English

Years 3 and 4

Reading

- By the beginning of year 3 children should be able to read books written at an age-appropriate interest level
- Children should develop their understanding and enjoyment of stories, poetry, plays and non-fiction, and learning to read silently
- They should develop their knowledge and skills in reading non-fiction about a wide range of subjects

Writing

- Children should be able to write down their ideas with a reasonable degree of accuracy and with good sentence punctuation
- Children need to use more varied grammar and vocabulary in their writing
- Joined handwriting should be the norm
- Spelling of common words should be correct, including common exception words and other words that they have learnt
- Children should spell words as accurately as possible using their phonic knowledge and other knowledge of spelling
- Children need opportunities to become more familiar with and confident in using language in a greater variety of situations, and/or a variety of audiences and purposes (this includes drama formal presentations and debate)

Years 5 and 6

Reading

- Children should be able to read aloud a wider range of poetry and books written at an age-appropriate interest level with accuracy and at a reasonable speaking pace
- They should be able to read most words effortlessly and to work out how to pronounce unfamiliar written words with increasing automaticity
- They should be able to prepare readings, with appropriate intonation to show their understanding, and should be able to summarise and present a familiar story in their own words
- Children should be reading widely and frequently, outside as well as in school, for pleasure and information. They should be able to read silently, with good understanding, inferring the meanings of unfamiliar words, and then discuss what they have read

Writing

- Children should be using a wide range of punctuation
- Grammar and punctuation should be broadly accurate

- Spelling of most words taught so far should be accurate and they should be able to spell words that they have not yet been taught by using what they have learnt about how spelling works in English
- Children's need to 'collect' language, from stories, plays, poetry, non-fiction and textbooks, to support their writing
- Confidence, enjoyment and mastery of language should be extended through public speaking, performance and debate

Mathematics

Year 3

- Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number
- Recognise the place value of each digit in a three-digit number (hundreds, tens, ones)
- Compare and order numbers up to 1000
- Read and write numbers up to 1000 in numerals and in words
- Solve number problems and practical problems
- Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction
- Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables
- Count up and down in tenths
- Recognise, find and write fractions of a discrete set of objects
- Add and subtract fractions with the same denominator within one whole
- Compare and order unit fractions, and fractions with the same denominators
- Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)
- Measure the perimeter of simple 2-D shapes
- Add and subtract amounts of money to give change
- Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks
- Know the number of seconds in a minute and the number of days in each month, year and leap year
- Draw 2-D shapes and make 3-D shapes using modelling materials
- Identify horizontal and vertical lines and pairs of perpendicular and parallel lines

Year 4

- Count in multiples of 6, 7, 9, 25 and 1000
- Find 1000 more or less than a given number
- Count backwards through zero to include negative numbers
- Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)
- Order, round and compare numbers beyond 1000 (including decimals)
- Solve number problems (up to two step)
- Read Roman numerals
- Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate

- Recall multiplication and division facts for multiplication tables up to 12 × 12
- Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers
- Multiply two-digit and three-digit numbers by a one-digit number using formal written layout
- Recognise and show, using diagrams, families of common equivalent fractions
- Count up and down in hundredths
- Add and subtract fractions with the same denominator
- Recognise and write decimal equivalents of any number of tenths or hundredths
- Solve simple measure and money problems involving fractions and decimals to two decimal places
- Convert between different units of measure (e.g. kilometre to metre; hour to minute)
- Calculate perimeters and areas
- Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes
- Identify acute and obtuse angles and compare and order angles up to two right angles by size
- Identify lines of symmetry in 2-D shapes
- Interpret and present data in a range of tables and charts
- Describe positions on a 2-D grid as coordinates in the first quadrant

Year 5

- Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit
- Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000
- Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero
- Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000
- Solve number problems and practical problems using a range of operations and including measures decimals and percentages (multi step)
- Read Roman numerals
- Add, subtract, multiply and divide numbers mentally with increasingly large numbers
- Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers
- Know and use the vocabulary of prime numbers, prime factors and composite (non- prime), squared and cubed numbers
- Multiply and divide numbers up to 4 digits by a one- or two-digit number using a formal written method
- Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000
- Identify, compare and order fractions (including equivalent, mixed number and improper)
- Round decimals with two decimal places to the nearest whole number and to one decimal place
- Read, write, order and compare numbers with up to three decimal places
- Recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal
- Convert units of measure
- Measure and calculate perimeter and area
- Identify 3D shapes from 2D drawings
- Know, measure and name different types of angles
- Identify, describe and represent the position of a shape following a reflection or translation

