Smiling International School

4th GRADE

CURRICULUM TOPICS

A.S.2025-2026

Mathematics

DEVELOPING REASONING, LOGIC AND PROBLEM SOLVING SKILLS

- explore effective strategies and useful steps to help read, understand and solve multi-step word problems
- use mathematical thinking and processes to solve word problems
- identify and select relevant and useful data in a word problem in order to resolve it
- identify numerical data within a problem that is implied or expressed only in words
- identify missing, useless or contradictory data within a word problem
- use mathematical knowledge to make logical estimations about the expected answer when solving problems
- think of different ways in which a problem may be solved

PLACE VALUE

Main objectives:

- understand the value of digits in numbers up to 100,000.
- read, write, order, and compare numbers up to 100,000.
- round numbers to the nearest 10, 100, 1,000, or specified place.
- use mental and written methods to add and subtract numbers up to 100,000.
- solve word problems using appropriate strategies.
- understand properties of operations (commutative, associative, and invariant).
- explore negative numbers and count through zero.
- recognise and understand Roman numerals.

THE FOUR OPERATIONS

Main objectives:

- use addition, subtraction, multiplication, and division confidently with numbers up to 1,000,000.
- Start using the four operations with decimal numbers (like tenths and hundredths).
- Understand and use rules like changing the order of numbers when adding or multiplying (e.g. 3 + 5 = 5 + 3)
- Use smart mental strategies to solve problems quickly
- Practise doubling and halving numbers up to 1,000.

FRACTIONS AND DECIMALS

Main objectives:

- understand and use fractions of shapes and amounts.
- compare and order fractions with the same denominator.
- recognise and name proper, improper, and mixed number fractions.
- find and create equivalent fractions using multiplication and division.
- work with complementary fractions (fractions that add up to 1).
- convert common fractions to decimals and the other way around.
- find fractions of a number using different strategies.
- understand decimal place value up to thousandths.
- read, write, compare, and order decimal numbers.
- round decimals to the nearest whole number.
- multiply and divide decimals and whole numbers by 10, 100, and 1,000.
- use all four operations with decimal numbers, including when one number is a decimal.
- understand different ways of showing the same amount (fractions, decimal fractions, and decimal numbers), especially using the decimal point.

MEASUREMENT AND MONEY

Main objectives:

- use standard units to measure and solve problems involving length, mass, capacity, time, money, and area
- estimate, measure, record, and compare using appropriate units, including multiples and submultiples
- read and write time in both analogue and digital (12- and 24-hour) formats
- convert between different time units (e.g. minutes to hours, months to years)
- solve real-life problems involving time and money, including cost, profit, sale, unit cost, and net/gross/tare weight
- use measurement data in calculations and investigations

GEOMETRY

Main objectives:

- understand lines, angles, and the terminology used in geometry
- recognise and classify 2d and 3d shapes based on their properties
- distinguish between polygons and non-polygons

- identify and describe different types of lines and angles
- use a protractor to measure angles
- identify and create symmetry and reflective symmetry
- calculate perimeter and area of 2d shapes, using appropriate formulae
- understand that different shapes can have the same area
- use coordinates to locate and plot points and shapes on a grid
- understand and use 2d nets to explore the structure of 3d shape
- reproduce shapes from their descriptions

STATISTICS

Main objectives:

- read, understand and use different types of graphs
- read, interpret and use different types of graphical representations to help solve problems (tables, pictograms, bar charts and graphs)
- create different graphs based on given data or a class survey (e.g. using pictographs, diagrams or bar graphs).

English

SPEAKING AND LISTENING

Main objectives:

- read aloud and perform using appropriate pace, tone, and volume
- tell stories and recite texts clearly and confidently
- listen carefully and respond respectfully in discussions
- ask and answer questions using correct grammar
- express and explain opinions, giving reasons and considering others' views
- evaluate what is heard and respond with agreement or disagreement, giving reasons
- take part in group conversations by asking questions and building on ideas

GRAMMAR AND PUNCTUATION

Main objectives:

- understand and use punctuation accurately (commas, full stops, question marks, exclamation marks, colons before lists)
- use standard english correctly, including verb agreement, pronouns, and prepositions
- use apostrophes correctly in contractions and to show possession

