



Elementary School Curriculum Guide 2019 - 2020



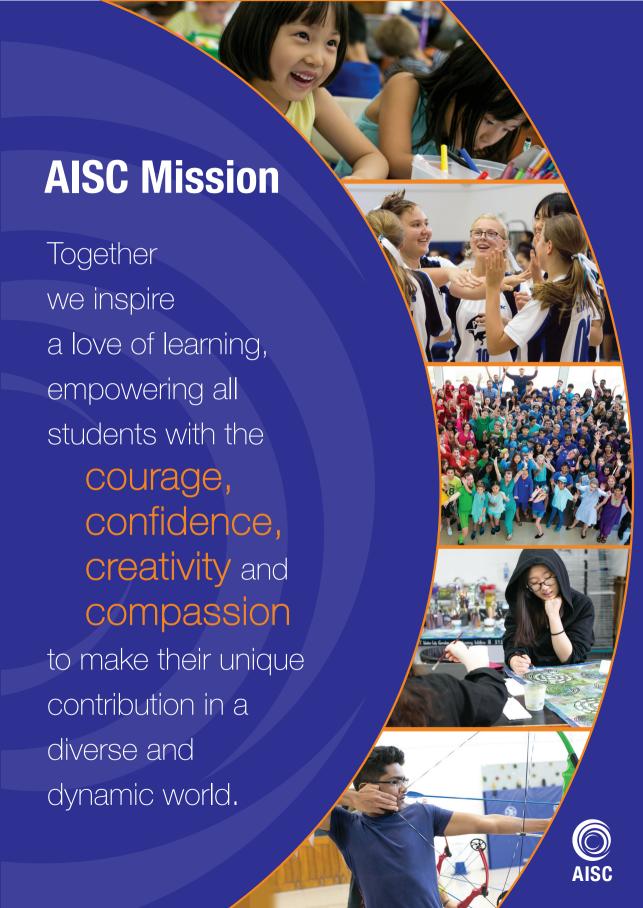


TABLE OF CONTENTS

MISSION	6
CORE VALUES	7
OUR VISION FOR AN AISC LEARNER	8
INTERNATIONALISM	9
WELCOME TO THE EARLY YEARS AND ELEMENTARY SCHOOL CURRICULUM GUIDE	10
EARLY YEARS ENVIRONMENT AND CURRICULUM	- 11
EARLY YEARS 3	12
Course Description	12
Units of Study	12
SUBJECT AREAS AND PROGRAMMATIC OVERVIEWS	14
Literacy Overview	14
Mathematics Overview	16
Bridges in Mathematics Resource	16
Social Studies Overview	17
Science Overview	17
Responsive Classroom	18
KINDERGARTEN	
Kindergarten Writing Overview	19
Kindergarten Writing Unit Descriptions	20
Kindergarten Reading Overview	21
Kindergarten Reading Unit Descriptions	21
Kindergarten Math Unit Descriptions	22
Kindergarten Science Unit Descriptions	23
Kindergarten Social Studies Unit Descriptions	23
GRADE I	
Grade I Writing Overview	24
Grade I Writing Unit Descriptions	24
Grade I Reading Overview	25
Grade I Reading Unit Descriptions	25
Grade I Math Unit Descriptions	27
Grade I Science Unit Descriptions	28
Grade I Social Studies Unit Descriptions	28
GRADE 2	29
Grade 2 Writing Overview	29
Grade 2 Writing Unit Descriptions	29
Grade 2 Reading Overview	30
Grade 2 Reading Unit Descriptions	30
Grade 2 Math Unit Descriptions	31

	Grade 2 Science Unit Descriptions	33
	Grade 2 Social Studies Unit Descriptions	33
GR/	ADE 3	34
	Grade 3 Writing Overview	34
	Grade 3 Writing Unit Descriptions	34
	Grade 3 Reading Overview	35
	Grade 3 Reading Unit Descriptions	35
	Grade 3 Math Unit Descriptions	36
	Grade 3 Science Unit Descriptions	38
	Grade 3 Social Studies Unit Descriptions	38
GR/	ADE 4	39
	Grade 4 Writing Overview	39
	Grade 4 Writing Unit Descriptions	39
	Grade 4 Reading Overview	40
	Grade 4 Reading Unit Descriptions	41
	Grade 4 Math Unit Descriptions	42
	Grade 4 Science Unit Descriptions	44
	Grade 4 Social Studies Unit Descriptions	44
GRA	ADE 5	45
	Grade 5 Writing Overview	45
	Grade 5 Writing Unit Descriptions	45
	Grade 5 Reading Overview	46
	Grade 5 Reading Unit Descriptions	46
	Grade 5 Math Unit Descriptions	47
	Grade 5 Science Unit Descriptions	49
	Grade 5 Social Studies Unit Descriptions	49
EXP	PERIENTIAL LEARNING OPPORTUNITIES	50
ELEI	MENTARY SPECIALIST SUBJECT AREA PROGRAMMATIC OVERVIEWS	53
	Physical Education Program Overview	53
	Lower Elementary Program Overview	53
	Upper Elementary Program Overview	54
	Kindergarten PE Unit Descriptions	54
	Grade I PE Unit Descriptions	54
	Grade 2 PE Unit Descriptions	55
	Grade 3 PE Unit Descriptions	56
	Grade 4 PE Unit Descriptions	57
	Grade 5 PE Unit Descriptions	58
DAI	NCE AND GYMNASTICS	59
	Dance Program Overview	59
	Lower Elementary Dance and Gymnastics Unit Description	59

Upper Elementary Dance and Gymnastics Unit Description	60
GYMNASTICS	60
Gymnastics Overview	60
Lower Elementary Unit Description	60
Upper Elementary Unit Description	60
ART	60
Art Program Overview	60
Lower Elementary Art Overview	61
Kindergarten Art Unit Descriptions	61
Grade I Art Unit Descriptions	61
Grade 2 Art Unit Descriptions	62
Upper Elementary Art Overview	62
Grade 3 Art Unit Descriptions	63
Grade 4 Art Unit Descriptions	63
Grade 5 Art Unit Descriptions	64
MUSIC	65
Lower Elementary Music Overview	65
Lower Elementary Music Unit Descriptions	65
Upper Elementary Music Overview	66
Upper Elementary Unit Descriptions	66
INDIAN STUDIES	68
Indian Studies Overview	68
Grade I Unit Descriptions	68
Grade 2 Unit Descriptions	69
Grade 3 FLEX Program Overview	69
WORLD LANGUAGE GRADES 4 & 5	71
French and Spanish	71
English	71
Grade 4 Unit Descriptions	71
Grade 5 Unit Descriptions	72
DIGITAL CITIZENSHIP	73
Overview	73
Lower Elementary	73
Upper Elementary	73





- Each person has equal intrinsic value, worthy of dignity and respect.
- We are responsible for our choices and their effect on ourselves, others and the environment.
- Being open to new ideas and challenging experiences enriches our lives.
- Mutual respect, trust and caring foster healthy interpersonal relationships.
- Embracing our diversity makes us a stronger community.
- In an interconnected world, our positive contributions to the community and the environment are essential.
- Individuals thrive in a nurturing environment that provides for their physical and emotional safety.

RESPONSIBILITY EXCELLENCE INTEGRITY RESPECT DIVERSITY



Leaders

We show courage by taking action and inspiring others to serve and contribute positively to our interconnected world. Leaders develop a vision, plan appropriately, and work collaboratively to achieve results.

Collaborators

We develop a deeper understanding by listening carefully to others' perspectives and confidently articulating personal viewpoints in the pursuit of common goals.

Innovators

We approach uncertainty with confidence, designing novel solutions in the face of challenges or change. Innovators are creative, resourceful, open-minded and resilient, seeking new perspectives through inquiry, trial, error and feedback.

Explorers

We investigate new interests with curiosity, inquiring with purpose, and seeking deeper understanding and fulfillment through our independent pursuits.

Thinkers

We use critical and creative thinking skills to analyze and take responsible action on complex problems. We exercise initiative in making reasoned, ethical, data-informed decisions.

Ethical

We show responsibility for our choices and consider their effects on ourselves, others, and the environment. We act on our principles and ideals because we value the dignity of others.

Versatile

We adapt to changing circumstances, balancing our commitments and showing courage as we take on new challenges. We seek new opportunities for learning, growth, and renewal.

Empathetic

We appreciate our own cultures and personal histories while respecting the values and traditions of others, believing each person has equal intrinsic value. We are sensitive to the needs of others and show compassion by making positive contributions to our local and global communities and the environment.

Resilient

We demonstrate on-going commitment to our endeavors by learning from our successes and failures in the positive pursuit of our objectives, goals, aspirations, and dreams. We practice patience and persistence in all situations, especially when they are challenging or uncomfortable.

Reflective

We pause to think about our goals, learning, and growth in order to develop and sustain our creativity and lifelong learning. We review and examine our own ideas and experiences in relation to the world and consider our interdependence and impact on others.

Internationalism at AISC



At AISC, we define international-mindedness as:

Possessing a strong sense of one's own cultural identity; **Respecting** and **valuing** the differences of others; **Learning** about local, national, and global issues; **Showing** empathy for others and care for the world around us.

