# The KS3 Curriculum

The Rosary Private School 2024 - 2026

## Key Stage 3 Curriculum Booklet

#### About this booklet

This year, all parents of students from Foundation Stage to Year 9 will be able to find a booklet which sets out the standards required of their child for their particular stage of education and Year group. Please note: we do not refer to grades in the British System.

Please refer to the section titled '*The British National Curriculum and Key Stages*' which sets out the years and key stages. A **KEY STAGE** sets the educational knowledge expected of students at various ages and allows you to see how a particular aspect of learning progresses over time.

We would encourage you to read the entire booklet for your child's Key Stage. This will help you understand what they should know at the start of Year 7, and what they must have mastered by the end of the Key Stage in Year 9 as prescribed by the relevant authorities. As a school, we expect all students will be able to meet each standard. Teachers at the school will do everything they can to help students to do so, and hope parents will also support the school to make sure that their children achieve well.

## Aims and Objectives of the Curriculum at The Rosary Private School Muweilah

Our curriculum adopts the notion that every student is a unique individual who is constantly learning. From the time of entry, we endeavour to develop students who are resilient, capable, confident, and self-assured. The Rosary Private School's curriculum facilitates learning in a way that students can develop as fully as possible, the understanding, knowledge and skills required to meet the challenges of a rapidly globalising and competitive world. Through enriching the curriculum holistically, our program focuses on the whole student so as to ensure they form positive relationships, develop a transferable skill set and have exposure to unique and enriching opportunities.

We intend to nurture students who are:

- motivated and stretched in all aspects of school life,
- tolerant and caring
- enjoying and understanding their learning
- intellectually curious
- digitally literate
- developing high quality learning skills and leadership qualities
- comfortable and knowledgeable about the United Arab Emirates
- internationally minded
- collaborative
- informed risk takers
- entrepreneurial
- socially conscious

To meet these aims, the curriculum provides:

- a broad education
- an in-depth education so that students are challenged and stretched at all times,
- a wide range of enrichment activities and styles of learning to appeal to all student,
- an inclusive program with individual pathways developed to suit all needs and abilities,
- opportunities for student leadership in areas such as the school council, sustainability, and sports
- a wide range of choice at senior level, keeping students options open for as long as possible.

#### The British National Curriculum and Key Stages

The British National Curriculum provides pupils with an introduction to the essential knowledge they need to be educated citizens. It introduces pupils to the best that has been thought and said, and helps engender an appreciation of human creativity and achievement.

The National Curriculum is just one element in the education of every child. There is time and space in the school day and in each week, term and year to range beyond the National Curriculum specifications. The national curriculum provides an outline of core knowledge around which teachers can develop exciting and stimulating lessons to promote the development of pupils' knowledge, understanding and skills as part of the wider school curriculum.

The National Curriculum is organised into blocks of **years** called '**key stages**' (KS). These are set out below. At the end of each key stage, the teacher will formally assess your child's performance.

Child's age	Year	Key stage	Assessment
3 to 4	FS1		Assessment of students' starting points in
4 to 5	FS2	Foundation	language, communication, literacy and maths and teacher assessments
5 to 6	Year 1		Phonics screening check
6 to 7	Year 2	KS1	National tests in English reading and maths. Teacher assessments in maths, science, and English reading and writing
7 to 8	Year 3		
8 to 9	Year 4		Multiplication tables check
9 to 10	Year 5	KS2	
10 to 11	11 Year 6		National tests in English reading, maths, and grammar, punctuation, and spelling. Teacher assessments in English writing and science
11 to 12	Year 7		
12 to 13	Year 8	KS3	
13 to 14	Year 9		End of KS Assessment in English, Maths and General Science. Teacher assessment in all other subjects.
14 to 15	Year 10	KS4	Some student may take GCSEs
15 to 16	Year 11		Most student take GCSEs or other national
16 to 17	Year 12	KS5	Most students take Advanced Supplementary (AS) levels
17 to 18	Year 13		Most students take Advanced (A) Levels

## ASSESSMENT IN SUBJECTS OTHER THAN ENGLISH, MATHS AND SCIENCE

Subjects other than English, Mathematics, and Science, will be assessed by a variety of other formats including the compilation of a portfolio of best work, observation of practical activities, projects, and in class quizzes or incidental tests of a minor nature. This is in compliance with the requirements of the British National Curriculum. There will be GL Progress Tests at various points in the Key Stage. This allows the school, students and parents to see how well students are working towards meeting the required standards, particularly in English and Mathematics.

## CAT Testing

At Year 4, 6, 8, and 10 Students are tested on the Cognitive Abilities Test. A cognitive ability test is a test that measures a person's general mental ability or aptitude. It covers a range of aptitudes, from problem-solving to spatial awareness and everything else that requires thinking. At The Rosary Private School Muweilah students are tested at Year 4, 6, 8 and 10. These tests are important because they allow us to set specific targets for each student and, give a guide as to the possible grade outcome for them at IGCSE, AS and Advanced Level.

## **KEY STAGE THREE and Beyond**

At The Rosary Private School Muweilah, the **Secondary** level of schooling takes students from age 11 to 18, and is broken into three stages:

#### Key Stage 3 (Years 7 and 9, ages 11 to 14)

- Key Stage 4 (Years 10 to 11, ages 14 to 16)
- Key Stage 5 (Years 12 and 13, ages 16 18)
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Our bespoke curriculum is based on the National Curriculum for England (also referred to as the UK or British National Curriculum) up to the end of Year 9 to ensure that the skills and knowledge gained are in line with UK expectations, but tailored to include the federally-required subjects such as Arabic, Islamic Studies, UAE Social Studies and Moral Education which must be taught here. These subjects have a curriculum published by UAE authorities. The UKNC is a set of subjects and standards used by primary and secondary schools so students learn the same things. It covers what subjects are taught and the standards students should reach in each subject. At Key Stage 3 it is still broad and all students must take every subject required under the UKNC with some modifications to account for our location.

Key Stage 1 is designed to support student in their transition from mostly play-based learning in the Foundation Stage to the more formalised routines and situations of Key Stage 2. Key Stage 3 prepares students with the basic knowledge required to take them through to external examinations at the end of Key Stage 4 and Key Stage 5. Opportunities are planned to make the learning experience memorable, by adding imagination and excitement into the mix, encouraging students to learn through collaboration, investigation, and perseverance.

By the time they reach **Key Stage 3** all students should be independent learners, taking leadership of their learning and collaborating on a wide variety of tasks in lessons and throughout the school. Teachers will continue to facilitate learning experiences designed to:

- • provoke thinking skills,
  - nurture risk-taking,
  - develop emotional intelligence,
  - stimulate the imagination,
  - challenge,
  - build confidence,
  - develop leadership skills.

Elements of the UK National Curriculum are modified in light of the requirement for religious and political sensitivity and, wherever possible UAE examples are used to illustrate learning since this is the environment our students are growing up in.

For students in key stage 2 the curriculum aims to provide students with experience and skill development in the following areas:

LINGUISTIC:	MATHEMATICAL:	SCIENTIFIC:	TECHNOLOGICAL:
To develop students' communication skills and increase their command of language. This is developed through English (Language and Literature) and at least one foreign language (Arabic and French).	To teach students how to calculate and appreciate relationships and patterns in number and space as well as to think logically and express themselves clearly. This is developed through Mathematics, Computer Science and Science.	To develop students' scientific skills, knowledge and understanding. This is developed through Integrated Science in KS3 Year 7 and as separate Biology, Chemistry and Physics from Year 8 upwards.	To teach students a range of technological skills including up- to-date applications of ICT, to develop, plan and communicate ideas and to produce and evaluate good quality products. This is developed through Computing and through IT use in classrooms in other subjects.
HUMAN AND SOCIAL: To teach students about people and their interaction with the environment and how human action has influenced events and conditions. This is developed through Integrated Humanities, including Geography and History, Islamic Studies, UAE Social Studies and Enrichment Days/Moral Education.	PHYSICAL: To teach the basic principles of fitness and health and to develop students' physical control and coordination. This is developed through Games and Physical Education.	CREATIVE: To develop students' aesthetic and creative skills. This is developed through Art.	MORAL, SOCIAL, SPIRITUAL AND CULTURAL DEVELOPMENT: To develop students' self- knowledge, self-esteem and self-confidence so that they can distinguish right from wrong and respect the law as well as accept responsibility for their behaviour, show initiative and understand how they can contribute to community life. This is developed through Islamic Studies, Geography, History, the extra-curricular programme and Enrichment Days/Moral Education.

#### Learning Skills

Learning skills delivered throughout the school from foundation stage to key stage 5 and underpin learning connections and constructions in order to develop the 21st century skills for our students to be successful throughout their lives. At The Rosary Private School Muweilah we focus on the development of the four skills of



From Year 7 – 9 Students will undergo activities during the lessons which underpinned the four skills. In some cases they may form part of the assessment within the lesson. Students may be asked to complete oral activities at home or to make a presentation to the class or their group or take part in critical thinking exercises which require them to arrive at a reasoned solution based on evidence and good common sense. This will happen within a range of contexts and across all subjects.

Oracy is the ability to articulate ideas, develop understanding and engage with others through spoken language. In school, oracy is a powerful tool for learning by teaching students to become more effective speakers and listeners, and to empower them to better understand themselves, each other, and the world around them. In classes students will be encouraged to explain their ideas, developing their vocabulary using more sophisticated language and specific subject words.

By the end of Year 9 students should have completed a portfolio of their best work across a range of subjects. This will be work which demonstrates the four skills and shows their improvement in understanding and their progress in each subject. As part of this, parents will be invited to a portfolio event where their child will demonstrate their skill of presenting their portfolio. This will demonstrate your child's readiness to transition into Year 10.

## Expectations

The expectations that all students are expected to have met by the end of Year 9 in the UK National Curriculum are set out under the sections for each subject. These have been taken from the relevant UK government websites including https://www.gov.uk/national-curriculum/

Where your child has an identified Special Educational Need, depending on the level of that need, modifications that allow your child to partake in the full National Curriculum will be made by the school, classroom teachers and/or the Special Educational Needs Department. *See the section on INCLUSION*. It is particularly important that any need that may give students additional access arrangements such as extra time, a reader or other access arrangements is identified by the end of Year 8. Later identification may mean that the examination board refuses the school's application for these access arrangements for a student.

Teachers will set high expectations for every student. They will plan stretching extension work for students whose attainment is significantly above the expected standard. *See the separate section on Extension for Exceptional Students.* Teachers will use appropriate assessment to set targets which are deliberately ambitious. So that the school is able to assess your child against National Curriculum

expectations, test materials obtained from the UK are used to assess the quality of your child's learning. The content of these is not made available in advance.



Compulsory National Curriculum subjects at The Rosary Private School are:

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English	English National Curriculum Key	
Mathematics	Stage requirements	
Science	Stage requirements	
Humanities: from Y6		
Physical Education	Adapted English Notional	
French: Y2-7	Adapted English National	
Computing	Curriculum for each key stage	
Art : Year 7		
Arabic A (Arab national students		
delivered in Arabic)		
Arabic B (Non Arab students		
delivered in English)		
Islamic A (Arab national students	UAE Ministry of Education	
delivered in Arabic)	curriculum	
Islamic B (Non Arab students		
delivered in English)		
UAE Social Studies		
Moral Education		

## **REQUIREMENTS OF SPECIFIC SUBJECTS**

#### ENGLISH

English has a pre-eminent place in education and in society. A high-quality education in English will teach pupils to speak and write fluently so that they can communicate their ideas and emotions to others and through their reading and listening, others can communicate with them. Through reading in particular, pupils have a chance to develop culturally, emotionally, intellectually, socially and spiritually. Literature, especially, plays a key role in such development. Reading also enables pupils both to acquire knowledge and to build on what they already know. All the skills of language are

essential to participating fully as a member of society; pupils, therefore, who do not learn to speak, read and write fluently and confidently are effectively disenfranchised.

