen to them read when you can.

Within their reading diary, we ask that you please make a comment on how your child has read, whether they are enjoying their book or even any questions you may have asked them and discussed about their story.

Both the reading book and reading diary need to be returned to school by Wednesday.

# The Secret Garden

A spoilt, 10-year-old girl called Mary Lennox is orphaned by an outbreak of cholera and sent to live with her reclusive uncle, Archibald Craven, at Misselthwaite Manor in Yorkshire. Liking no one and no one liking her, Mary is left to her own devices. One day, she hears about a secret garden somewhere on the property that nobody is allowed to enter. When Mary finds the key to the garden, it's like entering a secret world.

## Author

Frances Hodgson Burnett was born in Manchester, in 1849, into a wealthy family. When her father died, the family ran into financial difficulties. At the age of 15, Burnett and her family moved to New Market, a town in Tennessee, United States of America. Burnett was a keen reader and writer from an early age. Her first book was published when she was 17. Some of her most popular novels include *Little Lord Fauntleroy* (1885), *A Little Princess* (1905) and *The Secret Garden* (1911).



Frances Hodgson Burnett

## Historical context

*The Secret Garden* was written during the Edwardian era (the time when King Edward VII ruled England). The beginning of the book is set in India, which was part of the British Empire at the time. In the 19th century, cholera caused more deaths than any other disease. Hundreds of thousands of people across the world died during the cholera pandemic between 1881 and 1896.

## Characters

### Mary Lennox

At the start of the novel, Mary is spoilt, demanding and unwanted. In India, her parents spent little time with her and she always got her own way. When Mary is first sent to England, she thinks she is going to hate the place and the people. Slowly, Mary is transformed by the people she meets and the secret garden. By the end of the novel, she is a very different character.

### Dickon Sowerby

Dickon seems to be liked and trusted by the other characters in the book. A friend to animals and children alike, Dickon is always on the moors and is very connected to nature. Dickon has a strong influence on Mary.

### Colin Craven

Colin is the child of Archibald Craven and he had a similar start in life to Mary. At the beginning of the book, he is sickly and spoilt. He hardly leaves his bedroom and never breathes fresh air. Colin is another character who goes through a dramatic change during the course of the book.

### Archibald Craven

Archibald Craven is the owner of Misselthwaite Manor. He is Colin's father and Mary's uncle. Like Mary's parents, he doesn't see much of his son at the beginning of the novel. Instead, he spends most of his time travelling to distract himself from a tragic event that happened to him.

## Themes

- change
- grief
- loneliness
- recovery
- self-belief
- trust

## Settings

### India

India is a stiflingly hot place where Mary lives at the beginning of the novel. The lifestyle and customs that she experiences in India are very different from Misselthwaite Manor. In India, she treated servants very poorly, beating and kicking them without being punished.



### Misselthwaite Manor

Described using language that emphasises its size, the manor is filled with objects, furniture, pictures and tapestries that highlight Archibald Craven's wealth. Despite its amount of possessions, Misselthwaite Manor lacks warmth.



### The Secret Garden

The garden is a mysterious place that Archibald Craven has forbidden everyone at the manor from visiting. When Mary finds the garden, it gradually changes her character, health and outlook on life. It also has an impact on other characters.



## Story timeline

These are some of the key chapters in the novel. When you read the chapters, use the questions as starting points for discussion.

### Chapter 2

Several characters are introduced at the start of the book. What are your first impressions of Mary?

---

### Chapter 6

Mary explores the manor and finds that it is a quiet, lonely place. What mystery does Mary want to solve?

---

### Chapter 8–9

Mary makes an exciting discovery. How is the new location described?

---

### Chapter 13

Mary meets a mysterious character. How is he presented?

---

### Chapter 17

Mary confronts a character. What do you think of her behaviour?

---

### Chapter 22

Mary and Colin have changed since we first met them. How have they changed?

---

### Chapter 27

The master of the house returns. What do you think about the events in this chapter?

## Structure

The novel takes place over a year, following the seasons to show how the development of the children and the garden are entwined. The beginning of the story focuses on Mary but it ends with Colin. The third-person narrative allows the story to visit different characters and locations.

