

# KEY STAGE 2 CURRICULUM GUIDE

Academic Year 2021-2022

[www.oryxschool.qa](http://www.oryxschool.qa)



مدرسة اوريكس الدولية



**ORYX**

International School, Doha

# Welcome

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Welcome to Oryx International School.

At Oryx we believe the first step in your child's education is the most important one. We pride ourselves on providing a unique, learning-enriched environment accompanied by high-quality and experienced teaching staff.

We believe that every child is unique and special and it is our job to provide them with the appropriate attention, care, support and encouragement required to bring out his or her own talents and strengths.

It is at this stage that we lay down the foundation for children's success to move from one key stage to another to achieve both academically and personally throughout life.

## Our Mission

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Our mission at Oryx is to deliver an engaging, value rich, broad and balanced 'British International Education Programme' to the children of the employees of Qatar Airways by highly qualified and experienced UK curriculum teachers.

## Our Vision

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Our vision is to ensure that students leave Oryx International School enabled, confident and ready to face the challenges that their next stage of life will bring. They will have developed effective behaviours that will enable them to thrive and succeed as global citizens of the 21st century.

## Our Aim

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We aim to provide a happy, secure and caring environment in which the pupils feel safe and nurtured. This, combined with educationally stimulating surroundings and activities, encourages our students to develop their inquisitive nature and learn at their own pace.

## Key Personnel

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<b>Mr. Derek Laidlaw</b>	Executive Principal	exec.pa@oryxschool.qa	+974 4036 0063
<b>Mrs. Andrea Smith</b>	Vice Principal Head of Primary	hop@oryxschool.qa	+974 4036 0063
<b>Mrs. Jane Rimmer</b>	Assistant Principal - parent liaison	jane.rimmer@oryxschool.qa	+974 4036 0063
<b>Mrs. Julie Gano</b>	School Nurse	nurse@oryxschool.qa	+974 3091 6800
<b>Mrs. Devika Chada</b>	Admissions Manager	admissions@oryxschool.qa	+974 4036 0085
<b>Reception</b>		reception@oryxschool.qa	+974 4036 0063
<b>Finance Office</b>		finance@oryxschool.qa	+974 4036 0081

## Our Team

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Key Stage 2 comprises of Years 3 through to 6. Key Stage 2 will be overseen by the Year 5 and 6 Year Leaders and our Assistant Head Teacher, Mrs Jane Rimmer.

### Lower Key Stage 2

Year Group	Teacher	Class Name
<b>Year 3 Teacher and Year Leader</b>	Miss Mc Carry	Turkey
Year 3 Teacher	Mr Walsh	France
Year 3 Teacher	Miss Callaghan	Greece
Year 3 Teacher	Mr. McCann	Italy
Year 3 Teacher	Mr. McKiverigan	Ireland
Year 3 Teacher	Miss Fisher	Spain
<b>Year 4 Teacher and Year Leader</b>	Mrs. Wood	UK
Year 4 Teacher	Mr. O'Connor	Bulgaria
Year 4 Teacher	Mr. Laidlaw	Austria
Year 4 Teacher	Mr Hopkins	Sweden
Year 4 Teacher	Miss Santamera	Georgia
Year 4 Teacher	Miss. Khatun	Portugal

### Upper Key Stage 2

Year Group	Teacher	Class Name
<b>Year 5 Teacher and Year Leader</b>	Miss Dobinson	Argentina
Year 5 Teacher	Mr Spenser	Colombia
Year 5 Teacher	Mr Corrie	Peru
Year 5 Teacher	Miss Armstrong	Chile
Year 5 Teacher	Mr Hughes	Guatemala
<b>Year 6 Teacher and Year Leader</b>	Mr. Cassidy	Canada
Year 6 Teacher	Mr. Booth	USA
Year 6 Teacher	Mrs. Mughal	Mexico
Year 6 Teacher	Mr Ramsey	West Indies
Year 6 Teacher	Miss Curry	Costa Rica

# Year 3 Topic Skills & Learning Outcomes

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## Curriculum Areas

- Science
- History
- Geography
- Computing
- Design Technology
- Art & Design
- Music
- Physical Development
- Languages

# Science

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## **Working Scientifically**

Use straightforward scientific evidence to answer questions, or to support findings  
 Suggest answers or solutions to questions/ problems given to them  
 Answer questions such as: "How could we keep it hotter for longer?"  
 Present simple data in a variety of ways, using that data to identify findings  
 Select from a list, at least one variable that needs to be kept the same in an investigation to make it a fair test  
 Identify straightforward patterns in observations or in data presented in tables, pie and bar charts  
 Select correct equipment from a given list, or content from information provided, to investigate a question

## **Animals Including Humans**

Identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat  
 Identify that humans and some animals have skeletons and muscles for support, protection and movement

## **Forces and Magnets**

Compare how things move on different surfaces  
 Notice that some forces need contact between two objects, but magnetic forces can act at a distance  
 Observe how magnets attract or repel each other and attract some materials and not others  
 Compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials  
 Describe magnets as having two poles  
 Predict whether two magnets will attract or repel each other, depending on which poles are facing

## **Light**

Recognise that they need light in order to see things and that dark is the absence of light  
 Notice that light is reflected from surfaces  
 Recognise that light from the sun can be dangerous and that there are ways to protect their eyes  
 Recognise that shadows are formed when the light from a light source is blocked by a solid object  
 Find patterns in the way that the sizes of shadows change

## **Plants**

Identify and describe the functions of different parts of plants; roots, stem, leaves and flowers  
 Explore the requirements of plants for life and growth (air, light, water, nutrients from soil and room to grow) and how they vary from plant to plant  
 Investigate the ways in which water is transported within plants  
 Explore the role of flowers in the life cycle of flowering plants, including pollination, seed formation and seed dispersal

## **Rocks (materials)**

Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties  
 Describe in simple terms how fossils are formed when things that have lived are trapped within rock  
 Recognise that soils are made from rocks and organic matter

# History

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## **Students should be given the opportunity to apply historical skills in the context of their Home Countries:**

- Should be taught about changes in Britain from the Stone Age to the Iron Age
- Should be taught about the Roman empire and its impact on parts of the world
- Should be taught about Britain's settlement by Anglo-Saxons and Scots Significant and/or similar events in their home country
- Should be taught about the Viking and Anglo-Saxon struggle for the Kingdom of England to the time of Edward the Confessor and/or similar events in their home country
- Should be taught about an aspect of local history
- Should be taught a study of an aspect or theme in history that extends pupils' chronological knowledge beyond 1066
- Should be taught about the achievements of the earliest civilizations – an overview of where and when the first civilizations appeared and a depth study of one of the following:
  - Ancient Sumer;
  - The Indus Valley;
  - Ancient Egypt; or
  - The Shang Dynasty of Ancient China
- Should be taught a study of Greek life and achievements and their influence on the western world
- Should be taught about a society that provides contrasts with their home country

## **Chronological Awareness**

Have some awareness of the different periods of the past and an identify some of the differences and similarities between the periods

## **Knowledge and Understanding of Significant Aspects of History**

Have knowledge and understanding of some of the main events, people and changes from the past

## **Understand Historical Concepts**

Give reasons for and results of the main events and changes

Describe and explain simple concepts such as cause and effect

## **Organise, Evaluate and Communicate Information**

Identify some of the different ways in which the past is represented

# Geography

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## **Location Knowledge**

Know about the local area

Describe simply where places are beyond the local area e.g. rivers, mountains, capitals, landmarks

## **Place Knowledge**

Describe what gives the local area character and simply describe what other places are like beyond this area

Know the position and significance of the Equator, the Tropics of Cancer and Capricorn

## **Human and Physical Geography**

Observe and describe physical and human features of the local area and other places

Begin to compare these features to another place beyond the local area

Begin to understand how people effect the environment

Describe and Understand key aspects of volcanoes and earthquakes

## **Geographical Skills and Fieldwork**

Understand the 8 compass points and use them to explain/identify points on a map

Carry out simple tasks, use own observations and resources given to ask and answer questions about places and environments

Begin to use Geographical words e.g. region, local, community, agriculture, tourism, settlement, population, water cycle, precipitation, condensation

# Computing

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## **Computer Science**

Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts

Use sequence, selection and repetition in programs; work with variables and various forms of input and output

Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs

Understand computer networks, including the Internet; how they can provide multiple services, such as the World Wide Web; and the opportunities they offer for communication and collaboration

## **Information Technology**

Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content

Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information

## **Digital Literacy**

Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact

# Design & Technology

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## Design

Show that their design meets a range of requirements

Put together a plan which shows the order and also what equipment and tools are needed

