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ENGLISH LANGUAGE ARTS

The English Language Arts curriculum is based on the <u>Common Core State Standards</u> (CCSS). The standards establish guidelines for English language arts (ELA) as well as for literacy in history/social studies, science, and technical subjects. Because students must learn to read, write, speak, listen, and use language effectively in a variety of content areas, the standards promote the literacy skills and concepts required for college and career readiness in multiple disciplines.

The primary program utilized to support student learning in Kindergarten through fifth grade is the Columbia Teachers College Units of Study. Each unit of study has identified standards that are the focus for that unit of study. Teachers provide a variety of language learning opportunities to meet all students' developmental levels, experiences, abilities, and learning styles. Teachers use ongoing formal and informal assessments and are responsive to individual student needs.

SAS delivers a balanced literacy program which incorporates read loud, shared reading/writing, small group instruction, independent reading/writing and word study. The main model of instruction in a literacy program is reading and Writing Workshop. In a workshop instructional model teachers model and directly teach the skills and strategies that proficient readers/writers use. Daily, students engage in a mini- lesson, independent reading, small-group instruction, and conferring.

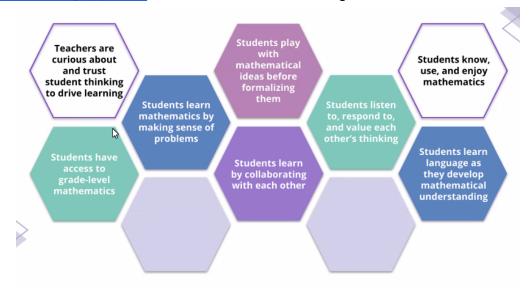
MATHEMATICS

The mathematics curriculum is based on the <u>Common Core State Standards</u> and is designed to achieve a balance among concept development, computational and procedural skills, and application. The Common Core State Standards include both content standards (what students will learn) and the Standards for Mathematical Practice (how students engage in math learning). The Standards for Mathematical Practice for all students to develop include:



In 2020-2021, Singapore American School engaged in an extensive curriculum and program mathematics review. For more information, including the schoolwide mathematics philosophy, please refer to the Math Curriculum and Program Review <u>website</u>.

The primary program utilized to support student learning in kindergarten through fifth grade is Illustrative Mathematics (IM). IM aims to create a world where all learners *know*, *use*, *and enjoy mathematics*. This is done through a coherent and K-12 aligned mathematical experience for students and teachers using a **problem-based teaching approach**. IM is founded on the following beliefs:



SOCIAL STUDIES

At SAS and in Elementary School, we use the C3 Framework. This framework emphasizes acquiring and applying knowledge to prepare students for college, career, and civic life. It intentionally envisions social studies instruction as an inquiry arc of interlocking and mutually reinforcing elements that speak to the intersection of ideas and learners. The "Four Dimensions" of the C3 Framework center on using questions to spark curiosity, guide instruction, deepen investigations, acquire rigorous content, and apply knowledge and ideas in real-world settings to become active and engaged citizens in the 21st century. Powerful social studies learning encourages students to think critically and consider multiple perspectives as they interpret the world and develop understandings that endure beyond the classroom. Students also have opportunities to apply and develop interdisciplinary skills in areas such as English language arts, math, research, and technology while working independently and collaboratively.



Inquiry Arc

- Dimension 1: Developing Questions and Planning Inquiries
- Dimension 2: Applying Disciplinary Tools and Concepts (Civics, Economics, Geography, and History)
- Dimension 3: Evaluating Sources and Using Evidence
- Dimension 4: Communicating Conclusions and Taking Informed Action

Image: https://www.nap.edu/read/24774/chapter/1#2

SCIENCE

The Elementary science program at SAS is an inquiry-based curriculum that aims to stimulate students' natural curiosity, build their interest in their world and themselves, and provide opportunities to practice the scientific method. SAS uses the Next Generation Science Standards (NGSS). Standards set the expectations for what students should know and be able to do. Every NGSS standard has three dimensions: disciplinary core ideas (content), scientific and engineering practices, and crosscutting concepts. The integration of rigorous content and application reflects how science and engineering are practiced in the real world.

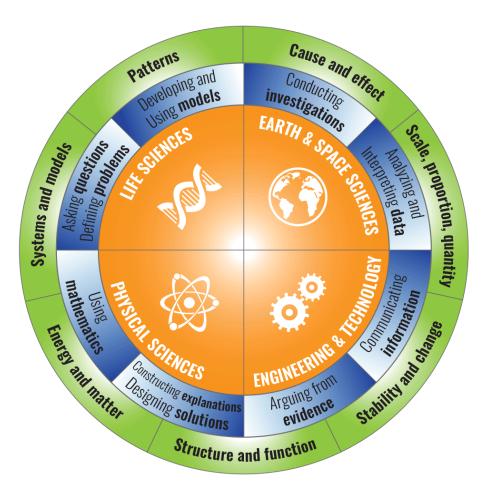


Image: https://www.mbari.org/next-generation-science-standards/

CHINESE IMMERSION PROGRAM

Singapore American School's Chinese immersion program honors the mission and vision of the school and provides students with opportunities to learn in both Chinese and English.