- use subject, object, possessive, relative, reflexive, and demonstrative pronouns accurately
- correctly use countable and uncountable nouns
- maintain correct subject-verb agreement
- understand and form questions and negative sentences correctly
- use a range of verb tenses correctly: present simple, present continuous, past simple, past continuous, imperative, future, and present perfect
- confidently form the simple past tense of regular and irregular verbs
- use adverbs and adverbial phrases to modify verbs and adjectives
- use coordinating and subordinating conjunctions accurately
- use and form comparative and superlative adjectives
- understand and use direct and indirect speech
- use subordinating and relative clauses
- explore and use prepositional phrases
- identify and use articles, quantifiers, and determiners

WRITING

Main objectives:

- explore and write a variety of fiction and non-fiction texts
- plan and write narratives with clear structure, logical sequence, and resolved conflict
- use settings, dialogue, and characterisation to engage the reader
- explore different story openings and endings
- write poems using poetic devices like alliteration, rhyme, and imagery
- write and perform short play scripts
- write non-chronological reports, persuasive, explanatory, and recount texts (e.g. diaries, blogs)
- choose vocabulary carefully to show emotion, structure ideas, and create vivid images
- use powerful and precise verbs, adjectives, and adverbs to enhance writing
- use paragraphs to organise ideas and link them with adverbs and conjunctions
- summarise texts and make short notes from reading
- review, revise, and edit writing for grammar, punctuation, and clarity

SPELLING AND VOCABULARY

Main objectives:

- carry out spelling 'self-checking' and proofreading
- expand and develop vocabulary
- apply and make use of phonics, spelling, grammatical and contextual knowledge to spell new and mis-spelt words

- correctly match spelling to meaning for homophones
- spell words with common letter strings but different pronunciations (e.g. tough, through, trough, plough)
- spell and classify words with common roots (e.g. invent, prevent)
- extend earlier work on prefixes and suffixes (non-, dis-, re-, -proof, -en, -ness, -al)
- apply spelling rules for plurals (e.g. s, es, y/ies, f/ves)
- use more powerful verb synonyms (e.g. 'rushed' instead of 'went')
- recognise meaning in figurative language: proverbs, idioms, similes, and metaphors
- use possessive apostrophes (also with regular and irregular plurals)
- explore degrees of intensity in adjective synonyms (e.g. cold, tepid, warm, hot)

READING AND COMPREHENSION

Main objectives:
explore features of poetry, prose, and non-fiction texts that recount events and experiences

- read and evaluate non-fiction for purpose and organisation, developing note-taking skills
- understand and recognise persuasive words and phrases in print and media
- read a variety of texts with increasing accuracy, fluency, and expression
- use decoding, context clues, and inference to understand unfamiliar words
- identify different genres, themes, and organisational features like paragraphs, chapters, headings, and glossaries
- explain how writers use figurative and descriptive language to create images, mood, and atmosphere
- ask and answer questions using evidence from the text to show understanding
- summarise main points and make notes from key words and phrases
- describe characters and explain how their actions affect the story
- explore how settings influence plot and how stories move from introduction to resolution
- compare and contrast poems, recognising features like rhyme, alliteration, assonance, and figurative language

Science

CORE SKILLS

- ask relevant questions and decide what to find out, plan and carry out fair tests, choose and use equipment appropriately, measure accurately using standard units (e.g. cm, ml, °C) and instruments (e.g. thermometers, rulers)

- record findings clearly in tables, charts, diagrams, or simple notes, compare results and look for patterns or differences, discuss and interpret the data collected
- consider alternative ways to plan an investigation, write clearly about their investigations, present their work to the class, use appropriate scientific vocabulary (e.g. evaporation, condensation, vibration, circuit, conductor).

SOLIDS, LIQUIDS AND GASES

Main objectives:

- group materials into solids, liquids and gases and learn the different properties of solids, liquids and gases
- learn and understand that all things are made from matter and that all matter is made from particles and explain the differences between solids, liquids and gases
- investigate and understand changes of state in terms of the movement of particles due to the effect of temperature
- understand and describe the processes of melting, freezing, evaporation and condensation in relation
- explain the water cycle and describe the processes involved in changing water from one state to another

Moonshot:

- understand what NASA is. Understand what the Moonshot program is.
- understand how humans survive in space. Where do they get food and water from?
- understand why we want to go back to the Moon
- understand why water filtration is important in space. Plan and carry out an investigation about water filtration.
- understand the Moon's water cycle and plan and carry out an investigation about mining water ice on the Moon.
- understand what the Moon's surface is made of.