Describe their design using an accurately labelled sketch and words

## Make

Use equipment and tools accurately

Think about how good their product is going to end up being

## Evaluate

Identify what they would change to make their design better

Practise evaluation skills by evaluating existing products

## Technical Knowledge

### Stiff and flexible sheet materials:

Use the most appropriate materials and work accurately to make cuts and holes and to join materials

### Textiles:

Identify what a user would want when choosing textiles

Think about how to make a product strong and how to join things in different ways

Devise a template

## Cooking and Nutrition

Select the right ingredients for a product

Use equipment safely

Describe how the combined ingredients come together

Set out to grow plants such as cress and herbs from seed with the intention of using them for a food product

# Art & Design

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## **Drawing**

Control a pencil with increasing confidence

Draw whole sketches

Experiment with different types of line to create a composition e.g. thick and thin, wavy, curved etc (looking closely at the type of line to fit the form)

Create texture through rubbings and creating surface patterns with pencils (focus on different textures)

Confidently work from observation

## **Painting**

Use paint and equipment correctly

Predict colour mixing results with increasing accuracy – colour wheel

Use colour washes to build up thicker layers and paint detail

Use a brush to produce marks appropriate for work, e.g. teaching how to use dots and dashes

## **Collage**

Use ripping as a technique for collage

## **3D**

Use the equipment and media with increasing confidence

Shape, form, model and construct from observation

Work safely

## **Printing**

Use the equipment and media with increasing confidence

Create repeating patterns

Print two colour overlays

## **Exploring**

Create sketch books to record their observations and use them to review and revisit ideas

Explore their own ideas

Use visual and other information for their work

## **Evaluating**

Comment on differences and similarities in their own work and the work of others

Adapt and improve their own work

# Music

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## Performing

### Vocal:

Sing rounds and partner songs, maintaining own part

### Instrumental:

Use correct technique for a range of percussion instruments, keyboards, plus own instruments if applicable

Copy and match simple patterns in 2, 3, and 4 metre

Keep to a steady beat

Maintain an independent part within a group

## Improvising and Composing

Choose carefully and order sounds within simple structures such as beginning, middle, end, and in response to given starting points

Within a group, create and play layered music with an awareness of how they fit together

Represent sounds with symbols - Staff notation: begin to recognise and use different rhythms and that positioning represents pitch

## Listening and Understanding

Develop an awareness of the music's context and purpose

Identify some of the structural and expressive aspects of music heard (e.g. starts quiet and gets gradually louder)

Identify instruments heard and how they are played

## Dimensions

**Pitch:** Identify steps, leaps and repeated notes in melodies

**Duration:** Begin to understand 2, 3 and 4 metre and how rhythms fit into a steady beat

**Dynamics:** Understand getting louder and quieter in finer graduations

**Tempo:** Understand getting faster and slower in finer graduations

**Timbre:** Identify a range of percussion and non-percussion instruments by name and the way they are played

**Texture:** Recognise different combinations of layers in music

**Structure:** Develop understanding of repetition (e.g. ostinato) and contrast (e.g. verse/chorus) structures

# Physical Education

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## Games

Beginning to influence opposed conditioned games using tactical thought and talking to peers

Control and catch a ball with movement and increasing stability

Move confidently with a ball keeping it under control e.g. using the inside of the hockey stick to keep the ball under control of the person more consistently

Talk about reasons for warming up

## Dance

Translate ideas from a variety of stimuli into movement

Compare, develop & adapt movement & motifs to create longer dance pieces

Use dance vocabulary to compare & improve my work in relation to others

Understand working safely

## Gymnastics

Copy, remember, explore & repeat simple actions, and link & vary ideas with control & co-ordination

Apply compositional ideas to sequences alone & with others

Describe own & others work noting similarities & differences

Understand working safely

Recognise changes in my body and can give reasons why PE is good for health

## Athletics

Run at a speed appropriate to the distance I am running

Take a running jump

Demonstrate a range of throwing actions using a variety of objects

Recognise a change in heart rate, temperature and breathing rate

## Swimming

Jump in from poolside and submerge to a minimum depth of 1.0 metre

Sink, push away from wall and maintain a streamlined position

Push and glide on the front with arms extended and log roll onto the back

Push and glide on the back with arms extended and log roll onto the front

Travel 5 metres on the front, perform a tuck to rotate onto the back and return on the back

Fully submerge to pick up an object

Answer correctly three questions on the Water Safety Code

Push and glide and travel 10 metres on the back

Push and glide and travel 10 metres on the front

Perform a tuck float and hold for three seconds

# Languages

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We teach English, Arabic, French and Spanish.

Pupils who are just beginning to learn English, will not take part in French and Spanish lessons until their command of English is good enough for them to access class based tasks independently. During the French and Spanish lessons, these identified pupils will receive additional English lessons.

## **Listening & Comprehension**

Link sounds to meanings

Recognise question forms and negatives

Identify specific sounds, phonemes and words

## **Speaking**

Communicate with others using simple words and phrases

Use the correct pronunciation in spoken work

Recognise question forms and negatives

## **Reading & Comprehension**

Make links between some phoneme, rhymes and spellings and read aloud familiar words

Notice the spelling of familiar words

Recognise how sounds are represented in written form

Identify specific sounds, phonemes and words

## **Writing**

Write some familiar simple words accurately using a model (copy)

Write some familiar simple words from memory

# Year 4 Topic Skills & Learning Outcomes

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## Curriculum Areas

- Science
- History
- Geography
- Computing
- Design Technology
- Art & Design
- Music
- Physical Development
- Languages

# Science

## Working Scientifically

Recognise scientific evidence that is for or against an argument, or supports a scientific idea or not e.g. evidence for how sound travels through different materials

Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions

Identifying differences, similarities or changes related to simple scientific ideas and processes

Draw tables & bar charts to present simple data

## Animals Including Humans

Describe the simple functions of the basic parts of the digestive system in humans

Identify the different types of teeth in humans and their simple functions

Construct and interpret a variety of food chains, identifying producers, predators and prey

## Electricity

Identify common appliances that run on electricity

Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers

Identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery

Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit

Recognise some common conductors and insulators, and associate metals with being good conductors

## Living Things and Their Habitats

Recognise that living things can be grouped in a variety of ways

Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment

Recognise that environments can change and that this can sometimes pose dangers to living things

## Sound

Identify how sounds are made, associating some of them with something vibrating for example, in different musical instruments

Identify patterns in the sounds that are made by different objects e.g. elastic bands of different thickness

Identify patterns between the volume of a sound and the strength of the vibrations that produced it, recognising that sound gets fainter over distance

## States of Matter (materials)

Compare and group materials together, according to whether they are solids, liquids or gases

Observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C)

Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature

# History

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- Should be taught about Britain's settlement by Anglo-Saxons and Scots Significant and/or similar events in their home country
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- Should be taught about an aspect of local history
- Should be taught a study of an aspect or theme in history that extends pupils' chronological knowledge beyond 1066
- Should be taught about the achievements of the earliest civilizations – an overview of where and when the first civilizations appeared and a depth study of one of the following:
  - Ancient Sumer;
  - The Indus Valley;
  - Ancient Egypt; or
  - The Shang Dynasty of Ancient China
- Should be taught a study of Greek life and achievements and their influence on the western world
- Should be taught about a society that provides contrasts with their home country

**Chronological Awareness**

Describe and compare different periods from the past

Have some awareness of how people's lives can shape a nation

**Knowledge and Understanding of Significant Aspects of History**

Explain some of the main events and give reasons for, and results of, the changes

Make connections between local, regional, national and international history

**Understand Historical Concepts**

Understand more complex, abstract concepts

**Organise, Evaluate and Communicate Information**

Understand that aspects of the past have been represented and interpreted in different ways

# Geography

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## **Location Knowledge**

Know about the local area and begin to appreciate the importance of wider geographical location in understanding places  
Begin to describe and compare features of different locations and offer explanations for the locations of some of those features

Understand the difference between the northern and southern hemisphere

Begin to understand 4 figure grid references on maps

## **Place Knowledge**

Be aware that different places may have both similar and different characteristics

## **Human and Physical Geography**

Begin to describe physical and human features and begin to offer reasons for observations and opinions about places and Environments

Recognise how people try to improve and keep environments

Understand the term 'climate zone' and touch upon global warming

Describe and understand key aspects of biomes and vegetation belts, rivers, mountains