The overarching aim for English in the national curriculum is to promote high standards of language and literacy by equipping pupils with a strong command of the spoken and written word, and to develop their love of literature through widespread reading for enjoyment. The national curriculum for English aims to ensure that all pupils:

- read easily, fluently and with good understanding
- develop the habit of reading widely and often, for both pleasure and information
- acquire a wide vocabulary, an understanding of grammar and knowledge of linguistic conventions for reading, writing and spoken language
- appreciate a rich and varied literary heritage
- write clearly, accurately and coherently, adapting their language and style in and for a range of contexts, purposes and audiences
- use discussion in order to learn; they should be able to elaborate and explain clearly their understanding and ideas
- are competent in the arts of speaking and listening, making formal presentations, demonstrating to others and participating in debate.

The national curriculum for English reflects the importance of spoken language in pupils' development across the whole curriculum – cognitively, socially and linguistically. Spoken language continues to underpin the development of pupils' reading and writing during key stage 3 and teachers will therefore ensure pupils' confidence and competence in this area continue to develop. Pupils willbe taught to understand and use the conventions for discussion and debate, as well as continuing to develop their skills in working collaboratively with their peers to discuss reading, writing and speech across the curriculum.

Reading at key stage 3 will be wide, varied and challenging. Pupils are expected to read whole books, to read in depth and to read for pleasure and information. We would ask parents to support this at home by joining a local library and making the selection and reading of books, newspapers(onlin or hard copy), magazines and other material a daily occurrence.

Pupils will continue to develop their knowledge of and skills in writing, refining their drafting skills and developing resilience to write at length. They will be taught to write formal and academic essays as well as writing imaginatively. They will also be taught to write for a variety of purposes and audiences across a range of contexts. This requires an increasingly wide knowledge of vocabulary and grammar. Opportunities to enhance vocabulary will arise naturally from reading and writing and teachers will show pupils how to understand the relationships between words, how to understand nuances in meaning, and how to develop their understanding of, and ability to use, figurative language.

Pupils will be taught to control their speaking and writing consciously, understand why sentences are constructed as they are and to use Standard English. They should understand and use age-appropriate vocabulary, including linguistic and literary terminology, for discussing their reading, writing and spoken language. This involves consolidation, practice and discussion of language. It is important that pupils learn the correct grammatical terms in English.

Teachers will build on the knowledge and skills that pupils have been taught at key stage 2. Decisions about progression should be based on the security of pupils' linguistic knowledge, skills and understanding and their readiness to progress to the next stage. Pupils whose linguistic development is more advanced will be challenged through being offered opportunities for increased breadth and depth in reading and writing. Those who are less fluent will consolidate their knowledge, understanding and skills, including through additional practice.

By the time they enter Year 7, students must be able to:

Reading: Word Recognition	apply their growing knowledge of root words, prefixes and suffixes as listed in <i>English</i> <i>Appendix 1</i> , both to read aloud and to understand the meaning of new words they meet.
	Read further exception words, noting the unusual correspondences between spelling and sound, and where these occur in the word.
Reading:	Demonstrate positive attitudes to reading and understanding of what they read by:
Comprehension	reading and discussing an increasingly wide range of fiction, poetry, plays, non-fiction and reference books or textbooks
	reading books that are structured in different ways and reading for a range of purposes,
	showing increasing their familiarity with a wide range of books, including myths, legends and traditional stories, modern fiction, fiction from our literary heritage, and books from other cultures and traditions
	recommending books that they have read to their peers, giving reasons for their choices,
	identifying and discussing themes and conventions in and across a wide range of writing
	making comparisons within and across books
	learning a wider range of poetry by heart
	preparing poems and plays to read aloud and to perform, showing understanding through intonation, tone, and volume so that the meaning is clear to an audience,
	understanding what they read by checking that the book makes sense to them, discussing their understanding and exploring the meaning of words in context, asking questions to improve their understanding,
	drawing inferences such as inferring characters' feelings, thoughts, and motives from their actions, and justifying inferences with evidence
	predicting what might happen from details stated and implied,
	summarising the main ideas drawn from more than one paragraph, identifying key details that support the main ideas,
	identifying how language, structure and presentation contribute to meaning,
	discuss and evaluate how authors use language, including figurative language, considering the impact on the reader,
	distinguish between statements of fact and opinion,
	retrieve, record and present information from non-fiction,

	participate in discussions about books that are read to them and those they can read for themselves, building on their own and others' ideas and challenging views courteously,
	explain and discuss their understanding of what they have read, including through formal presentations and debates, maintaining a focus on the topic, and using notes where necessary to provide reasoned justifications for their views.
Writing	Demonstrate skill in using the words from English Appendix 1:
	using further prefixes and suffixes and understand how to add them,
	spell some words with 'silent' letters [for example, knight, psalm, solemn]
	spell further homophones,
	place the possessive apostrophe accurately in words with regular plurals [for example, girls', boys'] and in words with irregular plurals [for example, student's]
	use the first two or three letters of a word to check its spelling in a dictionary,
	use a thesaurus.
Writing: Composition	identify the audience for and purpose of the writing, selecting the appropriate form and using other similar writing as models for their own,
	note and develop initial ideas, drawing on reading and research where necessary,
	in writing narratives, consider how authors have developed characters and settings in what students have read, listened to or seen performed,
	draft and write by selecting appropriate grammar and vocabulary, understanding how such choices can change and enhance meaning,
	in narratives, describe settings, characters and atmosphere and integrating dialogue to convey character and advance the action,
	précis longer passages,
	use a wide range of devices to build cohesion within and across paragraphs,
	use further organisational and presentational devices to structure text and to guide the reader [for example, headings, bullet points, underlining]
	evaluate and edit by assessing the effectiveness of their own and others' writing proposing changes to vocabulary, grammar, and punctuation to enhance effects and clarify meaning,
	ensure the consistent and correct use of tense throughout a piece of writing,
	ensure correct subject and verb agreement when using singular and plural, distinguishing between the language of speech and writing and choosing the appropriate register,
	proof-read for spelling and punctuation errors

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Vocabulary,	including subjunctive forms,			
punctuation and grammar	use passive verbs to affect the presentation of information in a sentence,			
Contraction of the second s	use the perfect form of verbs to mark relationships of time and cause,			
	use expanded noun phrases to convey complicated information concisely,			
	use modal verbs or adverbs to indicate degrees of possibility,			
	use relative clauses beginning with who, which, where, when, whose, that or with an implied (i.e. omitted) relative pronoun,			
	use commas to clarify meaning or avoid ambiguity in writing,			
	use hyphens to avoid ambiguity,			
	use brackets, dashes, or commas to indicate parenthesis,			
	use semi-colons, colons, or dashes to mark boundaries between independent clauses,			
	use a colon to introduce a list,			
	punctuate bullet points consistently,			
	use and understand the grammatical terminology in <i>English Appendix 2</i> accurately and appropriately when discussing their writing and reading.			

#### Specific Expectations:

By the end of Year 9, students must have met the following requirements:

#### Reading

Have developed an appreciation and love of reading, and read increasingly challenging material independently through:

- reading a wide range of fiction and non-fiction, including in particular whole books, short stories, poems and plays with a wide coverage of genres, historical periods, forms and authors. The range will include high-quality works from: English literature, both pre-1914 and contemporary, including prose, poetry and drama, Shakespeare (one play) and seminal world literature including Emirati short stories.
- choosing and reading books independently for challenge, interest and enjoyment.
- re-reading books encountered earlier to increase familiarity with them and provide a basis for making comparisons.

Understand increasingly challenging texts through:

- learning new vocabulary, relating it explicitly to known vocabulary
- understanding it with the help of context and dictionaries
- making inferences and referring to evidence in the text
- knowing the purpose, audience for and context of the writing and drawing on this knowledge to support comprehension
- checking their understanding to make sure that what they have read makes sense.

Read critically through:

- knowing how language, including figurative language, vocabulary choice, grammar, text structure and organisational features, presents meaning
- recognising a range of poetic conventions and understanding how these have been used
- studying setting, plot, and characterisation, and the effects of these
- understanding how the work of dramatists is communicated effectively through performance and how alternative staging allows for different interpretations of a play
- making critical comparisons across texts
- studying a range of authors, including at least one author in depth each year.

#### Writing

Write accurately, fluently, effectively and at length for pleasure and information through:

- writing for a wide range of purposes and audiences, including:
  - well-structured formal expository and narrative essays
  - stories, scripts, poetry and other imaginative writing
  - notes and polished scripts for talks and presentations
  - a range of other narrative and non-narrative texts, including arguments, and personal and formal letters
- summarising and organising material, and supporting ideas and arguments with any necessary factual detail
- applying their growing knowledge of vocabulary, grammar and text structure to their writing and selecting the appropriate form
- drawing on knowledge of literary and rhetorical devices from their reading and listening to enhance the impact of their writing

Plan, draft, edit and proof-read through:

- considering how their writing reflects the audiences and purposes for which it was intended
- amending the vocabulary, grammar and structure of their writing to improve its coherence and overall effectiveness
- paying attention to accurate grammar, punctuation and spelling; applying the spelling patterns and rules set out in the Key Stage 1 and Key Stage 2 curriculum. (*see Addenda in Key Stage 1 and Key Stage 2 Curriculum booklets*)

#### Grammar and vocabulary

Consolidate and build on their knowledge of grammar and vocabulary through:

- extending and applying the grammatical knowledge set out in Appendix 2 of the Key Stage 2 curriculum to analyse more challenging texts(*see Key Stage 2 Curriculum booklet*)
- studying the effectiveness and impact of the grammatical features of the texts they read
- drawing on new vocabulary and grammatical constructions from their reading and listening, and using these consciously in their writing and speech to achieve particular effects

- knowing and understanding the differences between spoken and written language, including differences associated with formal and informal registers, and between Standard English and other varieties of English
- using Standard English confidently in their own writing and speech

Discussing reading, writing and spoken language with precise and confident use of linguistic and literary terminology.

#### Spoken English

Speak confidently and effectively, including through:

- using Standard English confidently in a range of formal and informal contexts, including classroom discussion
- giving short speeches and presentations, expressing their own ideas and keeping to the point
- participating in formal debates and structured discussions, summarising and/or building on what has been said
- improvising, rehearsing and performing play scripts and poetry in order to generate language and discuss language use and meaning, using role, intonation, tone, volume, mood, silence, stillness and action to add impact.

Assessment: Students will be assessed at the end of every term on the topic and skills they have been taught, with assessment questions that will be stylised to mirror the GCSE English exam. The aim of this is to introduce exam techniques early on to students so that it is well embedded by the time that they are ready to sit their GCSE examinations. Throughout the terms, spelling tests, research projects, and various creative activities will be undertaken by students to encourage other skills outside of exam practice. At the end of the year, all students will sit the GL Progress test in English.

**Continuation into Years 10-11(KS4):** English as a 2<sup>nd</sup> Language is a core subject so students will be expected to continue this into Year 10 and Year 11. From September 2025, some students may choose English as a First Language and English Literature. English is one of the two subjects that must be in the five A\* - E passes for MOE accreditation of the IGCSE.

**Careers related to the subject:** English is looked upon favourably by higher institutions as it demonstrates the ability to analyse, think critically and communicate effectively. It is a fantastic subject to invest your education in as it has many future careers mapped out from it, for example, Law, Journalism, Publishing and Media.