PROGRAM INTRODUCTION

The Chinese immersion program was launched with two immersion kindergarten classes in 2017–18. These classes will roll forward each academic year, bringing the program across pre-kindergarten through fifth grade by 2022–23. The Chinese immersion program serves families who enroll their children in this optional program, which promotes high academic achievement by supporting second-language development and cross-cultural understanding. The program welcomes native Chinese speakers as we believe children learn best from each other, and they are both language learners and language models. Literacy in Chinese and English is developed simultaneously from kindergarten through fifth grade.

CURRICULUM AND INSTRUCTION

The curriculum in the Chinese immersion program is the same as the SAS monolingual English program; the only difference is that students learn in both English and Chinese. For language arts and math, the school uses the Common Core standards; Next Generation Science Standards guide science instruction; and the College, Career, and Civic Life (C3) Framework provides the standards for the social studies program.

Chinese literacy-specific standards and instruction are provided to ensure students can develop high literacy and academic language levels. Chinese culture learning is embedded in curriculum and instruction to increase cross-cultural understanding and appreciation. The language allocation varies depending on grade level. Contact your classroom teachers or program administrators to learn more.

For more information, please visit the SAS website.

ART, MUSIC, AND PHYSICAL EDUCATION

Elementary students receive instruction in physical education, music, and art on a three-day rotational calendar. A portion of each student's physical education program is swimming. These specialist class calendars are hosted on teacher blogs, which remind families of what lesson they will be participating in on each specific day and whether students should wear the PE uniform or regular school uniform.

ART

Students receive art instruction once every three days. They will experience a wide variety of media, including ceramics, drawing, painting, printmaking, sculpture, digital media model making and textiles. Students will be exposed to art of other cultures, works of famous artists, and basic elements and principles of art and design.

MUSIC

Students in elementary music classes engage in a wide range of activities such as singing, dancing, music technology, listening to music from all genres, creating music, and playing instruments. Students gain a dynamic exposure to music from other cultures and develop their skill and understanding in the four categories of National Core Arts Standards; Create, Perform, Respond, and Connect. The goal of music education in elementary school is musicianship and developing a love and appreciation for the performing arts.

PHYSICAL EDUCATION

The purpose of the SAS PE Program is to develop physically literate and socially responsible children who understand and enjoy movement and its benefits for lifelong wellness. This will be done by providing each student with a diverse range of learning opportunities in an active, safe, and enjoyable environment. We strive to engage and inspire students to develop their unique physical, social and intellectual potential.

WORLD LANGUAGE PROGRAM

Language and communication are at the heart of the human experience and individual identity. Therefore, it is imperative that all students have opportunities to become equipped both linguistically and culturally in other languages to establish and maintain relationships and to function confidently within a global society. To that end, we offer daily Chinese and Spanish instruction to all students in Kindergarten through fifth grade.

The World Language program is designed around language proficiency benchmarks that support students at every step of their language learning journey. The primary focus of the program is for students to develop their oral communication skills. Students will also have exposure to reading. Our units of study reflect a rich diversity of languages, traditions, and cultural influences.

Students progress from one language class to the next when they demonstrate mastery of the foundational content and/or they reach the proficiency level necessary to be successful in the next class. Students have a world language class every day for 40-45 minutes, depending on their grade level.

LIBRARY

The library works collaboratively with teachers to support the curriculum and to encourage a lifelong love of reading and learning. The collection offers a diverse range of quality, diverse, engaging print and electronic materials. Special events, such as the PTA-sponsored academic visitors-in-residence program, as well as division-wide literacy events, encourage our learners to celebrate and enjoy all things book-related.

All SAS students, teachers, and parents are welcome to use the elementary library to find information and check-out books. Each kindergarten through fifth-grade class comes to the library regularly for information literacy and digital citizenship lessons.

STEAM

STEAM is when student learning experiences incorporate more than one of the Science, Technology, Engineering, Arts, or Math disciplines and often include a project- or problem-based approach connected to developmentally and age-appropriate real-world contexts.

At the Singapore American Elementary School, we believe in providing all students with opportunities to engage in STEAM learning experiences designed to ensure they are well-equipped to meet the current and future challenges in our world. All ES students will apply our Learning Aspirations, such as critical thinking, creativity, and collaboration, by engaging in authentic and purposeful STEAM lessons and/or projects (engineering, maker, coding, and robotics).

The STEAM team works closely with teachers to develop age-appropriate STEAM engagements integrated with core subject areas (Reading, Writing, Math, Science, and Social Studies) at various times throughout the year. By providing students with relevant and consistent STEAM learning experiences, we are fostering a mindset at a young age that we are all critical thinkers, creative problem solvers, and capable of finding solutions collaboratively.

TECHNOLOGY INTEGRATION

At SAS, we constantly look through the lens of how technology can enhance learning and make it more personalized, collaborative, and relevant. In elementary school, every student starting in kindergarten has an iPad outfitted with a suite of core apps that becomes a scaffold for learning. With significant guidance from teachers, students set goals and monitor their progress, and use technology to express themselves, demonstrate their learning, and support the development of critical skills and core knowledge. Students use their iPads in various ways, from measuring their heart rate in physical education, building vocabulary, attempting new art techniques, and creating reflections of learning. Digital citizenship and internet safety are woven into the curriculum at each grade and collaboratively taught by counselors, librarians, and teachers.