Therefore, as an international school, we are committed to:

Incorporating other perspectives; Seeking common learning experiences with all peoples; Finding enriching connections between cultures; Using exposure to language, history, and the arts to access diverse cultures; Working well with all; Contributing through service; Reflecting about our thoughts and actions.

WELCOME TO THE EARLY YEARS AND ELEMENTARY SCHOOL CURRICULUM GUIDE

Our Elementary Section caters to students from Early Years right through until Grade 5, and we know that our students learn in a variety of environments; their homes, schools and communities. Parents and teachers form a partnership to assist this learning. When parents know what their children are doing at school, they can provide a further enriched and supportive environment at home. This Elementary Curriculum Guide is designed to give parents an overview of their child's education by fostering an understanding of what students will be exploring at each year/grade level.

Our curriculum is inquiry-based, aligned to standards, and is planned using the UbD or "Back by Design" approach.

Each grade plans their year through blocks of time, defined as learning "units." In the homeroom, where our Elementary students spend the majority of their day, these units are planned for within the areas of Reading, Writing, Math, Science and Social Studies. Other focuses', such as technology, personal, social and emotional education, health, child protection, and making, are not planned for as separate subjects but are integrated drivers that help shape our units.

Outside of the homeroom, children explore the specialist subjects of PE, Music, Art, Indian Studies and World Language (Spanish and French, from Grade 3 onwards).

The Elementary School begins in the Early Years and continues through Grades KG, I, 2, 3, 4, and 5. Each year/grade has its own distinct set of events, projects, and units that are specifically planned with the developmental stages of the child in mind. Our curriculum is continually evolving to be further personalized, inquiry-driven/play-based to best meet the needs of our youngest and oldest AISC learners.

Keryn Dowling

Elementary School Principal





EARLY YEARS ENVIRONMENT AND CURRICULUM

Children learn best through active exploration in an environment which is rich in materials and opportunities to interact, work and play. At AISC, we create those opportunities to support and extend children's cognitive growth, interpersonal skills, kinesthetic learning, and social and emotional development through play.

We believe children learn best when provided with opportunities to engage in activities that inspire curiosity and thinking. Teachers facilitate learning experiences that encourage students to pursue their independent interests, make deep connections, and extend their knowledge. Because we believe that each child is a unique individual, our Early Years Program provides inclusive settings that recognize children's varied abilities, interests, needs, and learning styles.

AISC values the diversity within our community and we intentionally work to build strong partnerships between home and school.

Multi-Age

We offer a multi-age program for our three- and four-year olds. We offer this because we believe there are strong benefits for both younger and older children. Our multi-age classrooms provide younger and older children opportunities to develop a sense of social belonging and interdependency. Young children gain a sense of security being with older children, and they engage in more complex and interactive social play. Younger children also are more likely to mirror the language and problem solving skills of their older age peers. Spending time with their younger age peers, older children gain an increased sense of

confidence about their own skills. They also exhibit more sharing, explaining, and nurturing behaviors as well as take on leadership roles in the classroom. Multi-age classrooms allow children to develop and grow at their own pace while promoting their strengths and supporting their individual needs.

Play-Based Learning

Young children learn by exploring, thinking about, and inquiring about all sorts of phenomena through play. These experiences help children investigate "big ideas," those that are important at any age and are connected to later learning. Play is a significant part of childhood in order for children to develop their self-regulation, language, cognition, and social competence. Play gives children opportunities to develop physical competence and enjoyment of the outdoors while making sense of the world around them. Through play, children are able to learn how to interact with others, express and manage their emotions, and develop problem-solving abilities.

Outdoor Learning Center (OLC)

Directly behind the Early Years classrooms, along the eastern wall of our AISC campus, is our Outdoor Learning Center (OLC). This area is a continuation of the Early Years classrooms and is considered a learning environment first, and a recess space second. Children from Early Years to Grade I enjoy this space throughout their day and are exposed to numerous opportunities to enhance their development and engage in big body play such as running, jumping, balancing, throwing, and catching. Children might explore the grassy mounds, crawl through the tunnels, make mud pies in the mud kitchen, ride on the tricycles, or play in the sand.

EARLY YEARS 3

Course Description

A play-based curriculum offers daily opportunities to promote children's development while meeting the needs of every learner. The six study topics allow for deep first-hand exploration in Science, Social Studies, and the arts while also developing children's language, early literacy, early numeracy, gross and fine motor, problem solving, and social skills. The curriculum also offers children opportunities to apply their acquired skills in meaningful ways and real-life contexts.

Units of Study

Unit I - Beginning of the Year

This unit is all about children getting to know their teacher and classroom community. During the first several weeks of school, children will become familiar with the classroom and school routines, and learn to find comfort in being a member of the classroom community while maintaining a secure connection to home. The beginning of the year unit has strategies for supporting children's social—emotional development as they become comfortable in their new environment.

Unit 2 - All About Me

This unit is focused on children exploring aspects about themselves, their family, and their friends. Learning about themselves is a fundamental part of a child's development, especially as young children start to ask questions about who they are and how they are the same or different from others. The beginning of the year, when everybody is getting to know one another, is the ideal time to talk and explore the unit on All About Me.

Unit 3 - Weather/Seasons

Children have a lot of wonderings and questions like the changes in weather and seasonal patterns. In this unit, children explore what is weather, what are seasons, why they change, and how they're different in different parts of the world. Exploring the weather can include learning about sunlight, rain, thunder, lightning, and rainbows. Gaining some understanding about weather is vital as weather patterns increasingly change across the world, impacting people and their homes as well as plants and animals.

Unit 4 - Food/Healthy Habits

In this unit, we talk about why eating healthy is important for young children. Early childhood is an important time to establish healthy eating patterns. A balanced diet is key to healthy eating habits because it provides children with the nutrients they need to grow. Children get the opportunity to explore different types of food and talk about what is good and bad for them. Also, the kids get to know the importance of being physically active which is vital for their growth and development.

Unit 5 - Animals/Habitats

Children are very curious about animals and where they live. This unit explores different kinds of animals and their homes. Wild animals have certain qualities that make them mysterious and exciting to children. The fact that their homes are different from ours, and are built by the animals themselves makes it all the more exciting for young children. Supporting children in their growing awareness and interest in animals can lead to deeper feelings of empathy in young children and more positive classroom relationships. As children have experiences with animals, they learn about differences and similarities, needs of animals (such as for food, shelter, water and space), and what makes them unique.

Unit 6 - Transportation:

Many young children are fascinated by vehicles and different forms of transport such as trucks, diggers, cars, trains, buses, or airplanes. This unit explores the ways in which we get to and from different places across land, through the air, or by water. Talking about transportation is important for children's language development and their general knowledge. Children will investigate different types of vehicles and how they move, work, and what they are used for.

SUBJECT AREA AND PROGRAMMATIC OVERVIEWS

Literacy Overview

The goal of the literacy program at the American International School Chennai is to ensure that all students become proficient and critical readers and writers who continue to use these skills throughout their lives. To achieve this goal, literacy instruction is based on a comprehensive, inquiry-based and balanced approach in which reading, writing, speaking, and listening allow students to develop skills and understandings that will enhance all areas of their learning. Teachers use ongoing formative and summative assessments to inform their instruction and to respond to each student's learning needs.

To foster a love of reading, to encourage students to explore new genres and authors, to allow children choice within the school day, and to reflect a literate community, we read.

To improve the overall literacy skills of our students, literacy instruction at AISC honors, captures, and capitalizes on critical literacy behaviors (reading, writing, listening, thinking, and speaking) through purposeful, integrated, and authentic instruction.

Teachers College Columbia Project - Reading and Writing Workshop Overview - Kindergarten to Grade 5

At AISC, Elementary students are taught Language Arts using the reading and writing workshop model from the Teachers College Reading and Writing Project of Columbia University. The overall goal is to ensure every student is engaged and working with materials appropriate to their proficiency and developmental levels. Teachers provide explicit instruction through a mini-lesson and conferences to the whole class, small groups and individuals.

The workshop model helps to develop independent, thoughtful and competent readers, writers, listeners and speakers by inquiring into different genres and writing styles.

- Reading
- Writing
- Speaking
- Listening

Reading Workshop

Reading Workshop combines language and literature-rich activities associated with holistic reading instruction with the explicit teaching of skills as needed to develop the fluency and comprehension that proficient readers possess.

Such instruction emphasizes the development of lifelong reading strategies and skills, gaining meaning from

print, and instruction of phonics in context. The Reading Workshop approach incorporates many reading strategies in order to meet the varying needs of all students. Some of the components of the approach include phonemic awareness and phonics instruction, reading aloud, independent and partner reading (private time and partner time), guided reading in small groups, shared reading, and literacy centers for independent practice. Reading Workshop cultivates the skills of reading, writing, thinking, speaking, and listening for all students. Reading Workshop also allows for flexibility within the classroom. It allows the teacher to meet each child where they are and move them forward in the manner and time best suited to the individual.

Reading Assessment

The process and speed at which children learn to read is unique to each child. To accurately identify our students' present set of literacy skills and reveal appropriate steps of instruction, teachers use a variety of assessment practices at AISC. From Kindergarten to Grade 5, running records are administered throughout the year. These assessments identify a child's reading level through a number of different literacy tasks, including: fluency, accuracy, and comprehension of text.