Teaching	Programme
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TOPIC	YEAR 7	YEAR 8	YEAR 9
Writing skills	Creative and Descriptive Writing	Composing own short stories	Blogs, articles, speeches
Speaking and Listening	Researching and analysing key speeches from a selection of famous figures with particular focus on persuasive techniques	Researching and analysing key speeches from a selection of famous figures with particular focus on persuasive techniques	Researching and analysing key speeches from a selection of famous figures with particular focus on persuasive techniques
Modern Novel	The Lion, the Witch and the Wardrobe by C.S.Lewis	<i>Of Mice and Men</i> by John Steinbeck	Roll of Thunder, Hear My Cry by Mildred D. Taylor
Poetry	Blackout, Nature	Haiku, Limerick, Acrostic	International Heritage
Shakespeare Study	1	Macbeth	-
Media	Languages of advertisement and marketing	Film making	Languages of Journalism

#### Mathematics

At The Rosary Private School Muweilah, we want students to develop an appreciation of the beauty and power of mathematics and a sense of enjoyment and curiosity about the subject. A firm grasp of the key concepts and processes in mathematics is essential to equip our young people to flourish in day-to-day living. Mathematics provides students with the skills and confidence to carry out everyday tasks with greater use, from handling bills to deciding the most efficient way to carry out a series of tasks. Students who are comfortable and confident with mathematics are able to develop critical thinking skills, enabling them to effectively problem solve and solution find. Young people who are able to leave school with these skills are better equipped to be numerate in multiple settings across society and are able to flourish in a variety of fields.

The course involves:

- applying suitable mathematics accurately within the classroom and beyond
- communicating mathematics effectively
- engaging in mathematics as an interesting and worthwhile activity
- selecting appropriate mathematical tools and methods
- knowing that mathematics is a rigorous, coherent discipline,
- combining understanding, experiences, imagination, and reasoning to construct new knowledge,
- using existing mathematical knowledge to create solutions to unfamiliar problems,
- understanding that mathematics is used as a tool in a wide range of contexts,
- recognizing the rich historical and cultural roots of mathematics, including in the Arab world
- knowing that mathematics is essentially abstract and can be used to model or represent situations,
- recognizing the limitations and scope of a model or representation

## **KEY STAGE 3**

The National Curriculum for mathematics at KS3 aims to ensure that all pupils:

- become **fluent** in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- **reason mathematically** by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language
- can **solve problems** by applying their mathematics to a variety of routine and non- routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

Mathematics is an interconnected subject in which pupils need to be able to move fluently between representations of mathematical ideas. The programme of study for key stage 3 is organised into apparently distinct domains, but pupils should build on key stage 2 and connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems. They should also apply their mathematical knowledge in science, geography, computing and other subjects.

Pupils who grasp concepts rapidly will be challenged through being offered rich and sophisticated problems before any acceleration through new content in preparation for key stage 4. Those who are not sufficiently fluent will consolidate their understanding, including through additional practice, before moving on.

Calculators will not be used as a substitute for good written and mental arithmetic.

## SPECIFIC YEAR STANDARDS

By the START of Year 7, students must be competent in all the standards of KS2 up to and including being able to:

- 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 0
- solve number and practical problems that involve place value
- 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
- perform mental calculations, including with mixed operations and large numbers
- identify common factors, common multiples and prime numbers

- use their knowledge of the order of operations to carry out calculations involving the 4 operations
- solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why
- solve problems involving addition, subtraction, multiplication and division
- use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy
- use common factors to simplify fractions; use common multiples to express fractions in the same denomination
- compare and order fractions, including fractions >1
- 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 [for example,  $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$ ]
- divide proper fractions by whole numbers [for example,  $\frac{1}{3} \div 2 = \frac{1}{6}$ ]
- associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example,  $\frac{3}{8}$ ]
- identify the value of each digit in numbers given to 3 decimal places and multiply and divide numbers by 10, 100 and 1,000 giving answers up to 3 decimal places
- multiply one-digit numbers with up to 2 decimal places by whole numbers
- use written division methods in cases where the answer has up to 2 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
- solve problems involving the relative sizes of 2 quantities where missing values can be found by using integer multiplication and division facts
- solve problems involving the calculation of percentages [for example, of measures and such as 15% of 360] and the use of percentages for comparison
- 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
- use simple algebraic formulae
- generate and describe linear number sequences
- express missing number problems algebraically
- find pairs of numbers that satisfy an equation with 2 unknowns
- enumerate possibilities of combinations of 2 variables
- solve problems involving the calculation and conversion of units of measure, using decimal notation up to 3 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 3 decimal places
- convert between miles and kilometres
- 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 centimetres (cm<sup>3</sup>) and cubic metres (m<sup>3</sup>), and extending to other units [for example, mm<sup>3</sup> and km<sup>3</sup>]
- draw 2-D shapes using given dimensions and angles

- recognise, describe and build simple 3-D 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
- describe positions on the full coordinate grid (all 4 quadrants)
- draw and translate simple shapes on the coordinate plane, and reflect them in the axes
- interpret and construct pie charts and line graphs and use these to solve problems
- calculate and interpret the mean as an average

In Key Stage 3 students students will be taught the following skills and by the end of Year 9 must be able to work mathematically to:

#### Develop fluency

- demonstrate their numerical and mathematical capability from key stage 2
- extend their understanding of the number system and place value to include decimals, fractions, powers and roots
- select and use appropriate calculation strategies to solve increasingly complex problems
- use algebra to generalise the structure of arithmetic, including to formulate mathematical relationships
- substitute values in expressions, rearrange and simplify expressions, and solve equations
- move freely between different numerical, algebraic, graphical and diagrammatic representations [for example, equivalent fractions, fractions and decimals, and equations and graphs]
- have algebraic and graphical fluency, including understanding linear and simple quadratic functions
- use language and properties precisely to analyse numbers, algebraic expressions, 2-D and 3-D shapes, probability and statistics.
- extend their understanding of the number system; make connections between number relationships, and their algebraic and graphical representations
- extend and formalise their knowledge of ratio and proportion in working with measures and geometry, and in formulating proportional relations algebraically
- identify variables and express relations between variables algebraically and graphically
- make and test conjectures about patterns and relationships; look for proofs or counterexamples
- reason deductively in geometry, number and algebra, including using geometrical constructions
- interpret when the structure of a numerical problem requires additive, multiplicative or proportional reasoning
- explore what can and cannot be inferred in statistical and probabilistic settings, and begin to express their arguments formally.

#### **Problem Solving**

• use their mathematical knowledge, in part through solving problems and evaluating the outcomes, including multi-step problems

- use of formal mathematical knowledge to interpret and solve problems, including in financial mathematics
- begin to model situations mathematically and express the results using a range of formal mathematical representations
- select appropriate concepts, methods and techniques to apply to unfamiliar and non- routine problems.

#### Number

- understand and use place value for decimals, measures and integers of any size
- order positive and negative integers, decimals and fractions; use the number line as a model for ordering of the real numbers; use the symbols =, ≠, <, >, ≤, ≥
- use the concepts and vocabulary of prime numbers, factors (or divisors), multiples, common factors, common multiples, highest common factor, lowest common multiple, prime factorisation, including using product notation and the unique factorisation property
- use the four operations, including formal written methods, applied to integers, decimals, proper and improper fractions, and mixed numbers, all both positive and negative
- use conventional notation for the priority of operations, including brackets, powers, roots and reciprocals
- recognise and use relationships between operations including inverse operations
- use integer powers and associated real roots (square, cube and higher), recognise powers of 2,
  3, 4, 5 and distinguish between exact representations of roots and their decimal approximations
- interpret and compare numbers in standard form A x 10n 1 $\leq$ A<10, where n is a positive or negative integer or zero
- work interchangeably with terminating decimals and their corresponding fractions (such as 3.5 and  $^{7}\!/_{2}$  or 0.375 and  $^{3}\!/_{8})$
- define percentage as 'number of parts per hundred', interpret percentages and percentage changes as a fraction or a decimal, interpret these multiplicatively, express one quantity as a percentage of another, compare two quantities using percentages, and work with percentages greater than 100%
- interpret fractions and percentages as operators
- use standard units of mass, length, time, money and other measures, including with decimal quantities
- round numbers and measures to an appropriate degree of accuracy [for example, to a number of decimal places or significant figures]
- use approximation through rounding to estimate answers and calculate possible resulting errors expressed using inequality notation *a*<*x*≤*b*
- use a calculator and other technologies to calculate results accurately and then interpret them appropriately
- appreciate the infinite nature of the sets of integers, real and rational numbers.

#### Algebra

Use and interpret algebraic notation, including:

- ab in place of a × b
- 3y in place of y + y + y and 3 × y
- a<sup>2</sup> in place of a × a, a<sup>3</sup> in place of a × a × a; a<sup>2</sup>b in place of a × a × b
- a/b in place of a ÷ b
- · coefficients written as fractions rather than as decimals
- brackets
- substitute numerical values into formulae and expressions, including scientific formulae
- understand and use the concepts and vocabulary of expressions, equations, inequalities, terms and factors
- simplify and manipulate algebraic expressions to maintain equivalence by:
  - collecting like terms
  - multiplying a single term over a bracket
  - taking out common factors
  - · expanding products of two or more binomials
- understand and use standard mathematical formulae; rearrange formulae to change the subject
- model situations or procedures by translating them into algebraic expressions or formulae and by using graphs
- use algebraic methods to solve linear equations in one variable (including all forms that require rearrangement)
- work with coordinates in all four quadrants
- recognise, sketch and produce graphs of linear and quadratic functions of one variable with appropriate scaling, using equations in x and y and the Cartesian plane
- interpret mathematical relationships both algebraically and graphically
- reduce a given linear equation in two variables to the standard form y = mx + c; calculate and interpret gradients and intercepts of graphs of such linear equations numerically, graphically and algebraically
- use linear and quadratic graphs to estimate values of *y* for given values of *x* and vice versa and to find approximate solutions of simultaneous linear equations
- find approximate solutions to contextual problems from given graphs of a variety of functions, including piece-wise linear, exponential and reciprocal graphs
- generate terms of a sequence from either a term-to-term or a position-to-term rule
- recognise arithmetic sequences and find the *n*th term
- recognise geometric sequences and appreciate other sequences that arise.

#### Ratio, proportion and rates of change

- change freely between related standard units [for example time, length, area, volume/capacity, mass]
- use scale factors, scale diagrams and maps
- express one quantity as a fraction of another, where the fraction is less than 1 and greater than 1
- use ratio notation, including reduction to simplest form
- divide a given quantity into two parts in a given part:part or part:whole ratio; express the division of a quantity into two parts as a ratio

- understand that a multiplicative relationship between two quantities can be expressed as a ratio or a fraction
- relate the language of ratios and the associated calculations to the arithmetic of fractions and to linear functions
- solve problems involving percentage change, including: percentage increase, decrease and original value problems and simple interest in financial mathematics
- solve problems involving direct and inverse proportion, including graphical and algebraic representations
- use compound units such as speed, unit pricing and density to solve problems.