KINDERGARTEN PERCEPTUAL MOTOR PROGRAM

The kindergarten perceptual motor program develops movement skills, sensory system stimulation and development, and learning in all domains (cognitive, social, and language). Curricular components include gross and fine motor skills, exploratory and creative play, and acquiring fundamental locomotor and non-locomotor skills. Such expressive movement activities aim at helping students develop spatial and kinesthetic awareness, acquire perceptual and visual discrimination, and correspondingly increase muscular endurance and strength. Efficient movement and body management skills go a long way in developing coordination and psychomotor competence and lay the foundation of sports and recreational skills. Such success builds confidence and self-esteem, enhancing students' cognitive activities in the classroom.

LEARNING SUPPORT

The learning support program is designed to meet the needs of all learners. Our elementary support services team includes teachers, counselors, school psychologists, speech-language pathologists, and divisional administrators.

Support services are designed to bridge student learning gaps with classroom expectations using a Response to Intervention/Multi-Tiered System of Support (RTI/MTSS) process. This means that the support services team partners with families to develop a plan of support that is flexible, targeted, and data-informed. The details of support plans are captured on intervention plans, accommodation plans, and Individualized Education Support Plans (IESP). The plans are subsequently shared with families during Student Support Meetings (SSM), a solution-focused meeting where learning strengths and challenges are considered and discussed.

Students may receive targeted instruction in their classrooms, in small groups, and/or in support services settings. Along with providing intervention, support teams monitor student progress in all areas of need (reading, writing, math, social-emotional, or behavior). The nature of the intervention is amended as students progress toward their goals and continue until learning gaps are closed.

ENGLISH AS AN ADDITIONAL LANGUAGE (EAL)

English language learning support is provided to multi-lingual students in kindergarten through fourth grade. EAL support is offered through a combination of in-class support with an EAL teacher working in the mainstream classroom as well as small-group classes in the EAL classroom. Pull-out classes focus on the explicit teaching of foundational literacy skills targeted to develop both social communication skills and academic language needed for the classroom. The type of support is determined based on the student's proficiency level. The EAL teacher and the classroom teacher work closely to support and monitor the English language development of identified EAL students.

COUNSELING

Elementary counselors are assigned to each grade level from Kindergarten to Grade Five, and a full-time counselor in the Early Learning Center. Elementary Counselors support students and families socially and emotionally. Counselors teach Second Step, and students learn skills for learning, emotional management, and problem-solving skills. The learning of these skills leads to success in school and life.

CURRICULUM DETAILS KINDERGARTEN

	KINDERGARTEN				
	Subject	Units			
Core	Reading Standards - Literature	Yearly Reading Overview: The first unit begins by helping students build foundational reading skills, including print and phonemic awareness. In the second unit, the youngsters learn "super power" strategies. Unit 3 invites children to attempt more difficult books and work on fluency, and by Unit 4,			
	Reading Standards - Nonfiction	kindergartners begin to establish their identities as readers in Becoming Avid Readers. Phonics Instruction:			
	Reading Standards Foundational Skills	Phonics instruction is one of the first steps toward teaching children how to read and write. Phonics introduces the concept that letters make different sounds and shows students that there is a relationship between the sounds that different letters make. Students who understand phonics are able to sound out their sounds while reading, and it helps them learn			
	Writing Standards	to read and write faster. Research supports the idea that young children grasp the art of reading with little effort when they are taught phonics explicitly and consistently.			
	Language Standards	 Yearly Phonics Overview: provide an instructional pathway in phonics that is realistic and doable, and that taps into kids' skills and energy for tackling the fabulous challenge of learning to read and write ntroduce high-leverage phonics concepts and strategies in a way that keeps pace with students' reading and writing and helps them understand when, how, and why they can use phonics to read and write offer delightfully fun and engaging storylines, classroom mascots, songs, chants, rhymes, and games to help students fall head over heels in love with phonics and to create a joyous community of learners align with state-of-the-art reading and writing workshops for a coherent approach in which terminology, tools, rituals, and methods are shared in ways that benefit both teachers and kids 			
		Children will be immersed in letters and sounds, rhyme, and word play. Childrens' names and letters will be used to teach phonics concepts. Letter knowledge and letter-sound correspondence, phonological awareness, and high-frequency words will be introduced next, followed by moving from writing labels to writing sentences. Students are introduced to the word wall to learn a growing number of high-frequency words. Later, students learn that the words at, in, it, and an have word power and can be made into lots of other words. Digraphs (sh, th, wh, ch) are introduced and used with word parts to make even more words. Unit 4 introduces vowels. Children study short vowels and distinguish between the sounds, including with words that are longer than CVC words. Blends are also introduced. Students think about not only what sounds letters make, but the instances in which those sounds are changed, muted, or manipulated by neighboring letters. This unit challenges students to tackle longer words and to begin thinking about the sounds that they hear in word parts or phonograms. The unit culminates with phonics projects that draw on all the phonics work children have engaged in during their kindergarten year.			
		Yearly Writing Overview: The kindergarten units begin by helping children approximate writing by drawing and labeling first in all-about books and then in stories. The first unit, Launching the Writing Workshop, acknowledges that most children will be labeling their drawings—and the letters in those labels will include squiggles and diamonds. The second unit, Writing for Readers, helps children write true stories—but does so fully aware that the hard part will be writing read-able words. In How-To Books: Writing to Teach Others, Unit 3, students write informational how-to texts on a procedure familiar to them. In Persuasive Writing of All Kinds: Using Words to Make a Change, the fourth and final unit in the kindergarten series, students craft petitions, persuasive letters, and signs that rally people to address problems in the classroom, the			

school, and the world.