Additionally, teachers regularly assess their students' reading levels and skills through informal assessment practices, including but not limited to, interest inventories, one-on-one conferring, and readers' notebooks. This information is used to identify present reading strengths, gauge progress over time, and assist in instructional choices.

Writing

Purposeful writing instruction provides meaningful reasons for children to communicate ideas on paper in relation to identified standards. The role of the teacher during such experiences changes with student need and instructional purpose. Our Elementary School teachers follow the Writing Workshop approach, which focuses on teaching students the academic demands of the three main types of writing: informational, narrative, and persuasive/opinion. Beginning in Kindergarten, each grade level has units of study specifically designed to teach students discrete skills in the three text types, following grade-level standards and benchmarks.

Our units of study in writing follow the most recent research in best practice conducted by Columbia University's Teachers College Reading and Writing Project.

Writing Assessment

In alignment with writing standards and units of study, we formally assess writing using genre-specific rubrics. Progress is monitored by comparing on-demand writing samples from the beginning of each unit to end-of-unit published pieces of writing. Writing assessments are passed along from year-to-year, so teachers and students can reflect on progress. Formative assessments are made by teachers in weekly individual writing conferences with students. Weekly conferences allow teachers to closely follow students' work and modify instruction based on student need.

Phonics & Word Study

We know that a child's understanding and experience with language and writing become more sophisticated with age. In the early years, children begin to see that words are made up of letters. Later, children recognize that these letters make patterns. This understanding assists students in recognizing that letter patterns direct sound and meaning. These stages of spelling are progressive and developmental. Word Study is a systematic approach to teaching phonics, vocabulary, and spelling. Teachers formally assess the quality of students' understanding of spelling conventions three times a year and informally assess throughout the year.

Mathematics Overview

As math teachers and learners at AISC, we recognize that mathematics is essential for describing and interpreting the world around us. Application of mathematics becomes possible through conceptual understandings as well as procedural skills including basic facts, principles, and methods. To develop these intertwined ways of knowing math, we value multiple approaches and perseverance, encouraging students to problem solve in written, verbal, and technological forms, emphasizing process over product. We help students develop their abilities to explore, make conjectures, reason logically, and communicate mathematical ideas. Recognizing that individual students learn in different ways, we provide opportunities for all students to construct and deepen their own knowledge and expand their mathematical horizons. We seek to develop an enriching environment that pushes students to think critically as problem solvers and to recognize the intrinsic beauty of mathematics.

Bridges in Mathematics Resource

At AISC Elementary, K–5 Mathematics is taught with Bridges in Mathematics (Bridges) as a core resource. The Bridges in Mathematics program from the Math Learning Center in Oregon fully addresses the Common Core State Standards (CCSS) for Kindergarten through Grade 5. The program is aligned to the Critical Areas of Focus and Major Instructional Shifts intended by the authors of the CCSS, and it weaves together the standards for content and practice in ways that support student learning. Bridges also features key visual models that deepen students' mathematical learning while providing developmentally appropriate ways for them to employ the mathematical practices as they engage with new mathematical content.

From Kindergarten through Grade 5, students' work in mathematics is differentiated into major topics, supporting topics, and additional topics so that teachers are able to focus on core concepts and provide highlights into other areas as appropriate. AISC teachers supplement and differentiate the Bridges Scope and Sequence to provide a rigorous and supportive mathematics education for all students. Each year has clear fluency goals which teachers emphasize in assessment and reporting.

- · Counting and cardinality
- Operations and algebraic thinking
- Base 10 understandings and fractional representations

- · Geometry and measurement competencies
- · Data representations

Math Assessment

All students are assessed by observations of group and individual work, frequent formative assessments such as checkpoint quizzes, and post-unit assessments. From second grade onwards, we employ preand post-assessments. Ongoing assessment helps our Math teachers to identify differentiation needs and provide both enrichment and extension as appropriate for our students.

Social Studies Overview

Through examining concepts in Social Studies, students develop a sense of personal cultural identity as well as learn to respect and value the differences of others. Our students identify their passions and develop high-level thinking skills which allow them to direct their own learning. We believe that understanding of the concepts and perspectives within social studies promotes empathy and engagement. Students who engage authentically in social studies are therefore able to participate in and contribute to the world around them. The Elementary School Social Studies curriculum is based on the College, Career, and Civic Life Framework (C3) which is founded on an inquiry-based approach to teaching social studies. The Four Dimensions highlighted below center on the use of 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.

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

Science Overview

The Elementary School Science program is based on the Next Generation Science Standards (NGSS). The NGSS Framework outlines the three dimensions that are needed to provide students with a high-quality science education. The integration of these three dimensions provides students with a context for the content of science, how science knowledge is acquired and understood, and how the sciences are connected through concepts that have universal meaning across the disciplines. The following provides a brief explanation of the three dimensions articulated in the NGSS standards.

- Scientific and Engineering Practices: The practices describe behaviors that scientists and engineers use to explain the world or solve problems
- Crosscutting Concepts: Concepts that cut across all domains of science, and include big ideas such as patterns and cause and effect
- Disciplinary Core Ideas: Identifies content or fundamental scientific knowledge

Disciplinary ideas are grouped in four domains:

Physical Science

Recognizing mechanisms of cause and effect in systems and processes that can be understood through a common set of physical and chemical principles

Life Science

Making sense of the living world, from single organisms to ecosystems to the entire biosphere

Earth and Space Science

Understanding the different processes that cause the Earth to change over time, interconnected systems of the Earth, and the Earth's place in the solar system

Engineering, Technology and Applications of Science

Exploring how engineers identify and define problems, develop possible solutions, and optimize design solutions, as well as looking at how engineering, technology, science, and society are interconnected

Responsive Classroom

The Elementary School utilizes an evidence-based educational approach to building collaborative communities called Responsive Classroom. This approach supports the development of positive classroom and school communities by bringing together social and academic learning. The morning meeting is one aspect of Responsive Classroom that all Elementary students participate in daily. There are four components of the morning meeting. These components include the greeting, sharing, group activity and a morning message.





KINDERGARTEN

Kindergarten follows a curriculum that incorporates aspects of play-based learning whilst also introducing students to more academic concepts such as Literacy (reading and writing), Conceptual Mathematics, Science, and Social Studies.

Kindergarten Writing Overview

Kindergarten is a time for students to independently gain power and confidence, not just as readers and writers but as thinkers as well. Throughout the year, students will begin to use state-of-the-art tools and methods to help them move up the ladder of complexity. They learn to rely on their minds and skill-sets to create stories and make meaning of books. Students will build foundational reading skills and strategies like making inferences, synthesizing, and identifying the main idea. Teachers will use the Teachers College of Columbia Reading and Writing project structure of mini lessons to teach a full and balanced literacy course. There is demonstration, shared demonstrations, independent practice, response, and feedback

with ongoing assessments. A goal of this course is for students to receive targeted, strategy instruction and are given significant amounts of time to practice these strategies in their independent reading and writing.

Kindergarten Writing Unit Descriptions

Launching the Writing Workshop

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. In this unit, students will learn that they are authors. Students will begin to increase their writing stamina over time so that they are able to think longer and invest more in a piece of writing. A guiding principle of this unit is that writers start with something to say and then do everything they can to put that meaning on to the page. They begin writing true stories with a clear beginning, middle, and end. Towards the end of this unit, students will begin to publish, focusing on revising and editing as they make stories the best they can be.

Writing for Readers

The second unit, Writing for Readers, helps children write true stories but does so, fully aware that the hard part will be writing readable words. Students will begin to realize that their wonderful writing is, so far, hard to read. They will create piles and decide what about their writing is hard to read or easy to read. This is the foundational groundwork that will lead the rest of the unit. Writing in clear sentences and rereading their work as they write are two crucial pieces of this unit. Students will also be introduced to checklists and learn how they might use a writing checklist as a guide for how to make their writing easy to read. Additionally, in this unit, students will begin to learn that all words have a vowel and that we can use sight words to make our writing easy to read. Towards the end of the unit, students will focus, again, on revision and how they can use and rely on partnerships to help them revise and make their writing easy to read.

How-To Books

In How-To Books: Writing to Teach Others, our third unit, students independently choose and write informational "how-to" texts on a procedure familiar to them. This unit is integrated with the Kindergarten Science unit on Pushes and Pulls, Forces and Motion. Students begin to realize that writers not only use writing to tell stories but they also use writing to teach others how to do stuff. They will use their expertise to write a story teaching someone how to do something like push a broom, push in a chair, or pull a rope. It is important to teach writers to write and draw with clarity, including details so that others can follow the directions. Students will rely on partners so they can test out their "how-to" writing stories. We will also use real, published, mentor texts as exemplars and then use what they learn from those texts, both to help them write better first drafts, and also to make revisions.

Writing of All Kinds

In Writing of All Kinds: Using Words to Make a Change, the final unit in the Kindergarten series, students craft petitions, persuasive letters, and signs. The students learn that these communication tools can be used to rally people to address problems in the classroom, the school, and the world. As they progress towards addressing concerns that are not obvious, that tackle hard-to-understand topics, they also learn more about persuasive writing and about writing in general. They begin to ponder the deep question of "What could make things better?" Students will be learning to make words (and pictures) to express what they want by writing stories, making posters, making lists, etc. In this unit, students will also realize that they can write directly to someone who can help them solve their problem by writing a letter to them. At the end of this unit, the class will rally together around one common topic and write stories or posters to persuade an audience to make a change.