#### Geometry and measures

- derive and apply formulae to calculate and solve problems involving: perimeter and area of triangles, parallelograms, trapezia, volume of cuboids (including cubes) and other prisms (including cylinders)
- calculate and solve problems involving: perimeters of 2-D shapes (including circles), areas of circles and composite shapes
- draw and measure line segments and angles in geometric figures, including interpreting scale drawings
- derive and use the standard ruler and compass constructions (perpendicular bisector of a line segment, constructing a perpendicular to a given line from/at a given point, bisecting a given angle); recognise and use the perpendicular distance from a point to a line as the shortest distance to the line
- describe, sketch and draw using conventional terms and notations: points, lines, parallel lines, perpendicular lines, right angles, regular polygons, and other polygons that are reflectively and rotationally symmetric
- use the standard conventions for labelling the sides and angles of triangle ABC, and know and use the criteria for congruence of triangles
- derive and illustrate properties of triangles, quadrilaterals, circles, and other plane figures [for example, equal lengths and angles] using appropriate language and technologies
- identify properties of, and describe the results of, translations, rotations and reflections applied to given figures
- identify and construct congruent triangles, and construct similar shapes by enlargement, with and without coordinate grids
- apply the properties of angles at a point, angles at a point on a straight line, vertically opposite angles
- understand and use the relationship between parallel lines and alternate and corresponding angles
- derive and use the sum of angles in a triangle and use it to deduce the angle sum in any polygon, and to derive properties of regular polygons
- apply angle facts, triangle congruence, similarity and properties of quadrilaterals to derive results about angles and sides, including Pythagoras' Theorem, and use known results to obtain simple proofs
- use Pythagoras Theorem and trigonometric ratios in similar triangles to solve problems in right angled triangles
- use the properties of faces, surfaces, edges and vertices of cubes, cuboids, prisms, cylinders, pyramids, cones and spheres to solve problems in 3-D

• interpret mathematical relationships both algebraically and geometrically.

#### Probability

- record, describe and analyse the frequency of outcomes of simple probability experiments involving randomness, fairness, equally and unequally likely outcomes, using appropriate language and the 0-1 probability scale
- understand that the probabilities of all possible outcomes sum to 1
- enumerate sets and unions/intersections of sets systematically, using tables, grids and Venn diagrams
- generate theoretical sample spaces for single and combined events with equally likely, mutually exclusive outcomes and use these to calculate theoretical probabilities.

#### Statistics

- describe, interpret and compare observed distributions of a single variable through: appropriate graphical representation involving discrete, continuous and grouped data; and appropriate measures of central tendency (mean, mode, median) and spread (range, consideration of outliers)
- construct and interpret appropriate tables, charts, and diagrams, including frequency tables, bar charts, pie charts, and pictograms for categorical data, and vertical line (or bar) charts for ungrouped and grouped numerical data
- describe simple mathematical relationships between two variables (bivariate data) in observational and experimental contexts and illustrate using scatter graphs.

**Assessment:** Each unit will be assessed individually with a unit test. End of term assessments will also take place which will consist of multiple topics. At the end of the academic year, all students will sit the GL Progress Test in Mathematics assessment.

**Continuation into Years 10-11(KS4):** Mathematics is a core subject that students must continue to Year 11 where they will take the IGCSE. It is also required in the minimum of 5 A\* - E passes a student must achieve to gain accreditation of the IGCSE Certificate. Many subjects are closely related closely to mathematics including business studies and the sciences, geography, history and PE among many others.

Careers related to the subject: Mathematics is applicable to nearly every industry today, from science and technology to business, retail, healthcare, and more. Professionals with advanced degrees in mathematics are highly desirable for their mastery of certain skills particularly for their critical thinking and problem-solving expertise.



## Teaching Programme

	YEAR 7	YEAR 8	YEAR 9
Term 1 1st half	Integers-Addition, subtraction, multiplication and division. Algebra-Using expressions and formulae, constructing and solving equations.	Integers-multiplication and division. Indices Algebra-Using expressions and formulae. Factorising, constructing and solving equations. Inequalities Multiplying and dividing by 0.1 and 0.01. Rounding.	Number and calculation-rational and irrational numbers, indices. Fractions and recurring decimals Decimals, percentages and rounding
Term 1 2nd half	Geometry-Angles and constructions Multiplication and division by powers of 10. Decimals multiplication and division	Decimals -multiplication and division Geometry- Parallel lines. Exterior angle of a triangle. Constructions.	Angles- Interior and exterior angles. Expressions and formulae- algebraic functions, using formulae, expanding brackets.
Term 2 1st half	Fractions- Addition, multiplication, and division. Geometry-Shapes and symmetry, circles, and polygons	Fractions and recurring decimals. Multiplying an integer by a mixed number. Dividing an integer by a fraction. Geometry-Shapes and symmetry, Circumference of a circle.	Equations and inequalities-solving equations, simultaneous equations. Shapes and measurements- Circumference and area, compound shapes. Ratios and proportion (Direct and inverse)
Term 2 2nd half	Percentages large and small. Geometry-Using hectare. Volume and surface area of cubes and cuboids. Statistics-Position and transformation	Algebra-Generating sequences and using nth term. Finding rules for sequences. Percentage increase and decrease using multiplier. Distance area and volume-Area of parallelogram and trapezium. Volume of triangular prisms. Surface	Sequences and functions- nth term of linear and quadratic sequence, representing functions and reverse functions Probability-mutually exclusive events, independent events, chance experiments
Term 3 1st half	Algebra-Generating sequences and using nth term. Ratio and proportion-Sharing in a ratio and using direct proportion. Probability-Mutually exclusive outcomes and experimental probabilities.	Ratio and proportion-Sharing in a ratio and using direct proportion. Probability-Calculating probabilities. Experimental and theoretical probabilities. Graphs-Plotting graphs. Gradient and intercept. Interpreting graphs.	Volume, surface area and symmetry- volume of prisms, surface areas of prisms, pyramids, and cylinders. Position and transformation- bearings, point on a line segment, transformations, and enlargements.
Term 3 2nd half	Graphs-Graphs of functions, Lines parallel to the axes and interpreting graphs. Statistics-Bar charts, Pie charts, waffle diagrams and infographics.	Position and transformations- Bearings. Transformations and enlargement. Interpreting and discussing results- Time series graph, stem and leaf diagrams, pie charts, representing data and using statistics	Graphs- plotting and interpreting graphs, gradient and intercept Interpreting and discussing results- frequency polygons, scatter graphs, stem and leaf diagrams, data and representing data

## SCIENCE

Students at The Rosary Private School Muweilah explore science through a combination of building their knowledge and understanding of a wide range of topics, alongside the development of the national curriculums 'working scientifically' inquiry skills. Teaching and learning follows the process of the scientific method which allows student to work through an investigation systematically while using skills of observation, questioning, research, prediction, experimentation, recording results, analysing, concluding, and finally sharing and applying their knowledge. Students develop a curiosity and passion for science by answering key questions through their inquiries and investigations with increasing independence. Through frequent opportunities for practical science and hands on learning, student connect with science in a meaningful way, motivating their curiosity beyond the classroom.

The principal focus of science teaching in key stage 3 is to develop a deeper understanding of a range of scientific ideas in the subject disciplines of biology, chemistry and physics. Pupils should begin to see the connections between these subject areas and become aware of some of the big ideas underpinning scientific knowledge and understanding. Examples of these big ideas are the links between structure and function in living organisms, the particulate model as the key to understanding the properties and interactions of matter in all its forms, and the resources and means

of transfer of energy as key determinants of all of these interactions. They should be encouraged to relate scientific explanations to phenomena in the world around them and start to use modelling and abstract ideas to develop and evaluate explanations.

By the time they enter Year 7, students are expected to be able to:

- 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 a 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
- 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
- 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

- 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
- 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
- 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

#### SPECIFIC STANDARDS FOR KEY STAGE THREE

#### Working scientifically

Through the content across all three disciplines, pupils should have acquired all the following knowledge, attitudes and skills by the end of Year 9:

#### Scientific attitudes

- objectivity and concern for accuracy, precision, repeatability and reproducibility
- an understanding that scientific methods and theories develop as earlier explanations are modified to take account of new evidence and ideas, together with the importance of publishing results and peer review
- evaluation of risks.

#### Experimental skills and investigations

- ask questions and develop a line of enquiry based on observations of the real world, alongside prior knowledge and experience
- make predictions using scientific knowledge and understanding
- select, plan and carry out the most appropriate types of scientific enquiries to test predictions, including identifying independent, dependent and control variables, where appropriate
- use appropriate techniques, apparatus, and materials during fieldwork and laboratory work, paying attention to health and safety
- make and record observations and measurements using a range of methods for different investigations; and evaluate the reliability of methods and suggest possible improvements
- apply sampling techniques.

#### Analysis and evaluation

- apply mathematical concepts and calculate results
- present observations and data using appropriate methods, including tables and graphs
- interpret observations and data, including identifying patterns and using observations, measurements and data to draw conclusions
- present reasoned explanations, including explaining data in relation to predictions and hypotheses
- evaluate data, showing awareness of potential sources of random and systematic error
- identify further questions arising from their results.

#### Measurement

- understand and use SI units and IUPAC (International Union of Pure and Applied Chemistry) chemical nomenclature
- use and derive simple equations and carry out appropriate calculations
- undertake basic data analysis including simple statistical techniques.

#### Specific Knowledge and skill related to individual scientific disciplines:

#### Biology

Pupils should have acquired the following specific knowledge and skills related to Biology by the end of Year 9 to be able to:

#### Structure and function of living organisms

#### Cells and organisation

- recall that cells are the fundamental unit of living organisms, including how to observe, interpret and record cell structure using a light microscope
- differentiate between the functions of the cell wall, cell membrane, cytoplasm, nucleus, vacuole, mitochondria and chloroplasts
- state the similarities and differences between plant and animal cells
- explain the role of diffusion in the movement of materials in and between cells
- describe the structural adaptations of some unicellular organisms
- state the hierarchical organisation of multicellular organisms: from cells to tissues to organs to systems to organisms.

#### The skeletal and muscular systems

- describe and explain the structure and functions of the human skeleton, to include support, protection, movement and making blood cells
- explain biomechanics the interaction between skeleton and muscles, including the measurement of force exerted by different muscles
- state the function of muscles and examples of antagonistic muscles.

#### Nutrition and digestion

- describe the content of a healthy human diet: carbohydrates, lipids (fats and oils), proteins, vitamins, minerals, dietary fibre and water, and why each is needed
- calculate energy requirements in a healthy daily diet
- state the consequences of imbalances in the diet, including obesity, starvation and deficiency diseases, the tissues and organs of the human digestive system, including adaptations to function and how the digestive system digests food (enzymes simply as biological catalysts)
- state the importance of bacteria in the human digestive system
- explain how plants make carbohydrates in their leaves by photosynthesis and gaining mineral nutrients and water from the soil via their roots.

#### Gas exchange systems

- state the structure and functions of the gas exchange system in humans, including adaptations to function
- explain the mechanism of breathing to move air in and out of the lungs, using a pressure model to explain the movement of gases, including simple measurements of lung volume
- explain the impact of exercise, asthma and smoking on the human gas exchange system
- state the role of leaf stomata in gas exchange in plants.

#### Reproduction

- describe reproduction in humans (as an example of a mammal), including the structure and function of the male and female reproductive systems, menstrual cycle (without details of hormones), gametes, fertilisation, gestation and birth, to include the effect of maternal lifestyle on the foetus through the placenta
- describe reproduction in plants, including flower structure, wind and insect pollination, fertilisation, seed and fruit formation and dispersal, including quantitative investigation of some dispersal mechanisms.

#### Health

Explain the effects of recreational drugs (including substance misuse) on behaviour, health and life processes.

#### Material cycles and energy

#### Photosynthesis

- state the reactants in, and products of, photosynthesis, and a word summary for photosynthesis
- explain the dependence of almost all life on Earth on the ability of photosynthetic organisms, such as plants and algae, to use sunlight in photosynthesis to build organic molecules that are an essential energy store and to maintain levels of oxygen and carbon dioxide in the atmosphere
- describe the adaptations of leaves for photosynthesis.

#### Cellular respiration

- explain aerobic and anaerobic respiration in living organisms, including the breakdown of organic molecules to enable all the other chemical processes necessary for life
- give a word summary for aerobic respiration
- explain the process of anaerobic respiration in humans and micro-organisms, including fermentation, and a word summary for anaerobic respiration
- describe the differences between aerobic and anaerobic respiration in terms of the reactants, the products formed and the implications for the organism.