HABITATS

Main objectives:

- plan and conduct simple investigations to observe and record living organisms in the local habitat
- understand how to use scientific keys to classify and identify living organisms
- explore fossil fuels and explain how the environment can be negatively impacted by their use and identify causes of air pollution
- identify causes of water pollution and explain how water pollution can endanger living

things
- give examples of natural disasters (tsunamis, earthquakes and volcanoes), and describe ways in which they can cause damage to habitats and environments

Moonshot:
- observe lunar habitats and learn how safe home will be built on the Moon
- understand what space pollution is (space junk)
- understand how a spacesuit can protect astronauts in space. Spacesuit design (Moonshot fair)
- build a lunar rover (Moonshot fair)

DIGESTION AND FOOD CHAINS

Main objectives:
- understand the process of digestion in humans
- identify types of teeth and their function and explain how we can keep our teeth healthy
- understand the importance of a healthy, balanced diet
- give examples of living things that are producers, consumers, predators or prey
- identify and explain the importance of maintaining balance in the food chain and identify potential risks.

Moonshot!:
- understand what astronauts' diet consists of and how food is prepared in space.

FORCES, ENERGY AND ELECTRICITY

Main objectives:

- give examples of different sources of energy
- understand how simple electrical circuits work, label parts of an electrical circuit and construct and test different types of electrical circuit
- understand the difference between conductors and insulators of electricity
- give examples of renewable and non-renewable energy sources
- identify ways to use electricity safely

Moonshot:

- understand what astronauts' diet consists of and how food is prepared in space.
- understanding what rockets are. Rocketry principles
- make fizz rockets (chemical reactions)
- make javelin rockets (elastic energy)
- understand that water pressure is generally greater than air pressure at the same depth

because water is denser than air. Make water rockets (air and water pressure).

SOUNDS

*underlined objectives are not in the Oxford textbook but should be taught using other resources

Main objectives:

- understand how sounds are made and identify ways to measure sound and investigate wave patterns of sound affected by pitch and volume
- understand how sound travels through different materials
- describe patterns between high and low sounds and different pitches
- explain how the inner ear works allowing us to hear sound

ICT

FOUNDATIONAL HARDWARE AND SOFTWARE SKILLS

Main objectives:

- use bullet points, numbered lists, and tables to organize information
- create new documents (google docs, google slides and google sheets) and learn more advanced editing skills: insert images from their computer or the web, and learn to resize and manipulate them within the document
- share documents, leave comments for feedback, and work together on the same document in real-time
- create simple presentations (google slides) including animations
- know hardware and software components
- create presentations on different topics (google slides and Canva)
- use basic formulas on Google Sheets.
- know how to stay safe online by recognising potential dangers

INTRODUCING PROGRAMMING

Main objectives:

- use simple block-based coding programs (Code.org)
- use simple loops (e.g., “repeat 5 times”) to repeat actions.
- recognize when repeating code can make a program shorter or faster.
- understand and use sequencing (putting steps in the right order).
- use event blocks (e.g., “when clicked”) to start actions in a program.

- understand that different events can cause different outcomes.
- notice when something in their code doesn't work properly.
- try different solutions to fix bugs or problems in their programs.
- use loops to repeat actions in your code (e.g., make a character move in a circle).
- use events to make things happen (e.g., "when I click the green flag, start the program").
- draw step-by-step instructions using arrows and pictures to show what should happen first, next, and last (use flowcharts).
- test your code to see if it works the way you want (debugging).
- use flowcharts, pictures, or storyboards to plan programs before coding.
- break big problems into smaller steps (decomposition).
- understand sequence: instructions must be in the right order.