## **Geographical Skills and Fieldwork**

Use skills and evidence to answer a range of geographical questions

Begin to investigate answers and use the correct vocabulary to share findings

# Computing

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## **Computer Science**

Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts

Use sequence, selection and repetition in programs; work with variables and various forms of input and output

Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs

Understand computer networks, including the Internet; how they can provide multiple services, such as the World Wide Web; and the opportunities they offer for communication and collaboration

## **Information Technology**

Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content

Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information

## **Digital Literacy**

Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact

# Design & Technology

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## Design

Come up with at least one idea about how to create their product  
 Take account of the ideas of others when designing  
 Produce a plan and explain it to others  
 Suggest some improvements and say what was good and not so good about their original design

## Make

Show a good level of expertise when using a range of tools and equipment  
 Explain how their product will appeal to the audience  
 Use a range of tools and equipment expertly

## Evaluate

Begin to explain how to improve original design  
 Evaluate a product, thinking of both appearance and the way it works  
 Practise evaluation skills by evaluating existing products against set criteria

## Technical Knowledge

### Stiff and flexible sheet materials:

Measure materials carefully and attempt to make a product strong

### Mouldable materials:

Work at my product even though the original idea might not have worked

## Cooking and Nutrition

Know what to do to be hygienic and safe  
 Think how to present a product in an interesting way

# Art & Design

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## **Drawing**

Draw whole sketches with detail of surrounds (i.e.) including the background  
Confidently work from imagination  
Express different feelings through drawing  
Use appropriate language

## **Painting**

Use paint and equipment correctly and with increasing confidence  
Use the colour wheel to mix different shades of the same colour  
Understand how to use tints and tones – to lighten and darken with the use of black and white  
Competently work with different consistencies of paint  
Use language appropriate to skill

## **Collage**

Use the technique of overlaying - building up layers on the surface/colour mixes

## **3D**

Shape, form, model and construct from imagination  
Use surface patterns/ textures

## **Printing**

Relief and impressed printing processes

## **Exploring**

Communicate their own ideas and meanings through a range of materials and processes for a range of purposes  
Identify the different forms art takes: books, pictures, wallpaper, fabrics, etc.

## **Evaluating**

Look at and talk about the work of other artists

# Music

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## Performing

### Vocal:

Sing rounds and partner songs, maintaining own part

### Instrumental:

Maintain rhythmic and melodic ostinati in 2, 3, and 4 metre and

Maintain an independent part within a group, using controlled playing techniques

## Improvising and Composing

Improvise and compose within known structures featuring musical changes

Improvise and compose with an awareness of context and purpose

Staff notation: recognise and use simple rhythms and a limited number of pitches

## Listening and Understanding

Listen to music with layered parts, noticing how the layers fit together

Beginning to develop an awareness of the music's context, purpose and the composer's intent

Identify some of the structural and expressive aspects of music heard (e.g. rhythmic ostinato on the drum)

Give opinions, using appropriate musical vocabulary to justify these

## Dimensions

**Pitch:** Identify melodic shape and different scale patterns (pentatonic, major and minor)

**Duration:** Understand 2, 3 and 4 metre and how rhythms fit into a steady beat

**Dynamics:** Identify getting louder and quieter

**Tempo:** Understand getting faster and slower in finer graduations

**Timbre:** Begin to identify a wide range of non- percussion instruments by name and the way they are played

**Texture:** Identify solo, unison, drone, layers and simple harmony (e.g. drone; melodic ostinati)

**Structure:** Begin to develop understanding of conventional musical structures (e.g. rondo, theme and variations, drone/ostinato)

# Physical Education

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## **Games**

Control and catch a ball & accurately pass whilst moving and demonstrating firm stability  
Take part in conditioned game with understanding of tactics & rules  
Move with a ball in opposed situations e.g. using side step movements within Tag Rugby to evade being tackled  
Understand / use principles of warm up & why exercise is good for health e.g. that warming up movements reduces the chance of muscles being pulled

## **Dance**

Vary dynamics & develop actions with a partner or as part of a group  
Continually demonstrate rhythm & spatial awareness  
Modify my performance & that of others as a result of observation & basic understanding of the structure of the body  
Demonstrate precision, control & fluency

## **Gymnastics**

Link ideas, skills & techniques with control, precision & fluency when performing basic skills  
Understand composition by performing more complex sequences  
Describe how to refine, improve & modify performances  
Demonstrate specific aspects of warm-up & describe effects of exercise on the body

## **Athletics**

Improve and sustain running technique at different speeds Demonstrate accuracy & technique in a range of throwing & jumping actions  
Maintain a good running technique when sprinting over obstacles  
Describe the changes in my body when running, jumping & throwing

## **Swimming**

Jump in from poolside and submerge bending knees on landing  
Sink, push away from wall on side and maintain a streamlined position  
Push and glide on the front with arms extended and log roll onto the back  
Push and glide on the back with arms extended and log roll onto the front  
Travel on the front, tuck and rotate around the horizontal axis and return on the back  
Fully submerge to pick up an object and return it with any recognised position  
Answer correctly 3 questions on the water safety code  
Travel at least 10 metres on the front or back choosing a recognised swimming technique such as the front crawl or backstroke

# Languages

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We teach English, Arabic, French and Spanish

Pupils who are just beginning to learn English, will not take part in French and Spanish lessons until their command of English is good enough for them to access class based tasks independently. During the French and Spanish lessons, these identified pupils will receive additional English lessons.

## **Listening & Comprehension**

Listen to and identify words and short phrases

Communicate by answering a wider range of questions

Sort words according to sounds

Recognise negative statements

Recognise categories of words (e.g. colours) and word classes

## **Speaking**

Use question forms

Use phonic knowledge to support accurate pronunciation and to say simple words and phrases

## **Reading & Comprehension**

Read and understand familiar words and short written phrases

Follow a short text while listening and reading, saying some of the text

Read a wider range of words, phrases and sentences aloud

Apply phonic knowledge to decode text

Recognise and apply simple agreements (e.g. gender, plural, singular)

Recognise negative statements

Recognise categories of words (e.g. colours) and word classes

## **Writing**

Write some familiar words and phrases (noun & gender and adjectives) without help (from memory) Copying simple structures Use question forms

Use phonic knowledge to support accurate pronunciation and to write simple words and phrases

Recognise and apply simple agreements (e.g. gender, plural, singular)

# Year 5 Topic Skills & Learning Outcomes

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## Curriculum Areas

- Science
- History
- Geography
- Computing
- Design Technology
- Art & Design
- Music
- Physical Development
- Languages

# Science

## Working Scientifically

Use straightforward scientific evidence to answer questions, or to support findings

Recognise that scientific ideas change and develop over time sometimes refuting or supporting previous understanding e.g. evidence for or against global warming

Give examples of where science cannot answer all our questions. E.g. Is there life on other planets?

Identify the main variables that may affect investigative results and select which ones to change or keep the same e.g. how forces affect elastic materials

Suggest different possible conclusions from the same range of evidence (pri or sec) Come up with alternative conclusions... "What could this show? What else could it show?"

Identify the evidence used in making a conclusion

## Earth and Space

Describe the movement of the Earth, and other planets, relative to the Sun in the solar system & understand that the Earth, Sun & Moon are approximately spherical

Describe the movement of the Moon relative to the Earth

Use the idea of the Earth's rotation to explain day and night and the apparent movement of the Sun across the sky

## Living Things and Their Habitats

Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird. (NOT HUMANS)

## Forces

Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object

Identify the effects of air resistance, water resistance and friction, that act between moving surfaces

Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect

## Properties and Changes of Materials (materials)

Compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets

Understand that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution

Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating

Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic

Demonstrate that dissolving, mixing and changes of state are reversible changes

Explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda

# History

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- Should be taught about the Viking and Anglo-Saxon struggle for the Kingdom of England to the time of Edward the Confessor and/or similar events in their home country
- Should be taught about an aspect of local history
- Should be taught a study of an aspect or theme in history that extends pupils' chronological knowledge beyond 1066
- Should be taught about the achievements of the earliest civilizations – an overview of where and when the first civilizations appeared and a depth study of one of the following:
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  - Ancient Egypt; or
  - The Shang Dynasty of Ancient China
- Should be taught a study of Greek life and achievements and their influence on the western world
- Should be taught about a society that provides contrasts with their home country

## **Chronological Awareness**

Describe significant features from time periods and know how a country has influenced and been influenced by the wider world

## **Knowledge and Understanding of Significant Aspects of History**

Understand why some civilisations have been successful and why others have not

## **Understand Historical Concepts**

Understand historical concepts and use them to make connections, draw contrasts, analyse trends and ask questions about the past