#### Interactions and interdependencies

#### Relationships in an ecosystem

- explain the interdependence of organisms in an ecosystem, including food webs and insect pollinated crops
- explain the importance of plant reproduction through insect pollination in human food security
- explain how organisms affect, and are affected by, their environment, including the accumulation of toxic materials.

#### Genetics and evolution

#### Inheritance, chromosomes, DNA and genes

- describe heredity as the process by which genetic information is transmitted from one generation to the next
- describe a simple model of chromosomes, genes and DNA in heredity, including the part played by Watson, Crick, Wilkins and Franklin in the development of the DNA model
- state differences between species
- explain the variation between individuals within a species being continuous or discontinuous,
- measurement and graphically represent variation
- explain the variation between species and between individuals of the same species means some organisms compete more successfully, which can drive natural selection
- describe changes in the environment may leave individuals within a species, and some entire species, less well adapted to compete successfully and reproduce, which in turn may lead to extinction
- state the importance of maintaining biodiversity and the use of gene banks to preserve hereditary material.

#### Chemistry

Pupils should have acquired the following specific knowledge and skills related to Chemistry by the end of Year 9 to be able to:

#### The particulate nature of matter

- state the properties of the different states of matter (solid, liquid and gas) in terms of the particle model, including gas pressure
- describe changes of state in terms of the particle model.

#### Atoms, elements and compounds

- draw a simple (Dalton) atomic model
- state the differences between atoms, elements and compounds
- recall correct chemical symbols and formulae for elements and compounds
- explain the conservation of mass, changes of state and chemical reactions.

#### Pure and impure substances

- explain the concept of a pure substance
- describe mixtures, including dissolving
- explain diffusion in terms of the particle model
- perform simple techniques for separating mixtures: filtration, evaporation, distillation and chromatography
- explain the identification of pure substances.

#### **Chemical reactions**

- explain chemical reactions as the rearrangement of atoms
- represent chemical reactions using formulae and using equations
- describe combustion, thermal decomposition, oxidation and displacement reactions
- define acids and alkalis in terms of neutralisation reactions
- describe the pH scale for measuring acidity/alkalinity; and indicators
- explain reactions of acids with metals to produce a salt plus hydrogen
- describe reactions of acids with alkalis to produce a salt plus water
- explain what catalysts do.

#### Energetics

- calculate energy changes on changes of state (qualitative)
- calculate exothermic and endothermic chemical reactions (qualitative).

#### The Periodic Table

- describe the varying physical and chemical properties of different elements
- explain the principles underpinning the Mendeleev Periodic Table
- describe the Periodic Table: periods and groups; metals and non-metals
- explain how patterns in reactions can be predicted with reference to the Periodic Table
- describe the properties of metals and non-metals
- explain the chemical properties of metal and non-metal oxides with respect to acidity.

#### Materials

• describe the order of metals and carbon in the reactivity series the use of carbon in obtaining metals from metal oxides

• describe properties of ceramics, polymers and composites (qualitative).

#### Earth and atmosphere

- describe the composition of the Earth
- explain the structure of the Earth
- explain the rock cycle and the formation of igneous, sedimentary and metamorphic rocks
- describe Earth as a source of limited resources and the efficacy of recycling
- describe the carbon cycle
- describe the composition of the atmosphere
- explain the production of carbon dioxide by human activity and the impact on climate.

#### Physics

Pupils should have acquired the following specific knowledge and skills related to Physics by the end of Year 9 to be able to:

#### Energy

#### Calculation of fuel uses and costs in the domestic context

- compare energy values of different foods (from labels) (kJ) comparing power ratings of appliances in watts (W, kW)
- compare amounts of energy transferred (J, kJ, kW hour)
- calculate domestic fuel bills, fuel use and costs
- compare fuels and energy resources.

#### Energy changes and transfers

- explain how simple machines give bigger force but at the expense of smaller movement (and vice versa): product of force and displacement unchanged
- explain heating and thermal equilibrium: temperature difference between two objects leading to energy transfer from the hotter to the cooler one, through contact (conduction) or radiation; such transfers tending to reduce the temperature difference: use of insulators
- describe other processes that involve energy transfer: changing motion, dropping an object, completing an electrical circuit, stretching a spring, metabolism of food, burning fuels.

#### Changes in systems

- describe energy as a quantity that can be quantified and calculated; the total energy has the same value before and after a change
- compare the starting with the final conditions of a system and describing increases and decreases in the amounts of energy associated with movements, temperatures, changes in positions in a field, in elastic distortions and in chemical compositions
- use physical processes and mechanisms, rather than energy, to explain the intermediate steps that bring about such changes.

#### Motion and forces

#### Describing motion

- calculate speed and explain the quantitative relationship between average speed, distance and time (speed = distance ÷ time)
- represent a journey on a distance-time graph
- explain relative motion: trains and cars passing one another.

#### Forces

- describe forces as pushes or pulls, arising from the interaction between two objects
- use force arrows in diagrams, adding forces in one dimension, balanced and unbalanced forces
- define the moment as the turning effect of a force
- explain forces associated with deforming objects; stretching and squashing springs; with rubbing and friction between surfaces, with pushing things out of the way; resistance to motion of air and water
- calculate forces measured in newtons, measurements of stretch or compression as force is changed
- explain force-extension linear relation; Hooke's Law as a special case
- describe non-contact forces: gravity forces acting at a distance on Earth and in space, forces between magnets and forces due to static electricity.

#### Pressure in fluids

- explain why atmospheric pressure, decreases with increase of height as weight of air above decreases with height
- describe pressure in liquids, increasing with depth; upthrust effects, floating and sinking
- calculate pressure measured by ratio of force over area acting normal to any surface.

#### **Balanced forces**

Describe opposing forces and equilibrium: weight held by stretched spring or supported on a compressed surface.

#### Forces and motion

- Explain how forces being needed to cause objects to stop or start moving, or to change their speed or direction of motion (qualitative only)
- Describe change as dependent on direction of force and its size.

#### Waves

#### Observed waves

describe waves on water as undulations which travel through water with transverse motion; these waves can be reflected, and add or cancel – superposition.

#### Sound waves

- establish the frequencies of sound waves, measured in hertz (Hz); echoes, reflection and absorption of sound
- explain why sound needs a medium to travel, the speed of sound in air, in water, in solids
- describe sounds produced by vibrations of objects, in loud speakers, detected by their effects on a microphone diaphragm and the ear drum
- explain why sound waves are longitudinal
- state the auditory range of humans and animals.

#### Energy and waves

Describe how pressure waves transfer energy; are used for cleaning and physiotherapy by ultra-sound; and how waves transfer information for conversion to electrical signals by microphone.

#### Light waves

- state the similarities and differences between light waves and waves in matter
- describe light waves travelling through a vacuum; speed of light
- explain the transmission of light through materials: absorption, diffuse scattering and specular reflection at a surface
- use a ray model to explain imaging in mirrors, the pinhole camera, the refraction of light and action of convex lens in focusing (qualitative); the human eye
- explain how light transfers energy from source to absorber leading to chemical and electrical effects; photo-sensitive material in the retina and in cameras
- describe colours and the different frequencies of light, white light and prisms (qualitative only); differential colour effects in absorption and diffuse reflection.

#### Electricity and electromagnetism

#### Current electricity

- calculate electric current, measured in amperes, in circuits, series and parallel circuits, currents add where branches meet and current as flow of charge
- calculate potential difference, measured in volts, battery and bulb ratings; resistance, measured in ohms, as the ratio of potential difference (p.d.) to current
- explain the differences in resistance between conducting and insulating components (quantitative).

#### Static electricity

- explain what happens during separation of positive or negative charges when objects are rubbed together: transfer of electrons, forces between charged objects
- explain the idea of electric field, forces acting across the space between objects not in contact.

#### Magnetism

- explain magnetic poles, attraction and repulsion
- deduce magnetic fields by plotting with compass, representation by field lines
- describe the Earth's magnetism, compass and navigation
- explain the magnetic effect of a current, electromagnets, D.C. motors (principles only).

#### Matter

#### **Physical changes**

- explain the conservation of material and of mass, and reversibility, in melting, freezing, evaporation, sublimation, condensation, dissolving
- describe the similarities and differences, including density differences, between solids, liquids and gases
- describe Brownian motion in gases
- explain how diffusion in liquids and gases is driven by differences in concentration
- list the difference between chemical and physical changes.

#### Particle model

- explain the differences in arrangements, in motion and in closeness of particles explaining changes of state, shape and density, the anomaly of ice-water transition
- describe atoms and molecules as particles.

#### Energy in matter

- explain how changes with temperature in motion and spacing of particles
- explain the internal energy stored in materials.

#### Space physics

- calculate the gravity force, weight = mass x gravitational field strength (g), on Earth g=10 N/kg, different on other planets and stars; gravity forces between Earth and Moon, and between Earth and Sun (qualitative only)
- describe our Sun as a star, other stars in our galaxy, other galaxies
- explain the seasons in terms of the Earth's tilt, day length at different times of year, in different hemispheres
- define the light year as a unit of astronomical distance.

**Assessment:** Students will be assessed at the end of each topic. At the end of each term, a summative assessment on all topics covered that term. At the end of the year, students will be assessed on all topics split into three assessments, Biology, Chemistry and Physics.

**Continuation into Years 10-11(KS4):** Students can choose to study Biology, Chemistry and Physics as Separate or Combined Sciences. There is no longer a requirement from the UAE Ministry of Education that all students have at least one science subject to be accredited at IGCSE.

**Careers related to the subject:** People who work in science careers are responsible for many of the things we, as a society, benefit from everyday ways to prevent and cure diseases, new technology, and strategies to help control climate change.

#### **Teaching Programme:**

		Terr	m 1	Ter	m 2	Term	3
Year 7	7	Cells Forces & Energy	Materials and their structure	Grouping and Identifying Organisms Properties of Matter	Sound	Microorganisms in the environment Changes to materials	Electricity
	В	Respiration		Ecosystems		Diet & Growth	
Year 8	С	Properties of materials		Materials & cycles on Earth		Chemical Reactions	
	Ρ		Forces & Energy		Light		Magnetism
	В	Photosynthesis	Carbon Cycle	Maintaining life in plants	Maintaining life in animals	Genes and Inheritance	Variation & natural selection
Year 9	С	Materials & properties Atomic structure	Chemical bonding	Reactivity	Salts and their preparation	Rates of reaction	Factors affecting rates of reactions
	Ρ	Forces	Energy	Electricity – parallel circuits	Resistance	Sound	Space

B = Biology C = Chemistry P = Physics

#### Humanities - combined History and Geography

At The Rosary Private School Muweilah we deliver history and geography through a cross curricular topic based approach, alternating the two subject areas. We endeavour to include all other aspects of our broad and balanced curriculum, engaging deep and immersive learning for all our student. In history we will help all student to develop an understanding of time, place, people and events. We view history not only as simple facts and dates but encourage students to become detectives to explore the past in an exciting way. Now aim is to ignite a curiosity to learn about the past that will help student understand who they are and how their environment and the world has changed over time.



In geography our curriculum will inspire students curiosity and fascinating about the world and its people, that will remain with them for the rest of their lives. In our diverse society student need more than ever before to understand other people and cultures. As people's progress, they're growing knowledge about the world will help them to deepen their understanding of the interaction between physical and human processes. They will also gain knowledge of the formation and use of landscapes and the different environments.

