



THE ENGLISH MODERN SCHOOL ALWAKRA CAMPUS

Our mission is to provide a challenging, internationally based education that nurtures lifelong learners in a multi-cultural setting.

Our vision is for all our students to reach their full potential and positively impact their world.

YEAR 5 CURRICULUM GUIDE

Curriculum Frameworks

The following curriculum frameworks provide a set of progressive learning objectives for Mathematics, English and Science, taken directly from the Cambridge Curriculum Frameworks. The objectives detail what the learner should know or what they should be able to do by the end of that year in Primary. The learning objectives provide a structure for teaching and learning and a reference against which a learners' ability and understanding can be checked. These are the three core Cambridge Primary Curriculum subjects, other subjects such as Social Studies are taught following standards from the UK National Curriculum.

EMSW Primary Teaching Philosophy

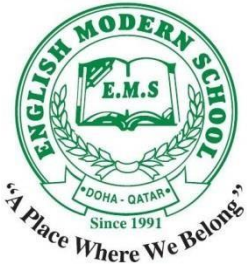
The English Modern School strengthens the curriculum with research-based best practice using instructional and assessment methodologies. The Primary division use an inquiry-based approach where children are encouraged to think critically to investigate the world around them, often with different subject areas integrated together. Connections of ideas across different subjects help students to consolidate their learning by being able to make strong and relevant connections. EMS provides students with learning experiences through inquiry that are engaging, relevant, challenging and significant, in learning environments that are stimulating and provocative. Students are supported in their journey towards mastery and control on their journey to become independent, autonomous inquirers. In the Primary school teachers use continuous, on-going assessments of and for learning throughout the year.

The assessments are varied and provide multiple opportunities for students to demonstrate learning. Together this information is used to support the child's learning, inform teachers of next learning steps and is also used to make a judgement on an overall grade for reporting three times a year.

Expected School-Wide Learning Results

It is the consensus of the EMS community that the following are school-wide learning results for every EMS graduate:





PRIMARY- YEAR 5

Academic Information

CAMBRIDGE ENGLISH STANDARDS

Reading:

Students are learning to:

Skim read to gain an overall sense of a text and scan for specific information.

Compare and evaluate the print and film versions of a novel or play and compare dialogue and dramatic conventions in film narrative.

Read poems by significant poets and compare style, forms and themes and read and perform narrative poems.

Locate information confidently and efficiently from different sources and extract key points and group and link ideas.

Demonstrate understanding of implicit meaning in texts.

Provide accurate textual reference from more than one point in a story to support answers to questions.

Explain, comment on and analyse the way writers use stylistic and other features of language and structure in texts

Comment on a writer's use of language and reasons for the writer's choices and consider how a writer expresses their point of view, e.g. how characters are presented.

Begin to interpret imagery and techniques, e.g. metaphor, personification, simile, adding to understanding beyond the literal.

Discuss metaphorical expressions and figures of speech.

Understand clauses within sentences and how they are connected.

Compare the structure of different stories and compare writing that informs and persuades.

Understand the difference between direct and reported speech and learn how dialogue is set out and punctuated.

Understand the use of impersonal style in explanatory texts.

Investigate the origin and appropriate use of idiomatic phrases.

Understand conventions of standard English, e.g. agreement of verbs.

Recognise conventions and evaluate viewpoint, purpose, themes and ideas in texts and identify the point of view from which a story is told.

Read and evaluate non-fiction texts for purpose, style, clarity and organisation and explore the features of texts about events and experiences, e.g. diaries.

Note the use of persuasive devices, words and phrases in print and other media.

Read and identify characteristics of myths, legends and fables.

Writing

Students are learning to:

Make notes for different purposes, using simple abbreviations and writing 'in your own words'.

Map out writing to plan structure, e.g. paragraphs, sections, chapters and practise fast, fluent and legible handwriting styles for different purposes.

Use imagery and figurative language to evoke imaginative response and use a thesaurus to extend vocabulary and choice of words.

Use a more specialised vocabulary to match the topic and choose words and phrases carefully to convey feeling and atmosphere.

Write non-chronological reports and explanations and draft and write letters for real purposes.

Write new scenes or characters into a story, or write from another viewpoint.

