



MATHEMATICS (SINGAPORE MATH)

Number and Numeration

- Count to 1000 by 1's, 10's and 100's starting from any number in the sequence.
- Read and write numbers to 1000 in numerals and words, and relate them to the quantities they represent.
- Compare and order numbers to 1000; use the symbols $>$ and $<$.
- Count orally by 3's and 4's starting with 0, and by 2's, 5's, and 10's starting from any whole number.
- Express numbers through 999 using place value, e.g., 137 is 1 hundred, 3 tens, and 7 ones; use concrete materials.
- Comparing numbers.
- Recognize, name, and represent commonly used unit fractions with denominators 12 or less.
- Recognize, name, and write commonly used fractions
- Place 0 and halves on the number line; relate to a ruler.
- For unit fractions from $\frac{1}{12}$ to $\frac{1}{2}$ understand the inverse relationship between the size of a unit fraction and the size of the denominator; compare unit fractions from $\frac{1}{12}$ to $\frac{1}{2}$
- Recognize that fractions such as $\frac{2}{2}$, $\frac{3}{3}$, and $\frac{4}{4}$ are equal to the whole (one).
- Using money to develop place-value and decimal concepts

Operations and Computations

- Recalling addition and subtraction facts
- Decompose 100 into addition pairs, e.g., $99 + 1$, $98 + 2 \dots$

- Find the distance between numbers on the number line, e.g., how far is 79 from 26?
- Find missing values in open sentences, e.g., $42 + \quad = 57$; use relationship between addition and subtraction.
- Given a contextual situation that involves addition and subtraction using numbers through 99: model using objects or pictures; explain in words; record using numbers and symbols; solve.
- Add fluently two numbers through 99, using strategies including formal algorithms; subtract fluently two numbers through 99.
- Estimate the sum of two numbers with three digits.
- Calculate mentally sums and differences involving: three-digit numbers and ones; three-digit numbers and tens; three-digit numbers and hundreds.
- Working with fact families
- Adding and subtracting with tens and hundreds
- Making reasonable estimates
- Understand multiplication as the result of counting the total number of objects in a set of equal groups, e.g., 3×5 gives the number of objects in 3 groups of 5 objects, or $3 \times 5 = 5 + 5 + 5 = 15$
- Represent multiplication using area and array model
- Understand division (\div) as another way of expressing multiplication, using fact families within the 5×5 multiplication table; emphasize that division "undoes" multiplication, e.g., $2 \times 3 = 6$ can be rewritten as $6 \div 2 = 3$ or $6 \div 3 = 2$.
- Given a situation involving groups of equal size or of sharing equally, represent with objects, words, and symbols; solve.
- Develop strategies for fluently multiplying numbers up to 5×5 .
- Read and write amounts of money using decimal notations, e.g., \$1.15.
- Add and subtract money in mixed units, e.g., $\$2.50 + 60$ cents and $\$5.75 - \3 , but not $\$2.50 + \3.10 .

Data and Chance (Probability)

- Collecting, organizing, and interpreting data using tables, charts, line plots, and graphs
- Exploring concepts of chance
- Make pictographs using a scale representation, using scales where symbols equal more than one.
- Read and interpret pictographs with scales, using scale factors of 2 and 3.
- Solve problems using the information in pictographs

Measurement and Reference Frames

- Measure lengths in meters, centimeters, inches, feet, and yards approximating to the nearest whole unit and using abbreviations: cm, m, in, ft, yd.
- Compare lengths; add and subtract lengths
- Using both A.M. and P.M., tell and write time from the clock face in 5-minute intervals and from digital clocks to the minute; include reading time: 9:15 as nine-fifteen and 9:50 as nine-fifty. Interpret time both as minutes after the hour and minutes before the next hour, e.g., 8:50 as eight-fifty and ten to nine. Show times by drawing hands on clock face.
- Use the concept of duration of time, e.g., determine what time it will be half an hour from 10:15.
- Solve simple word problems involving length and money.
- Determine perimeters of rectangles and triangles by adding lengths of sides, recognizing the meaning of perimeter.
- Measure area using non-standard units to the nearest whole unit.
- Find the area of a rectangle with whole number side lengths by covering with unit squares and counting, or by using a grid of unit squares; write the area as a product.

Geometry

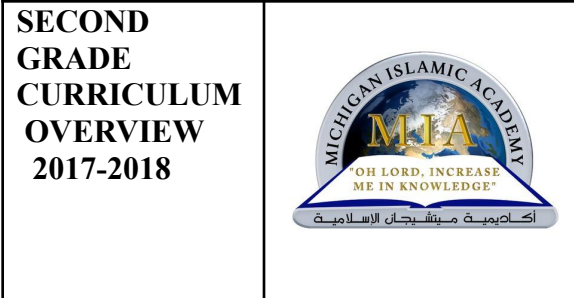
- Exploring 2- and 3-dimensional shapes
- classifying polygons
- Identify, describe, and compare familiar two-dimensional and three-dimensional

shapes, such as triangles, rectangles, squares, circles, semi-circles, spheres, and rectangular prisms.