By the time students start formal Humanities study in Year 6 they should be able to:

- name and locate the world's seven continents and five oceans
- name, locate and identify characteristics of at least four MENA countries and name their capital cities
- understand geographical similarities and differences through studying the human and physical geography of a small area of the UAE, and of a small area in a contrasting European country
- identify seasonal and daily weather patterns in the UAE and the location of hot and cold areas of the world in relation to the Equator and the North and South Poles
- use basic geographical vocabulary to refer to key physical features, including: beach, cliff, coast, forest, hill, mountain, sea, ocean, river, soil, valley, vegetation, season and weather, city, town, village, factory, farm, house, office, port, harbour and shop
- use simple compass directions (North, South, East and West) and locational and directional language [for example, near and far; left and right], to describe the location of features and routes on a map
- recognise landmarks and basic human and physical features;
- devise a simple line map; and use and construct basic symbols in a key
- use simple fieldwork and observational skills to study the geography of their school and its grounds and the key human and physical features of its surrounding environment.
- describe changes within living memory. Where appropriate, these should be used to reveal aspects of change in UAE national life
- recall events beyond living memory that are significant nationally or globally [for example, the death of Sheikh Khalifa and the start of the rule of Sheikh Mohammed bin Zayed, the death of Queen Elizabeth II and the start of the reign of King Charles III]
- recall significant individuals in the past who have contributed to national and international achievements [for example, Elizabeth I and Elizabeth II, Christopher Columbus, Neil Armstrong, William Caxton and Tim Berners-Lee]
- name significant historical events, people and places in their own locality.

#### SPECIFIC STANDARDS FOR GEOGRAPHY

By the end of Year 9, which is the end of the Key Stage, students must be competent and knowledgeable in the following geographical skills:

#### Locational knowledge

- extend their locational knowledge and deepen their spatial awareness of the world's countries,
- using maps of the world to focus on Africa, Russia, Asia (including China and India), and the Middle East,
- focusing on their environmental regions, including polar and hot deserts, key physical and human characteristics, countries and major cities

#### Place knowledge

understand geographical similarities, differences and links between places through the study of the human and physical geography of a region in Africa and a region in Asia

#### Human and physical geography

- understand the key processes in physical geography relating to: geological timescales and plate tectonics; rocks, weathering and soils; weather and climate, including the change in climate from the Ice Age to the present; and glaciation, hydrology and coasts
- outline aspects of human geography relating to: population and urbanisation; international development; economic activity in the primary, secondary, tertiary and quaternary sectors; and the use of natural resources
- understand how human and physical processes interact to influence and change landscapes, environments and the climate
- explain how human activity relies on the effective functioning of natural systems

#### Geographical skills and fieldwork

- apply their knowledge of globes, maps and atlases routinely in the classroom and in fieldwork
- interpret maps in the classroom and the field, including using grid references and scale, topographical and other thematic mapping, and aerial and satellite photographs
- use Geographical Information Systems (GIS) to view, analyse and interpret places and data
- use fieldwork in contrasting locations to collect, analyse and draw conclusions from geographical data, using multiple sources of increasingly complex information

## SPECIFIC STANDARDS FOR HISTORY

By the end of Year 9, which is the end of the Key Stage, students must be competent and knowledgeable in the following historical aspects:

- the ancient history of the UAE which dates back to at least 10,000 years and incorporates the bronze and iron ages
- the Roman Empire and its achievements and impact on the known world at the time and going forward in history
- describe how people lived at one particular era in British history e.g. the Medieval Period, the Renaissance, the Civil War period.
- significant turning points in British history, for example, the Industrial Revolution, The Black Death, and Britain's part in the trans-Atlantic Slave Trade
- The life of one significant British monarch, either Elizabeth I, Henry VIII or Queen Victoria
- Explain why a particular event was significant in world history
- the use of maps, diagrams, films, texts and other historical sources including having an understanding of anachronism, reliability and the selection of relevant sources as evidence to support their opinion.

**Assessment:** Students will be assessed at the end of each unit. This may take the format of a project, quiz, or class or fieldwork based on an assessment rubric.

**Continuation into Years 10-11(KS4):** History and Geography are optional subjects for IGCSE providing students with a great number of skills which can be applied to multiple disciplines and career paths. For example, source analysis, debate and essay writing.

#### Careers related to the subject:

**History:** Many people think history is about memorizing facts and dates. In reality, history is perfect training for critical thinking. Historians are trained not to believe what they are told, to instead find facts to support an argument. Studying history can lead to a great number of excellent careers as diverse as the media, government, heritage organisations, conservation, teaching, archives, museums and galleries, the police and law.

**Geography:** Geography is everywhere you look—from the phones we carry in our pockets to the navigation systems in our cars to the debate over geo-political issues. Professionals with a geography degree pursue careers in many fields, including geography, cartography, GIS mapping, and surveying. Earning a geography degree also prepares graduates for careers in non-traditional areas, including conservation, urban planning, and environmental research, media, marketing, trade and economics, agricultural and industrial planning, marine conservation and engineering and a host of other fields.

	TER	RM 1	TER	M 2	TEF	RM 3
Year 7	Roman Empire (H)	The climate and vegetation of hot deserts (Gg)	The Fort at Mlieha: the study of an ancient site (H)	Earthquakes and volcanoes (G)	How did people live in Britain in 1100? (H)	Geographical location: Would you locate a new school here?(G)
Year 8	map making skills (G)	The Pearl of Marawah (H)	How important are rainforests?(G)	The Black Death (H)	all people on earth - where the population has grown (G)	Explorers of the Elizabethan age (H)
Year 9	Comparative study of the UAE and Indonesia (G)	The industrial Revolution and its impact on history (H)	Black history and civil rights in the USA (H)	Protecting the coastline: climate change and the UAE (G)	Individual study of a modern historical event (H)	Towns and cities of the future (G)

## Teaching Programme

## French – To Year 7 only

Based on the UK national curriculum, Key Stage 3 Focuses on developing the breadth and depth of students' Competence in listening, speaking, reading and writing. This is based on a solid foundation of core grammar and vocabulary taught in key stage 2. This should enable pupils to understand and communicate personal and factual information that goes beyond their immediate needs and interests, developing and justifying points of view in speech and writing, with increased spontaneity, independence and accuracy. Students will be encouraged to lead their learning through interactive activities and groupwork, and develop confidence and fluency in communicating in French.

When they start French in Year 7 students studying French must be able to:

- Understand that some sounds and letter combinations need to be said and written differently from in English
- Listen to spoken foreign language for details and gist. Identify key points and some detail.
- Understand the main spoken points of a short text on a known topic that contains familiar and unfamiliar language.
- Follow a wide range of classroom instructions.
- Be confident and open to understanding very familiar language spoken by someone other than their teacher e.g. a guest speaker
- Take part in a simple conversation, ask and answer questions and express opinions.
- Retrieve numbers up to 50 with accuracy and numbers up to 100 with reasonable accuracy
- Use spoken language confidently to initiative and sustain a simple conversation.
- Present simple information on a familiar topic to the class.
- Use peer- and self-assessment strategies to support language learning
- Recite a short piece of narrative from memory with increasing confidence, accuracy and expression.
- Use a range of questions and statements spontaneously to seek clarification and help.
- Understand the term 'conjugation' and what it means when looking at familiar verbs in the present tense
- Read aloud with increasing confidence, accuracy and expression and know that symbols such as accents, cedillas and umlauts exist in the foreign language, why they are used and what they do.
- Be willing to have a go at tackling the pronunciation of new and unfamiliar words, using phonic knowledge gained throughout KS2.
- Understand key points and some *detail* in short written texts in familiar contexts and be able to give simple answers in French and more complex answers in English.
- Understand key points in short written texts in unfamiliar contexts
- Find the meaning of new words by using a bilingual dictionary.
- Write a short text on a familiar topic using a model and adapting language already learnt to suit their own purposes. Writing reflects understanding of gender of nouns, forming the plural, word order, agreement of high frequency adjectives. Writing may also show some understanding of past and future tense.
- Use peer and self-assessment strategies to support language learning.

**Assessment**: Pupils will have an assessment every term. The focus will primarily be on students grammar, vocabulary and linguistic competence.

**Continuation into Years 10-11(KS4):** IGCSE French as a 2<sup>nd</sup> Language is an option taught in the school and students may, if they are a native French speaker, choose IGCSE French as a First Language which they study privately and take the examination at the school.

**Careers related to the subject:** the potential careers for knowing a modern language include becoming a classroom teacher, interpreter, translator (legal/ medical), children's author, Blogger, speaker, marketer, journalist and travel guide.



## Teaching Programme:

	TERM 1	TERM 2	TERM 3
Year 7	Unité 1 "présentation "	Unité 3" Deux enfants peu raisonnable «	Unité5 "Un accident "
	<ul> <li>les salutations en français</li> <li>les jours de la semaine et les mois del'année.</li> <li>comment se présenter ?</li> <li>V.être et V.avoir au présente del'indicatif</li> </ul>	<ul> <li>les parties du visage</li> <li>compréhension écrite .</li> <li>Les verbes au troisième groupe .</li> </ul>	<ul> <li>En ville .</li> <li>Qui suis – je ?</li> <li>l'impératif</li> <li>compréhension écrite</li> </ul>
	Unité 2 « un homme qui arrive toujours trop trad « - une lettre personnelle . - les signes de ponctuation . - Conversation dans la rue relie de la vie réelle - une invitation par utilisant le futur proche	<ul> <li>Unité 4 "Qu'il fait beau "</li> <li>a météo en UAE et dans leur pays .</li> <li>Quel temps fait-il ?</li> <li>les quatre saisons de l'année.</li> <li>les vêtements .</li> <li>le passé composé.</li> </ul>	<ul> <li>Unité 6"Chez l'horloger</li> <li>les adjectifs possessifs</li> <li>décrire un objet .</li> <li>compréhension écrite</li> <li>les articles contractés.</li> </ul>

## Arabic (A) – For Arab Students

Arabic is the official language of the UAE, and it is important to ensure that students perfect all the skills involved in the language, ranging from reading, writing, speaking and listening. We encourage our students to communicate in Arabic inside the school and also outside in the wider community to ensure that they are getting the full experience of developing their knowledge of one of the most popular languages in the world.

Arabic at The Rosary Private School aims to:

- Make the learning of Arabic enjoyable and encourage students to communicate with it through various fun and interactive techniques. This will result in the development of the language and will ensure students are keen on further developing Arabic skills
- Provide a high standard of teaching for students in learning Arabic
- Guarantee an excellent learning environment for students to encourage them to develop their skills
- Plan the subject in such a way that topics relate to real life and enrich students' knowledge about Arabic language and UAE culture The Arabic syllabus, based on the Ministry of Education's curriculum is extended with additional topics, resources, and activities that enrich the language to ensure students are excited and interested to learn the language and also develop the four skills.

The Arabic syllabus, based on the Ministry Of Education curriculum, is extended with additional topics, resources and activities that enrich the language to ensure students are excited and interested to learn the language and also develop the four skills.

By the time students start Key Stage 3, they must be knowledgeable and competent in the skills noted for Key Stage 2(*see Key Stage 2 Curriculum Booklet*).