Write own versions of legends, myths and fables, using structures from reading and write a play script, including production notes to guide performance.

Write a commentary on an issue, setting out and justifying a personal view and maintain a consistent viewpoint when writing.

Record ideas, reflections and predictions about books, e.g. in a reading log.

Practise proofreading and editing own writing for clarity and correctness and use dictionaries efficiently and carry out IT spell checks.

Review, revise and edit writing in order to improve it, using IT as appropriate and evaluate own and others' writing.

Begin to establish links between paragraphs using adverbials and use a range of sentence structures and punctuation to convey meaning and create effects.

Combine simple sentences and re-order clauses to make compound and complex sentences and use an increasing range of subordinating connectives.

Begin to use the comma to separate clauses within sentences and clarify meaning in complex sentences.

Begin to set out dialogue appropriately, using a range of punctuation.

Identify prepositions and use the term preposition.

Extend understanding of the use of adverbs to qualify verbs, e.g. in dialogue.

Use apostrophes for both possession and shortened forms.

Use pronouns, making clear to what or to whom they refer and spell and make correct use of possessive pronouns, e.g. their, theirs, my, mine.

Investigate the spelling of word-final unstressed vowels, e.g. the unstressed 'er' at the end of butter and unstressed 'ee' at the end of city.

Learn spelling rules for words ending in -e and -y, e.g. take/ taking, try/tries.

Know rules for doubling consonants and investigate patterns in the use of single and double consonants, e.g. -full/-ful.

Use effective strategies for learning new spellings and misspelt words and investigate spelling patterns for pluralisation, e.g. -s, -es, -y/-ies, -f/-ves.

Identify 'silent' vowels in polysyllabic words, e.g. library, interest.

Extend earlier work on prefixes and suffixes, recognising that different rules apply for suffixes which begin with vowels and those that begin with consonants.

Understand ways of creating opposites, e.g. un-, im- and comparatives, e.g. -er, -est.

Understand grammatical homophones, e.g. they're, their, there and collect synonyms and opposites and investigate shades of meaning.

Identify word roots and derivations to support spelling and vocabulary, e.g. sign, signal, signature.

Speaking and Listening

Students are learning to:

Prepare and present an argument to persuade others to adopt a point of view and shape and organise ideas clearly when speaking to aid the listener.

Talk confidently in extended turns and listen purposefully in a range of contexts, responding to guidance about, and feedback on, the quality of contributions.

Describe events and convey opinions with increasing clarity and detail.

Recall and discuss important features of a talk, possibly contributing new ideas and ask questions to develop ideas and extend understanding.

Report back to a group, using notes to present findings about a topic studied. Evaluate what is heard and give reasons for agreement or disagreement.

Take different roles and responsibilities within a group and begin to discuss how and why language choices vary in different situations.

Convey ideas about characters in drama through choice of speech, gesture and movement and begin to adapt non-verbal gestures and vocabulary to suit content and audience.

CAMBRIDGE SCIENCE STANDARDS

Scientific Enquiry

Students are learning to:

Know that scientists have combined evidence with creative thinking to suggest new ideas and explanations for phenomena.

Use observation and measurement to test predictions and make links.

Make predictions of what will happen based on scientific knowledge and understanding, and suggest and communicate how to test these.

Use knowledge and understanding to plan how to carry out a fair test.

Collect sufficient evidence to test an idea.

Identify factors that need to be taken into account in different contexts.

Make relevant observations.

Measure volume, temperature, time, length and force.

Discuss the need for repeated observations and measurements.

Present results in bar charts and line graphs.

Decide whether results support predictions.

Begin to evaluate repeated results.

Recognise and make predictions from patterns in data and suggest explanations using scientific knowledge and understanding.

Interpret data and think about whether it is sufficient to draw conclusions.

Biology

Students are learning to:

Know that plants need energy from light for growth.

Know that plants reproduce.

Observe how seeds can be dispersed in a variety of ways.

Investigate how seeds need water and warmth for germination, but not light.

Know that insects pollinate some flowers.

Observe that plants produce flowers which have male and female organs; seeds are formed when pollen from the male organ fertilises the ovum (female).