- Explore and predict the results of putting together and taking apart two-dimensional and three-dimensional shapes.
- Distinguish between curves and straight lines and between curved surfaces and flat surfaces.
- Classify familiar plane and solid objects, e.g., square, rectangle, rhombus, cube, pyramid, prism, cone, cylinder, and sphere, by common attributes such as shape, size, color, roundness, or number of corners and explain which attributes are being used for classification.
- Recognize that shapes that have been slid, turned, or flipped are the same shape, e.g., a square rotated 45° is still a square.
- Find and name locations using simple coordinate systems such as maps and first quadrant grids.

Patterns and Rules

- Exploring number patterns, rules for number sequences, relations between numbers, and attributes.



ENGLISH LANGUAGE ARTS

Reading

Reads at grade level

- Consistently demonstrates ability to read and comprehend grade level material (social studies books, periodicals, science materials, genre studies)

Uses Strategies to Decode Unknown Words and Recognizes Words

- Picture clues
- Beginning and ending sound or word chunks
- Context clues
- Word families
- Long/short vowels, digraphs, irregular vowels
- Rereading to end of sentence or paragraph then rereading
- Automatically recognizes frequently encountered words in print whether encountered in connected text or in isolation with the number of words that can be read fluently increasing steadily across the school year .make progress in automatically recognizing the 220 Dolch basic sight words and 95 common nouns for mastery in third grade.

Vocabulary

- In context, determine the meaning of words and phrases including objects, actions, concepts, content vocabulary, and literary terms, using strategies and resources including context clues, mental pictures, and questioning.
- Recognizes prefixes and suffixes to determine the meaning of words
- Analyzes compound words

- Recognizes words with multiple meanings
- Recognizes antonyms and synonyms

Demonstrate Comprehension of Narrative Text/Informational Text

- Applies comprehension strategies before, during, and after reading (making connections, visualizing, asking questions, understanding text structure, determining important ideas, and making inferences)
- Demonstrates understanding of story elements (setting, characters, events, problem, solution, and ending)
- Identifies topic, main idea, and supporting details
- Identifies and utilizes text features (headings, captions, table of contents, bold faced text, maps, diagrams, glossary, and index)

Reads Fluently

- Automatically recognizes and fluently reads identified grade-level high frequency words encountered in or out of context.
- Uses punctuation cues (periods and question marks) when reading aloud with intonation, pauses, and emphasis.
- Reads aloud unfamiliar text with a minimum of 90% accuracy in word recognition at an independent reading level.
- Reads smoothly without unnatural pauses
- Reads with expression

Initiates Independent Reading

- Enthusiastic about reading and learning how to read
- Reads on his/her own
- Uses individual reading time effectively and appropriately

Chooses Material That Can Be Read Independently

- Materials chosen are appropriate for child's reading level

Writing

Generates own Writing Ideas

- Demonstrates ability to brainstorm and organize ideas

- Utilizes graphic organizers

suffixes); for less frequently encountered (e.g., letter/sound, rimes)

Organizes and Focuses Ideas

- Central idea is evident in topic sentence
- Stays on topic
- Has developed a clear beginning, middle, and end

Demonstrates Voice

- Awareness of audience when writing
- Exhibits personal style by expressing emotion, using details, and showing samples

Varies Word Choice

- Uses words correctly
- Uses strong verbs and adjectives

Demonstrates Sentence Fluency

- Writes complete sentences with subject and predicate.
- Sentences vary in both length and style
- Writing is smooth, natural and easy to read

Evaluates and Revises Own Writing

- attempt to revise writing based on reading it aloud, requesting suggestions and clarifications that support meaning.
- Rereads for clarity, order of ideas, and word choice

Applies Grade-level Conventions

- In the context of writing, correctly uses more complex complete sentences, nouns and verbs, commas (in a series, in a letter, and with dates), contractions, colons to denote time, and capitalization of proper nouns.
- Utilizes proper punctuation (periods, exclamation points, question marks)
- Utilizes proper capitalization

Applies Spelling Conventions

- Spells grade level words correctly
- Correctly spells frequently encountered words (e.g., two-syllable words including common prefixes and

Handwriting

- Fluently and legibly writes upper and lowercase manuscript letters and begins to write the cursive alphabet.

Listening and Speaking

Listens attentively in large and small groups

- Looks at the speaker
- Asks appropriate questions
- Listens to or views knowledgeably while demonstrating appropriate social skills of audience behaviors (e.g., eye contact, attentive, supportive) in small and large group settings; listen to each other, interact, and respond appropriately.