#### Teaching programme: Arabic - Arabs)

	TERM 1	TERM 2	TERM 3	
YEAR 7	حبيبي يا رسول الله حلم وجهل قصة الجملة و أغراضها الجملة و التركيب زلمسجد النيوي تاريخ يتجدد) نص معلوماتي (كن أكثر وعيا (المسجد النيوي تاريخ يتجدد) يغضبك البحارة والدب البحارة والدب المعرد الغيرية تص معلوماتي: إكسبو دبي زايد رجل بني أمة المعرول فيه المعرول فيه كالمة نصر بديد م	المفعول المطلق التصوص حولنا الفقراء مجَّانًا أخلاق كريمة الجمال والأخلاق ن عالم الحيوانات تركيب العطف تركيب العطف فارسة المعمار فارسة المعمار العلم لغة العالم المشتركة تفسيري تقسيري	التصوص حولنا علم التوم و الأحلام تقديم عرض بعنوان ( أنت صديقي ) كتابة نص سردي أحلام لييل السعيدة التركيب التعتي ضمائر الرفع المتصلة	
YEAR 8	شعر شبباب بلادي قصة الضحك في آخر الليل نص معلوماتي أساليب التدفئة استماع قمحة في حجم بيضة كتابة نص تفسيري شعر قوة العلم نص معلوماتي ثمن التعلم استماع عالم الطباعة نحو علامات الإعراب إعراب المثني وجمع المذكر السالم	ضمائر النصب المتصلة حكم ومواعظ شعر الاستماع أكلت يوم أكل الثور الأبيض المفعول لأجله نحو مصابيح الكلام نص معلوماتي القول ما قالت حذام طائر القطا نص معلوماتي كتابة نص تفسيري	رواية الولد الذي عاش مع النعام الفعل المبني للمعلوم والفعل المبني للمجهول (حو) العدد والمعدود. كتابة نص إقناعي نص معلوماتي ماذا تعرف عن الصحراء نص الاستماع الغزال حيوانات الصحراء محادثة.	
YEAR 9	أنواع النصوص الأدبية الإحسان إلى الوالدين. من تجارب الحياة الحال الحال عرض القاعي (محادثة) ذلك النيع القديم (الاستماع) آمال ذهبت مع الريح (كتابة)	أنواع النصوص وصية ذي الإصبع العواتي لاينه أسيد نصب الفعل المضارع الاستماع رجال اللؤلؤ روح الطبيعة المحادثة كتابة متى تخطط لمستقبل راشد الخضر وداغا يا أحياني جزم الفعل المضارع كتابة التعصب الأعمى للأفكار والأشياء	أنواع النصوص حولنا إلى عبد الله الصغير وصية علشق الجدار الأخير الوجه الآخر فن النهمة سيرة غيرية (استماع ممائر الجر المتصلة كتابة نص إقناعي	

#### Arabic (B) – Non-Arab students

Arabic (B) is taught to non Arab students and is a compulsory subject for all students directed by the Ministry of Education. Arabic B classes are divided based on the number of years of exposure a student has in learning Arabic. The main focus is on the development of the four skills - reading, writing, listening and speaking - To ensure students gain confidence across all areas of the language and its use. Each lesson is designed to ensure that students not only enrich their knowledge and their use of the Arabic language but also develop a deep appreciation of Arabic and in particular, Emirati culture.

### Teaching Programme: Arabic - NonArabs

	TERM 1	TERM 2	TERM 3
LEVEL 6 ( YEAR 7-8)	قائمة التسوق	السفر	الألعاب الرياضية
	التسوق الإلكتروني	السفر والتكنولوجيا	الطعام
LENEL 8(YEAR 9-10)	لا للتنمر	الزراعة	القدوة
	صديقي الغريب	الغابات	التطوع غاية
	السعادة	الإنسانة جورج	الإعلان
	الغضب	مسبار الأمل	الملابس

**Assessment:** Students undertake a benchmark assessment and regular end of term tests. Students are assessed their Reading and speaking skills and through project work

**Continuation into Years 10-11(KS4):** Arabic is a core subject and all students must continue to study the Ministry of Education curriculum through to Year 11. There is an optional IGCSE in Arabic that students could take in order to receive internationally recognised qualifications in the subject.

**Careers related to the subject:** Arabic is spoken by 300 million people spread all over the world. It is one of the top 5 most spoken languages. Learning Arabic creates better opportunities for working in the middle east and other Arab countries

#### **Islamic Studies**

Islamic studies is compulsory for all Muslim students from Year 2 – 13. The school provides the Ministry of Education syllabus for both Arab and non-Arab students. Arab Muslim students undertake Islamic A where the curriculum is taught in Arabic, while non-Arab Muslim students undertake Islamic B where the curriculum is taught in English.

Islamic education is anchored in books and resources approved by the UAE's Ministry of Education. Whilst most topics are repeated over time, levels of understanding increase as students progress through the curriculum. Student will learn and promote a critical approach to the study of Islam and will gain skills reflected in experience, belief and practices in Islam.

The Islamic education course covers the key subjects as follows:

- Divine Revelation students demonstrate memorization of the Holy Quran with application of Tajweed rules. Students also demonstrate understanding and application of the Quran and Hadith.
- Islamic beliefs Students demonstrate awareness and belief in the foundations of the belief in Allah, His attributes, His angels, His books, and His Messengers. Students also demonstrate awareness of the value of the mind with the importance of thinking in reaching the truth.
- Islamic rulings and aims students demonstrate knowledge of the correct jurisprudence of worship, And the jurisprudence of transactions, understanding their impact on the community.

- Islamic values and manners students demonstrate understanding and implementation of the individual and social Islamic values and manners.
- Biographies students draw out their most important principles and lessons learned from the biography of the Prophet Muhammad (PBUH). They also show commitment to following the example of the prophetic personality and learn about some prominent Muslim figures who have had a positive impact on Islam and Muslim society.
- Identity and contemporary issues students demonstrate pride in their own personalities, identities, and homeland(s). They showed their commitment to customs and traditions and show their understanding of contemporary issues and challenges in the Islamic community.

By the time they start Key Stage 3, all students are expected to have a good grasp of the curriculum components for Key Stage 2. (*see Key Stage 2 Curriculum Booklet*)

**Assessment**: Students will be assessed regularly in class. At the end of each term, students will take an assessment. This will be in Arabic for Arab students and in English for non-Arab students.

**Continuation into Years 10-11(KS4):** Islamic studies is a core subject in the UAE and continues through to Year 10 and 11. Students with a keen interest could opt to pursue IGCSE Islamiyat as an optional qualification in addition to following The Ministry of Education syllabus.

	TERM 1	TERM 2	TERM 3
YEAR 7	سورة السجدة (1-12)	سورة السجدة (25-30)	سورة الملك(15-24)
	من وصايا الرسول -صلى الله عليه وسلم		الإخفاء الحقيقي
		حكم الإدغام	اختيار الجليس
	حزمه المسلم	المؤمن بين الشكر والصبر	عزوة احد
	فرائض الصلاة وسننها ومكروهاتها	Test third Mark	دروس معير.
	سوره السجده (13-22)	من علامات الساعه	يسر الإسلام الدترمانغة باشمنا
	احدام النون السادية والتنوين حدم الاظفار	سوره المنك (1-14)	السيدة عانشه رصي الله عنها
	سجود السهو والتلاوة	حكم الاقلاب	
		أخلاق حميدة	
YEAR 8	البعث والنشور	بشارة ومواساة	نعيم الحياة
	المستظلون في ظل الرحمن	أحكام الميم الساكنة	كفالة اليتيم
	مراقبة الله تعالى	الاعتدال في الإنفاق	التواضع
	سنن الفطرة	سورة الرحمن	صلاة التطوع والليل
	الخلاق العليم	القلب وصلاح الإنسان	جزاء الإحسان
	الغسل	صلاة المسافر والمريض	الفتح المبين
	غزوة الاحزاب		المجالس وادابها
YEAR 9	صدق الرسول صل الله عليه وسلم	فصه مؤمن ال يس	الطريق إلى الجنه
	الاعمال بالنيات	اقدس بيوت الله	الافتداء في الخير.
	احكام المد	احكام العمر ه	الايمان والندور
	نعمه الامن	قدره الله تعالى	ادله وحدانيه الله وقدرته
	اصحاب الفرية	المد الفرعي	صله الارحام
	الإيمان بالقصاع والقدر	حرمه برويع الإسان	العلم نوز و رفعه الا ا اثارة الأم
	الصنوات دات الاسياب		الإمام الشناقعي

#### Teaching programme - Arabs

## Teaching programme - NonArabs

		TERM 1	TERM 2	TERM 3
2	YEAR 7	Unit -1: The True Book (Surah As Sajdah 1- 12) Recommendations by the Prophet Volunteering: An Act of Worship and Belonging Sanctity of the Muslim Obligatory, Voluntary and Disliked Acts of Prayer Unit -2: Qualities and Rewards of the Believers (Surah As-Sajdah 13-22) The Rules of Silent Noon and Tanween Prostration of Forgetfulness and Prostration of Recitation	Unit-3: Patience and Certainty (Surah As-Sajdah 23-30) The Rule of Blending The Believer between Gratitude and Patience Few Signs of the Hour Imam Malik bin Anas Unit 4: The Right Way (Surah al Mulk 1-14) Iqlaab (Changing) Good Morals I am Tolerant	Unit 5: The Power of Allah (Surah al Mulk 15-24) Ikhfaa Haqiqi (Real Hiding) Selecting Friends Scientific Thinking The Battle of Uhud Unit 6: Lessons to be learned (Surah al Mulk 25-30) The Ease of Islam Manners of Supplication Voluntary Fasting Aaisha, Mother of the Believers (R.A)
	YEAR 8	Resurrection and Raising Up (Surah Qaaf 1-15) The People who will be in the Shade of the Most Gracious Glad Tidings for those who Pray Evidence of the One of Allah SWT Observing Allah SWT Sunan al Fitra The Supreme Creator, the All- Knowing (Surah Qaaf 16-30) The Reliever, the Forbearing Full Ablution (Ghusl) 6. Battle of the Confederates (Ghazwah al Ahzaab)	Glad Tidings and Consolation (Surah Qaaf 31-45) Rules of the Silent Meem Moderate Spending Imam Abu Hanifa al Numan Surah Ar-Rahman, 1-25 The Heart & the Righteousness of Man The Religion of Islam is Easy Thinking in Islam The Prayers of the Travelers and of the Sick	The Pleasure of Life (Surah Ar-Rahman 26-53) Taking Care of Orphans Humbleness Voluntary Prayers (Duha and Night) The Clear Conquest The Reward of Good Deeds (Surah Ar-Rahman 54-78) Majlis and its Manners 4. Rufaida al Aslamiya, Pioneer of Volunteering Work
	YEAR 9	Honesty of the Prophet (Surah YaSeen 1-12) Rules of Madd 1 (Original Madd) Acts are Judged only by Intentions Sincerity Good Earning The Gift of Security People of the City (Surah YaSeen 13-19) Getting Closer to Allah SWT Belief in Divine Decree and Predestination Prayers for Certain Purposes (Eclipse, Rain and Istikhara)	The Story of the Believer (Surah YaSeen 20-32) The Holiest Mosques The Conquest of Makkah Travel Manners Umrah Rules The Power of Allah (Surah Yaseen 33-54) Secondary Madd Merits of the Believer Social Cohesion Prohibition of Frightening People	The Path to Paradise (Surah Yaseen 55-68) Modelling Good Deeds Oaths and Vows The Battle of Hunayn My Health is my Responsibility Evidence of the Oneness & Power of Allah (Surah Yaseen 79-83) Maintaining Ties of Kinship Knowledge Brings Enlightenment & Status

## **Physical Education**

The aim of Key Stage 3 Physical Education is for students to build on and embed the physical development and skills continuum from Key Stage 2, become more competent and confident in their techniques, and apply them across different sports and physical activities. Students gain a better understanding of what makes a performance more effective and how to apply these principles to their own and others' work. Students learn about the importance of exercise and the long-term health benefits of physical activity. Opportunities are provided for students to improve their physical literacy in a way which supports their interest to partake in exercise, sports and activities both in and out of a school setting.

Assessment: Assessment is carried out through practical activities conducted during lessons.