History

CORE SKILLS

- analyse different historical sources to draw conclusions and evaluate their usefulness
- understand and use historical and geo-historical maps
- know the conventional western system of periodisation and be aware of non-western systems
- understand cause and effect and use related vocabulary
- recognise physical changes over time and identify objects and materials as sources
- investigate how different sources, including archaeological and mythical, teach us about past civilizations
- evaluate the value and reliability of sources, noting their limitations and contradictions
- organise historical information using timelines for different civilizations

MESOPOTAMIA

Main objectives:

- understand how geography, climate, and rivers (Euphrates and Tigris) shaped early civilisations and the development of agriculture in the first cities
- know key economic, political, cultural, and religious features of Mesopotamia and explore its religions
- compare the Sumerian, Babylonian, Assyrian, and Hittite civilisations, including their societies, cities, timelines, and contributions to the modern world
- investigate important inventions and developments such as writing, literature, the wheel, iron, fast chariots, and the first library
- study significant Babylonian achievements including cities, monuments, and Hammurabi's code of laws

- examine the role of war and slavery in the Assyrian civilisation
- compare Anatolia (Hittite region) with Mesopotamia in terms of geography, society, and inventions

ANCIENT EGYPT

Main objectives:

- understand the relationship between Egypt's culture and its intellectual and artistic heritage
- know key economic, political, cultural, and religious features of ancient Egypt
- use maps and timelines to locate Egypt and major historical events
- investigate important figures like Ramses the Great
- explore the significance of the Nile River to Egyptian civilisation
- study Egyptian social structure and compare daily life across different social groups
- examine ancient Egyptian religion and its impact on society
- investigate Egyptian art, design, and writing to understand their civilisation
- evaluate Egyptian contributions such as architecture, inventions, and art

CIVILISATIONS IN CHINA AND INDIA

Main objectives:

- know key geographical, economic, political, and religious features of ancient China
- understand China's unique characteristics, including its long history, writing system, and religious/philosophical traditions
- explore important Chinese inventions and contributions to history
- investigate the geography of China, especially the Yellow River, and its influence on civilisation
- compare China with other civilisations and understand their interactions, such as via the Silk Road
- learn about the Indus Valley civilisation, focusing on its city design and unique features
- study physical artefacts from the Indus Valley and what they reveal about the civilisation

THE EASTERN MEDITERRANEAN

Main objectives:

- know key economic, political, cultural, and religious features of the Eastern Mediterranean civilisations
- develop awareness of collective civil conduct and responsibility

- investigate the Phoenician civilisation, focusing on reasons for its success and inventions like phonetic writing and glass blowing
- analyse maps showing the movement of people and trade in the Mediterranean
- explore the early Hebrew civilisation and how it differs, including its long nomadic period
- study the ancient Minoan civilisation, its importance, cultural influences, and trade interactions
- compare and contrast the Mycenaeans with the Minoans, including city construction and archaeological remains

Geography

CORE SKILLS

- use a compass to orientate in real spaces and on maps
- represent objects and spaces using scale, plans, symbols, and create detailed keys
- understand different types of maps (physical, political, thematic, historical, digital) and their uses
- collect and analyse geographical information from multiple sources and maps
- locate places using longitude and latitude
- use scale maps to understand real-life distances
- interpret and create graphs showing geographical data

THE PHYSICAL EARTH

Main objectives:

- recognise which earth features are natural and which result from human activity
- understand major climates, climatic zones, and their effects on the environment, animals, and human activity
- use correct geographical terminology related to physical geography
- analyse the earth's physical structure and phenomena like earthquakes and volcanoes
- understand other physical processes shaping the earth, including climate, seas, and rocks
- investigate how human activities like farming, mining, and urbanisation shape landscapes
- explore human impact on the world's climate

DISCOVERING ITALY

Main objectives:

- observe and analyse Italy's territory, landscape, climate, economy, population, and

environment
- identify and remember main physical features on a map, including seas, mountains, lakes, and rivers
- understand Italy's main climate regions and factors influencing its climate

- analyse physical and human features of mountains, hills, plains, and coastal areas
- locate major cities and understand differences between rural and urban life
- examine Italy's economic sectors (primary, secondary, tertiary) and the role of tourism

CITIZENSHIP AND THE EU

Main objectives:

- explore our rights and responsibilities
- compare and contrast cultural differences with other EU countries
- understand our individual rights and responsibilities as global citizens
- develop an awareness and understanding of the civic responsibilities outlined in the 2030 agenda (in particular sustainable development and environmental protection)
- explore and investigate the role of the EU and other international associations

Italiano

Ascolto e oralità

- Intervenire negli scambi comunicativi in modo coerente, rispettando i turni di parola e comprendendo le opinioni altrui.
- Comprendere l'argomento trattato e selezionare le informazioni principali, con il supporto dell'insegnante.
- Ascoltare testi narrativi, informativi ed espositivi cogliendone il senso globale e le parti più significative.
- Tradurre giochi o attività in semplici istruzioni e saperle riferire in modo chiaro.
- Raccontare esperienze personali o storie fantastiche seguendo l'ordine cronologico e includendo elementi descrittivi e informativi.
- Interagire in conversazioni esponendo il proprio pensiero in modo lineare e motivato, formulando ipotesi e domande pertinenti.
- Comprendere lo scopo e l'argomento dei messaggi trasmessi dai media.
- Chiedere chiarimenti su spiegazioni, istruzioni o consegne.