Recognise that flowering plants have a life cycle including pollination, fertilisation, seed production, seed dispersal and germination.

Chemistry

Students are learning to:

Know that evaporation occurs when a liquid turns into a gas.

Know that condensation occurs when a gas turns into a liquid and that it is the reverse of evaporation.

Know that air contains water vapour and when this meets a cold surface it may condense.

Know that the boiling point of water is 100°C and the melting point of ice is 0°C.

Know that when a liquid evaporates from a solution the solid is left behind.

Physics

Students are learning to:

Observe that shadows are formed when light travelling from a source is blocked.

Investigate how the size of a shadow is affected by the position of the object.

Observe that shadows change in length and position throughout the day.

Know that light intensity can be measured.

Explore how opaque materials do not let light through and transparent materials let a lot of light through.

Know that we see light sources because light from the source enters our eyes.

Know that beams/rays of light can be reflected by surfaces including mirrors, and when reflected light enters our eyes we see the object.

Explore why a beam of light changes direction when it is reflected from a surface.

Explore, through modeling, that the sun does not move; its apparent movement is caused by the Earth spinning on its axis.

Know that the Earth spins on its axis once in every 24 hours.

Know that the Earth takes a year to orbit the sun, spinning as it goes.

Research the lives and discoveries of scientists who explored the solar system and stars.

CAMBRIDGE MATHEMATICS STANDARDS

Number

Students are learning to:

Count on and back in steps of constant size, extending beyond zero and count on or back in thousands, hundreds, tens and ones to add or subtract.

Know what each digit represents in five- and six-digit numbers.

Partition any number up to one million into thousands, hundreds, tens and units.

Use decimal notation for tenths/hundredths and understand what the digit represents.

Round four-digit numbers to the nearest 10, 100 or 1000.

Round a number with one or two decimal places to the nearest whole number.

Order and compare numbers up to a million using the > and < signs.

Order and compare negative/positive numbers on a number line or temperature scale.

Order numbers with one or two decimal places and compare using > and < signs.

Recognise and extend number sequences.

Recognise odd/even numbers and multiples of 5, 10, 25, 50 and 100 up to 1000.

Make statements about sums, differences and multiples of odd and even numbers.

Recognise equivalence between: $\frac{1}{2}$, $\frac{1}{4}$ and $\frac{1}{8}$; $\frac{1}{3}$ and $\frac{1}{6}$; $\frac{1}{5}$ and $\frac{1}{10}$.

Recognise equivalence between the decimal and fraction forms of halves, tenths and hundredths and use to order fractions, e.g. 0.6 is more than 50% and less than $\frac{7}{10}$.

Change an improper fraction to a mixed number, e.g. $\frac{7}{4}$ to $1\frac{3}{4}$; order mixed numbers and place between whole numbers on a number line.

Relate finding fractions to division and use to find simple fractions of quantities.

Understand percentage as number of parts in 100 and find percentages of quantities.

Express halves, tenths and hundredths as percentages.

Use fractions to describe and estimate a proportion.

Use ratio to solve problems, e.g. adapt a recipe for 6 people to one for 3 people.

Estimate and approximate when calculating, e.g. using rounding, and check working.

Choose an appropriate strategy for a calculation and explain how they worked out the answer.

Explore and solve number problems and puzzles and use ordered lists and tables to help to solve problems systematically.

Multiplication and Division

Students are learning to:

Multiply or divide three-digit numbers by single-digit numbers and multiply two-digit numbers by two-digit numbers, and multiply two-digit numbers with one decimal place by single-digit numbers,

Know multiplication and division facts for the $2\times$ to $10\times$ tables and know squares of all numbers to 10×10 and recognise multiples of 6, 7, 8 and 9 up to the 10th multiple.

Know and apply tests of divisibility by 2, 5, 10 and 100.

Find factors of 2-digit numbers and use them to multiply, e.g. multiply by 3, then double to multiply by 6.

Multiply and divide any number from 1 to 10 000 by 10 or 100 and understand the effect.