## Teaching Programme

	TERM 1	TERM 2	TERM 3
YEAR 7 - 9			
	Gymnastics	Netball	Athletics
	Badminton	Basketball	Rounders
	Health Related Fitness	Football	Gymnastics
	Athletics	Handball	Dance

## Art and Design – Year 7 only

Art at The Rosary Private School Muweilah has been designed and developed to support young creative minds in their pursuit of creativity. They are encouraged to be passionate about the subject and courageous through their arts making they should be brave and ambitious without losing sight of themselves. We learn from our experiences, discover character through artistic expression, and become more fully ourselves through Art.

#### Students will

- learn to work directly from observation to understand about colour, space, form, shapes, textures, tones, line, and composition using a still life setup as stimulus
- develop work in a variety of media using a drawing from observation as the core activity
- learn how to look and record their responses to objects so that they understand how to use the basic elements to make a figurative/ realistic and recognisable world. Figures of work should be the key here so that the students get a good grounding in exploring the peculiarities of familiar shapes and images around them.
- Learning about the properties of drawing with different tools (charcoal, pencil, and paint) and they will build on this area each year to include more expressive mark making, and will further their technical skills in a range of media and stimuli.

Assessment: See Teaching Programme

## Teaching Programme

	TERM 1	TERM 2	TERM 3
YEAR 7	Your Wildest Dreams: Surrealism and Optical illusions A study of one surrealist artist: Max Ernst, René Magritte, Yves	Inspecting the world of Insects through photography, sketching, using mixed media to represent them in 2D and 3D format.	Whose Shoe? A unit exploring the world of shoe design, focussing on the weird and wonderful. Produce a sketchbook
	Assessment: Project on one artist	A study of one wildlife artist or artist associated with insects: Cath Hodsman, Rosalind Monks,	creating the actual shoe using everyday materials or remodelling an old shoe.
	+ one piece of artwork completed in class.	Lucy Arnold, Jan van Kessel the elder (1626–1679)	Assessment: Sketchbook and finished product.
		Assessment: One piece of 2D artwork based on enlargement of an insectin the style of	

## Computing

The exciting world of computing covers 3 important educational strengths: computer science, information technology, and digital literacy. Computer science is the study of coding and programming, a skill that is being sought after more and more in the job market. Information technology is the skill of using technology to be creative, making projects such as movies, animations, word processing, and spreadsheets. These can be used across all their other subjects once learned. Finally, digital literacy is making sure that student learn how to be safe, respectful, and responsible when using technology, and particularly when they go online.

Each strand plays its own unique part in preparing students for life in the digital age. At The Rosary Private School Muweilah, we use technology to great effect. Student use a mixture of tablets, laptops and computers when completing their work. This will also work in synchronization with various robotics and other STEAM (Science, Technology, Engineering and Math) related kits and resources.

**Assessment:** Assessment in Computing is carried out using several methods, usually consisting of a written or practical assessment at the end of each unit of work. However, due to the diversity of the subject, research projects and class presentations will also be used as a form of assessment.

**Continuation into Years 10-11(KS4):** Due to the breadth of the subject, Computing forms lots of link with other curriculum subjects and is one of the compulsory subjects studied for IGCSE. The IGCSE programme begins in Year 9 and is examined at the end of Year 11.

**Careers related to the subject:** Never has there been such demand for students who have these skills. At the moment, students with computer science and IT-related degrees are in increasingly high demand by employers globally. With not enough supply of graduates to meet the demand, these jobs are becoming better and better paid, with opportunities all over the world in a variety of industries. It is said that by 2030, 80% of the job market will be completely different from today. These statistics show how important technology and computer science skills will be key for this ever-changing job market.

## Teaching Programme

	TER	M 1	т	ERM 2	TER	IM 3
YEAR 7	Using data modelling	Living with AI	Moving from blocks to text	Coding with Python	Staying safe online	Make a podcast
YEAR 8	Network structure	Data collection and validation	Coding with Python	Software design and development	Creating digital media assets	Developing games
YEAR 9	Data Manipulation	Network and Security	Data Analysis	Safety and Security	System Life Cycle	Website Authoring

## UAE Social Studies

The UAE Ministry of Education provides the UAE Social Studies curriculum. The syllabus is derived directly from its objectives and requirements. Social studies is a complementary field and combines history, geography, science, and national education. We offer students information and skills for the Arab World as well as the United Arab Emirates. Students study the geography of the United Arab Emirates and Islamic countries, and their relationships to geographical locations of Europe and the American continent. Our curriculum aims to equip students with the knowledge and understanding of the past as part of the inspiration to develop new ideas in the present whilst planning for the future. The Social Studies programme is taught in Arabic.

Skills, knowledge, and understanding in Social Studies are consolidated through project work so students develop an understanding of the UAE and an understanding of Emirati identity. Our termly projects support student in becoming successful with information literacy and processing. Elements of Moral Education are incorporated into the Social Studies curriculum to give it greater depth.

Assessment: The assessment is done through the use of the prescribed book and end of term assessment set by the teacher.

**Continuation into Year 10 – 11(KS4):** Social Studies remains a core subject for all students through secondary school and will continue through to Year 11.



## Teaching Programme – Arabs

	TERM 1	TERM 2	TERM 3
YEAR 7	جغرافية شبه الجزيرة العربية: - الموقع الجغرافي وأهميته - سكان شبه الجزيرة العربية النقود في شبه الجزيرة العربية	الإمارات ودول آسيا: قارة اسيا موروث بلادي	الإمارات والعالم القديم: - النباتات الحولية - اليابان عبقرية من الصحراء: الصحراء في فكر الشيخ زايد-رحمه الله
YEAR 8	الموقع الجغرافي وأهميته - سكان شبه الجزيرة العربية النقود في شبه الجزيرة العربية- التاريخ الحديث والمعاصر لدول شبه الجزيرة العربية	نظم المعلومات الجغرافية ـ نظام تحديد المواقع العالم ـ تاريخ الحديث والمعاصر ـ زايد والتاريخ	النباتات المعمرة بدولة الإمارات العربية المتحدة جولات ميدانية للشيخ زايد رحمه الله الأندلس (كنوز معمارية )
YEAR 9	<ul> <li>الأمن الوطني</li> <li>البيت المتوحد</li> <li>قضية الجزيرة الإمار اتية الثلاث</li> <li>المحتلة</li> <li>سكان العالم</li> <li>النظم الاقتصادية العالمية</li> </ul>	<ul> <li>الدولة الأموية</li> <li>الدولة العباسية</li> <li>الحضارة العربية الإسلامية</li> <li>زايد وحلم الشباب</li> </ul>	- النباتات الطبيعية (الساحلية والجبلية) - الدولة والحكومة - الثورة الصناعية الرابعة

## Teaching Programme – NonArabs

	TERM 1	TERM 2	TERM 3
YEAR 7	After the Fall of the Roman Empire The High Middle Ages of Europe The Republic of Venice The Late -Middle Ages—The First Hundred Years' War Crises of the Late Middle Ages	The Renaissance The Printing Press The Age of Discovery -The Fur and Spice -Trades Gold The Age of Sail The East India and Hudson's Bay Companies	How the Government Functions Modern Political Systems How Laws are Made How Laws are Interpreted- Rights and Responsibilities
YEAR 8	Geography of East Asia Chinese Technology Science & Medicine Spreading Culture in China & South East Asia Mid Term review Renaissance (1392CE- 1910CE) Modern East Asia Since 1945 Supplement lesson on national heritage Final review	East Asia. Asian Industrial Centers. Engineering and Civilization in Ancient China. Islamic Culture in China. Mongol Empire. Modern Japan and Economic Activity. Asia from World War II to Expo 2020. Present Expo 2020 Pavilion Project.	The introduction to central Asia Silk road The culture of central Asia Mid-term review

YEAR 9	Land & Resources of Africa Ancient African Civilization Traditional African Art West African Civilization Mid Term Review African Resources & Economy Your city presentation Final Review	The Seas, Rivers, and Mountains of Europe. Map Matching of Cities and Resources of Europe. The Hellenistic Empire and the Early Roman Empire. Mount Vesuvius and Destruction of Pompeii. Medieval Culture and Technology. Maps and Texts on the First World War (1918-1914). Maps and Texts on World War II and Cold War Division of Europe. Europe, the European Common Market; European Union.	<ol> <li>Geography of west Asia</li> <li>Geography of North Africa</li> <li>The rise of the Ottoman Empire</li> <li>Mid-term review</li> </ol>

## Moral Education

Moral Education is a program of study that is taught in school through the directive of the Crown Prince's Court in Abu Dhabi. It is an innovative, engaging curriculum designed to develop young people of all nationalities and ages in the UAE with universal principles and values, that reflect the shared experiences of humanity.

Aims:

- to ensure a holistic approach to education
- to encourage youth to explore questions common to everyday life, building on the cultural values shared across the UAE's diverse communities
- to promote character building and to develop our students to be the next generation of role models and leaders
- to encourage healthy choices and the importance of well-being in a hectic pace of life
- to provide active learning that goes beyond the classroom

The curriculum is based on 4 pillars which include: character and morality, the individual and the community, civic studies, and cultural studies. It blinds academic content with an exploration of character and ethics. At The Rosary Private School Muweilah, the Moral Education curriculum is taught by Arabic teachers.

**Assessment**: Ongoing assessment through the prescribed textbook and teacher assessment. No formal exam is taken by the students.

#### Continuation into Year 10-11(KS4):

Moral Education will continue up to Year 11 as a compulsory subject as outlined by the MOE.

## Inclusion

The Rosary Private School Muweilah welcomes learners with English as an Additional Language(EAL). These are students whose English is very limited which prevents then from both socializing within the school community and accessing the school curriculum. At the school, EAL learners are identified on entry and grouped according to their linguistic needs as noted below:

## EAL-A

- Learners who have English skills at the level of BICS(Basic Interpersonal Communication Skills)
- Learners who have advanced and developed their English skill but still need support
- learners who are in the process of developing their Cognitive Academic Language Proficiency (CALP)

## EAL-B

- Learners who have developed an equal competency level the same as their peers
- learners who do not need significant support in accessing the curriculum
- independent learners of English who have secured the level of CALP.

Those who are at EAL – B are likely to be assisted by their class teacher through the modification of work, whilst those at EAL – A may require in-class support, out-of-class interventions and one- to-one sessions developing their proficiency in

- phonology the sound system of English
- morphology the forms and formation of words
- syntax the rules and structure of the English language
- semantics the meaning of language including general vocabulary and academic terminology
- language functions the purpose and use of specific language
- pragmatics the appropriate use of the English language in various contexts

## EXTENSION FOR EXCEPTIONAL LEARNERS

At The Rosary Private School Muweilah, we recognize that there are students with special gifts and talents and that these groups of students are at risk of educational exclusion. We strive to prevent this through the implementation of a programme which allows them to excel both in the classroom and beyond.

These students will be identified through the production of exceptionally high quality personal work in the classroom, and through external assessments such as the Cognitive Achievement Tests (CAT) carried out in Year 4 and Year 6 at key stage 2. Students demonstrating skill and capability which significantly exceeds age-related expectation in performance subjects such as sports, music and art can also be identified through peer and parental nomination. It is not necessary for a student to be both academically gifted and talented in an area of skill. Neither are students always exceptionally gifted across all academic areas. For example, an exceptionally creative Year 7 student may write stories are well in advance of the expectations for their age or show exceptional independence in

developing strategies for solving problems in science or mathematics, but for this to be identified in one or two areas of the curriculum only.

Students who are identified as exceptional will be put on an Individual Plan once they are identified so the school and teachers within subjects can enhance their work through the provision of higher level activities. They may also be given additional opportunities which allow them to nourish and extend their exceptional potential.



## The Key Stage 3 Curriculum

This booklet has been prepared for The Rosary Private School in Sharjah, United Arab Emirates to ensure compliance with both the English National Curriculum and the UAE Ministry of Education,

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