## **Organise, Evaluate and Communicate Information**

Evaluate sources and identify those that are useful to the task

Beginning to make use of dates and terms to structure their work

# Geography

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## **Location Knowledge**

Know more about the features of a variety of places around the world from local to global using a range of resources including ICT and google maps

Use 4 figure grid references to read maps

Understand different countries have different time zones; prime/Greenwich Meridian

## **Place Knowledge**

Understand more about the links between different places and that some places depend on each other

## **Human and Physical Geography**

Describe and begin to explain geographical patterns and a range of physical and human processes and recognise that these interact to affect the lives and activities of people living there

Describe and understand the key aspects of the water cycle

Understand how people can both improve and damage the environment

## **Geographical Skills and Fieldwork**

Draw on knowledge and understanding to suggest suitable geographical enquiry questions

Suggest an appropriate sequence of events and use geographical skills to conduct an enquiry

Communicate findings using the appropriate vocabulary

# Computing

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## **Computer Science**

Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts

Use sequence, selection and repetition in programs; work with variables and various forms of input and output

Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs

Understand computer networks, including the Internet; how they can provide multiple services, such as the World Wide Web; and the opportunities they offer for communication and collaboration

## **Information Technology**

Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content

Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information

## **Digital Literacy**

Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact

# Design & Technology

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## Design

Come up with a range of ideas after collecting information  
 Produce a detailed step-by-step plan  
 Use cross sectional planning to show design  
 Produce prototypes of ideas

## Make

Explain why their finished product is going to be of good quality and how the product will appeal to the audience  
 Use a range of tools and equipment expertly  
 Think about the aesthetic qualities  
 Think about the functionality of the design

## Evaluate

Check designs are the best they can be  
 Evaluate appearance and function against the original criteria  
 Begin to test and evaluate final product identifying if a product is fit for purpose

## Technical Knowledge

**Electrical & mechanical components:** Incorporate a switch on a product; Incorporate hydraulics and pneumatics;  
 Identify ways a circuit could improve product

**Mouldable materials:** Consider the use of the product when selecting materials

**Stiff and flexible sheet materials:** Measure accurately to ensure everything is precise and the product is strong and fit for purpose

## Cooking and Nutrition

Describe what to do to be both hygienic and safe and present a product well

# Art & Design

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## **Drawing**

Use a range of pencils (including different grade of pencil)  
Begin to create depth in a composition through the use of very simple perspective  
Draw the layout of the face and figure  
Experiment with shading techniques (light/dark – pencil)  
Use language appropriate to skill and techniques

## **Painting**

Begin to use tints in their work  
Confidently apply paint to large flat areas of colour and use appropriate brushwork to the method of painting  
Use colours and know their relationship – e.g. hot and cold colours  
Confidently work from direct observation  
Use language appropriate to skill and technique

## **Collage**

Use the techniques of folding, repeating and overlapping with a variety of different collage mediums

## **3D**

Shape, form, model and join with confidence  
Work directly from observation with confidence  
Use appropriate Language  
Use appropriate to skill and technique

## **Printing**

Modify and adapt print as work progresses  
Make a two colour print and begins to experiment with additional colours

## **Exploring**

Create sketch books to record their observations and use them to review and revisit ideas

## **Evaluating**

Comment on ideas methods and approaches in their own work and the work of others  
Relate ideas, methods and approaches to context in which a work was created  
Adapt and improve their own work to realise their own intentions

# Music

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## Performing

### Vocal:

Sing simple part songs with control and an awareness of phrasing

### Instrumental:

Play simple parts with accuracy and accurately maintain an independent part within a group, using controlled playing techniques

## Improvising and Composing

Improvise and compose including the use of simple chord structures

Improvise, compose and refine with an awareness of context and purpose

Represent sounds with detailed symbols - Staff notation: recognise and use simple rhythms, rests and a limited number of pitches

## Listening and Understanding

Listen to music with a variety of textures, noticing different types of harmony

Compare and contrast different music, with an awareness of the music's context, purpose and the composer's intent

Identify some of the structural and expressive aspects of music heard (e.g. major or minor chords used)

Identify different ensemble combinations, instruments heard and their role within the ensemble (e.g. ostinato; melody)

## Dimensions

**Pitch:** Identify a range of different scale patterns (pentatonic, major and minor, chromatic)

**Duration:** Understand more complex rhythms and metres, e.g. counting in 6 or 8

**Dynamics:** Understand how a range of dynamics can be manipulated for expressive effect

**Tempo:** Understand how a wide range of tempi can be manipulated for expressive effect

**Timbre:** Identify families of instruments and different ensemble combinations

**Texture:** Begin to understand types of harmony (e.g. simple parts; use of chords as an accompaniment)

**Structure:** Understand a wider range of musical structures (e.g. rondo, theme and variations, drone/ostinato, leitmotifs)

# Physical Education

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## Games

Control movement confidently with a ball in opposed situations whilst moving

Combine accurate passing skills / techniques in game e.g. using the inside and outside of the hockey stick to move the ball in different directions (towards a team mate or away from an opposing member)

Advise and help others in their techniques in a game e.g. making suggestions in how to improve their skillset

Understand & explain short term effects of exercise, warming, cooling

Understand & can explain long term effects of exercise e.g. stating that you will become fitter because your heart and lungs are becoming more efficient

## Dance

Perform & create motifs in a variety of dance styles with accuracy & consistency

Select & use a wide range of compositional skills to demonstrate ideas

Suggest ways to improve quality of performance showing sound knowledge & understanding

Lead my own warm up & demonstrates all round safe practice

## Gymnastics

Perform & create movement sequences with some complex skills & displaying accuracy & consistency

Select & use a wide range of compositional skills in complex sequences alone & in groups. I can innovate

Analyse skills & can suggest ways to improve quality of performance showing sound knowledge & understanding

Lead own warm up & demonstrates all round safe practice

## Athletics

Adapt my running speed to the distances required

Improve and sustain running technique at different speeds.

Demonstrate accuracy & alter my jumping and throwing technique in a range of competitive situations.

Alter and then maintain a good running technique when sprinting over obstacles.

Describe the changes in my body when running, jumping & throwing

## Swimming

Perform a tuck (mushroom) float for around 5 seconds

Perform a sequence of changing shapes (minimum of 3) whilst floating at the surface

Push and glide from the wall to the pool floor

Perform a front crawl leg kick action for a distance of 10 metres and return on back performing back crawl leg action (one item of equipment optional)

Perform a butterfly leg kick action on the front or the back

Perform a breaststroke leg kick action on the front and return on the back with a breaststroke leg action

Perform head first sculling for a distance of 5 metres

I can swim a recognised stroke (breaststroke, front crawl or backstroke) for a distance of 10 metres

# Languages

We teach English, Arabic, French and Spanish

Pupils who are just beginning to learn English, will not take part in French and Spanish lessons until their command of English is good enough for them to access class based tasks independently. During the French and Spanish lessons, these identified pupils will receive additional English lessons.

## Listening & Comprehension

Pick out some of the main points from short spoken passages  
 Join in a short conversation  
 Understand simple opinion  
 Recognise typical conventions of word order and compare with English  
 Understand and use negative statements

## Speaking

Communicate by asking a wider range of questions  
 Express simple opinions  
 Make a short presentation using a model  
 Develop accuracy in pronunciation and intonation  
 Manipulate language by changing a single element in a sentence  
 Use repair strategies to keep a conversation going  
 Understand and use negative statements  
 Apply knowledge of language rules and conventions when building short

## Reading & Comprehension

Read and understand some of the main points from a short text  
 Recognise typical conventions of word order and compare with English  
 Understand and use negative statements

## Writing

Understand how a simple sentence is written  
 Write words, phrases and a few sentences using a model  
 Remembering simple structures and applying in new contexts  
 Joining simple sentences using et/mais, y/pero.  
 Manipulate language by changing a single element in a sentence  
 Understand and use negative statements  
 Apply knowledge of language rules and conventions when building short sentences. Use 1st, 2nd and 3rd person singular forms of familiar verbs

# Year 6 Topic Skills & Learning Outcomes

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## Curriculum Areas

- Science
- History
- Geography
- Computing
- Design Technology
- Art & Design
- Music
- Physical Development
- Languages

# Science

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## Working Scientifically

Interpret data from tables, bar & line graphs etc...to draw conclusions consistent with the evidence e.g. Use graphs & charts to describe the effects of diet on health

Evaluate practical investigation methods and suggest improvements. E.g. Describe some strengths and weaknesses of the plan/method. Make a comment on reliability