## Language

The author describes the house in terms of size. It is a *'huge rambling house'* with a *'massive door'*. Mary is contrasted as being *'very small'*. The author's vocabulary choices are reflective of the characters. Dickon is described in terms associated with nature, such as *'his eyes like a bit of the sky'*. Colin is described using language associated with gloom and illness, such as being *'ill and having to lie down'*. As Mary begins to enjoy life at the manor, lively verbs are used to capture her movements, such as *'scrambled'* and *'flew'*.

## Symbolism

The robin is presented as a gatekeeper to the garden. It helps Mary make a very important discovery. It reminds us that humans and animals are all part of nature.

The robins' eggs represent the importance of life, suggesting all living things are precious in nature.

Described in vivid detail, the secret garden is a symbol of life, rebirth and love.



## Literary terms

### alliteration

Starting more than one word with the same letter to draw the reader's attention to the text and make it flow, such as *'Between the blossoming branches of the canopy bits of blue sky looked down like wonderful eyes.'*

---

### metaphor

Describing something by comparing it to something that has similar characteristics but would usually be considered unrelated. For example, the roses *'had crept from one tree to another and made lovely bridges of themselves'*.

---

### pastoral

A pastoral novel is about the benefits of living in the countryside.

---

### personification

Giving human qualities to something non-human. For example, the wind *'rushed at [Mary's] face and roared and held her back as if it were some giant'*.

---

### simile

Comparing one thing to another, often using like or as. For example, *'the sun fell warm upon his face like a hand with a lovely touch'*.

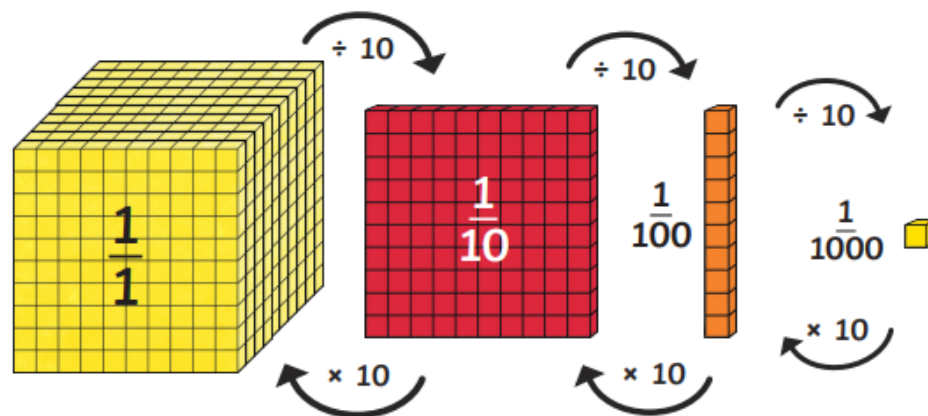
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### symbolism

Using a character, action, animal or object in a novel to represent qualities or ideas.

# Decimals

| Key Vocabulary      | Tenths, Hundredths and Thousandths                                                                                                                                                        |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| tenths              | $\frac{0}{10}$ $\frac{1}{10}$ $\frac{2}{10}$ $\frac{3}{10}$ $\frac{4}{10}$ $\frac{5}{10}$ $\frac{6}{10}$ $\frac{7}{10}$ $\frac{8}{10}$ $\frac{9}{10}$ $\frac{10}{10}$                     |
| hundredths          |                                                                                                                                                                                           |
| decimal tenths      | $\frac{0}{100}$ $\frac{1}{100}$ $\frac{2}{100}$ $\frac{3}{100}$ $\frac{4}{100}$ $\frac{5}{100}$ $\frac{6}{100}$ $\frac{7}{100}$ $\frac{8}{100}$ $\frac{9}{100}$ $\frac{1}{10}$            |
| decimal hundredths  |                                                                                                                                                                                           |
| decimal equivalents | $\frac{0}{1000}$ $\frac{1}{1000}$ $\frac{2}{1000}$ $\frac{3}{1000}$ $\frac{4}{1000}$ $\frac{5}{1000}$ $\frac{6}{1000}$ $\frac{7}{1000}$ $\frac{8}{1000}$ $\frac{9}{1000}$ $\frac{1}{100}$ |
| part-whole model    | $\frac{0}{1000}$ $\frac{1}{1000}$ $\frac{2}{1000}$ $\frac{3}{1000}$ $\frac{4}{1000}$ $\frac{5}{1000}$ $\frac{6}{1000}$ $\frac{7}{1000}$ $\frac{8}{1000}$ $\frac{9}{1000}$ $\frac{1}{100}$ |
| rounding            |                                                                                                                                                                                           |
| decimal point       |                                                                                                                                                                                           |
| place value         |                                                                                                                                                                                           |