Kindergarten Reading Overview

Kindergarten is a time for students to independently gain power and confidence, not just as readers and writers but as thinkers as well. Throughout the year, students will begin to use state-of-the-art tools and methods to help them move up the ladder of complexity. They learn to rely on their minds and skill-sets to create stories and make meaning of books. Students will build foundational reading skills and strategies like making inferences, synthesizing, and identifying the main idea. Teachers will use the Teachers College of Columbia Reading and Writing project structure of mini lessons to teach a full and balanced literacy course. There is demonstration, shared demonstrations, independent practice, response, and feedback with ongoing assessments. A goal of this course is for students to receive targeted, strategy instruction and are given significant amounts of time to practice these strategies in their independent reading and writing.

Kindergarten Reading Unit Descriptions

We Are Readers

We Are Readers explores the exciting world of books independently and with a partner. This unit is designed to induct students into a Reading Workshop and to help them dive into many different kinds of books. They will begin to develop their identities as readers and learn routines and procedures of readers.

Super Powers

Students will become familiar with storybooks and how to think deeply about them. There is a strong focus on student collaboration to further our deep thinking about storybooks. Students will also get more practice with making connections to their books and connecting books with other books through the use of reading super powers.

Bigger Books, Bigger Reading Muscles

The purpose of this unit is to teach children to use multiple sources of information in order to read conventionally. The overarching goal of the unit is to teach children that they can do the same work they have been doing in emergent storybooks and shared reading, while placing a greater emphasis on looking at the print and developing the concept of one-to-one matching. This unit is known as the Super Powers unit as they are taught reading strategies, or super powers to help them reading.

Becoming Avid Readers

This unit supports readers in applying their newly learned reading skills as they encounter more books. Students will meet and work in small groups and partnerships for instruction based on their needs. This will continue throughout the unit, with changes to groups and instruction made as needed. In this unit, mini lessons will encourage students to use the strategies that were taught in previous units to foster independence and build on concepts.

Kindergarten Math Unit Descriptions

Teachers use Bridges in Mathematics for Kindergarten as a core resource that is designed to develop children's mathematical thinking and reasoning abilities. Students engage in age-appropriate problems and investigations in the areas of number, operations, algebraic thinking, measurement, data, and geometry. Some of these problems and investigations grow out of ventures into everyday life, like reading stories, playing games, drawing pictures, building structures, and making collections while others delve more deeply into the world of mathematics itself. Students are encouraged to explore, develop, test, discuss, and apply ideas: to see mathematics as something that is fluid, vibrant, creative, and relevant.

Kindergarten focuses intensively on the two critical areas specified by the Common Core State Standards for Mathematics in Kindergarten: first, representing and comparing whole numbers; second, describing shapes and space.

Mathematics Content Standards for Kindergarten

Bridges Kindergarten at AISC includes seven units of study. Six of those seven units are devoted to number and operations. They help students learn to use numbers, including written numerals, to represent quantities and solve problems; count out a given number of objects; compare sets or numerals; and model simple joining and separating situations with objects, fingers, words, actions, drawings, numbers, and equations.

Standards for Mathematical Practice for Kindergarten

The standards for mathematical practice from CCSS help us identify the types of thinking behaviors that we can expect and cultivate in our math learners. Our Kindergarteners learn mathematics in a

community, and practice their skills collaboratively and individually. Below, we have listed some of the key characteristics of Kindergarten mathematicians.

Perseverance: Kindergarteners learn to make sense of problems and focus their attention while persevering in their efforts to solve those problems. They use manipulatives, pictures, numbers, and talking to engage with problems and develop strategies for solving them.

Reasoning: Kindergarteners use pictures, objects, and words to describe their understanding of a problem as well as their strategies for solving it.

Modeling: Kindergarteners look for patterns and structure as they explore mathematics. Patterns and structure, and students' search for them, contribute to their mathematical learning and development of efficient strategies for performing mathematical tasks.

Kindergarten Science Unit Descriptions

Pushes and Pulls

Students will study motion and forces as they investigate the effects of different strengths or different directions of pushes and pulls. The concept of cause and effect is emphasized throughout the unit. Through inquiry and observation, students will brainstorm designs and solutions to problems which involve speed, direction, pushes, and pulls.

Weather Watching

Students develop an understanding of recording and analyzing patterns and variations in local weather. They will understand how sunlight warms the Earth's surface, and work in the Discovery Studio to design and build a structure to protect from and reduce the warming effect of sunlight.

Taking Care of the Environment

Students use observations to describe what plants and animals (including humans) need to survive, and the relationship between their needs and where they live. Students also explore solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.

Kindergarten Social Studies Unit Description

The Uniqueness of Me

Students explore what makes them special, as well as their connections to people and places. This builds to develop a community of learners, where they understand their individual roles and responsibilities in their community. Through reflection, as well as asking and answering questions, students learn to compare their perspective with that of others.



GRADE I

Grade I Writing Overview

First Grade students become active and engaged writers. Students will write narrative, persuasive, and nonfiction texts. Students publish at least one piece of writing by the end of each unit, and they reflect upon their writing. As students progress through the writing cycle, they learn editing and revising skills while applying their understanding of how writing is used to communicate ideas. The following Writing Units of Study are completed in Grade I.

Grade I Writing Unit Descriptions

Small Moments

In this unit, students take every day events of their young lives and make them into focused, well-structured stories. Then they breathe life into the characters by making them talk, think, and interact. One focus for writers is stamina. We start the year by providing booklets, not single pages, each containing three to five pages. Each page can contain a box for the picture and plenty of lines, emphasizing our expectations that First Graders will write pages every day, and to write sentences—not just a sentence—on each page. Another goal of the unit is to help children be brave and resourceful word solvers. We weave instruction in spelling throughout the unit to help students write using initial and final consonant sounds, then further develop and represent the sounds inside words. A third goal is for students to learn to generate and record cohesive, sequenced narratives. As they progress, they will be ready to learn to write with greater detail.

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. We begin with how to make a basic type of information book, a picture book, and end with children creating multiple information chapter books, filled with elaboration, interesting text elements, and pictures that supplement the teaching of the words.

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. Students will learn to write their judgements and their reasons for those judgements and to organize their reasons and supply supporting details for those reasons. They will use their writing skills to make and defend judgements, allowing students to appreciate the power and purposes of writing.

From Scenes to Series

In this final unit, students learn to "show, not tell" and use action, dialogue, and feelings to create a whole series of fiction books modeled after a popular series. The focus of the unit is on realistic fiction rather than any kind of fiction. Students will draw on their ability to tell what happens first, then next, and then bring their characters to life by describing what they do, say and think. Students will plan and act out and bring their lively imaginations to their serious work as writers. Students will create characters that return for more than one book and have more than one adventure. Students will learn that writers use patterns to elaborate, and they will then draw on all their skills and knowledge as writers of fiction to create even more powerful stories.

Grade I Reading Overview

Grade I students become active and engaged readers. Students practice their reading skills individually and with partners. Strategy groups enable students to read books at a level that provides scaffolding for them to progress and become stronger readers. Students learn how to read smoothly, make predictions about stories and make connections between themselves and the world around them through literature. The following Reading Units of Study are completed in Grade I.

Grade I Reading Unit Descriptions

Building Good Reading Habits

This unit is all about helping children feel secure, safe, and confident that they will become strong readers. Like runners, we warm up for reading, set goals for ourselves, establish good habits, and push ourselves to be the strongest readers we can be. The good reading habits that students will practice are organized into three categories: habits for reading long and strong, habits for solving hard words, and habits for working with a partner. Students practice previewing books and making predictions about the text, looking at the

pictures and the print for help with tough words, and retelling what they have read, all while building their reading stamina. Readers learn the routines involved with using their Book Bags, including how to choose appropriate books. Students learn that we read for a variety of purposes: to learn something new, for pleasure, and to build their skills.

Learning About the World

Students discover what makes nonfiction reading special and unique. They begin the unit by learning strategies for reading nonfiction texts by studying the pictures and integrating that knowledge into work with words and sentences. Students will learn strategies that will help them constantly monitor for meaning and focus on text details that help understand the larger meaning. Students also learn strategies for solving hard words that they encounter in nonfiction texts. They are taught strategies to decode the words and also think about their meanings. Students practice reading fluency by preparing a nonfiction read-aloud that will be read to a Kindergarten class. Students work with partners throughout the unit through discussions about the books they read and the words they learn.

Readers Have Big Jobs to Do

In this unit, students focus on the importance of not only reading the words but also monitoring for understanding. Readers need to envision the story, think about what's happening, and predict what could come next. They are also working hard to decode new words and solve tricky parts of the text. Students will learn strategies that will help them read more independently and conquer challenging books. To do this, readers think about the story and make predictions about how the story will go before reading. They use all they know about letters, sounds, patterns, and basic sight words. They monitor their reading when it does not sound right or make sense. Students and teachers will work together to analyze their own reading and see where they have difficulty solving tricky words and monitoring for understanding. Students will begin to use reading partners to help them work through these challenges and read independently. Most importantly, students become active problem solvers when reading.

