Heather Garth Primary Academy

Year 3 Programme of Study

Heather Garth Primary Academy
Stars Aiming High

English

At Heather Garth, we teach English in Year 3 through the use of carefully developed themed units. These units are created to draw upon prior learning from the wider curriculum. This is to ensure the children are securing understanding of key conceptual vocabulary and context. Over the year, these units cover a wide range of age-appropriate, challenging narratives/novels, non-fiction and poetry.

These units are used in whole class reading lessons to develop pupils' vocabulary, oracy, fluency, comprehension and to apply the reading skills they have been taught. Staff integrate carefully developed assessment activities into each unit to check that pupils have truly learned the important knowledge they have been taught and can apply this in meaningful contexts. Explicit teaching of speaking and listening also forms part of our English curriculum, while also ensuring that it is integrated into wider learning.

We also read age-appropriate texts to the children on a daily basis to encourage reading for pleasure.

The English units also provide children with purposeful writing opportunities linked to the texts they have been exploring in their reading lessons. Units teach a full range of writing strategies, including spelling, grammar, sentence structure and composition. Children then apply all the taught and modelled skills to independent writing tasks. Following independent writing, children are encouraged to find and correct errors, using their blue pens to complete their editing.

Spelling Shed is used to teach spelling weekly. It is directly linked to the English National Curriculum, designed to cover all statutory and non-statutory spelling targets, rules, and high-frequency words. Children can also access this at home so they can practise throughout the week.

Handwriting is taught using the Letterjoin handwriting programme.

Please refer to the Year 3 half-termly English Overviews on the class page for a more detailed over view of the texts studied and the writing opportunities that take place.

Mathematics

In Year 3, the maths units we cover are:

Number: Place Value

Identify, represent and estimate numbers using different representations
Find 10 or 100 more or less than a given number
To know that 10 tens are equivalent to 1 hundred and that 100 is 10 times the size of 10; apply this to identify and work out how many 10's there are in 3-digit multiples of 10.
Recognise the place value of each digit in a three-digit number (hundreds, tens, ones).
Compose and decompose three-digit numbers using standard and non-standard partitioning.
Identify the previous and next multiple of 100 and 10.
Compare and order numbers up to 1000
Divide 100 into 2, 4, 5 and 10 equal parts and read scales/numbers lines marked in multiples of 100 with 2, 4, 5 and 10 equal parts.
Read and write numbers up to 1000 in numerals and in word
Solve number problems and practical problems involving these ideas.
Count from 0 in multiples of 4, 8, 50 and 100
Solve number problems and practical problems involving these ideas.

Number- addition subtraction, multiplication + division

Secure fluency in addition and subtraction facts that bridge 10, through continued practice.
Calculate compliments to 100.
Add and subtract numbers mentally, including: a three-digit number and ones; a three-digit number and tens; a three digit number and hundreds.
Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction.
Understand the inverse relationship between addition and subtraction and how both relate to the part-part-whole structure.
Understand and use the commutative property of addition and understand the related property for subtraction.
Estimate the answer to a calculation and use inverse operations to check answers.
Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.
Recall and use multiplication and division facts for the 2, 5 an 10 tables from year 2.
Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.
Write and calculate mathematical statements for multiplication and division using the multiplication tables they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods.
Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objectives.

Fractions

Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10.
Interpret and write proper fractions to represent 1 or several parts of a whole that is divided into equal parts.
Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators.
Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators.
Solve problems that involve all of the above.
Recognise and show, using diagrams, equivalent fractions with small denominators.
Compare and order unit fractions, and fractions with the same denominators.
Add and subtract fractions with the same denominator within one whole [for example,

$$\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$$

Solve problems that involve all of the above.

Measurement: Money

Add and subtract amounts of money to give change, using both £ and p in practical contexts.

Measurement: Length and Perimeter

Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml).
Measure the perimeter of simple 2D shapes.