## Knowledge Organiser

### Order and Compare Numbers with Three Decimal Places

| Ones | Tenths                           | Hundredths      | Thousandths                          |
|------|----------------------------------|-----------------|--------------------------------------|
|      | $\frac{1}{10}$<br>$\frac{1}{10}$ | $\frac{1}{100}$ | $\frac{1}{1000}$<br>$\frac{1}{1000}$ |

0 . 2 1 3

| Ones | Tenths | Hundredths                         | Thousandths                          |
|------|--------|------------------------------------|--------------------------------------|
| 1    |        | $\frac{1}{100}$<br>$\frac{1}{100}$ | $\frac{1}{1000}$<br>$\frac{1}{1000}$ |

1 . 0 2 2

| Ones   | Tenths         | Hundredths | Thousandths                          |
|--------|----------------|------------|--------------------------------------|
| 1<br>1 | $\frac{1}{10}$ |            | $\frac{1}{1000}$<br>$\frac{1}{1000}$ |

2 . 1 0 3

### Decimal Numbers as Fractions

$$0.71 = \frac{71}{100} = \frac{7}{10} + \frac{1}{100}$$

$$0.37 = \frac{37}{100} = \frac{3}{10} + \frac{7}{100}$$

# Decimals

## Knowledge Organiser

### Multiplying and Dividing by 10, 100 and 1000

| Tens | Ones | Tenths | Hundredths | Thousandths |
|------|------|--------|------------|-------------|
| 3    | 8    |        |            |             |
|      | 3    | 8      |            |             |
| 3    | 8    |        |            |             |

$\div 10$  (arrow from 8 to 3)  
 $\times 10$  (arrow from 3 to 8)

| Tens | Ones | Tenths | Hundredths | Thousandths |
|------|------|--------|------------|-------------|
| 3    | 8    |        |            |             |
|      | 0    | 3      | 8          |             |
| 3    | 8    |        |            |             |

$\div 100$  (arrow from 8 to 3)  
 $\times 100$  (arrow from 3 to 8)

| Tens | Ones | Tenths | Hundredths | Thousandths |
|------|------|--------|------------|-------------|
| 3    | 8    |        |            |             |
|      | 0    | 0      | 3          | 8           |
| 3    | 8    |        |            |             |

$\div 1000$  (arrow from 8 to 3)  
 $\times 1000$  (arrow from 3 to 8)

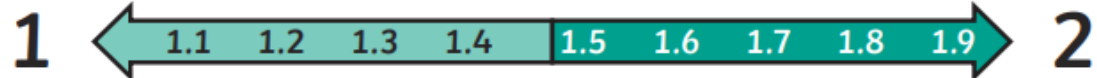
### Adding and Subtracting Decimals

$$0.8 + 0.001 = 0.801$$

$$1.031 - 0.23 = 0.801$$

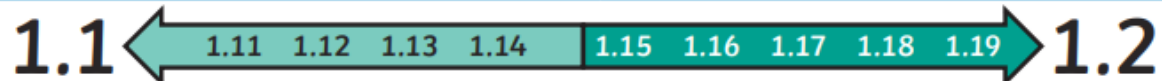
$$0.4005 + 0.4005 = 0.801$$

### Rounding Decimals



If the tenths digit is 1, 2, 3 or 4, we round down to the nearest whole number.

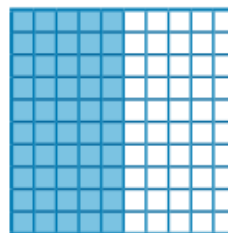
If the tenths digit is 5, 6, 7, 8 or 9, we round up to the nearest whole number.



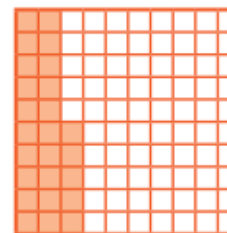
If the hundredths digit is 1, 2, 3 or 4, we round down to the nearest tenth.