Meeting Characters and Learning Lessons

In this unit, students will step into the shoes of the characters they meet in books and bring those characters to life. Readers will explore the world of acting, and through acting the important role of coming to understand characters with greater complexity. There is a playful yet vital relationship between reading and drama. When we read, readers both embody the character and see through their eyes; what we really are doing is putting ourselves into the drama of the story and this means coming to understand it in richer ways. Student goals are to envision as they read. When students envision the story and characters, they can read with increased fluency and richer comprehension and can share this new understanding with other people.

Grade I Math Unit Descriptions

AISC teachers use Bridges in Mathematics as a core resource that is designed to develop children's mathematical thinking and reasoning abilities. Students will engage in age-appropriate problems and investigations in the areas of numbers, operations, algebraic thinking, measurement, data, and geometry. Some of these problems and investigations grow out of ventures into everyday life, like reading stories, playing games, drawing pictures, building structures, making collections, and conducting simple hands-on science experiments, while others delve more deeply into the world of mathematics itself. Students are encouraged to explore, develop, test, discuss, and apply ideas: to see mathematics as something that is fluid, vibrant, creative, and relevant.

Mathematics Content Standards for Grade 1

First Graders focus intensively on the four critical areas specified by the Common Core State Standards (CCSS) for Mathematics in Grade I: first, addition and subtraction within 20; second, whole number relationships and place value; third, linear measurement in non-standard units; and fourth, reasoning with shapes and their attributes.

Grade I includes eight units of study, with four of those eight units devoted to the major clusters relating to addition and subtraction within 20. They help students gain fluency with facts to 10 and develop increasingly sophisticated strategies for facts to 20. During these units, students model, solve, and pose a wide variety of story problems to construct meaning for the operations of addition and subtraction, as well as an understanding of how the two operations are related.

Two units focus on place value, with students extending the counting sequence to 120 and thinking of 2-digit whole numbers as groups of tens and ones. In these units, students also develop, discuss, use, and generalize methods for accurately and efficiently adding within 100 and subtracting multiples of 10.

Two more units involve geometry and measurement. The geometry unit challenges children to identify, describe, construct, draw, compare, compose, and sort shapes. Students also learn about fractions in the context of two-dimensional shapes. The final unit helps students understand the meaning and processes of measuring time and length through conducting duration experiments; constructing, flying, and measuring the flight distances of paper gliders; and investigating some of the many ways in which they have grown and changed since they were born.

Standards for Mathematical Practice

The standards for mathematical practice from CCSS help us identify the types of thinking behaviors that we can expect and cultivate in our math learners. Below, we have listed some of the key characteristics of Grade I Mathematicians.

Perseverance: First Graders make sense of problems, develop strategies for solving them, and focus their attention while persevering in their efforts to solve those problems. They begin to evaluate whether their answers make sense and become better able to troubleshoot when their answers do not make sense or when they reach an impasse.

Reasoning: First Graders use pictures, objects, and words to describe their understanding of a problem as well as their strategies for solving it. They listen respectfully to others and ask questions to learn more about and make connections between others' thinking and their own.

Modeling: First Graders model mathematical situations with objects, drawings, actions, numbers, tables, and graphs. They also draw connections between these different ways of modeling a given situation or problem.

Patterning: First Graders look for patterns and structure as they explore mathematics. Patterns and structure, and students' search for them, contribute to their mathematical learning and development of efficient strategies for performing mathematical tasks.

Grade I Science Unit Descriptions

Light and Sound

Students develop an understanding of the causes and effects of light and sound. They explore the relationship between sound and vibrating materials, as well as how light penetrates surfaces and bends. The students work with a variety of hands-on materials including musical instruments, tuning forks, mirrors, flashlights, and bottles filled with colored liquids. They ultimately work to engineer a device to use light and/or sound to communicate over a distance.

Plants and Animals

Students develop an understanding of how plants and animals grow and survive in their environment. Students work to analyze the patterns that exist in nature, and how these affect the local Olive Ridley turtles. They then engage in a Service Learning project to help with the efforts to rehabilitate injured turtles.

Grade I Social Studies Unit Descriptions

Responsibility

Students start off their year with examining their roles and responsibilities as learners, and as part of a learning community. They identify the characteristics of responsible students and community members as well as determine that everyone is important in their community. They develop an understanding of rules and expectations of an academic setting, and that individuals make decisions that impact themselves and others.

Systems in Our Community

Students explore different systems in the school and around Chennai. They identify how a system works, and the role of problem solving when deciding to create or improve systems. Students work on self-selected projects to create or improve systems here at school, explaining how people play important roles to accomplish common tasks.



GRADE 2

Grade 2 Writing Overview

Across the writing genres, children develop an understanding of the techniques that published authors use by investigating mentor texts. Students will engage their audience by applying a variety of these techniques to their own written work. They focus on the Writing Process with a particular emphasis on revising and editing. Students' progress against the standards will be measured by a variety of forms of assessment, including multimedia projects, a variety of forms of writing, and publishing for a shared audience. Students view their writing as a joyful way to share stories and ideas. The following Writing Units of Study are completed in Grade 2.

Grade 2 Writing Unit Descriptions

Lessons from the Masters

This unit teaches students how to create engaging narratives by stretching out small moments and elaborating on their stories in detail. Students will write narratives in which they recount an event from their lives, include details to describe actions, thoughts, and feelings. They will use temporal words to signal event order, a strong beginning to hook their reader, and an ending that provides a sense of closure.

Lab Reports and Science Books

Informational texts are used to inspire students to design and write multimedia works. Students use various text features to deliver key facts and information to their audience. Students write informative and explanatory texts in which they introduce a topic, use facts and definitions to develop points, and provide a concluding statement or section.

Writing About Reading

Students read closely and gather evidence to craft persuasive arguments. Students write opinion pieces in which they introduce their topic, state an opinion, supply reasons that support the opinion, use linking words (e.g. because, and, also) to connect opinion and reasons, and provide a concluding statement or section.

Big Thought in Small Packages

Poetry helps children explore language through poetic devices such as onomatopoeia, alliteration, similes and metaphors. Students learn to use line breaks to create a rhythm, use powerful imagery to convey emotion, and create a mental picture for their audience.

Grade 2 Reading Overview

In Second Grade, children move from a focus on print to focus on meaning and build an understanding that reading is thinking. They work on developing the habits and strategies of strong readers, building stamina and cultivating a love of reading. Students' progress against the standards is measured by assessing their ability to read grade-level texts with fluency, expression, and comprehension. The following Reading Units of Study are completed in Grade 2.

Grade 2 Reading Unit Descriptions

Reader's Workshop begins with teaching children to take charge of their reading. We discuss choosing "just right" books, how to tackle tricky words, making connections to their world and asking questions about the books they read. They begin to ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.

Second-Grade Reading Growth Spurt

Children learn that books can be their teachers as we delve into mentor texts to look at author's craft. They notice how authors use sensory description, action, dialogue, and interesting adjectives to tell their stories and work towards applying the same techniques to their own work. They continue to build their reading stamina and demonstrate an understanding of the text.

Becoming Experts

This unit allows students to study text features and understand how they can locate key facts or information in a text efficiently. Students begin to identify the main purpose of a text, including what the author wants to answer, explain, or describe. Another important skill that is cultivated in this unit is paraphrasing; putting the main topic of a paragraph into their own words. Children also investigate other ways to locate information using media sources.

Bigger Books Mean Amping Up Reading Power

This unit builds on the skills used in personal narratives and introduces the concept of story elements such as character, setting, and plot. Students analyze a variety of mentor texts to see how the author presents the problem and solution in a story arc. We also take this time to engage in an author's study and to look for where the author may have found inspiration.

Series Book Clubs

Children work within book clubs to study the 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.

Grade 2 Math Unit Descriptions

AISC teachers use Bridges in Mathematics as a core resource that is designed to develop children's mathematical thinking and reasoning abilities. Students will engage in age-appropriate problems and investigations in the areas of number, operations, algebraic thinking, measurement, data, and geometry. Some of these problems and investigations grow out of ventures into everyday life, like reading stories, playing games, exploring interesting creatures in the environment, buying and selling at the market, and conducting simple hands-on science experiments, while others delve more deeply into the world of mathematics itself. Students are encouraged to explore, develop, test, discuss, and apply ideas: to see mathematics as something that is fluid, vibrant, creative, and relevant.

Mathematical Content Standards for Grade 2

In Grade 2, students focus intensively on the four critical areas specified by the Common Core State Standards (CCSS) for Mathematics in Grade Two: first, extending understanding of base ten notation; second, building fluency with addition and subtraction; third, using standard units of linear measure; and fourth, describing and analyzing shapes.

Bridges Grade 2 includes eight units of study. The first unit revisits and extends addition and subtraction within 20, with students practicing the efficient, flexible, and accurate strategies they developed in Grade I to develop fact fluency with understanding.

Three full units, and half of another unit, are devoted to place value and multi-digit addition and subtraction. During these units, students learn to count by 5s, 10s, and multiples of hundreds, tens and ones; read,

write, and compare numbers to 1,000; and develop fluency with addition and subtraction to 100 as they solve and pose a wide variety of story problems.

Later in the year, students use concrete models and sketches as well as strategies based on place value, properties of operations, and the relationship between addition and subtraction to add and subtract to 1000.

One entire unit focuses on geometry by having students investigate, describe, build, draw, combine, decompose, and analyze two- and three-dimensional shapes. This work helps students build foundations for understanding area, volume, congruence, similarity, and symmetry, which are explored in greater depth in later years.

