Year 6 Curriculum

Science

Living Things and their Habitats
◆Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals
◆Give reasons for classifying plants and animals based on specific characteristics

Animals, Including Humans
◆Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood
◆Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function
◆Describe the ways in which nutrients and water are transported within animals, including humans

Evolution and Inheritance
◆Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago
◆Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents
◆Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution

Year 6 Curriculum

Science

Light

♦ Recognise that light appears to travel in straight lines

♦ Use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye

♦ Explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes

♦ Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them

Electricity

♦ Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit

♦ Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches

♦ Use recognised symbols when representing a simple circuit in a diagram

Year 6 Curriculum

English

Grammar & punctuation in Year 6 (age 10–11)
In Year 6, your kid will be learning to:
♦ Active & Passive voice
♦ Formal & Informal Language
♦ As part of their work on formal and informal language, your kid will be taught about:

Using the **subjunctive** form in formal writing

♦ Using formal vocabulary, for example: suggest, perform, assist.
♦ Apply different approaches to link ideas across paragraphs to give their writing cohesion. To help their writing flow, your kid will excel to use cohesive devices such as:

Determiners (the, a/an, this, those, my, your, some, every) to convey exactly about a particular thing or situation. For example: 'some characters of the movie are funny' or 'that character of the movie is funny'.

Pronouns (he, she, it, them) to avoid repetition. For example: 'David was hungry so he ordered some meal.'

Year 6 Curriculum

English

Conjunctions (such as but, and, because) to combine sentences together. For example: 'I played video games after I'd completed homework.' or 'I requested her to move so I could park my car.' Adverbials (for example 'later that day,' 'when we've finished') are phrases that act as adverbs to describe more information about a verb. Fronted adverbials are used to create links between paragraphs, for example: 'After a month, he joined the cricket academy again.' or 'On the other hand, practice helps students to progress.'

Ellipsis (missing out a word or phrase when the assumed meaning is obvious) can help text to flow. Ex: 'I wanted the yellow card, not the black.' rather than 'I wanted the yellow card instead of the black one.'

♦ Use semi-colons, colons, and dashes to join sentences
♦ Use colons, semicolons and commas when writing lists. Your kid will practice using a colon to introduce a list and commas to separate items, for example:

'Pick any of the following: coke, chips juice, water, mango, grapes and cookies.'
Your child will learn to use semicolons to interpret lengthy sentences simpler, for example:
'The following month matches are taking place: the under-11s, under-12s and under-13s in football; the under-15s and under-18s in cricket.'

Year 6 Curriculum

English

Using hyphens to join two words together-

for example
My friend has a semi-acoustic guitar.
Hyphens can be used with prefixes, for example to show the difference between 're-cover' (cover again) and 'recover' (get better).
♦ Use different ways of presenting non-fiction, for example by using headings, subheadings, captions, columns, bullet points, tables and so on.
♦ Practice finding antonyms (opposites) and synonyms (words with similar meanings for words) for example, shouted, called, whispered, mumbled.

Spelling in Year 6 (age 10–11)
In Year 6, your child will continue to practise:
♦ To spell words with silent letters, for example, wrack, listen, knowledge, hour, honour etc.
♦ To spell words ending in ence/ance or able/ible
♦ To spell more homophones and other confusing words
♦ Year 5 and 6 homophones list
♦ Aisle/isle, aloud/allowed, affect/effect, altar/alter, ascent/assent, bridal/bridle, cereal/serial, compliment/complement, descent/dissent, desert/dessert, draft/draught, farther/further/father, guessed/guest, heard/herd, led/lead, morning/mourning, past/passed, precede/proceed, principal/principle, profit/prophet, stationary/stationery, steal/steel, wary/weary, who's/whose

Year 6 Curriculum

English

♦ to talk about word families, for example, fine, twine, shine, shrine, whine
♦ to use a thesaurus to find new words
♦ to use a dictionary to check their spelling
♦to spell the words in the Spelling word list for Year 5 and Year 6

Writing in Year 6 (age 10–11)
 In Year 6, your child will learn to:
♦ Select the right style and approach to match the writing text
♦ Discover the right vocabulary and grammar
♦ Practice new words
♦ Write non-fiction with headings, captions, bullet points, subheadings & pictorials
♦Use same tense throughout the paragraph
♦ Proofread written content

Handwriting in Year 6 (age 10–11)

Year 6 Curriculum

Math

Number - Number and Place Value

♦ Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit

♦ Round any whole number to a required degree of accuracy

♦ Use negative numbers in context, and calculate intervals across zero

♦ Solve number and practical problems that involve all of the above

Number - Addition, Subtraction, Multiplication and Division

♦ Solve problems involving addition, subtraction, multiplication and division

♦ Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why

♦ Perform mental calculations, including with mixed operations and large numbers

♦ Use their knowledge of the order of operations to carry out calculations involving the four operations

Math

♦ Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy

♦ Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication

♦ Divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context

♦ Divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context

♦ Identify common factors, common multiples and prime numbers

Number - Fractions

♦ Use common factors to simplify fractions; use common multiples to express fractions in the same denomination

♦ Compare and order fractions

♦ Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions

♦ Multiply simple pairs of proper fractions, writing the answer in its simplest form

♦ Divide Proper Fractions by Whole Numbers

♦ Associate a fraction with division and calculate decimal fraction equivalents for a simple fraction

♦ Identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places

Year 6 Curriculum

Math

♦ Multiply one-digit numbers with up to two decimal places by whole numbers
♦ Use written division methods in cases where the answer has up to two decimal places
♦ Solve problems which require answers to be rounded to specified degrees of accuracy
♦ Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.

Ratio and Proportion

♦ Solve problems involving similar shapes where the scale factor is known or can be found
♦ Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.
♦ Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts
♦ Solve problems involving the calculation of percentages and the use of percentages for comparison

Year 6 Algebra

♦ Use simple formulae
♦ Generate and describe linear number sequences
♦ Express missing number problems algebraically
♦ Find pairs of numbers that satisfy an equation with two unknowns
♦ Enumerate possibilities of combinations of two variables

Year 6 Curriculum

Math

Measurement

♦ Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate

♦ Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places

♦ Convert between miles and kilometers

♦ Recognise that shapes with the same areas can have different perimeters and vice versa

♦ Recognise when it is possible to use formulae for area and volume of shapes

♦ Calculate the area of parallelograms and triangles

♦ Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimeters and cubic meters, and extending to other units

Geometry - Properties of Shape

♦ Draw 2D shapes using given dimensions and angles

♦ Recognise, describe and build simple 3D shapes, including making nets

♦ Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons

♦ Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius

♦ Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.

Year 6 Curriculum

Math

Geometry - Position and Direction

♦ Describe positions on the full coordinate grid (all four quadrants)
♦ Draw and translate simple shapes on the coordinate plane, and reflect them in the axes

Statistics

♦ Interpret and construct pie charts and line graphs and use these to solve problems
♦ Calculate and interpret the mean as an average