If the hundredths digit is 5, 6, 7, 8 or 9, we round up to the nearest tenth.

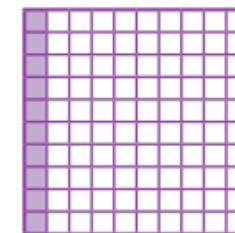
### Percentage and Decimal Equivalents



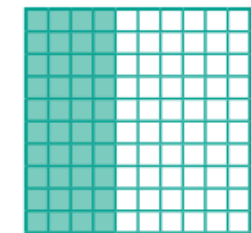
$$50\% = \frac{50}{100} = \frac{1}{2} = 0.5$$



$$25\% = \frac{25}{100} = \frac{1}{4} = 0.25$$



$$10\% = \frac{10}{100} = \frac{1}{10} = 0.1$$

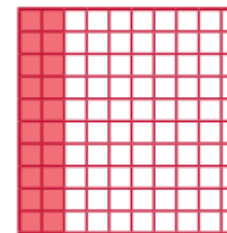


$$40\% = \frac{40}{100} = \frac{2}{5} = 0.4$$

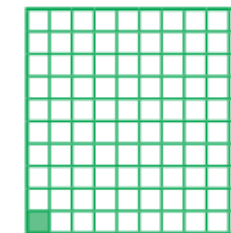
### Crossing the Whole

$$0.82 + 0.63 = 1.45$$

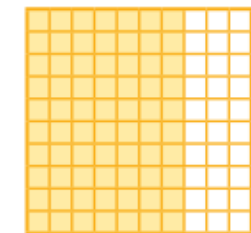
$$2.531 - 0.6 = 1.931$$



$$20\% = \frac{20}{100} = \frac{1}{5} = 0.2$$



$$1\% = \frac{1}{100} = 0.01$$



$$70\% = \frac{70}{100} = \frac{7}{10} = 0.7$$

# Sow, Grow and Farm

## Farming in the UK

Farming is the business of growing crops and rearing livestock. Up to 70% of the land in the UK is used for farming. There are three main types of farming in the UK. These are arable, pastoral and mixed.



Arable farming is growing crops, such as cereals and vegetables.



Pastoral farming is rearing animals, such as cows and sheep.



Mixed farming is both growing crops and rearing animals.

The type of farming depends on the climate, the quality of the soil and the topography of the area. For example, the flat, nutrient-rich land in the east of England is perfect for arable farming, whereas the wet and windy hills of central Wales are most suited to pastoral sheep farming.

## Allotments

Allotments are small pieces of land that individuals can rent to use for growing fruit, vegetables and flowers. The location of allotments in the local environment depends on many factors, including soil quality, drainage, transport links, availability of water and local facilities.



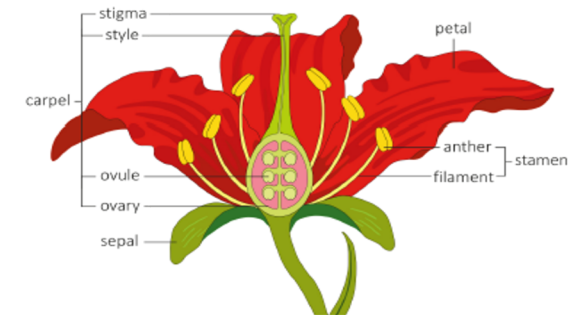
During the Second World War there were food shortages and rationing. The Dig for Victory campaign encouraged people to grow fruit and vegetables on open land, increasing the number of allotments by over 70%.



## Plant life cycles

Plants can reproduce in one of two ways. Firstly, by sexual reproduction where two parent plants are needed, and the offspring are genetically different to either parent. Secondly, by asexual reproduction where only one parent plant is needed, and the new plants are genetically identical to that parent. Some plants can reproduce in either way.

Flowers are needed for sexual reproduction. Flowers have both male and female parts. Pollen from the male stamen gets transferred to the female carpel in a process called pollination. Following pollination, the ovules are fertilised and seeds are produced.



## Modern farming techniques

Some farmers use modern farming practices, including new machinery, technology and scientific discoveries, to produce more food. Whilst this has increased food production there have also been some negative effects on the environment.