Measurement: Time
Tell and write the time from an analogue clock, including using Roman numerals from I to XII and 12-hour and 24-hour clocks.
Estimate and read time with increasing accuracy to the nearest minute.
Record and compare time in terms of seconds, minutes and hours.
Use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight.
Know the number of seconds in a minute and the number of days in each month, year and leap year.
Compare durations of events [for example to calculate the time taken by particular events or tasks].

Measurement: Mass and Capacity
Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml).

Statistics
Interpret and present data using bar charts, pictograms and tables.
Solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables.

Geometry- Position and Direction
Recognise angles as a property of shape or a description of a turn.
Identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle.
Identify horizontal and vertical lines and pairs of perpendicular and parallel lines.
Draw 2-D shapes and make 3- D shapes using modelling materials.
Recognise 3-D shapes in different orientations and describe them.

Art and Design

In art and design, Year 3 will focus on: Drawing and painting, Printing and Sculpture. In the drawing unit, the children will learn about the Japanese Ukiyo-e artist, painter and printmaker Katsushika Hokusai. They will produce a waterscape inspired by the work of Hokusai's Great Wave.
In the printing unit, the children will look at Indian style Paisley prints, the design originated in India in the 11th Century near Kashmir and is believed to represent a pine cone. The children will produce a Paisley print design on Styrofoam, that will be transferred onto a canvas bag.
In the sculpture unit, the children will look at Stone Age art work which included animals and geometric designs using natural pigments (dyes) to paint on the walls. The children will produce a clay slab including a prehistoric design inspired by their research into prehistoric cave art.

Citizenship

Throughout our citizenship lessons, Year 3 will cover four units: VIP's, Teams, Diverse Britain and Well-being- Think positive, delivered by our Learning Mentor Mrs LeMasurier.

Within the VIPs (Very Important Persons) unit, children will focus on the relationships they have with our VIPs. It will look at friendships, how friendships are formed and maintained, and the qualities of a good friend. The lessons will then move on to disputes and bullying and will address strategies for coping with each of these.

When covering the 'Teams' unit, this theme is inspired by the idea that if a class team works well together, it has a positive impact on all of its members and what they can achieve. It aims to enable the children to identify the impact their actions have on the team they are working in. In this unit, children learn about successful teamwork skills, being considerate of others in the team and how to positively resolve any conflicts that occur. They will also learn about their individual responsibilities towards teams they work in and how new starts, such as starting a new school year, may feel and how they can support each other in

In Diverse Britain, the theme is inspired by the idea that we live in a diverse, multicultural and democratic society and that this is important and brings many benefits. It aims to enable the children to identify that they should be respectful of difference. Children learn about British people, rules, the law, liberty and what living in a democracy means. They also learn about the importance of being tolerant of differences within their society.

In well-being - think positive, the theme is designed to build on what the children have already learnt about feelings, both comfortable and uncomfortable and how our attitude towards life can affect our mental health. The lessons centre around themes such as thinking positively and calmly, managing difficult emotions, taking responsibility for decisions and developing a growth mindset approach to learning.

Computing

In computing, Year 3 cover: computing systems and networks, programming, creating media and data handling.

As part of 'computing systems and networks' the children look at three areas. The first being networks and the internet where they learn what a network is and how devices communicate and share information. They also look at emailing where they will send emails with attachments and gain or develop their understanding of what cyberbullying is. Finally, the children look at 'The Journey Inside a Computer' where they assume the role of computer parts and create paper versions of computers to consolidate understanding of how a computer works.

As part of programming, children explore the programme Scratch, following the predict > test > review cycle. The children will also learn about 'loops' and programme an animation, story and game.

In creating media, children develop digital video skills to create trailers, with special effects and transitions.

In data handling, children learn about records, fields and data and sorting and filtering data.

Design and Technology

In design and technology, Year 3 will focus on: food technology, textiles and mechanisms.

In the food technology unit, the children will develop their knowledge of a healthy and varied diet as well as seasonality and how it affects food availability. They will understand that we need to eat a variety of different food and drink in order to stay healthy. They will be able to follow a recipe and begin to understand that a recipe can be adapted and changed due to availability. They will be able to safely and hygienically prepare food using a range of techniques.