One entire unit, and half of another, focus on standard units of linear measurement. Students construct their own rulers; estimate and measure in inches, feet, yards, centimeters, and meters; and solve problems that involve adding, subtracting, and comparing lengths.

The final unit of the year, in collaboration with our STEM program, also focuses on linear measurement in the context of science and engineering. Students make and test cardboard ramps of different kinds to investigate some of the factors that cause marbles to roll farther and faster. In the process, they generate data by measuring marble roll distances multiple times, pool their data, and enter it on line plots to better see, understand, and analyze how manipulating the different variables affects the outcomes.

Standards for Mathematical Practices

The standards for mathematical practice from CCSS help us identify the types of thinking behaviors that we can expect and cultivate in our Math learners. Below, we have listed some of the key practice standard manifestations of Grade 2 Mathematicians.

Perseverance: Second Graders make sense of problems, develop strategies for solving them, and persevere in their efforts to solve those problems. They evaluate whether their answers make sense and become better able to troubleshoot when their answers do not make sense or when they reach an impasse.

Reasoning: Second Graders use objects, pictures, equations, and words to describe their understanding of a problem, as well as their strategies for solving it. They listen respectfully to others and ask questions to learn more about and make connections between others' thinking and their own.

Modeling: Second Graders model mathematical situations with objects, drawings, actions, numbers, tables, and graphs. They also draw connections between these different ways of modeling a given situation or problem.

Patterning: Second Graders look for patterns and structure as they explore mathematics. Patterns and structure, and students' search for them, contribute to their mathematical learning and development of efficient strategies for performing mathematical tasks.

Grade 2 Science Unit Descriptions

Properties of Matter and Materials

Through hands-on learning, students explore how and why things are made the way they are. They design their own investigations of heating and cooling, properties of different materials, and if changes are permanent. They apply their learning to a design project, Building a Bridge, in which they determine the best materials to build a bridge in Chennai in a needed area.

Weathering and Erosion

In this unit of study, students apply their knowledge of natural Earth processes to generate and compare multiple solutions to reduce the impacts of natural Earth processes on humans. Students engage in a number of learning experiences to gather evidence in order to make and revise models and explanations about how Earth changes. Students learn about water flow and landscapes, how the structure and properties of different earth materials can affect water flow, and how water, wind, and ice can change the shapes and kinds of land quickly or slowly.

Grade 2 Social Studies Unit Descriptions

Personal Identity

In our first social studies unit of the year, students inquire into their own lives to come to a better understanding of how events in their lives have shaped their identity. Through reflection, interview, gathering and evaluating sources, and building a timeline, they reveal their identity with evidence for their own understanding of themselves. Families and friends join the students for an Identity Museum, where the students' evidence and artifacts are displayed.

Economic Interdependence

In this unit, students explore the role of value and exchange in consumer decisions. Through project-based learning, they make predictions from evidence of things that will be valuable to their consumers, designing services and goods to raise money for a local school.



GRADE 3

Grade 3 Writing Overview

In Writing Workshop, Third Graders are expected to write for increasingly extended periods of time. There is a greater emphasis on drafting and revising to improve their writing pieces. Students will be able to write for an audience. Students will craft personal narrative stories and will create nonfiction chapter books. They will also write a speech that uses logical reasoning to convince others to see their own view related to a cause that is important to them. They will explore techniques of fiction writing by changing elements of an existing fairy tale to create their own fractured fairy tale. At the end of each unit, students will show their learning through "on demand" writing assessments.

The following Writing Units of Study are completed in Grade 3: Crafting True Stories, The Art of Information Writing, Changing the World, and Once Upon a Time.

Grade 3 Writing Unit Descriptions

Crafting True Stories

Third Grade writers will write about personal experiences in journals and then work through the writing process to produce two published pieces. Third Grade writers are expected to use dialogue and descriptions of actions, thoughts, and feelings to develop their small moment story. Students will generate writing ideas while concurrently building writing stamina.

The Art of Information Writing

Students will be invited to choose a topic that they know well to write their first informational book. For their second project, they will use multiple resources to research and take notes on a new topic of interest. They will include nonfiction text features and group similar ideas together in sections or chapters. They will publish their work to share what they have learned and to teach their reader about their chosen topic.

Changing the World

Throughout the course of this unit, students will come to see that their passionate opinions are strengthened by thoughtful reasoning and evidence. First, Third Grade writers will try to persuade others to make the world a better place in some way by writing a persuasive speech. Then, they will apply the skills they have learned to writing a persuasive letter. The students will come to see the power in language and word choice as they make careful decisions about how to write convincingly.

Fairy Tales

Students will choose a traditional fairy tale and then change some key elements to write their own fractured fairy tale. They will focus on inventing characters, setting, problems, solutions, and dialogue which will be used to write their fairy tale.

Grade 3 Reading Overview

In Reading Workshop, Third Graders ramp up their reading skills by immersing themselves in "just right" fiction and nonfiction texts. Students will use fiction texts to work on observing characters, making predictions and inferences, and visualizing stories. Students will read nonfiction texts to determine main ideas, to use nonfiction text features, and to compare texts on the same topic. Children will work in book clubs to compare different books in a series. Students are assessed throughout the year using running records to check for their reading fluency, literal comprehension, ability to make inferences, and retelling. The following Reading Units of Study are completed in Grade 3: Building a Reading Life, Reading to Learn, and Character Studies.

Grade 3 Reading Unit Descriptions

Building a Reading Life

This unit of study will use realistic fiction books to inspire readers to think deeply about and to learn from their characters. Readers are invited to immerse themselves in the worlds of the books they are reading and to do so by wearing the shoes of the characters who inhabit those worlds. Living as their characters, readers will develop their skills at predicting, envisioning, inferring, and reading with fluency.

Reading to Learn

This unit of study gives children stretches of time to read whole nonfiction texts to learn what the author wants to teach. There is an emphasis on skills essential to a reader of nonfiction such as finding the main idea and supportive details, using text features to find information, questioning, figuring out new content-specific vocabulary, and applying analytical thinking skills to compare and contrast nonfiction texts on the same topic.

Character Studies

In this unit of study, students will compare and contrast the themes, setting, plots, and characters of stories in a series. Students will carefully examine main characters in a series to determine how the characters may grow and change over time and to revise their initial theories about the characters. They will meet in a book club with other readers using accountable talk to facilitate productive discussions.

Grade 3 Math Unit Descriptions

AISC teachers use Bridges in Mathematics as a core resource that is designed to develop children's mathematical thinking and reasoning abilities. Students will engage in age-appropriate problems and investigations in the areas of numbers, operations, algebraic thinking, measurement, data, and geometry. Some of these problems and investigations grow out of ventures into everyday life like reading stories, playing games, exploring interesting aspects of the environment, buying and selling at the market, and conducting simple hands-on science experiments, while others delve more deeply into the world of mathematics itself. Students are encouraged to explore, develop, test, discuss, and apply ideas; to see mathematics as something that is fluid, vibrant, creative, and relevant.

Mathematics Content Standards

This year, students focus intensively on the four critical areas specified by the Common Core State Standards (CCSS) for Mathematics in Grade 3: first, developing understanding of multiplication and division and strategies for multiplication and division within 100; second, developing understanding of fractions, especially unit fractions (fractions with numerator 1); third, developing understanding of the structure of rectangular arrays and of area; and fourth, describing and analyzing two-dimensional shapes.

Bridges Grade 3 includes eight units of study. Much of the work in Unit 1 provides students with opportunities to review and extend skills and concepts from the previous grade level, including addition and subtraction to 20, double-digit addition and subtraction, and linear measurement.

During Unit 3, students learn to round whole numbers to the nearest 10 or 100. They apply this skill to estimating the results of multi-digit problems while developing increasingly efficient methods, including use of the standard algorithms for adding and subtracting within 1,000.

Units 2, 5, and 7 focus on multiplication and division. Students work with several models, including groups of equal sizes, the number line, and rectangular arrays, as they transition from additive to multiplicative thinking. The associative, commutative, and distributive properties help students find efficient and

generalizable strategies for multiplication with products to 100, multiples of 10, and 1-digit-by-2-digit combinations.

In the first half of Unit 4, students work with measurement and estimation of time, mass, and liquid volume. The latter half of the unit features work with fractions, culminating in several sessions around line plots. Fractions, multiplication, and division appear regularly throughout the rest of the year in a variety of contexts, connecting these concepts and operations with everyday experiences and helping students develop a repertoire of models and strategies for working with them.

In Unit 6, students develop precise ways to describe, classify, and make generalizations about twodimensional shapes. Students categorize polygons, with a special focus on quadrilaterals, according to their shared attributes. Then they measure and calculate the perimeters and areas of various polygons. Shapes, area, and fractions come together at the end of the unit when the largest square that can be formed on a geoboard is assigned an area of I unit, and students determine the (fractional) areas of different regions on the board.

In the final unit of the year, in collaboration with our STEM department, students use science and engineering explorations to revisit and cement the skills students have built in the previous units while providing a foundation for work they'll begin in Fourth Grade. Students make and test model bridges of different kinds to investigate factors that allow bridges to span longer distances and support greater loads. In the process, they generate data by measuring length and mass; organize and visualize data in tables, line plots, and bar graphs; plan and manage their own time while designing models and experiments; and predict and analyze how geometric shapes and materials they choose affect their models' performance.