Modern farming techniques include chemical pesticides, synthetic fertilisers and irrigation technologies.

# Eat the Seasons

## Seasonality

Seasonality is the time of year when the harvest or flavour of a type of food is at its best. It is often when the item is at its lowest cost and freshest on the market.

Different foods are at their best in different seasons; for example, apples are freshest between September and February, and carrots between June and September.



## Benefits of seasonal eating

### Taste

Food that has grown and ripened naturally tastes best.

### Freshness

Local, seasonal food will be fresher than foods transported thousands of kilometres from where they were grown.

### Nutrition

A food's nutritional value drops after it has been picked, so eating freshly-picked, seasonal foods provides more nutritional value.

### Carbon footprint

It uses a lot of energy to grow food in heated greenhouses or transport it over long distances. This use of energy releases carbon into the atmosphere which contributes to climate change. Local, seasonal foods do not need to be grown in heated greenhouses or transported long distances so they have a smaller carbon footprint.

### Supporting local farmers

Buying locally grown foods supports local farmers and local shops.

### Cost

Locally grown food is usually cheaper as transport costs are lower.

## Nutritional value of food

Nutritional value is the amount of protein, carbohydrate, fat, minerals and vitamins in a food or a meal. It is important to eat a balanced diet to provide all the nutrients the body needs in the correct quantities. Meals need careful planning to provide the right balance of nutrients and make use of seasonal ingredients.

## Food hygiene

Food hygiene is important to prevent the spread of disease-causing bacteria. Health and safety rules include:

|  |                                                                                      |
|--|--------------------------------------------------------------------------------------|
|  | Wash hands thoroughly before, during and after preparing food and handling raw meat. |
|  | Clean all work surfaces with antibacterial spray.                                    |
|  | Use different-coloured chopping boards for different foods.                          |

## Food preparation techniques

### Dicing

Cutting food into small cubes measuring approximately half a centimetre.



### Peeling

Removing the skin of a fruit or vegetable, either with your fingers or with a knife or peeler.



### Grating

Rubbing food against a grater to create small, shredded pieces.



## Cooking techniques

### Boiling

Water is heated on a hob, so it moves vigorously and bubbles burst and roll on the surface. This method is used for cooking potatoes and pasta.



### Steaming

The steam from boiling water rises and cooks food held above the water by a perforated pan. This method is used for cooking fish and vegetables.



### Sautéing

A small amount of butter or oil is used in a shallow pan over high heat to fry vegetables or meat until brown.



## Glossary

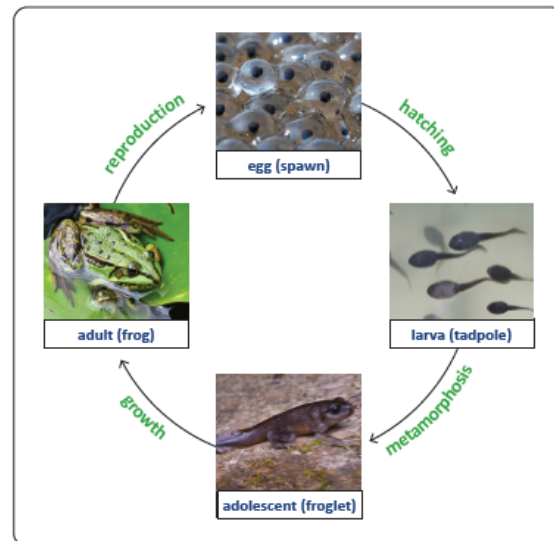
|                         |                                                                                                     |
|-------------------------|-----------------------------------------------------------------------------------------------------|
| <b>carbon footprint</b> | The total amount of greenhouse gases released into the atmosphere by an individual or organisation. |
| <b>food hygiene</b>     | The conditions necessary to ensure safe handling of foods to avoid the spread of bacteria.          |

# Human Reproduction and Ageing

Reproduction is the process of producing offspring, which is vital for the survival of all plant and animal species. All living things go through a series of changes during their life cycle, where they grow, mature, reproduce and age. As living things age, they gradually decline and then die.