Use clear sentences and correct scientific words and symbols to describe ideas and observations e.g. Describe heat transfer using correct wording

Make sets of observations or measurements and say what the range and intervals are e.g. record a set of results and state the highest, lowest measurement

## Animals Including Humans

Identify and name the main parts of the human circulatory system, and explain 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

## Electricity

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

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

Use recognised symbols when representing a simple circuit in a diagram

## Evolution

Understand 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. (NOT HUMANS)

Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution

## Light

Recognise that light appears to travel in straight lines

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

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

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

## Living Things and Their Habitats

Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals

Give reasons for classifying plants and animals based on specific characteristics

# History

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**Students should be given the opportunity to apply historical skills in the context of their Home Countries:**

- Should be taught about changes in Britain from the Stone Age to the Iron Age
- Should be taught about the Roman empire and its impact on parts of the world
- Should be taught about Britain's settlement by Anglo-Saxons and Scots Significant and/or similar events in their home country
- Should be taught about the Viking and Anglo-Saxon struggle for the Kingdom of England to the time of Edward the Confessor and/or similar events in their home country
- Should be taught about an aspect of local history
- Should be taught a study of an aspect or theme in history that extends pupils' chronological knowledge beyond 1066
- Should be taught about the achievements of the earliest civilizations – an overview of where and when the first civilizations appeared and a depth study of one of the following:
  - Ancient Sumer;
  - The Indus Valley;
  - Ancient Egypt; or
  - The Shang Dynasty of Ancient China
- Should be taught a study of Greek life and achievements and their influence on the western world
- Should be taught about a society that provides contrasts with their home country

**Chronological Awareness**

Make appropriate use of dates and specialist terms

**Knowledge and Understanding of Significant Aspects of History**

Depth of factual knowledge and understanding of the wider world

Identify features and make links between past societies and periods

**Understand Historical Concepts**

Use historical concepts to create their own structured accounts, including written narratives and analyses

**Organise, Evaluate and Communicate Information**

Understand the methods of historical enquiry, including how evidence is used and discern how and why contrasting arguments and interpretations of the past have been constructed

# Geography

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## Location Knowledge

Use 6 figure grid references

Understand the significance of latitude and longitude

Know more about the features of a variety of places around the world from local to global and in different parts of the world

Name and locate key topographical features including; hills, mountains, coasts and rivers. And understand how some of these aspects have changed over time

## Place Knowledge

Understand about the links and relationships between different places and what makes places dependent on each other

## Human and Physical Geography

Describe and explain a range of physical and human processes and recognise that these processes interact to produce distinctive characteristics of places

Describe ways in which physical and human processes operating at different scales create geographical patterns and lead to changes in places

## Geographical Skills and Fieldwork

Explain own views

Suggest own geographical enquiry

Select and use appropriate skills to conduct enquiry

Collate data and record it using data handling software to produce graphs and charts of results

Present findings both graphically and in writing to reach a conclusion and evaluate the information

# Computing

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## **Computer Science**

Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts

Use sequence, selection and repetition in programs; work with variables and various forms of input and output

Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs

Understand computer networks, including the Internet; how they can provide multiple services, such as the World Wide Web; and the opportunities they offer for communication and collaboration

## **Information Technology**

Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content

Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information

## **Digital Literacy**

Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact

# Design & Technology

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## Design

Use a range of information to inform designs including market research  
 Explain their plan to someone else  
 Consider culture and society in their designs  
 Use computer aided designs to show ideas  
 Make prototypes

## Make

Use tools and materials precisely  
 Identify and change the way they are working if needed  
 Identify the aesthetic qualities of their work  
 Identify the function

## Evaluate

Test and evaluate final product  
 Identify if a product is fit for purpose  
 Evaluate improvements  
 Evaluate if different resources would have improved the product  
 Evaluate existing products against criteria

## Technical Knowledge

**Textiles:** Identify what a user would want when choosing textiles; Make a product attractive and strong; Use a range of joining techniques; Identify how a product could be sold

**Electrical and mechanical components:** Use different kinds of circuit in a product

## Cooking and Nutrition

Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques

# Art & Design

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## **Drawing**

Use a range of: drawing media (pencil (including different grades of pencil), ink, biro, pastel, charcoal etc.)

Use perspective in their drawings

Draw the layout of the figure in motion

Select different techniques for different purposes: shading, smudging etc.

Confidently use language appropriate to skill and techniques

## **Painting**

Use complimentary colours

Replicate patterns, colours and textures in their work

Confidently work from imagination

Begin to use different kinds of paints (Chromar, acrylics, watercolour etc.)

Confidently use language appropriate to skill and technique

## **Collage**

Arrange and re-arrange colours, shapes, and texture, for effect before completion of the final composition

## **3D**

Able to produce more intricate patterns and textures

Work directly from imagination with confidence

Confidently use appropriate language

Able to take into account the properties of media being used and use appropriate media for a specific purpose

## **Printing**

Combine prints taken from different objects to produce an end piece

Produce pictorial and patterned prints

Use printing techniques such as relief works (batik) and tie-dye

## **Exploring**

Create sketch books to record their observations and use them to review and revisit ideas

## **Evaluating**

Look at and talk about the work of other artists, architects and designers in history

Adapt and refine their work to reflect and their view of its purpose and meaning

# Music

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## Performing

### Vocal:

Confidently sing a part in songs with control, expression and an awareness of phrasing

### Instrumental:

Play simple parts with accuracy and awareness of pitch, metre and balance

Accurately maintain an independent part within a group, using controlled playing techniques in a variety of metres

## Improvising and Composing

Choose carefully and order sounds within simple structures such as beginning, middle, end, and in response to given  
 Improve and compose including the use of scales, complex rhythm patterns and simple chord structures

Within a group, create and play with an awareness of balance

Represent sounds with detailed symbols - Staff notation: recognise and use simple rhythms, rests and an increased number of pitches

## Listening and Understanding

Listen to music with a range of different metres

Beginning to identify some of the structural and expressive aspects of music heard

Beginning to develop an awareness of cross-dimensional links between different areas of music

## Dimensions

**Pitch:** Identify a range of different scale patterns (pentatonic, major and minor, chromatic)

**Duration:** Beginning to understand rhythms and metres, e.g. counting in 6, 8, 5 or 7

**Dynamics:** Understand how a range of dynamics can be manipulated for expressive effects

**Tempo:** Understand how a wide range of tempi can be manipulated for expressive effect

**Timbre:** Identify families of instruments and different ensemble combinations (e.g. jazz band, orchestra, choir, blues group)

**Texture:** Begin to understand types of harmony (e.g. simple parts; use of chords as an accompaniment), and how they can be used for effect

**Structure:** Beginning to use a wider range of musical structures

# Physical Education

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## Games

Control movement confidently with a ball in opposed situations whilst moving

Combine accurate passing skills / techniques in game e.g. using the inside and outside of the hockey stick to move the ball in different directions (towards a team mate or away from an opposing member)

Advise and help others in their techniques in a game e.g. making suggestions in how to improve their skillset

Understand & explain short term effects of exercise, warming, cooling

Understand & can explain long term effects of exercise e.g. stating that you will become fitter because your heart and lungs are becoming more efficient

## Dance

Perform & create a variety of dance styles with consistency and confidence

Select & use a wide range of compositional skills to demonstrate ideas

Suggest ways to improve quality of performance showing sound knowledge & understanding

Lead a group to produce a Dance influenced by a number of styles.

Lead my own warm up & demonstrates all round safe practice

## Gymnastics

Perform & create movement sequences with some complex skills & displaying accuracy & consistency

Select & use a wide range of compositional skills in both simple and complex sequences alone & in groups.

Show the ability to refine my individual and group performance.

Analyse skills & can suggest ways to improve quality of performance showing sound knowledge & understanding

Lead my own warm up & demonstrate all round safe practice

## Athletics

Demonstrate good control, strength, speed & stamina in a variety of athletic events

Understand how to apply athletic skills & tactics to the competitive situation

Explain how to improve technique in a variety of events.

Understand & can explain the short & long term effects of exercise, and I understand the need for specific warm up & cool down

## Swimming

Give two examples of how to prepare for exercise and understand why it is important

Sink, push off on side from the wall, glide, kick and rotate into backstroke

Sink, push off on side from the wall, glide, kick and rotate into front crawl

Swim 10 metres wearing clothes

Push and glide and swim front crawl to include at least six rhythmical breaths

Push and glide and swim breaststroke to include at least six rhythmical breaths

Push and glide and swim butterfly to include at least three rhythmical breaths

Push and glide and swim backstroke to include at least six regular breaths

Push and glide and swim 25 metres, choice of stroke is optional

Perform a 'shout and signal' rescue

Perform a surface dive

# Languages

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We teach English, Arabic, French and Spanish

Pupils who are just beginning to learn English, will not take part in French and Spanish lessons until their command of English is good enough for them to access class based tasks independently. During the French and Spanish lessons, these identified pupils will receive additional English lessons.