- Complete, read and interpret information in tables, including timetables

Year 6

- 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
- Multiply, divide, add and subtract multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method
- Perform mental calculations, including with mixed operations and large numbers
- Identify common factors, common multiples and prime numbers
- Compare, order and simplify fractions
- Add, subtract, multiply and divide fractions
- Multiply one-digit numbers with up to two decimal places by whole numbers
- Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts
- Solve problems involving ratio and proportion
- Use simple formulae
- Express missing number problems algebraically
- Convert measures
- Recognise when it is possible to use formulae for area and volume of shapes
- Calculate the area of parallelograms and triangles
- Draw 2-D shapes and make 3D shapes using given dimensions and angles
- 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
- Describe positions on the full coordinate grid (all four quadrant)
- Interpret and construct pie charts and line graphs and use these to solve problems
- Calculate and interpret the mean as an average

Science

Lower Key Stage 2

- Ask relevant questions and use different types of scientific enquiries to answer them
- Set up simple practical enquiries, comparative and fair tests
- Make systematic and careful observations and, where appropriate, take accurate measurements using standard units and a range of equipment (including thermometers and data loggers)
- Gather, record, classify and present data in a variety of ways to help in answering questions
- Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables
- Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions

- Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions
- Identify differences, similarities or changes related to simple scientific ideas and processes
- Use straightforward scientific evidence to answer questions or to support their findings

Year 3

- Learn about **Plants**
- Explore the nutritional needs of **Animals (including Humans)** and recognise muscles and skeletons
- Classify **Rocks** and explore fossils and soils
- Investigate shadows and **Light**
- Investigate **Forces and Magnets**

Year 4

- Learn about **Living Things and their Habitats**Investigate food chains as well as teeth and the digestive system of **Animals (including Humans)**
- Compare, identify and describe **States of Matter** and make links with the water cycle
- Explore how **Sound** is made and how to change it
- Investigate **Electricity** through constructing simple circuits and exploring conductors and insulators

<u>Upper Key Stage 2</u>

- Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary
- Take measurements, using a range of scientific equipment, with increasing accuracy and precision (taking repeat readings when appropriate)
- Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs
- Use test results to make predictions to set up further comparative and fair tests
- Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations
- Identify scientific evidence that has been used to support or refute ideas or arguments

Year 5

- Learn about the life cycles and reproduction of **Living Things and their Habitats**
- Describe changes as **Humans** develop into old age
- **Properties and Changes of Materials** (including the states of matter, reversible/ irreversible changes and properties)
- Learn about the **Earth and Space** describing its movement and the effects that these have
- Explore mechanisms and **Forces** (including gravity, air/water resistance and friction)

Year 6

- Classifying **Living things and their Environment**
- Learn about the circulatory system of **Animals (including Humans)** and the impact of diet, exercise etc.
- Explore **Evolution and Inheritance** looking at fossils and adaptation
- Investigate how **Light** travels and how objects are seen
- Investigate **Electricity** and how circuits can be changed and represented

Year 3, 4, 5, 6

Art & design

- Children should be given opportunities to create sketch books to record their observations and use them to review and revisit ideas
- Improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials (e.g. pencil, charcoal, paint, clay)
- Learn about great artists, architects and designers in history

Computing

- Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
- Use sequence, selection, and repetition in programs; work with variables and various forms of input and output
- Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs

Music

- Play and perform in solo and ensemble contexts, using their voices and playing musical instruments with increasing accuracy, fluency, control and expression
- Improvise and compose music for a range of purposes using the inter-related dimensions of music
- Listen with attention to detail and recall sounds with increasing aural memory
- Use and understand staff and other musical notations
- Appreciate and understand a wide range of high-quality live and recorded music drawn from different traditions and from great composers and musicians
- Develop an understanding of the history of music

UAE Social Studies

UAE Social Studies is taught to all students as per MOE guidelines. The subject matter is designed to teach the values of citizenship and loyalty in their broader meaning among students. It emphasizes the concepts of citizenship and heritage that combine the principles of culture, traditions, and affiliations to the UAE.

UAE social studies in the timetable ensure all students are able to learn about the UAE's geography, history, and language. They are important parts of education in the UAE and are incorporated into the school's curriculum to provide students with a better understanding and appreciation for the history and culture of the UAE.