In textiles, the children will begin to develop their textiles skills. They will practice how to thread a needle and sew a running stitch. They will learn about and create templates for a fabric pouch before cutting out the fabric pieces and sewing them together. Finally, they will decorate their pouch using felt shapes before evaluating its effectiveness against the design criteria.

In mechanisms, the children will use a range of materials, to make the chassis of their car and the slingshot launch mechanism, learning that their slingshot cars work by storing kinetic energy in the elastic band before it launches. They will then design car bodies to cover their chassis, make the nets for their car bodies based on their designs, adding the graphics and tabs that will attach to the chassis.

Geography

In geography, Year 3 will cover three units: Food and Farming UK, Journey to Scotland and Rivers.

In ‘Food and Farming’, children learn about where land is farmed in the UK and why some parts of the country are more suited to farming than others. They learn about the differences between arable and pastoral farming and also learn about the journey of food from ‘farm to fork’. They will also will make links between what happens on a farm in different seasons as a result of the weather.

In ‘Journey to Scotland’, children extend their knowledge of the United Kingdom through an in-depth study of Scotland. By exploring a range of maps and using symbols and keys, children learn about the physical features of Scotland, including its mountain ranges and remote islands. They then compare and contrast life in Barnsley to life on the Scottish island of Coll, making links to its physical features and location. They will also learn to use four figure grid references to find and describe the location of cities and points of interest.

In the Rivers unit, children learn how rivers are formed, how they change as they journey from source to mouth and how they are used. They also learn about flooding and the impact it can have on a community, as well as the impact we can have on rivers in our local area.
Alongside these units, children will work on mapping and fieldwork skills where they will use 4 compass points and coordinates as well as using a range of maps and age appropriate atlases. They will complete fieldwork based on rivers.

History

In history, Year 3 will cover three units: Stone Age to Iron Age, 'Down the Pit' (a local history study) and Ancient Civilizations, focusing on Ancient Egypt.

As part of Stone Age to Iron Age, children learn that people have been living in Britain for a very long time. They learn about the changes that occurred over a time span of 10,000 years during the three main periods in prehistory: the Stone Age, Bronze Age and Iron Age. They discover that during the Stone Age, the Neolithic Revolution changed the way people lived from hunter-gatherers to farmers. They also learn about how copper, then bronze and finally iron started to be used to make weapons and tools and how the Celts built hill forts for protection from their enemies during the Iron Age.

In our local history study, Year 3 learn about coal mining and what coal is and why it was so important to our locality in the past. They learn where the local collieries are and how this helped shape our local community today. They look at why significant technological changes over the centuries contributed to the demise of the coal industry. They also undertake a memorable visit to a local coal mining museum.

In the Ancient Egypt unit, Year 3 learn about the Ancient Egyptians and where they existed in history alongside other ancient civilizations across the world, until they were conquered by the Romans. They discover that the Ancient Egyptians were united under one ruler and look at the importance of different Pharaohs through their existence. Children also learn about the beliefs and achievements of this civilization.

Modern Foreign Language

In Spanish, Year 3 will cover three units: Core Vocabulary, Los Saludos – Greetings and Me Presento - Presenting myself.

In unit 1, Core Vocabulary' children will focus on phonics and pronunciation. They will also focus on, numbers, Colours, Days of the Week and Months of the Year.

In unit 2, 'Los Saludos', pupils will learn the vocabulary for basic greetings in Spanish enabling the pupils to participate in a short oral conversation by the end of the unit. 'Greeting's and Myself' are themes that will continue throughout the curriculum

In unit 3 'Presenting Myself' continues the themes of 'Greetings' and 'Myself'. In this unit pupils focus on asking questions as well as providing accurate replies. They will demonstrate a growing understanding of grammar to manipulate language and start to create sentences of their own using a range of personal details including name, age, where they live and nationality. Pupils will also continue to learn numbers, increasing to numbers to 20.

Music

In Music, Year 3 will cover three units: Hear it, Play it! Exploring rhythmic patterns, Painting Pictures with Sound and Sing Play Notate!