Lettura

- Leggere testi di vario tipo in modo scorrevole ed espressivo, rispettando la punteggiatura e variando l'intonazione.
- Comprendere testi letti silenziosamente, ponendosi domande per facilitarne

l'interpretazione.

- Riconoscere e comprendere i significati espliciti e impliciti di testi narrativi, poetici, espositivi e informativi.
- Ricavare informazioni da testi diversi, inclusi grafici, tabelle e schemi.
- Confrontare testi di diversa tipologia e individuarne le funzioni comunicative.
- Utilizzare strategie per la comprensione (sottolineature, mappe concettuali…).
- Distinguere realtà e invenzione letteraria nei testi narrativi.
- Leggere semplici poesie cogliendo l'argomento e l'intenzione dell'autore.

Scrittura

- Scrivere sotto dettatura testi di media lunghezza, curando ortografia e punteggiatura con autonomia crescente.
- Pianificare e produrre testi narrativi coerenti e completi, rispettando le caratteristiche dei generi studiati (es. brivido, avventura).
- Strutturare testi con introduzione, sviluppo e conclusione, inserendo sequenze descrittive e dialogiche.
- Rispondere a domande in modo completo o sintetico, secondo la richiesta.
- Redigere testi poetici utilizzando rime e semplici figure retoriche.
- Rielaborare e autocorreggere testi per migliorarne chiarezza e coerenza.
- Produrre testi collettivi (es. resoconti, opinioni condivise).
- Adattare linguaggio e struttura al tipo di testo richiesto.
- Utilizzare correttamente il foglio protocollo rispettando impaginazione e margini.

Lessico

- Comprendere parole complesse o non note attraverso il contesto e la famiglia di parole.
- Ampliare il vocabolario includendo termini tecnici e specifici.
- Usare consapevolmente strategie per apprendere e comprendere il lessico.
- Adattare il registro linguistico alla situazione comunicativa.
- Comprendere il significato letterale e figurato di una parola nei contesti più semplici.
- Ricavare e utilizzare termini specifici delle diverse discipline di studio.
- Attivare relazioni di significato tra parole (sinonimi, contrari, campi semantici…).

Elementi di grammatica e riflessione linguistica

- Riconoscere e analizzare la struttura logico-sintattica della frase.
- Riconoscere e distinguere le frasi all'interno di un testo.
- Applicare con sicurezza le regole ortografiche e di punteggiatura nella produzione scritta.
- Riconoscere la frase minima e le sue componenti essenziali.

- Conoscere e classificare le principali parti del discorso: nomi, articoli, aggettivi, pronomi, preposizioni.
- Conoscere i verbi all'indicativo, distinguendo tempi, persone, coniugazioni e il ruolo ausiliare di *essere* e *avere*.
- Saper svolgere l'analisi grammaticale degli elementi studiati.
- Riflettere su testi propri e altrui per coglierne le caratteristiche morfosintattiche e migliorare la correttezza espressiva.

Citzenship

THE CONSTITUTION

Main objectives:

- develop a knowledge that the Constitution must be put into practice and protected for the common good
- demonstrate care for oneself and one's own health and safety
- develop an awareness of the European Union and other international organisations
- understand the value of cultural and artistic heritage and the importance of respecting public services and shared amenities

SUSTAINABLE DEVELOPMENT

Main objectives:

- understand the importance of individual and collective responsibility regarding the protection of the environment for ourselves and future generations
- understand the need to take action on sustainable development in relation to the goals of Agenda 2030

DIGITAL CITIZENSHIP

Main objectives:

- know and use digital tools to improve knowledge and communication
- be able to distinguish between real life and virtual life
- understand the use of different methods of communication, using these appropriately in a variety of situations