Use multiplication to check the result of a division, e.g. multiply 3.7×8 to check $29.6 \div 8$.
Divide three-digit numbers by single-digit numbers, including those with a remainder (answers no greater than 30).
Start expressing remainders as a fraction of the divisor when dividing two-digit numbers by single-digit numbers.
Decide whether to group (using multiplication facts and multiples of the divisor) or to share (halving and quartering) to solve divisions.
Decide whether to round an answer up or down after division, depending on the context.
Begin to use brackets to order operations and understand the relationship between the four operations and how laws of arithmetic apply to multiplication.
Multiply multiples of 10 to 90, and multiples of 100 to 900, by a single-digit number.
Multiply by 19 or 21 by multiplying by 20 and adjusting and multiply by 25 by multiplying by 100 and dividing by 4.
Double numbers up to 100 and halve even numbers to 200, use this to double and halve numbers with one or two decimal places, e.g. double 3.4, half of 8.6.
Double multiples of 10 to 1000 and multiples of 100 to 10 000, e.g. double 360 or double 3600, and derive the corresponding halves.

Addition and Subtraction

Students are learning to:

Use strategies to add or subtract pairs of two/three-digit numbers and numbers with one decimal place.
Add or subtract near multiples of 10 or 100, e.g. $4387 - 299$ and calculate differences between near multiples of 1000, e.g. $5026 - 4998$, or near multiples of 1, e.g. $3.2 - 2.6$.
Know by heart pairs of one-place decimals with a total of 1, e.g. $0.8 + 0.2$.
Derive quickly pairs of decimals with a total of 10, and with a total of 1.
Find the total of more than three two- or three-digit numbers using a written method.
Add or subtract any pair of three- and/or four-digit numbers, with the same number of decimal places.
Solve single and multi-step word problems (four operations); represent them, e.g. with diagrams or number line.
Check with a different order when adding several numbers or by using the inverse when adding or subtracting a pair of numbers.

Geometry

Students are learning to:

Read, choose, use and record standard units to estimate and measure length, mass and capacity.
Convert larger to smaller metric units (decimals to one place), e.g. change 2.6 kg to 2600 g.
Order measurements in mixed units and round measurements to the nearest whole unit.
Interpret a reading that's between two unnumbered divisions on a scale and compare readings on different scales.
Draw and measure lines to the nearest centimetre and millimetre.
Recognise and use the units for time (seconds, minutes, hours, days, months and years).
Tell and compare time using digital and analogue clocks using the 24-hour clock and read timetables using 24-hour clock.
Calculate time intervals in seconds, minutes and hours using digital or analogue formats.
Use a calendar to calculate time intervals in days and weeks (using knowledge of days in calendar months) and calculate time intervals in months or years.
Measure and calculate the perimeter of regular or irregular polygons.
Understand area measured in square centimetres (cm²).

Use the formula for the area of a rectangle to calculate the rectangle's area.
Understand everyday systems of measurement in length, weight, capacity, temperature and time and use these to perform simple calculations.

Measurement

Students are learning to:

Identify and describe properties of triangles and classify as isosceles, equilateral or scalene.

Recognise reflective and rotational symmetry in regular polygons.

Create patterns with two lines of symmetry, e.g. on a pegboard or squared paper.

Visualise 3D shapes from 2D drawings or nets, e.g. different nets of an open or closed cube.

Recognise perpendicular and parallel lines in 2D shapes, drawings and the environment.

Understand and use angle measure in degrees; measure angles to the nearest 5°; identify, describe and estimate the size of angles and classify them as acute, right or obtuse.

Calculate angles in a straight line.

Read and plot coordinates in the first quadrant.

Predict where a polygon will be after reflection where the mirror line is parallel to one of the sides, including where the line is oblique.

Understand translation as movement along a straight line, identify where polygons will be after a translation and give instructions for translating shapes.

Recognise the relationships between different 2D and 3D shapes.

Understand everyday systems of measurement in length, weight, capacity, temperature and time and use them to perform calculations.

Data Handling

Students are learning to:

Answer a set of related questions by collecting, selecting and organising relevant data; draw conclusions from their own and others' data and identify further questions to ask.

Draw and interpret frequency tables, pictograms and bar line charts, with the vertical axis labelled for example in twos, fives, tens, twenties or hundreds.

Construct simple line graphs, e.g. to show changes in temperature over time.