Math

In Kindergarten, we focus on two critical areas: (1) representing and comparing whole numbers, initially with sets of objects; (2) describing shapes and space. More learning time in Kindergarten is devoted to number than to other topics.

The Story of Kindergarten - Illustrative Mathematics

Units in Kindergarten include:

- Math in Our World
- Numbers 1 10
- Flat Shapes All Around
- Understanding Addition and Subtraction
- Composing and Decomposing Number to 10
- Numbers 0 20
- Solid Shapes All Around
- Putting it All Together

Science

Unit Title: What is a Scientist?

The overarching purpose of the unit: Cultivate student curiosity about the world and everything in it!

Standards:

- Make observations to determine the effect of sunlight on the Earth's surface. (Cause and Effect)
- Use tools and materials provided to design and build a structure that will reduce the warming effect of sunlight on an area. (Cause and Effect)
- Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.
- Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.

Unit Title: Keep the World Alive

Overarching purpose of unit: Everyone has a responsibility to take care of the Earth since all living things depend on it for survival

Standards:

- Use observations to describe patterns of what plants and animals (including humans) need to survive
- Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs. (Systems and System Models)
- Use a model to represent the relationship between the needs of different plants and animals (including humans) and the places they live. (Systems and System Models)
- Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment. (Cause and Effect).

Social Studies

Unit Title: Me and My Friends

Essential Questions:

- What is a community?
- Why do we have roles and responsibilities in our classroom?
- How do our choices impact others?
 - How do our classroom rules help us?

Unit Title: Me and My Family

Essential Questions:

- How are we the same and different?
- How can important events change us?
- How does knowing more about each other help us to get along?

CURRICULUM DETAILS FIRST GRADE

FIRST GRADE Units Subject **Reading Standards -**Core Yearly Reading Overview: Literature In the first unit, Building Good Reading Habits, learning from kindergarten is reinforced. Reading Standards -Partnerships will be introduced. The second unit, Learning About the World: Reading Nonfiction Nonfiction, taps into children's natural curiosity as they explore nonfiction, while learning Reading Foundational about comprehension strategies, word solving, vocabulary, fluency, and author's craft. The **Standards** third unit, Readers Have Big Jobs to Do: Fluency, Phonics, and Comprehension, focuses on the reading process to set children up to read increasingly complex texts. The last unit of first Writing Standards grade, Meeting Characters and Learning Lessons: A Study of Story Elements, spotlights story Language Standards elements and the skills that are foundational to literal and inferential comprehension, including empathy, character study, and interpretation. Phonics Instruction: Phonics instruction is one of the first steps toward teaching children how to read and write. Phonics introduces the concept that letters make different sounds and shows students that there is a relationship between the sounds that different letters make. Students who understand phonics are able to sound out their sounds while reading, and it helps them learn to read and write faster. Research supports the idea that young children grasp the art of reading with little effort when they are taught phonics explicitly and consistently. Yearly Phonics Overview: provide an instructional pathway in phonics that is realistic and doable, and that taps into kids' skills and energy for tackling the fabulous challenge of learning to read and introduce high-leverage phonics concepts and strategies in a way that keeps pace with students' reading and writing and helps them understand when, how, and why they can use phonics to read and write offer delightfully fun and engaging storylines, classroom mascots, songs, chants, rhymes, and games to help students fall head over heels in love with phonics and to create a joyous community of learners align with state-of-the-art reading and writing workshops for a coherent approach in which terminology, tools, rituals, and methods are shared in ways that benefit both teachers students **Yearly Writing Overview:** The first-grade units are written for children who are just tapping into their burgeoning powers as readers as well as writers, and believe they can do anything. Students begin with the always-popular unit Small Moments: Writing with Focus, Detail, and Dialogue. In this unit students take the everyday events of their young lives and make them into focused, well-structured stories, then they learn to breathe life into the characters by making them talk, think, and interact. In Unit 2, Nonfiction Chapter Books, students enter the world of informational writing as they combine pictures and charts with domain-specific vocabulary and craft moves to create engaging teaching texts. In Unit 3, Writing Reviews, students create persuasive reviews of all sorts—pizza restaurant reviews, TV show reviews, ice cream flavor reviews, and finally book reviews that hook the reader, clearly express the writer's opinion, and bolster their argument in convincing ways. In From Scenes to Series: Writing Fiction, the final unit of the Grade 1 series, students learn to "show, not tell" and use action, dialogue, and

feelings to create a whole series of fiction books modeled after Henry and Mudge.