## **Listening & Comprehension**

Listen to and understand the main points and some detail from a short spoken passage  
Notice and manipulate agreements

## **Speaking**

Join in a short conversation  
Give a clear presentation in a clear audible voice  
Recognise the importance and significance of intonation  
Notice and manipulate agreements  
Use knowledge of words, text and structure to make meaning, using simple language

## **Reading & Comprehension**

Read aloud with confidence, enjoyment and expression, in chorus or individually  
Read and understand the main points and some detail from a short written passage  
Identify different text types and read short, authentic texts for enjoyment or information  
Match sound to sentences and paragraphs  
Notice and manipulate agreements  
Apply knowledge of word order and sentence construction to support understanding of written text

## **Writing**

Write several sentences from memory  
Develop a short text using a model  
Know how to use a bilingual dictionary to check their spelling and the gender  
Notice and manipulate agreements  
Use knowledge of words, text and structure to make meaning, using simple language Apply knowledge of words and text conventions to build meaningful sentences and short texts

# Oryx International Learning Topics 2021/2022

Lower Key Stage 2					
Year 3			Year 4		
Autumn Term	Spring Term	Summer Term	Autumn Term	Spring Term	Summer Term
<ul style="list-style-type: none"> <li>How is food made?</li> <li>Are plants important on our planet?</li> </ul>	<ul style="list-style-type: none"> <li>How can I save the world?</li> <li>What is sound and light?</li> </ul>	<ul style="list-style-type: none"> <li>What inventions saved the world?</li> </ul>	<ul style="list-style-type: none"> <li>Where shall we go on our adventure?</li> <li>Can we change?</li> </ul>	<ul style="list-style-type: none"> <li>What did Ancient civilisations do for us?</li> <li>What are habitats?</li> <li>Would we be lost without electricity?</li> </ul>	<ul style="list-style-type: none"> <li>How do we travel?</li> </ul>
Upper Key Stage 2					
Year 5			Year 6		
Autumn Term	Spring Term	Summer Term	Autumn Term	Spring Term	Summer Term
<ul style="list-style-type: none"> <li>Can you hear me? What's out there?</li> <li>How can we survive in extreme locations?</li> </ul>	<ul style="list-style-type: none"> <li>How does the weather impact on our world?</li> <li>Why are some animals extinct?</li> </ul>	<ul style="list-style-type: none"> <li>How does the past influence the future?</li> </ul>	<ul style="list-style-type: none"> <li>Does oil rule the world?</li> <li>How long can we survive on Planet Earth?</li> </ul>	<ul style="list-style-type: none"> <li>What powers the world?</li> <li>What communities do I belong to?</li> </ul>	<ul style="list-style-type: none"> <li>Am I unique?</li> <li>How can I take care of myself?</li> </ul>



# The National Curriculum for English

## A Guide for Parents

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### Year 3 and 4

In lower Key Stage 2, your child will build on their work from the infants to become more independent in both their reading and their writing. Most children will be confident at decoding most words – or will have extra support to help them to do so and so now they will be able to use their reading to support their learning about other subjects.

They will begin to meet a wider range of writing contexts, including both fiction and non-fiction styles and genres.

#### Speaking and Listening

The Spoken Language objectives are set out for the whole of primary school, and teachers will cover many of them every year as children's spoken language skills develop. In Years 3 and 4, some focuses may include:

- Use discussion and conversation to explore and speculate about new ideas
- Begin to recognise the need to use Standard English in some contexts
- Participation in performances, plays and debates
- Explain thinking and feeling in well-structured statements and responses

#### Reading Skills

- Extend skills of decoding to tackle more complex words, including with unusual spelling patterns
- Read a wide range of fiction, non-fiction and literary books
- Recognise some different forms of poetry
- Use dictionaries to find the meanings of words
- Become familiar with a range of traditional and fairy tales, including telling some orally
- Identify words which have been chosen to interest the reader
- Ask questions about what they have read
- Draw simple inferences about events in a story, such as how a character might be feeling
- Make predictions about what might happen next in a story
- Summarise ideas from several paragraphs of writing
- Find and record information from non-fiction texts
- Take part in discussions about reading and books
- Use possessive apostrophes correctly in regular and irregular plurals, such as children's and boys'
- Use examples of writing to help them to structure their own similar texts
- Plan out sentences orally to select adventurous vocabulary
- Use paragraphs to organise ideas
- Use description and detail to develop characters and settings in story-writing
- Write interesting narratives in stories
- In non-fiction writing, use features such as sub-headings and bullet points
- Review their own work to make improvements, including editing for spelling errors
- Read others' writing and suggest possible improvements
- Read aloud work that they've written to be clearly understood
- Extend sentences using a wider range of conjunctions, including subordinating conjunctions
- Use the present perfect verb tense
- Use nouns and pronouns with care to avoid repetition
- Use conjunctions, adverbs and prepositions to add detail about time or cause
- Use fronted adverbials
- Use direct speech, with correct punctuation

Young children have a tendency to repeat nouns or pronouns, leading to several sentences containing 'He' or 'They'. They can use alternatives to make writing more interesting. For example, alternatives for describing an individual character might include: he, the burglar, Mr Smith, John, the criminal, the villain, etc.

To add information to a sentence about its location, children might use conjunctions ("Although it was still early..."), adverbs ("Early that morning...") or prepositions ("At about six-thirty that morning..."). Often these techniques allow children to write more complex sentences.

**Grammar Help**

For many parents, the grammatical terminology used in schools may not be familiar. Here are some useful reminders of some of the terms used:

- Present perfect tense: a tense formed using the verb 'have' and a participle, to indicate that an action has been completed at an unspecified time, e.g. The girl has eaten her ice-cream
- Fronted adverbial: a word or phrase which describes the time, place or manner of an action, which is placed at the start of the sentence, e.g. "Before breakfast,..." or "Carrying a heavy bag,..."
- Direct speech: words quoted directly using inverted commas

**Parent Tip!**

Reading aloud at home continues to be vitally important at this age. You may even get your child to read their own writing aloud, attempting to add expression appropriate to the sentence.

# The National Curriculum for English

## A Guide for Parents

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### Year 5 and 6

In upper Key Stage 2, your child will increasingly meet a wider range of texts and types of writing, and will be encouraged to use their skills in a broader range of contexts.

#### Speaking and Listening

The Spoken Language objectives are set out for the whole of primary school, and teachers will cover many of them every year as children's spoken language skills develop. In Years 5 and 6, some focuses may include:

- Speak clearly in a range of contexts, using Standard English where appropriate
- Monitor the reactions of listeners and react accordingly
- Consider different viewpoints, listening to others and responding with relevant views
- Use appropriate language, tone and vocabulary for different purposes new ideas

#### Reading Skills

- Read a wide range of fiction, non-fiction, poetry, plays and reference books
- Learn a range of poetry by heart
- Perform plays and poems using tone, volume and intonation to convey meaning
- Use knowledge of spelling patterns and related words to read aloud and understand new words
- Make comparisons between different books, or parts of the same book
- Read a range of modern fiction, classic fiction and books from other cultures and traditions
- Identify and discuss themes and conventions across a wide range of writing
- Discuss understanding of texts, including exploring the meaning of words in context
- Ask questions to improve understanding of texts
- Summarise ideas drawn from more than one paragraph, identifying key details
- Predict future events from details either written in a text or by 'reading between the lines'
- Identify how language, structure and presentation contribute to meaning
- Discuss how authors use language, including figurative language, to affect the reader
- Make book recommendations, giving reasons for choices
- Participate in discussions about books, building on and challenging ideas
- Explain and discuss understanding of reading
- Participate in formal presentations and debates about reading
- Provide reasoned justifications for views

Figurative language includes metaphorical phrases such as 'raining cats and dogs' or 'an iron fist', as well as using language to convey meaning, for example by describing the Sun as 'gazing down' upon a scene.

#### Themes & Conventions

As children's experience of a range of texts broadens, they may begin to notice conventions, such as the use of first person for diary writing, or themes such as heroism or quests.

#### Parent Tip!

As children get older, they will increasingly take responsibility for their own work and homework tasks. That's not to say that parents can't help though.

Encourage your child to work independently on their homework, but also take the opportunity to discuss it with them and to have them explain their understanding to you.