Understand where intermediate points have and do not have meaning, e.g. comparing a line graph of temperature against time with a graph of class attendance for each day.

Find and interpret the mode of a set of data.

Describe the occurrence of familiar events using the language of chance or likelihood.

Year 5 BOOKS:

CAMBRIDGE GLOBAL ENGLISH LEARNERS BOOK 5

CAMBRIDGE GLOBAL ENGLISH ACTIVITY BOOK 5

CAMBRIDGE PRIMARY MATHEMATICS LEARNERS BOOK 5

CAMBRIDGE PRIMARY MATHEMATICS SKILL BUILDERS BOOK 5

CAMBRIDGE PRIMARY SCIENCE LEARNERS BOOK 5

CAMBRIDGE PRIMARY SCIENCE ACTIVITY LEARNERS BOOK 5

CAMBRIDGE PRIMARY SCIENCE SKILL BUILDERS BOOK 5

SOCIAL STUDIES FOR A BETTER WORLD 5

In an effort to help you provide extension for your children at home, we are giving few websites which can work through with your children :

General:

Reading

<http://jackprelutsky.com/bio/> Kenn Nesbitt - Wikipedia
https://en.wikipedia.org/wiki/Kenn_Nesbitt
www.roalddahl.com/roald-dahl/characters/magical.../the-big-friendly-giant
<http://www.roalddahl.com/roald-dahl/stories/a-e/charlie-and-the-chocolate-factory>
www.nutritionaustralia.org/national/resource/healthy-eating-pyramid
Stone Soup - YouTube www.youtube.com/watch?v=P_TXIoiuBd4
<https://www.pandotrip.com/top-10-celebrations-around-the-world-1937/>
https://en.wikipedia.org/wiki/Rio_Carnival
<http://www.francescasimon.com/http://www.horridhenry.co.uk/>
<https://www.biography.com/people/jackie-chan-9542080> Jackie Chan - Martial Arts Expert, Actor - Biography;
<http://www.ted.com> Jane Goodall
<https://www.kidsreads.com/reviews/stowaway>
https://cdn.oxfordowl.co.uk/2016/05/05/13/14/53/858/ttops_gs_icarus_tns.pdf
<http://www.phrasemix.com/collections/the-50-most-important-english-proverbs>
http://www.vrml.k12.la.us/curriculum/elem/4th/ela/poetry/characteristics_poem.pdf

Science

<http://www.easyfunschool.com/article1941.html>
<http://www.kidsgrowingstrong.org/germination>
<http://www.sciencekids.co.nz/gamesactivities/plantsgrow.html>
<http://www.buzzle.com/articles/plant-growth-factors.html>
<https://www.ixl.com/science/grade-5/identify-flower-parts-and-their-functions>
<http://www.123ict.co.uk/website/wp-content/uploads/2014/07/plant-life-cycle.png>
http://www.ehow.com/info_8342820_viewing-evaporation-experiment-kids.html
<http://oureverydaylife.com/examples-evaporation-condensation-38181.html>
www.preservearticles.com/201012231561/factorsaffectingevaporation.html
<http://legacy.mos.org/oceans/planet/watercycle.html>
http://www.physics4kids.com/files/thermo_scales.html
<https://svs.gsfc.nasa.gov/1373>
www.eyeonthesky.org
<http://www.childrensuniversity.manchester.ac.uk/learning-activities/science/the-earth-and-beyond/sun-moon-and-earth-orbits/>
<http://www.bbc.co.uk/schools/scienceclips/info>

21st Century Learning at home and in the classroom!

This is our second year of using online resources for homework support and our Character Education program.



Show My Homework: Each student has a personal login that gives access to the homework that has been assigned each week. Using Show My Homework has supported our development of 21st Century Learning by using online assignments to support student learning.



Mathletics: Mathletics is an online resource, used mostly for homework, that uses games and friendly competition to strengthen students' Maths skills. This year, we will be using it with Years 3-6.



secondSTEP is part of our Character Education program. Teachers use online and printed materials to teach and strengthen important social skills such as Learning to Focus and Listen, Learning to Stay Calm and Problem Solve, as well as Learning to develop Empathy (recognizing and feeling emotions that others feel).