In ‘Hear it, Play it!’, the children will explore rhythmic patterns. With activities designed to get everyone up and moving, the children will learn to identify rhythms and play them using body percussion, instruments and plastic cups! They will explore call-and-response techniques used in a range of songs and have fun creating their own call-and-response (question and answer) phrases. The children will develop their ensemble skills, learning to perform simple rhythmic ostinatos to accompany a song or poem. They will sing songs influenced by different musical styles such as Blues and Rock ’n’ Roll and listen out for simple stylistic features in music such as Hound Dog by Elvis Presley and Rock Around The Clock by Bill Haley & His Comets. The children will move on to composing and notating simple rhythmic patterns using different forms of graphic notation.

‘Painting Pictures with Sound’ begins with activities designed to help children identify and describe the ingredients (dimensions) that make up music. The children will explore instruments, learning about instrumental timbres associated with different countries and use this knowledge to create simple accompaniments to songs. The term ends with an opportunity to compose music inspired by stories and settings.

In ‘Sing Play Notate!’, the children begin with songs and activities to get children listening and describing pitch and melody. Using their voice as an instrument, they will create simple soundscapes or develop solo singing with songs. The children will learn to represent melodies from songs such as Healthy Heart and Un, Deux, Trois, exploring different forms of graphic notation such as dots, coins and pipe cleaners!

As singing is the golden thread that underpins all music, children will also take part in a variety of singing activities and games using the Barnsley Singing strategy. These will help children to find their singing voice, sing tunefully, sing in a group and most of all develop a love of singing!

Physical Education

In physical education, Year 3 cover a number of areas throughout the year including: fundamental skills, invasion games (dodgeball, tag rugby and football), gymnastics, dance, athletics, outdoor adventurous activities and cricket as part of striking and fielding. Children have two PE sessions per week, delivered by the class team.

Religious Education

In religious education, Year 3 learn about both the Christian and Islam faiths.

For each religion we learn about sacred texts, places of worship, beliefs and traditions, festivals and families, significant people of faith as well as exploring how the children and others feel about life and universe around them. Children then compare and contrast, recognising similarities and differences of each faith.

Science

In science, Year 3 cover 5 units including Animals Including Humans, Light, Plants, Rocks and Forces and Magnets.

In animals including humans, children learn that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat. Children further develop their knowledge of what humans need to thrive by learning about a balanced diet, including how sugar can cause tooth decay and obesity, the food groups and their role in human development. New learning includes how humans and some other animals have skeletons and muscles for support, protection and movement.

In the light unit, children find patterns in the way that the size of shadows changes. They learn that we need light in order to see things and that dark is the absence of light. New learning also includes that light is reflected from surfaces and they develop their understanding that light from the sun can be dangerous and that there are ways to protect their eyes.

In the rocks unit, children compare and group together different kinds of rocks on the basis of their appearance and simple physical properties. Children describe how fossils are formed when things that have lived are trapped within rock and recognise that soils are made from rocks and organic matter.

In the unit of plants, children learn about the function of each part of a plant as well as what seeds and plants need to grow and be healthy. This unit also builds upon pupils' knowledge of germination, pollination and life cycle diagrams. Children learn about seed formation and the methods of seed dispersal. Children investigate the way in which water is transported within plants.

In forces and magnets, children learn how things move on different surfaces with a focus on the force friction. New learning is based on magnetism as children notice that some forces need contact between two objects, but magnetic forces can act at a distance. Children learn about magnets having two poles and observe how magnets attract or repel each other. Children further develop their knowledge of everyday materials as they compare and group according to whether they are attracted to a magnet, and identify some magnetic materials.

Enrichment Activities

Throughout the year, Year 3 take part in a number of enrichment activities. These include educational visits, visitors into school and after school clubs.

Educational visits that Year 3 take part in include:
A visit to the National Coal Mining Museum, where they learn about mining life and experience a what a real working mine would have been like.
History to life workshop in school, where children learn about ancient Egyptians and look at artefacts.

Year 3 have access to a rang of after school activities. These can be found on the school website.