Math

In Grade 1, instructional time should focus on four critical areas: (1) developing an understanding of addition, subtraction, and strategies for addition and subtraction within 20; (2) developing an understanding of whole number relationships and place value, including grouping in tens and ones; (3) developing an understanding of linear measurement and measuring lengths as iterating length units; and (4) reasoning about attributes of, and composing and decomposing geometric shapes.

The Story of Grade 1 - Illustrative Mathematics

Units in Grade 1 Include:

Unit 1: Adding, Subtracting, and Working with Data

Unit 2: Addition and Subtraction Story Problems

Unit 3: Adding and Subtracting Within 20

Unit 4: Numbers to 99

Unit 5: Adding Within 100

Unit 6: Length Measurements Within 120 units

Unit 7: Geometry and Time

Unit 8: Putting it all Together

Science

Unit Title: Let's Ask Nature

Overarching Enduring Understanding: Humans design interventions to solve problems by mimicking the structures of organisms.

Standards:

- Biomimicry Design Solution: Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs. (Structure and Function)
- Behavior Parents and Offspring: Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive.
- Plant and Animal Structures Parents and Offspring: Make observations to construct an
 evidence-based account that young plants and animals are like, but not exactly like, their
 parents. (Patterns)

Unit Title: Light and Sound

Overarching Enduring Understanding: Sound and light can be used to send and receive information as a form of communication

Standards:

- Plan and conduct investigations to provide evidence that vibrating materials can make sound and that sound can make materials vibrate. (Cause and Effect)
- Make observations to construct an evidence-based account that objects in darkness can be seen only when illuminated. (Cause and Effect)
- Plan and conduct investigations to determine the effect of placing objects made with different materials in the path of a beam of light. (Cause and Effect)
- Use tools and materials to design and build a device that uses light or sound to solve the problem of communicating over a distance. (Connection to Engineering and Technology)

Social Studies

Unit Title: Community

Overarching Essential Question: How does a community work together towards a common goal?

Essential Questions

- What makes a community?
- How do communities meet people's needs?
- Who is responsible for taking care of communities?
- What responsibilities do governments have to their community?

CURRICULUM DETAILS SECOND GRADE

SECOND GRADE				
	Subject	Units		
Core	Reading Standards - Literature Reading Standards - Nonfiction	Yearly Reading Overview: In second grade, children move from a "little-kid" focus on print to a "big-kid" focus on meaning. The first unit, Second-Grade Reading Growth Spurt, teaches children to take charge of their reading, drawing on everything they know to figure out hard words, understand the author's craft, and build big ideas about the books they read. Children learn that books can be their teachers in the second unit, Becoming Experts: Reading Nonfiction, in which they learn more about familiar topics and grow understanding of new topics while working on word solving, vocabulary development, and comparing and contrasting information across texts. In the third unit, Bigger Books Mean Amping Up Reading Power, children learn strategies to build three foundational reading skills—fluency, understanding figurative language, and comprehension. In the final unit for second grade, Series Book Clubs, children work within book clubs to study author's craft to understand ways authors use word choice, figurative language, punctuation, and even patterns to construct a series and evoke feelings in readers.		
	Reading Foundational Skills	Phonics Instruction: Phonics instruction is one of the first steps toward teaching children how to read and write. Phonics introduces the concept that letters make different sounds and shows students that there is a relationship between the sounds that different letters make. Students who understand phonics are able to sound out their sounds while reading, and it helps them learn to read and write faster. Research supports the idea that young children grasp the art of reading with little effort when they are taught phonics explicitly and consistently. Yearly Phonics Overview: • provide an instructional pathway in phonics that is realistic and doable, and that taps into kids' skills and energy for tackling the fabulous challenge of learning to read and write • introduce high-leverage phonics concepts and strategies in a way that keeps pace with students' reading and writing and helps them understand when, how, and why they can use phonics to read and write • offer delightfully fun and engaging storylines, classroom mascots, songs, chants, rhymes, and games to help students fall head over heels in love with phonics and to create a joyous community of learners		
	Writing Standards	align with state-of-the-art reading and writing workshops for a coherent approach in which terminology, tools, rituals, and methods are shared in ways that benefit both teachers and the student Yearly Writing Overview:		
	Language Standards	In second-grade students write a variety of genres across the year. First, children learn to craft powerful true stories based on their own small moments. In the second unit, students study nonfiction texts and learn to write about nonfiction topics of their choice. In the next unit, students explore fiction-writing techniques by studying fairy tales. In the final unit, students craft persuasive arguments based on evidence.		

Mathematics

In Grade 2, instructional time should focus on four critical areas: (1) extending understanding of base-ten notation; (2) building fluency with addition and subtraction; (3) using standard units of measure; and (4) describing and analyzing shapes.

The Story of Grade 2 - Illustrative Mathematics

Units in Grade 2 include:

- Adding Subtracting and Working with Data
- Adding and Subtracting within 100
- Measuring Length
- Addition and Subtraction on the Number Line
- Numbers to 1000
- Geometry, Time, Money
- Adding and Subtracting within 1000
- Equal Groups
- Putting It All Together

Science

Unit Title: Structure and Properties of Matter

Overarching Enduring Understanding: Different properties of matter are suited for different purposes.

