



Spring Term 1 – Year 6: Outline of Our Work

Numeracy

We will be developing these skills and concepts:

- reading and writing numbers with up to 7-digits, understanding what each digit represents
- working systematically to find out how many numbers round to 5,000,000
- solving subtractions of 5- and 6-digit numbers using written column method
- multiplying and dividing by 10, 100 and 1000
- comparing and ordering numbers up to three decimal places
- learning common fraction/decimal equivalents
- multiplying pairs of unit fractions by non-unit fractions
- partitioning to mentally multiply 2-digit numbers with one decimal place by whole 1-digit numbers
- multiplying numbers with two decimal places
- using short multiplication to multiply amounts of money
- using estimation to check answers to calculations
- using long multiplication to multiply 3-digit and 4-digit numbers
- naming, classifying and identifying properties of quadrilaterals
- exploring how diagonal lines can bisect quadrilaterals
- understanding what an angle is and knowing what the angles of triangles, quadrilaterals, pentagons, hexagons and octagons add up to, using these facts and mathematical reasoning to calculate missing angles
- understanding the parts and properties of circles
- drawing circles using pairs of compasses; drawing polygons using a ruler and protractor
- adding and subtracting numbers using mental strategies
- solving additions of 4- to 7-digit numbers using written column additions
- identifying patterns in the number of steps required to generate palindromic numbers
- solving subtractions of 5-, 6- and 7-digit numbers using written column method
- reading, understanding and solving word problems
- identifying common factors and common multiples
- understanding and finding prime numbers less than 100
- understanding what a composite (non-prime) number is
- using long division to divide 3- and 4-digit numbers by 2 digit numbers, giving remainders as a fraction, simplifying where possible.

How you can help:

Practise mental maths skills at any opportune moment. Constant practise helps reinforce concepts and facts as well as improve speed. Go over times tables up to 12 regularly and get them to identify common factors, common multiples and prime numbers. Give your child opportunities to add, subtract, multiply and divide numbers, asking them to explain their working and find alternative ways of reaching the same answer. Discuss which method is most appropriate, reliable or quickest. Encourage your child to read 7 digit numbers. Practise converting between fractions and decimals. Ask your child to name, draw and identify 2-D shapes & 3-D nets. When out shopping, ask your child to calculate the new cost of items which have been reduced by 10%, 20%, 30% etc. Reinforce their understanding of angles with quick-fire questions in the car, on the tram etc. Give your child word problems and puzzles to solve, making sure they highlight the information they need to find the answer and discard the rest. Regular practise of the above will help your child to consolidate work covered in lessons and keep everything fresh so they can build on it as they go along.

Language and Literacy

We will be developing these skills and concepts:

Grammar

- subject & object
- adverb clauses
- conditional clauses

Spelling

- -ant, -ent, -ance, -ence word endings
- tricky words
- silent letters

Creative Writing

- autobiography
- paragraphing
- writing for a specific purpose & audience

Reading/Comprehension

Genres

- analysing descriptive text.
- identifying & interpreting key information
- investigating audience & purpose in a fiction text

Skills

- read, re-read, and decoding
- skimming and scanning
- deducing information
- developing their ability to find what has been inferred in the text
- restating the question
- using evidence to support their answers
- searching for the writer's viewpoint
- understanding the purpose, audience and form of the text
- using the text as a stimulus to develop writing skills

How you can help:

Reading is still one of the most important ways in which your child will learn Literacy skills, so it is important that they not only read a variety of fiction and non-fiction texts, but that they can share this with a parent. Reading to your child, a book slightly beyond the level of your child's ability, allows them to discuss unfamiliar words and more complicated plots with you. With non-fiction, it allows them a point of discussion to express their thoughts and ideas about a new concept or idea. Guided use of the internet to access news reports for major news stories, searches for information about an area of the curriculum they are studying and accessing educational sites are fun ways to link their skills in ICT and Literacy.

Children should be reading for at least 20 minutes per day and need to write one constructive and thorough book review every week in their reading records. Children will have Grammar and Spelling homework fortnightly; spellings can be tested aloud and in writing sentences, using them in context. Encourage them to check spellings of common words in their written work as each piece is completed. Allow them to read their work aloud and discuss the development of their ideas, encourage them to re-word sentences that do not make sense. Visits to libraries and bookshops along with 'book-swapping' is a good way of allowing children to have access to as wide a range of literature as possible. Access to a dictionary and a children's thesaurus is essential.

Science

The topic we are currently covering is: Changing Circuits (cont...)

We will be developing these skills and concepts:

- children will work towards answering the Quest question, 'How can we fix a broken score board?'
- recognise and use accepted scientific symbols in circuit diagrams
- learn that altering the brightness of bulbs and the volume of a buzzer can be achieved in different ways, including changing the number of components, battery voltage, or the properties of the wires in the circuits
- apply their knowledge of complete circuits to make quiz cards and provide a solution to the score board Quest question
- planning and carrying out an investigation
- predict outcomes relating to the arrangement in electrical circuits
- record their results.

How you can help:

You could help your child understand how electricity is made available in different parts of the house, and that every electricity point is connected in an unbroken circuit. Safety issues and dangers related to dealing with electricity should be highlighted e.g. that wires are embedded in parts of the wall, so we should never drill holes into them without first checking.

Geography (Coasts)

We will be developing these skills and concepts:

- features of coasts
- grid references
- bays and headlands
- caves, arches and stacks
- longshore drift
- sand dunes

How you can help:

Encourage your child to use a globe or atlas to locate coastal regions across the world and what these have in common. Brainstorm places that you have visited with your child, looking at old photographs to assess how coasts change over time. Visit the library and/or use the internet to research coastal features, separating them into man-made and natural; discuss the different types of beach and how this impacts upon their use. Investigate how some coastal regions are used for tourism and leisure activities - considering the positive and negative effect this has on both the environment and employment. Are coasts dangerous? Discuss ways to keep safe and the role of the lifeguard/coastguard in these regions.

Computing

Websites: understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration.

We will be developing these skills and concepts:

- create a web page.
- structure a web page using columns.
- add images to a web page.
- add text to a web page.
- add interactive features to a web page.
- publish a web page.
- create hyperlinks to pages within a website
- change the share settings of a website

How you can help at home:

Many businesses nowadays have a website. People who know how to make websites offers a service to businesses, making sites for them.

Take a look at any businesses that you know of with websites. Discuss what benefits can a business get from having a website. Review what could make a reliable and effective business website.