Responds appropriately to material read/heard

- Actively contributes to class discussions
- Respond to multiple text types listened to or viewed knowledgeably, by discussing, illustrating, and/or writing in order to reflect, make connections, take a position, and/or show understanding.

Speaks clearly when sharing information

- Uses common grammatical structures correctly when speaking including subject/verb agreement, pronoun/noun agreement, nominative and objective case pronouns, and more complex conjunctions (e.g., although, instead of, so that).



SCIENCE

Science Process

Inquiry Process

- Make purposeful observation of the natural world using the appropriate senses.
- Generate questions based on observations.
- Plan and conduct simple and fair investigations

Inquiry Analysis

- Summarize information from charts and graphs to answer scientific questions.
- Communicate and present findings of observations and investigations.
- Develop research strategies and skills for information gathering and problem solving.

Using Science McGraw Hill. Second grade Science focuses on Life, Physical, and Earth Science.

1- Life Science: Unit 4: Living Things and Habitats

This unit helps students explore what plants require for survival, how plants grow, plant parts and their functions, how people and other animals use plants, special types of plants, where different kinds of plants can be found, and other plant-related topics.

2- Physical Science: Unit 2: Properties of Materials

This unit is about everything on this planet that is made of materials. All materials have properties that help distinguish them from other types of materials. This unit explains how shape, color, texture, weight, state of materials, and other properties can be used to identify, describe, and compare materials. The unit also explains how we choose to make things out of materials that have the properties we need or want.

3- Earth Science: Unit 1: Land and Water and Unit 3: Earth's Changing Landscape

This unit is about Earth's surface and is the part of our planet that we interact with every day. This unit helps students explore the land and water that make up Earth's surface. The land is composed of rocks and soil. Water covers about 70 percent of Earth's surface. Much of it is salt water found in oceans. Fresh water can be found in lakes, ponds, rivers, and underground. Earth's surface is shaped into various landforms by gravity, wind, water, and the movements of Earth's crust. Earth's surface provides everything needed for life to thrive, including shelter, food, and water.



SOCIAL STUDIES

We Live Together

- Use components of culture (e.g., foods, language, religion, traditions) to describe diversity in the local community.
- Demonstrate chronological thinking by distinguishing among years and decades using a timeline of local community events.
- Compare the physical and human characteristics of the local community with those of another community.
- Explain how local governments balance individual rights with the common good to solve local community problems.
- Use maps to describe the spatial organization of the local community by applying concepts including relative location and using distance, direction, and scale.

Exploring Earth

- Construct maps of the local community that contain symbols, labels, and legends denoting human and natural characteristics of place.
- Describe how the local community is part of a larger region (e.g., county, metropolitan area, state).
- Describe land use in the community (e.g., where people live, where services are provided, where products are made).
- Describe the means people create for moving people, goods, and ideas within the local community.
- Suggest ways people can responsibly interact with the environment in the local community.

Long Ago and Today

- Explain why descriptions of the same event in the local community can be different.
- Use an example to describe the role of the individual in creating history.

- Construct a historical narrative about the history of the local community from a variety of sources (e.g., data gathered from local residents, artifacts, photographs).
- Explain why people form governments.

Needs and Wants

- Identify the opportunity cost involved in a consumer decision.
- Identify business in the local community.
- Describe how business in the local community meet economic wants of consumers.
- Describe the natural, human, and capital resources needed for production of a good or service in a community.
- Use examples to show that people cannot produce everything they want (specialization) and depend on trade with others to meet their wants.

How Government Works

- Describe changes in the local community over time (e.g., type of business, architecture and landscape, jobs, transportation, population).
- Identify a problem in the community's past and describe how it was resolved.
- Explain why people form governments.
- Use examples to describe how local government affects the lives of its citizens.



RELIGIOUS STUDIES

Arabic

- Be able to sound out and read words in Arabic
- Understand basic texts when read or listened to
- Begin to communicate their thoughts to other individuals, especially on topics relating to everyday matters
- Comprehend and answer oral and written questions
- Learn basic grammar rules
- Be able to spell and write out words when heard verbally

Qur'an

- To understand the meaning of the Ayat
- To recite the Quran in a correct manner (Tajweed)
- To memorize the Ayat of the following Surahs:
 - Al-Buruj
 - Al-Inshiqaq
 - Al-Mutaffifin
 - Al-Infitar
 - Al-Takwir
 - Abasa
 - An-Naziat

Islamic Studies

- Unit A: Iman in my life
- Unit B: I love Mohammad
- Unit C: Born to Worship
- Unit D: Islam in the world
- Unit E: My Muslim Manner