Standards:

- Material Properties Plan and conduct an investigation to describe and classify different kinds of materials by their observable properties (Patterns)
- Materials Testing: Analyze data obtained from testing different materials to determine which materials have the properties that are best suited for an intended purpose (Cause and Effect).
- Objects and Pieces: Make observations to construct an evidence-based account of how an object made of a small set of pieces can be disassembled and made into a new object (Energy and Matter).
- Reversible and Irreversible Changes: Construct an argument with evidence that some changes caused by heating or cooling can be reversed and some cannot (Cause and Effect).

Unit Title: Biodiversity - Life Needs Plants

Overarching Enduring Understanding: Diverse plants are essential to life

Standards:

- Plan and conduct an investigation to determine if plants need sunlight and water to grow.
 (Cause and Effect)
- Develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants. (Structure and Function)
- Make observations of plants and animals to compare the diversity of life in different habitats. (Patterns)

Social Studies

Unit Title: Civics/ History

Essential Questions

- How does our culture make us similar and different?
- How can we learn about the past?
- How do we know if we weren't there?
- How are our lives different from the lives of our parents and grandparents?
- Why do things change over time?

Unit Title: Economics

Essential Questions

- What is money?
- How do people earn money?
- How do people spend, save and share their resources?
- Why do people trade?

CURRICULUM DETAILS THIRD GRADE

THIRD GRADE				
	Subject	Units		
Core	Reading Standards - Literature Reading Standards - Nonfiction Reading Foundational Standards	Yearly Reading Overview: The third-grade units were written to support the crucial transition children make from learning to read to reading to learn. The opening unit, Building a Reading Life, launches students' lives as upper elementary school readers. Children ramp up their reading skills by immersing themselves in within-reach fiction books while working on word solving, vocabulary development, and more. The second unit, Reading to Learn: Grasping Main Ideas and Text Structures, addresses essential skills for reading expository nonfiction, such as ascertaining main ideas, recognizing text infrastructure, comparing texts, and thinking critically, as well as the skills for reading narrative nonfiction, such as determining importance by using knowledge of story structure. The third unit, Character Studies, lures children into fiction books, teaching them to closely observe characters and sharpen their skills in interpretation. The final unit, Research Clubs: Elephants, Penguins, and Frogs, Oh My!, shows youngsters how to turn to texts as their teachers. Children work in clubs to gather, synthesize, and organize information about animals, and then use this information to seek solutions to real-world problems. Word Study: Word Study in grades 3-5 continues to be important as students develop and expand their vocabulary. Word Study is taught explicitly and reinforced within the context of reading and writing. The word study program in grades 3-5 focuses on building words (base words, prefixes and suffixes), word families (how words are connected by meaning), and vowel/consonant patterns in multisyllabic words.		
	Writing Standards Language Standards	Yearly Writing Overview: The third-grade units of study take into account that many third-graders are writing on full sheets of notebook paper and in writers notebooks for the first time. The opening unit, Crafting True Stories, extends students' work with personal narrative while engaging them more fully in the complete writing process, with increasing emphasis on drafting and revising their work. In the second unit, The Art of Information Writing, youngsters write chapter books that synthesize a wide variety of information and learn to section their topics into subtopics. They are supported in this challenging work because they are writing about topics on which they have firsthand, personal knowledge: dogs, soccer, gymnastics. In the next unit, students Explore fiction writing techniques while writing realistic fiction. Students learn to develop characters and write problems with a climax and a solution The final unit, Changing the World: Persuasive Speeches, Petitions, and Editorials rallies third-graders to use their ability to gather and organize information to persuade people about causes the children believe matter: stopping bullying, recycling, saving dogs at the SPCA. Word Study In grades 3-5 continues to be important as students develop and expand their vocabulary. Word Study is taught explicitly and reinforced within the context of reading and writing. The word study program in grades 3-5 focuses on building words (base words, prefixes and suffixes), word families (how words are connected by meaning), and vowel/consonant patterns in multisyllabic words.		
	Mathematics	In Grade 3, instructional time should focus on four critical areas: (1) developing understanding of multiplication and division and strategies for multiplication and division within 100; (2) developing understanding of fractions, especially unit fractions (fractions with numerator 1); (3) developing understanding of the structure of rectangular arrays and of area; and (4) describing and analyzing two-dimensional shapes. The Story of Grade 3 - Illustrative Mathematics		

Units in Grade 3 include: Introducing Multiplication Area and Multiplication Wrapping Up Addition & Subtraction within 1000 Relating Multiplication to Division Fractions as Numbers Measuring, Length, Time, Liquid Volume and Weight Two Dimensional Shapes and Perimeter Putting It All Together Science Unit Title: May The Force Be With You Overarching Enduring Understanding: Balanced and unbalanced forces affect the motion of objects. Standards: Plan and conduct an investigation to provide evidence of the effects of balanced and unbalanced forces on the motion of an object. (Cause and Effect) Make observations and/or measurements of an object's motion to provide evidence that a pattern can be used to predict future motion. Ask questions to determine cause and effect relationships of electric or magnetic interactions between two objects not in contact with each other Define a simple design problem that can be solved by applying scientific ideas about magnets. (Engineering and Technology)

Unit Title: We Will Survive

Overarching Enduring Understanding: Group behavior and interactions increase animals' chances of survival.