Standards for Mathematical Practice

The standards for mathematical practice from CCSS help us identify the types of thinking behaviors that we can expect and cultivate in our math learners. Below, we have listed some of the key practice standard manifestations of Grade 3 Mathematicians.

Perseverance: Third Graders consider the meaning of a problem and look for appropriate, efficient ways to solve it. They use concrete and visual models as well as expressions and equations to represent, understand, and solve problems. They try different approaches when necessary, evaluate whether their solutions make sense in the context of the problem, and use alternative methods to check their answers.

Modeling: Third Graders represent mathematical situations with numbers, words, sketches, actions, charts, graphs, expressions, arrays, and ratio tables. They learn to connect these models and explain the connections among them. They use models not only as a way to represent problems, but also as tools for solving them and developing deeper understanding of the mathematics.

Reasoning: Third Graders refine their mathematical communication skills by using words (written and spoken) and symbols (equations and expressions) to clarify their thinking. They support the representations they have made with sketches or objects, and they explain and justify their own strategies and solutions. They also ask specific questions to better understand and evaluate other students' reasoning.

Patterning: When considering mathematical situations and solving problems, Third Graders seek out patterns and notice structure. They use what they notice to solve problems and develop deeper conceptual understandings.

Grade 3 Science Unit Descriptions

Ecosystems

With the local ecosystems as the backdrop, students explore the life cycles and traits of living organisms found there. They investigate how natural and man-made changes have impacted the marsh, the plant and animal life, and the local community. Students explore what can be done to protect the marsh and raise awareness of environmental impact.

Forces and Interactions

Students determine the effects of balanced and unbalanced forces on the motion of an object and engage in inquiry to discover some cause and effect relationships of magnetic interactions between two objects not in contact with each other. They are then able to apply their understanding of magnetic interactions to define a simple design problem that can be solved with magnets.

Grade 3 Social Studies Unit Descriptions

Legacies of the Past

Students develop an understanding of the idea that historical sources provide insight into cultural and environmental changes over time. They further develop their understanding by inquiring into how culture influences the way people modify and adapt to their environments. They then compare life in specific historical time periods to life today.

Children's Rights

Students develop an understanding of the idea that everyone has a responsibility to protect human rights and treat others fairly. They further develop their understanding by inquiring into rights and rules developed to protect citizens, points of view on civic issues, the relationship between incentives and decisions, and how individuals and groups influence human rights.



GRADE 4

Grade 4 Writing Overview

This unit develops students' ability to write focused pieces that are planned, rehearsed, revised and edited. The students follow the Writing Process.

The following Writing Units of Study are completed in Grade 4: The Arc of Story, Boxes and Bullets, Bringing History to Life, and Literary Essay.

Grade 4 Writing Unit Descriptions

The Arc of Story

Students learn that fiction writers get their ideas from paying attention to the moments and issues in their lives. Students will collect a few true small moment stories to help launch into fictionalizing those moments. Children develop ideas about their character traits incorporating internal and external traits. Students delve deeper into developing three dimensional characters. Students will think critically about what a character wants and needs. Story arcs will be introduced to help students with the planning, drafting and revising process. The story arc will help students show how stories with two to three strong scenes can successfully show a character, plot, and even setting change over the course of the story.

Boxes and Bullets

Students learn the value of organization and form as they gather evidence to support and express an opinion on topics they know well. Students will learn a variety of more sophisticated strategies for introducing their topics and providing reasons to support their opinions with facts and details to elaborate on these reasons. They will learn to create pieces that are more cohesive by incorporating more sophisticated transition words. Students will also develop persuasive opinions that are more generalized and develop a plan for a persuasive essay.

Bringing History to Life

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. In this unit, students learn the foundations of research report writing, as they dive deep into the project of writing more than one research report. As part of their research, they work with citations, primary documents, conflicting views on a subject and the challenge of synthesizing information into logically structured pieces of writing. Students will work to introduce a topic and group related information, and then develop the topic, elaborating with facts, definitions and details. Students will learn sophisticated ways to organize their writing, such as including formatting, headings and subheadings, and to include information that is rich, detailed and concrete.

Literary Essay

To write well about reading, students not only need to learn more about writing; they also need to learn more about reading. Throughout this unit, students will be taught the value of close reading of complex texts. Students will learn to closely read and write about the literature they are reading. Students will focus on arguing for ideas about characters while carrying forward what they have been taught about planning and drafting a boxes-and-bullets essay, writing introductions and conclusions, and showing evidence from the book. Students will continue to draft stories while focusing on writing more interpretively and analytically. While writing about favorite texts, novels, read-alouds, and short stories, students will learn to resist closure on an issue, to value complexity, and to commit themselves to examining all sides of an issue with the most open mind possible.

Grade 4 Reading Overview

Through the Reading Workshop pedagogy, students continue to develop reading behaviors. They are introduced to a range of genres and will continue to build reading stamina. Students use different reading strategies to develop their comprehension and write about their reading to provide evidence of their understanding. Students are assessed throughout the year using running records to check for their reading fluency, literal comprehension, ability to make inferences and retelling. The reading units are Interpreting Characters: Interpreting Characters, Reading the Weather, Reading History, and Historical Fiction Clubs.

Grade 4 Reading Unit Descriptions

Interpreting Characters

Students learn how to build a reading life and get started doing the work readers do. They will be inducted into the structures, routines, and habits of a richly literate Reading Workshop. Students also make places for reading in their homes; it is helpful to develop habits, tools, and places that support reading not only in the Reading Workshop but also across people's whole lives.

Children will be taught to read intensely to grow ideas about their characters. There is an emphasis on growing significant, text-based ideas about characters. Here, the focus will shift to help readers think in more complex ways about characters by drawing evidence-based conclusions, tweaking their ideas so they are grounded in the text and defensible. Students will further their understanding by shifting their focus from studying characters to building interpretations. Students will connect ideas to form interpretations that are supported across a whole text, conveying to students that there is no one-and-only correct way to interpret literature.

Reading the Weather, Reading the World

In this unit, students will be taught the skills that are becoming the new essentials for researchers. Students learn to read in a such a way that they can summarize a text, leaning on the text structure to help them determine importance. Working hard to form a basic understanding of the topic, that first text can provide a context to reading denser and more difficult texts. Students will be launched into studies of hurricanes, tornadoes, earthquakes, and tsunamis. Teaching will support the skill of synthesis channeling children to think about how new information can add to or change information they have already learned. Students will practice the skills of close reading as well as comparing and contrasting. They will compare and contrast not only the content of what they are learning but also the tone and craft between texts. Readers practice the skill of evaluating the sources to determine their credibility.

Reading History

This unit builds upon the work of the first Fourth Grade nonfiction unit and guides students on a journey of learning to read like historians. Students embark on a research project on the events leading up to the American Revolution. Student begin building their knowledge about the era by reading accessible texts. Students will learn that researchers pay attention to text structures in order to organize their notes and their thinking. Synthesizing new information into what the students already know will be an important aspect of this unit. Paying special attention, as historians do, to the people, geography, and the chronology of the event they are studying is another skill students will learn. Students will understand that historians learn about multiple points of view in order to gain a more complete picture of events in the past.

Historical Fiction Clubs

Students practice reading analytically, synthesizing complicated narratives, comparing and contrasting themes, and incorporating nonfiction research into their reading. This is a unit on reading skills, specifically

on developing ideas about characters, determining themes, inferring within a text, comparing and contrasting texts, synthesizing and analyzing across text, and talking and writing about reading.

When reading historical fiction, readers pay close attention to "Story Elements: Time, Plot, Setting." The novels themselves are inherently complex. The characters live in places in which our students have not lived, in times they have not known. Readers must figure out the nature of the setting, the ways people live, and not just who the characters are but also the relationships the characters have to historical tensions; this will offer more work around "Analyzing Author's Craft." Students will realize during this unit that reading is, really, about learning how to live. In Book Clubs, children read in the company of friends where they consider which perspectives are missing and which characters' voices and thoughts are not being heard. This will ramp up their work in "Analyzing Perspective." These clubs are important because it is helpful for young people to develop interpretations in the company of others. The shared pleasure of reading with friends matters when the goal here is to help kids author lives in which reading matters.

Grade 4 Math Unit Descriptions

AISC teachers use Bridges in Mathematics as a core resource that is designed to develop children's mathematical thinking and reasoning abilities. Students will engage in age-appropriate problems and investigations in the areas of numbers, operations, algebraic thinking, measurement, data, and geometry. Some of these problems and investigations grow out of ventures into everyday life, while others delve more deeply into the world of mathematics itself. Students are encouraged to explore, develop, test, discuss, and apply ideas; to see mathematics as something that is fluid, vibrant, creative, and relevant.

Mathematical Content Standards

This year, students focus intensively on the three critical areas specified by the Common Core State Standards (CCSS) for Mathematics in Grade 4: first, developing understanding and fluency with multi-digit multiplication, and developing understanding of dividing to find quotients involving multi-digit dividends; second, developing an understanding of fraction equivalence, addition and subtraction of fractions with like denominators, and multiplication of fractions by whole numbers; and third, 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.