### Writing Skills

- Write with increasing speed, maintaining legibility and style
- Spell some words with silent letters, such as knight and solemn
- Recognise and use spellings for homophones and other often-confused words from the Y5/6 list
- Use a dictionary to check spelling and meaning
- Identify the audience and purpose before writing, and adapt accordingly
- Select appropriate grammar and vocabulary to change or enhance meaning
- Develop setting, atmosphere and character, including through dialogue
- Write a summary of longer passages of writing
- Use a range of cohesive devices
- Use advanced organisational and presentational devices, such as bullet points
- Use the correct tense consistently throughout a piece of writing
- Ensure correct subject and verb agreement
- Perform compositions using appropriate intonation, volume and movement
- Use a thesaurus
- Use expanded noun phrases to convey complicated information concisely
- Use modal verbs or adverbs to indicate degrees of possibility
- Use relative clauses
- Recognise vocabulary and structures that are appropriate for formal use
- Use passive verbs to affect the presentation of information
- Use the perfect form of verbs to mark relationships of time and cause
- Recognise the difference in informal and formal language
- Use grammatical connections and adverbials for cohesion
- Use ellipses, commas, brackets and dashes in writing
- Use hyphens to avoid ambiguity
- Use semi-colons, colons and dashes between independent clauses
- Use a colon to introduce a list
- Punctuate bullet points consistently

### Grammar Help

For many parents, the grammatical terminology used in schools may not be familiar. Here are some useful reminders of some of the terms used:

- Noun phrase: a group of words which takes the place of a single noun. Example: The big brown dog with the fluffy ears.
- Modal verb: a verb that indicates possibility. These are often used alongside other verbs. Example: will, may, should, can.
- Relative clause: a clause which adds extra information or detail. Example: The boy who was holding the golden ticket won the prize.
- Passive verb: a form of verb that implies an action being done to, rather than by, the subject. Example: The boy was bitten by the dog.
- Perfect form: a form of verb that implies that an action is completed. Example: The boy has walked home.

# The National Curriculum for Maths

## A Guide for Parents

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### Year 3

During the years of lower Key Stage 2 (Year 3 and Year 4), the focus of mathematics is on the mastery of the four operations (addition, subtraction, multiplication and division) so that children can carry out calculations mentally, and using written methods. In Year 3 your child is likely to be introduced to the standard written column methods of addition and subtraction.

#### Number and Place Value

- Count in multiples of 4, 8, 50 and 100
- Recognise the place value of digits in three-digit numbers (using 100, 10s and 1s)
- Read and write numbers up to 1,000 using digits and words
- Compare and order numbers up to 1,000

#### Calculations

- Add and subtract numbers mentally, including adding either 1s, 10s or units to a 3-digit number
- Use the standard column method for addition and subtraction for up to three digits
- Estimate the answers to calculations, and use inverse calculations to check the answers
- Learn the 3x, 4x and 8x tables and the related division facts, for example knowing that  $56 \div 8 = 7$
- Begin to solve multiplication and division problems with two-digit numbers

#### Fractions

- Understand and use tenths, including counting in tenths
- Recognise and show equivalent fractions with small denominators
- Add and subtract simple fractions worth less than one, for example  $5/7 + 1/7 = 6/7$
- Put a sequence of simple fractions into size order

Equivalent fractions are fractions which have the same value, such as  $1/2$  and  $3/6$  or  $1/4$  and  $2/8$

#### Measurements

- Solve simple problems involving adding and subtracting measurements such as length and weight
- Measure the perimeter of simple shapes
- Add and subtract amounts of money, including giving change
- Tell the time to the nearest minute using an analogue clock
- Use vocabulary about time, including a.m. and p.m., hours, minutes and seconds
- Know the number of seconds in a minute and the number of days in a year or leap year

#### Shape and Position

- Draw familiar 2-d shapes and make familiar 3-d shape models
- Recognise right angles, and know that these are a quarter turn, with four making a whole turn
- Identify whether an angle is greater than, less than or equal to a right angle
- Identify horizontal, vertical, perpendicular and parallel lines

Parallel lines are those which run alongside each other and never meet. Perpendicular lines cross over each other meeting exactly at right angles.

#### Graphs and Data

- Present and understand data in bar charts, tables and pictograms
- Answer questions

#### Parent Tip!

Playing traditional games, such as battleships or even draughts and chess, is great for exploring coordinates and movements across the coordinate grid

# The National Curriculum for Maths

## A Guide for Parents

### Year 4

By the end of Year 4, children will be expected to know all of their times tables up to  $12 \times 12$  by heart. This means not only recalling them in order but also being able to answer any times table question at random, and also knowing the related division facts. For example, in knowing that  $6 \times 8 = 48$ , children can also know the related facts that  $8 \times 6 = 48$  and that  $48 \div 6 = 8$  and  $48 \div 8 = 6$ . This expertise will be particularly useful when solving larger problems and working with fractions

#### Number and Place Value

- Count in multiples of 6, 7, 9, 25 and 1,000
- Count backwards, including using negative numbers
- Recognise the place value in numbers of four digits (1000s, 100s, 10s and 1s)
- Put larger numbers in order, including those greater than 1,000
- Round any number to the nearest 10, 100 or 1,000
- Read Roman numbers up to 100

Roman Numerals' Basics:

I = 1; V = 5; X = 10; L = 50; C = 100

Letters can be combined to make larger numbers. If a smaller value appears in front of a larger one then it is subtracted, e.g. IV (5 - 1) means 4. If the larger value appears first then they are added, e.g. VI (5 + 1) means 6.

#### Calculations

- Use the standard method of column addition and subtraction for values up to four digits
- Solve two-step problems involving addition and subtraction
- Know the multiplication and division facts up to  $12 \times 12 = 144$
- Use knowledge of place value, and multiplication and division facts to solve larger calculations
- Use factor pairs to solve mental calculations, e.g. knowing that  $9 \times 7$  is the same as  $3 \times 3 \times 7$
- Use the standard short multiplication method to multiply three-digit numbers by two-digit numbers

#### Fractions

- Use hundredths, including counting in hundredths
- Add and subtract fractions with the same denominator, e.g.  $\frac{5}{7} + \frac{4}{7}$
- Find the decimal value of any number of tenths or hundredths, for example  $\frac{7}{100}$  is 0.07
- Recognise the decimal equivalents of  $\frac{1}{4}$ ,  $\frac{1}{2}$  and  $\frac{3}{4}$
- Divide one- or two-digit numbers by 10 or 100 to give decimal answers
- Round decimals to the nearest whole number
- Compare the size of numbers with up to two decimal places

#### Measurements

- Convert between different measures, such as kilometres to metres or hours to minutes
- Calculate the perimeter of shapes made of squares and rectangles
- Find the area of rectangular shapes by counting squares
- Read, write and convert times between analogue and digital clocks, including 24-hour clocks
- Solve problems that involve converting amounts of time, including minutes, hours, days, weeks and months

#### Shape and Position

- Classify groups of shapes according to the properties, such as sides and angles
- Identify acute and obtuse angles
- Complete a simple symmetrical figure by drawing the reflected shape
- Use coordinates to describe the position of something on a standard grid
- Begin to describe movements on a grid by using left/right and up/down measures

#### Graphs and Data

- Construct and understand simple graphs using discrete and continuous data

Discrete data is data which is made up of separate values, such as eye colour or shoe size.

Continuous data is that which appears on a range, such as height or temperature.

# The National Curriculum for Maths

## A Guide for Parents

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### Year 5

During the years of upper Key Stage 2 (Year 5 and Year 6), children use their knowledge of number bonds and multiplication tables to tackle more complex problems, including larger multiplication and division, and meeting new material. In Year 5, this includes more work on calculations with fractions and decimals, and using considerably larger numbers than previously.

#### Number and Place Value

- Recognise and use the place value of digits in numbers up to 1 million (1,000,000)
- Use negative numbers, including in contexts such as temperature
- Round any number to the nearest 10, 100, 1,000, 10,000 or 100,000
- Read Roman numerals, including years

#### Calculations

- Carry out addition and subtraction with numbers larger than four digits
- Use rounding to estimate calculations and check answers are of a reasonable size
- Find factors of multiples of numbers, including finding common factors of two numbers
- Know the prime numbers up to 19 by heart, and find primes up to 100
- Use the standard methods of long multiplication and short division
- Multiply and divide numbers mentally by 10, 100 or 1,000
- Recognise and use square numbers and cube numbers
- Factors are numbers which multiply to make a product, for example 2 and 9 are factors of 18.
- Common factors are numbers which are factors of two other numbers, for example 3 is a factor of both 6 and 18.