## Life cycles

A life cycle is a series of changes that happen to a living thing during its lifespan. The events happen in a set order as the animal or plant grows and develops. A life cycle is presented on a circular diagram to show the main developmental **stages** of a plant or animal's life and the **processes** between these stages. All living things eventually die, but reproduction starts the life cycle again.



Life cycle of the common frog.

## Mammals

Mammals are a group of vertebrate animals, which means they have a backbone. Mammals have several characteristics that make them different from other vertebrates. These include:

- producing milk to feed their young
- being warm blooded
- giving birth to live young
- having fur or hair
- breathing air with lungs



brown bear



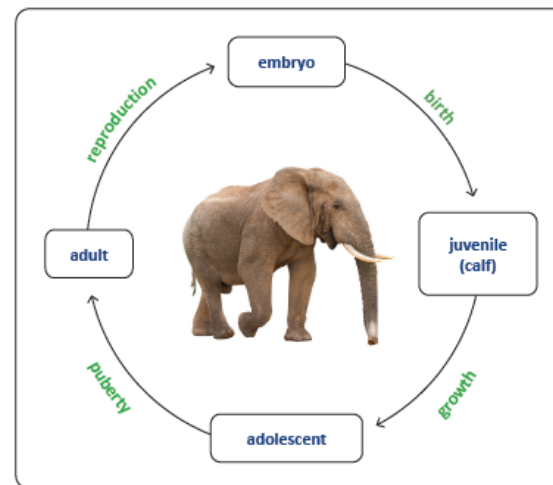
Bengal tiger



human

## Mammalian life cycle

There are four stages and four processes in the mammalian life cycle.



The length of each stage varies for different animals. For example, the European hamster has a 2–3 week juvenile stage, but the same stage is 10 years for an African elephant.

## Human life cycle

The human life cycle has the same stages and processes as other mammalian life cycles.

### Embryo

The embryo stage takes around 40 weeks. This is called the gestation period.



### Juvenile

During the juvenile stage, the child grows and develops rapidly until around 12 years old.



### Adolescent

The adolescent stage ends at around 19 years old. The process of puberty enables an adolescent to develop into an adult and be able to reproduce.



### Adult

A person is a fully developed adult at around 20 years old and may choose to reproduce, which starts a new human life cycle.



## Reading:

[Oxford Owl for School and Home](#)

<https://www.bbc.co.uk/bitesize/topics/zs44jxs/year/zhgppg8>

<https://schoolreadinglist.co.uk/category/reading-lists-for-ks2-school-pupils/>

## Phonics:

<https://www.topmarks.co.uk/english-games/7-11-years/spelling-and-grammar>

[PhonicsPlay](#)

[Phase 2 Games – Letters and Sounds \(letters-and-sounds.com\)](#)

## Writing:

<https://www.bbc.co.uk/bitesize/subjects/zv48q6f/year/zhgppg8>

<https://home.oxfordowl.co.uk/english/primary-writing/writing-year-5-age-9-10/>

[Spelling and Grammar, English Games for 7-11 Years - Topmarks](#)

## Maths:

[Key Stage 2 Maths - Topmarks Search](#)

<https://www.timestables.co.uk/multiplication-tables-check/>

## Science:

<https://www.bbc.co.uk/bitesize/subjects/z2pfb9q/year/zhgppg8>

[Home | WowScience - Science games and activities for kids](#)

<https://www.bbc.co.uk/bitesize/topics/z6wwxnb/articles/zdvhxbk>

## Geography:

<https://kids.britannica.com/kids/article/agriculture/352715>

<https://www.bbc.co.uk/teach/class-clips-video/ks2-geography-food-and-farming/z9yjjsq>

## Computing:

[Is my child safe online? Parent's questions answered | Barnardo's \(barnardos.org.uk\)](#)

[Parents and Carers - UK Safer Internet Centre](#)

[Parental Controls & Privacy Settings Guides | Internet Matters](#)

## PSHE:

[Talk PANTS & Join Pantosaurus - The Underwear Rule | NSPCC](#)

[How to make an emergency 999 call – West Midlands Ambulance Service University NHS Foundation Trust \(wmas.nhs.uk\)](#)

PE:

[Nutrition Based Physical Activity Games - Action for Healthy Kids](#)  
[Kids Active Learning & PE at Home – Think Active](#)