Standards:

- Construct an argument that some animals form groups that help members survive.
 (Cause and Effect)
- Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all.
- Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change.

Social Studies

Unit Title: Innovation

Overarching EQ: Why do we innovate?

Essential Questions

- How can we know if we weren't there?
- Why do innovations change over time?
- What are the effects of society on innovation?
- What are the effects of innovation on society?
- How does innovation acquire value?
- How are resources used to solve problems?

Unit Title: Our Connected World

Overarching EQ: How is the world connected?

Essential Questions

- What can a map tell us?
- How are we interconnected? Why are we interconnected?
- Why do people modify and/or adapt?

CURRICULUM DETAILS FOURTH GRADE

FOURTH GRADE				
	Subject	Units		
Core	Reading Standards- Literature Reading Standards - Nonfiction	Yearly Reading Overview: In fourth grade, students delve into complex texts and see the significance in details. In the first unit, Interpreting Characters: The Heart of the Story, students study the complexity of characters and explore themes while developing skills such as inference and interpretation. In the second unit, Reading the Weather, Reading the World, children form research teams to delve into extreme weather and natural disasters while developing their skills in cross-text synthesis, practicing close reading, comparing and contrasting, and evaluating sources to determine credibility. Children take on the challenge of researching history in the third unit, Reading History. Children study multiple points of view, support a position with reasons and evidence, tackle complex texts, and learn strategies for using new domain-specific words. In the final unit for fourth grade, Historical Fiction Clubs, children practice reading analytically, synthesizing complicated narratives, comparing and contrasting themes, and incorporating nonfiction research into their reading.		
	Standards - Foundational Skills	Word Study: Word Study in grades 3-5 continues to be important as students develop and expand their vocabulary. Word Study is taught explicitly and reinforced within the context of reading and writing. The word study program in grades 3-5 focuses on building words (base words, prefixes and suffixes), word families (how words are connected by meaning), and vowel/consonant patterns in multisyllabic words.		
	Writing Standards	Yearly Writing Overview:		
	<u>Language</u> <u>Standards</u>	The fourth-grade units familiarize students with the genres they will regularly encounter throughout school—thesis-driven persuasive essays, literary essays, and research reports. Each of the units begins where children are and then provides a progression of instruction that brings students step-by-step toward increasing proficiency. In Unit 1, <i>The Arc of Story: Writing Realistic Fiction</i> , students learn that the lenses they bring to reading fiction can also be brought to writing fiction, as they develop believable characters with struggles and motivations and rich stories to tell. This unit is followed by <i>Boxes and Bullets: Personal and Persuasive Essays</i> in which students learn the value of organization and form as they gather evidence to support and express an opinion on topics they know well. By Unit 3, <i>Bringing History to Life</i> , students are ready to tackle historical research in which they collect evidence and use details to vividly describe people and events long ago and far away. Unit 4, <i>The Literary Essay: Writing About Fiction</i> , brings the series full circle as students build on their learning of essay writing and apply it with increasing sophistication to a unit on literary essays—that is, writing about fiction.		
	Mathematics	In Grade 4, instructional time should focus on three critical areas: (1) developing understanding and fluency with multi-digit multiplication, and developing understanding of dividing to find quotients involving multi-digit dividends; (2) developing an understanding of fraction equivalence, addition and subtraction of fractions with like denominators, and multiplication of fractions by whole numbers; (3) understanding that geometric figures can be analyzed and classified based on their properties, such as having parallel sides, perpendicular sides, particular angle measures, and symmetry.		
		The Story of Grade 4 - Illustrative Mathematics Units in Grade 4 include: Factors and Multiples Fraction Equivalence and Comparison Extending Operations to Fractions From Hundredths to Hundred-Thousands Multiplicative Comparison and Measurement Multiplying and Dividing Multi-Digit Numbers Angles and Angle Measurement Properties of Two-Dimensional Shapes Putting It All Together		

Science Unit Title: Survival of the Fittest Overarching Enduring Understanding: structures that function to support survival, growth, behavior, and Standards: Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction. (Systems and System Models) Use a model to describe that animals receive different types of information through their senses, process the information in their brain, and respond to the information in different ways. (Systems and Develop a model to describe that light reflecting from objects and entering the eye allows objects to be seen. (Cause and effect) Unit Title: Go With The Flow Overarching Enduring Understanding: Light, sound, heat, electric current and motion are evidence of enerav. Standards: Make observations to provide evidence that energy can be transferred from place to place by sound, light, heat, and electric currents. (Energy and Matter) Apply scientific ideas to design, test, and refine a device that converts energy from one form to another. (Energy and Matter) Use evidence to construct an explanation relating the speed of an object to the energy of that object. (Energy and Matter) Ask questions and predict outcomes about the changes in energy that occur when objects collide. (Energy and Matter) Obtain and combine information to describe that energy and fuels are derived from natural resources and their uses affect the environment. (Cause and Effect) **Social Studies** Unit Title: Responsibility: Making positive and responsible choices for a better world. **Essential Questions** Why are nations interdependent? What are the different perspectives regarding the use of natural resources? How do experiences shape our values? Unit Title: We Can Work It Out **Essential Questions**

What are some different types of conflict? What are some different causes of conflict?