#### Fractions and Decimals

- Put fractions with the same denominator into size order, for example recognising that  $\frac{3}{5}$  is larger than  $\frac{2}{5}$
- Find equivalents of common fractions
- Convert between improper fractions and mixed numbers, for example recognising that  $\frac{5}{4}$  is equivalent to  $1\frac{1}{4}$
- Add and subtract simple fractions with related denominators, for example  $\frac{2}{3} + \frac{1}{6} = \frac{5}{6}$
- Convert decimals to fractions, for example converting 0.71 to  $\frac{71}{100}$
- Round decimals to the nearest tenth
- Put decimals with up to three decimal places into size order
- Begin to use the % symbol to relate to the 'number of parts per hundred'

In a fraction, the numerator is the number on top; the denominator is the number on the bottom.

**Measurements**

- Convert between metric units, such as centimetres to metres or grams to kilograms
- Use common approximate equivalences for imperial measures, such as 2.5cm  $\approx$  1 inch
- Calculate the area of rectangles using square centimetres or square metres
- Calculate the area of shapes made up of rectangles
- Estimate volume (in cm<sup>3</sup>) and capacity (in ml)

**Shape and Position**

- Estimate and compare angles, and measure them to the nearest degree
- Know that angles on a straight line add up to 180°, and angles around a point add up to 360°
- Use reflection and translation to change the position of a shape

**Graphs and Data**

- Read and understand information presented in tables, including timetables
- Solve problems by finding information from a line graph

**Parent Tip!**

Much of the knowledge in Year 5 relies on number facts being easily recalled. For example, to find common factors or to make simple conversions, knowledge of multiplication tables is essential. Any practise at home to keep these skills sharp will certainly be appreciated by your child's class teacher!

# The National Curriculum for Maths

## A Guide for Parents

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### Year 6

By the end of Year 6, children are expected to be confident with the use of all four standard methods for written calculations, and to have secured their knowledge of the key number facts for the four operations. Their work will focus more on fractions, ratio, proportion and the introduction of algebra.

#### Number and Place Value

- Work with numbers to up ten million (10,000,000) including negative numbers
- Round any number to any required number of digits or magnitude

#### Calculations

- Use the standard method of long multiplication for calculations of four-digit numbers by two-digit numbers
- Use the standard method of long division for calculations of four-digit numbers by two-digit numbers
- Identify common factors, common multiples and prime numbers
- Carry out complex calculations according to the mathematical order of operations
- Solve complex problems using all four operations

The mathematical order of operations requires that where calculations are written out in long statements, first calculations in brackets are completed, then any multiplication or division calculations, and finally any addition or subtraction. So, for example, the calculation  $4 + 3 \times (6 + 1)$  has a solution of 25, not 43 or 49.

#### Fractions and Decimals

- Understand and use tenths, including counting in tenths
- Recognise and show equivalent fractions with small denominators
- Add and subtract simple fractions worth less than one, for example  $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$
- Put a sequence of simple fractions into size order

Equivalent fractions are fractions which have the same value, such as  $\frac{1}{2}$  and  $\frac{3}{6}$  or  $\frac{1}{4}$  and  $\frac{2}{8}$

#### Ratio and Proportions

- Find percentages of quantities, such as 15% of £360
- Use ratio to explain relationships and solve problems
- Use simple scale factors for drawings, shapes or diagrams

Ratio is represented using the colon symbol. For example, if £100 is shared in a ratio of 1:3 between two people, then the first person receives £25 (one part), with the other receiving £75 (three parts).

**Algebra**

- Use simple formulae
- Describe sequences of numbers where the increase between values is the same each time
- Solve missing number problems using algebra
- Find possible solutions to problems with two variables, such as  $a + b = 10$

**Measurement**

- Convert between any metric units and smaller or larger units of the same measure
- Convert between miles and kilometres
- Use a given formula to find the area of a triangle or parallelogram

**Shape and Position**

- Draw 2-d shapes using given sizes and angles
- Use knowledge of 2-d shapes to find missing angles in triangles, quadrilaterals and other regular shapes
- Name and label the radius, diameter and circumference of a circle
- Find missing angles in problems where lines meet at a point or on a straight line
- Use a standard grid of coordinates including negative values

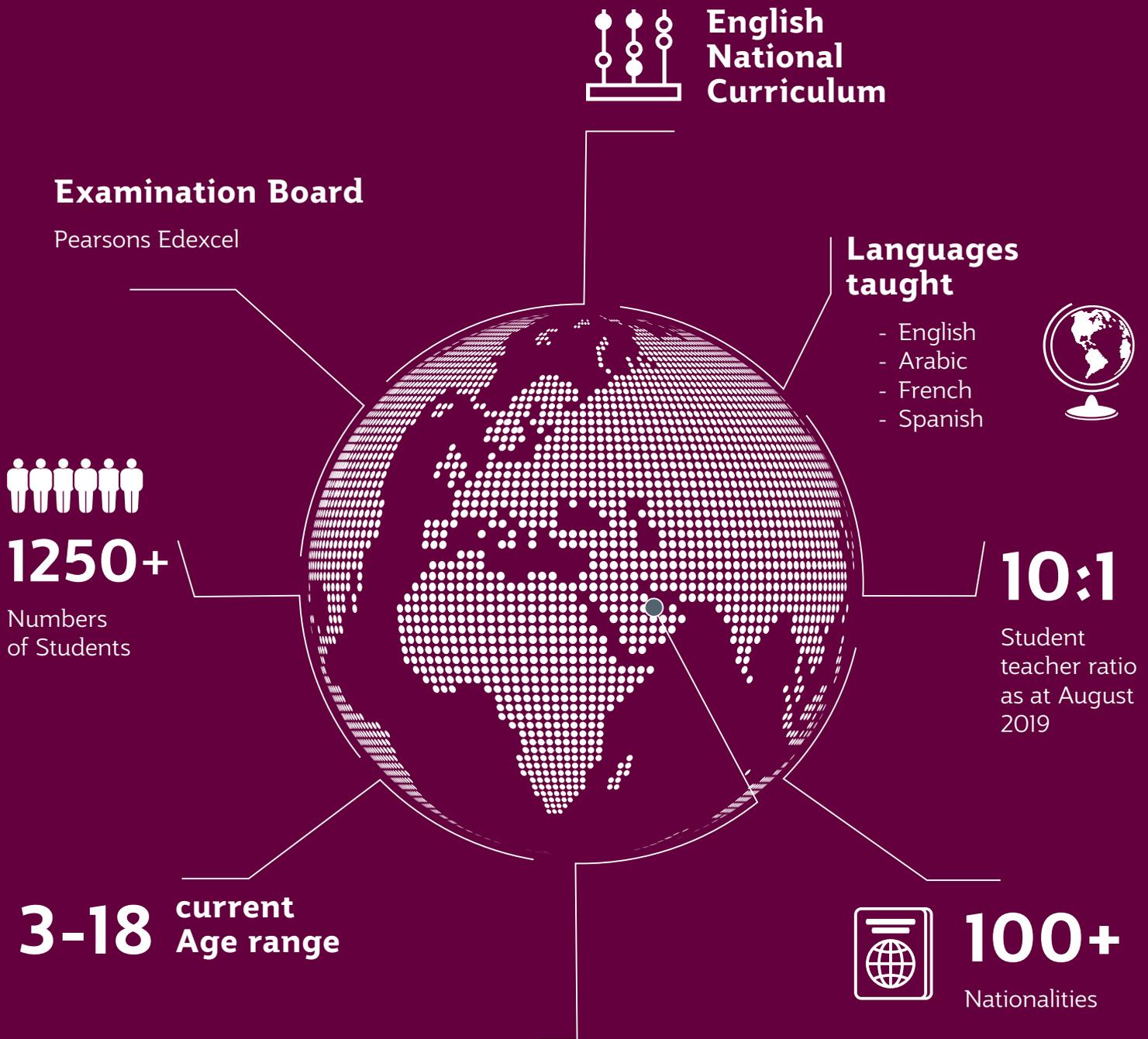
**Graphs and Data**

- Construct and understand pie charts and line graphs
- Calculate the mean average of a set of data

Mean average is calculated by adding up all the values and dividing by the number of items. For example, the mean average of 3, 5, 8, 9 and 10 is 7

$(3 + 5 + 8 + 9 + 10 = 35, \text{ then } 35 \div 5 = 7)$

# Our school at a glance



Contact us to  
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children aged 3-18 years

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