How can conflicts bring about change? How do people manage and resolve conflict?

How might disputes over resources lead to conflict?

What factors influence people's perspectives? (or What shapes/forms our perspectives?)

CURRICULUM DETAILS FIFTH GRADE

FIFTH GRADE			
	Subject	Units	
Core	Reading Standards - Literature Reading Standards - Nonfiction Reading Standards - Foundational Skills	Yearly Reading Overview: Fifth grade is a time for children to hone their intellectual independence. In the first unit, Interpretation Book Clubs: Analyzing Themes, students draw on a repertoire of ways for reading closely, noticing how story elements interact, understanding how different authors develop the same theme, and comparing and contrasting texts that develop a similar theme. In the second unit, Tackling Complexity: Moving Up Levels of Nonfiction, students investigate the ways nonfiction texts are becoming more complex, and they learn strategies to tackle these new challenges. This unit emphasizes the strong foundational skills, such as fluency, orienting to texts, and word solving, that are required to read complex nonfiction. In the third unit, Argument and Advocacy: Researching Debatable Issues, students read complex nonfiction texts to conduct research on a debatable topic, consider perspective and craft, evaluate arguments, and formulate their own evidence-based, ethical positions on issues. In the final unit for fifth grade, Fantasy Book Clubs: The Magic of Themes and Symbols, students work in clubs to become deeply immersed in the fantasy genre and further develop higher-level thinking skills to study how authors develop characters and themes over time. They think metaphorically as well as analytically, explore the quests and themes within and across their novels, and consider the implications of conflicts, themes, and lessons learned. Word Study: Word Study in grades 3-5 continues to be important as students develop and expand their vocabulary. Word Study is taught explicitly and reinforced within the context of reading and writing. The word	
	Writing Standards Language Standards	Study for leading and writing. The word study program in grades 3-5 focuses on building words (base words, prefixes, and suffixes), word families (how words are connected by meaning), and vowel/consonant patterns in multisyllabic words. Yearly Writing Overview: The sequence of fifth-grade units consolidates those skills and introduces the learning objectives called for in the sixth-grade standards: how to conduct research using primary sources, how to write narratives that are reflective and theme-based, and how to write argument essays that use counter-arguments to clarify a position. Unit 1, Narrative Craft, helps students deliberately use their knowledge of narrative craft to make their stories more thematic. In Unit 2, The Lens of History: Research Reports, students draw inspiration and understanding from mentor texts, historical accounts, primary source documents, maps, and timelines to write focused research reports that engage and teach readers. Building on these new skills, Unit 3, Fantasy Writing, students learn that the lenses they bring to reading fantasy can also be brought to writing fantasy, as they develop characters and themes over time and create rich stories to tell. The Research-Based Argument Essay, fifth-graders learn to build powerful arguments that convincingly balance evidence and analysis to persuade readers to action	
	Mathematics	In Grade 5, instructional time should focus on three critical areas: (1) developing fluency with addition and subtraction of fractions, and developing understanding of the multiplication of fractions and of division of fractions in limited cases (unit fractions divided by whole numbers and whole numbers divided by unit fractions); (2) extending division to 2-digit divisors, integrating decimal fractions into the place value system and developing an understanding of operations with decimals to hundredths, and developing fluency with whole number and decimal operations; and (3) developing an understanding of volume. The Story of Grade 5 - Illustrative Mathematics Units in Grade 5 include: Finding Volume Fractions as Quotients and Fraction Multiplication Multiplying and Dividing Fractions	

Wrapping Up Multiplication and Division with Multi-Digit Numbers Place Value Patterns and Decimal Operations More Decimal and Fraction Operations Shapes on the Coordinate Plane Putting It All Together **Science** Unit Title: What's The Matter Standards: Develop a model to describe that matter is made of particles too small to be seen. (Scale, Proportion, and Quantity) Measure and graph quantities to provide evidence that regardless of the type of change that occurs when heating, cooling, or mixing substances, the total weight of matter is conserved. (Scale, Proportion, and Quantity) Make observations and measurements to identify materials based on their properties. (Scale, Proportion, and Quantity) Conduct an investigation to determine whether the mixing of two or more substances results in new substances. (Cause and Effect) **Unit Title: Spheres and Cycles** Overarching Enduring Understanding: Standards: Support an argument that plants get the materials they need for growth chiefly from air and water (Energy and Matter) Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment. (Energy and Matter) Use models to describe that energy in animals' food (used for body repair, growth, motion, and to maintain body warmth) was once energy from the sun. Develop a model using an example to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment. **Social Studies** Unit Title: Wherever You Will Go **Essential Questions:** What does it mean to migrate? What are the consequences of migration on nations and communities? Why do people settle in specific geographic regions? What are the different points of view regarding migration? Unit Title: Advocacy (Me, My Family, My School) **Essential Questions:** What is advocacy? How can people take action?

Why do people advocate? Can everybody advocate?



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