Bridges Grade 4 includes eight units of study. Much of the work in Unit 1 provides students with opportunities to explore multiplication and division, focusing in particular on models, strategies, and multiplicative comparisons.

During Unit 2, students continue to build multiplicative reasoning as they work with multi-digit multiplication and early division. Later in the year, during Unit 6, students revisit multiplication and division as they explore the many connections between the two. Unit 6 is rich with opportunities to model and solve problems, share and explain strategies, play games, and apply computational skills and concepts in a variety of contexts.

During Unit 3, students focus on fractions and decimals. They work with a variety of tools, including folded paper strips, egg cartons, geoboards, number lines, and base ten pieces, to model, read, write, compare, order, compose, and decompose fractions and decimals.

In Unit 4, students study addition, subtraction, and measurement concepts. They compare the use of algorithms to other methods and make generalizations about which work best for certain problems. The measurement concepts in this unit include length and distance, liquid volume, time, mass, and weight.

During Unit 5, students are formally introduced to a host of new geometric concepts, including angles and angle measure, parallel and perpendicular lines, and reflective symmetry. They also measure the area and perimeter of rectangles, making generalizations that support the introduction of the formulas for both.

Unit 7 offers a review of material covered earlier in the year, as well as opportunities to extend skills and concepts into working with larger numbers and bigger ideas. Early in the unit, students investigate a variety of shape and number sequences, looking for patterns that will enable them to extend each sequence and state the general rule that produced it. In the second module, they hone their skills at choosing and writing equations to represent multi-step number and word problems. In the latter half of the unit, they review some of the strategies they have developed for multi-digit multiplication over the year, and explore the standard multiplication algorithm.

In collaboration with our STEM teachers, the final unit of the year uses science and engineering explorations to revisit and cement the mathematical skills students have built in the previous units while providing a foundation for work they'll begin in Fifth Grade. Students design and build scaled model playgrounds that incorporate simple machines. They experiment with simple machines, conduct research to help them make decisions about safety issues, survey the school community to find the most important playground items to use in their designs, and use spreadsheet software to analyze the data they collect. They then use the information to create a scaled map of their designs and to build a scaled 3D model.

Standards for Mathematical Practice

The standards for mathematical practice from CCSS help us identify the types of thinking behaviors that we can expect and cultivate in our math learners. Below, we have listed some of the key characteristics of Grade 4 mathematicians.

Perseverance: Fourth Graders consider the meaning of a problem and look for appropriate, efficient ways to solve it. They use concrete and visual models as well as expressions and equations to represent, understand, and solve problems. They try different approaches when necessary, evaluate whether their solutions make sense in the context of the problem, and use alternative methods to check their answers.

Reasoning: Fourth Graders refine their mathematical communication skills by using words (written and spoken) and symbols (equations and expressions) to clarify their thinking. They support the representations they have made with sketches or objects, and they explain and justify their own strategies and solutions. They also ask specific questions to better understand and evaluate other students' reasoning.

Modeling: Fourth Graders represent mathematical situations with numbers, words, sketches, actions, charts, graphs, equations, arrays, and ratio tables. They learn to connect these models and explain the connections among them. They use models not only as a way to represent problems but also as tools for solving them and developing deeper understanding of the mathematics.

Grade 4 Science Unit Descriptions

Natural Disasters

This unit explores how sudden geological changes or extreme weather conditions can affect the Earth's surface. Students are introduced to natural forces through an examination of natural hazards. They see how these natural events become disasters when they impact people, and how engineers help to make people safe from them. Students apply their knowledge of natural disasters and resulting damage as they work individually or in groups to design solutions that reduce the impacts of hazards on humans. This unit is taught in conjunction with the reading unit, Reading the Weather, Reading the World.

Sound Waves

Students develop an understanding of the transfer of energy through waves which affects humans in various ways. They further develop their understanding by inquiring into patterns that waves follow, how waves cause objects to move, and the transfer of energy through waves. Students develop models of waves to explain energy transfer, transformation, and the particulate nature of matter.

Grade 4 Social Studies Unit Descriptions

Making a Difference

Students develop an understanding of the idea that throughout time, people have been motivated to make a difference. They further develop their understanding by inquiring into the variety of reasons that people are motivated to make a difference, the different perspectives of people based on beliefs, experiences, and values, and the idea that anyone can make a difference.

Global Trade

Students develop an understanding of the idea that trade supports global economies. They further develop their understanding by inquiring into the needs and wants that are met through trade, the economic interdependence that develops through trade, and cultural and environmental elements that affect the distribution and movement of people, goods, and ideas.



GRADE 5

Grade 5 Writing Overview

Through Writer's Workshop pedagogy, students will begin the year by consolidating writing behaviors. They will then hone their writing skills in the genres of Shaping Texts: From Essay And Narrative To Memoir; Navigating Nonfiction: Using Text Structures to Comprehend; Writing Fiction; Big Dreams; Tall Ambitions; Little Things Are Big; Making Meaning from Poems and Poetic Craft in Literature, and The Research-Based Argument Essay. Students will have the opportunity to explore the work of established authors across these different genres.

Students will gather ideas, draft relevant pieces, revise, edit and publish work for sharing.

For each genre, a published piece of work will be assessed against a rubric which addresses desired skills of the genre, allied with the Common Core Writing Standards for Fifth Grade.

Grade 5 Writing Unit Descriptions

Narrative Craft

During this unit, most children write two focused personal narrative stories and then select one for further revision, editing, and publication. The major "bends in the road" of the unit teach children: how

to find the beauty in small moments, drafting seed ideas, revising a timeline, making a movie in their minds whilst envisioning the story, and editing and recopying the draft as their best. Also important in this unit is checking their use of end punctuation, capitals, paragraphs, and spellings of high-frequency words.

The Lens of History

Through the art of writing research reports, students will learn from informational texts and write informational texts that teach others in engaging ways. Students will learn how to use primary and secondary resources in their informational writing. Students will analyze what writers do to shape their craft, add structure, and provide perspective. In this unit, students will learn to angle their research reports in compelling ways.

Shaping Texts

This unit helps students recognize significant events in their lives and write about these events reflectively. Students will understand that a memoir is a piece of writing that demonstrates a personal epiphany or journey that has transformed them. This piece of writing is written about a single, or collected number of events in the past, and is written in the first-person narrative. Although based on a real event or events, it can be embellished for the purpose of entertaining the reader.

The Literacy Essay Argument Essay

Students learn to develop a solid argument by researching both sides of an issue. Students read critically and evaluate data collected, examine it for flaws and present their findings persuasively to an audience. Students will be guided to understand how to develop a solid argument.

Grade 5 Reading Overview

Through Reader's Workshop pedagogy, students will begin the year by consolidating reading behaviors. They will then build stamina across a range of genres, making their thinking visible and writing coherently about their reading. They will keep a reading log to track their reading habits.

The reading units are: Interpretation Book Clubs, Tackling Complexity, Argument and Advocacy, and Fantasy Book Clubs. Within each unit, students will be assessed against the Common Core Reading Standards for Fifth Grade.

Grade 5 Reading Unit Descriptions

Interpretation Book Clubs

In this unit, students will read closely to grow and formulate theories about characters. Students will also notice that sometimes the author offers windows into a character's mind by writing passages exposing the character's thoughts or offering an explanation of a character's motives.

Tackling Complexity

Much of the work in Fifth Grade informational reading is similar to the work students were expected to do in Fourth Grade, but Fifth Graders are now expected to do this work with greater independence and complexity. Students will explore text features of the genre and will be expected to use these features to glean further information about a topic.

Argument and Advocacy

This unit helps students develop the reading strategies and the skills that enable them to read critically and to think deeply, especially about power, relationships, and social issues. The skills that students will use to improve their reading of texts, like empathy, critical reading, and interpretation, are skills they can also use to "read" their worlds and to inform the way they live their lives.

Fantasy Book Clubs

In this unit, students explore elements of fantasy. They specifically think about how understanding these elements, as a reader, helps to build expertise as a writer. Students work in pairs to follow a Book Club routine in preparation for larger-group Book Clubs later in the year.

Grade 5 Math Unit Descriptions

AISC teachers use Bridges in Mathematics as a core resource that is designed to develop children's mathematical thinking and reasoning abilities. Students will engage in age-appropriate problems and investigations in the areas of numbers, operations, algebraic thinking, measurement, data, and geometry. Some of these problems and investigations grow out of ventures into everyday life, while others delve more deeply into the world of mathematics itself. Students are encouraged to explore, develop, test, discuss, and apply ideas: to see mathematics as something that is fluid, vibrant, creative, and relevant.

This year, students focus intensively on the three critical areas specified by the Common Core State Standards (CCSS) for Mathematics in Grade 5: first, 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); second, extending division to 2-digit divisors, integrating decimal fractions into the place value system and developing understanding of operations with decimals to hundredths, and developing fluency with whole number and decimal operations; and third, developing understanding of volume.

Bridges Grade 5 includes eight units of study. In Unit 1, students use the study of volume to review and extend a host of skills and concepts related to multiplication. They use expressions with parentheses to represent different rectangular prisms, find the surface area of boxes, develop multi-digit multiplication strategies to solve real-world and mathematical problems, and revisit multiplication and division through the lens of the area model. Much of Unit 2 centers on students adding and subtracting fractions with unlike denominators, using a variety of strategies to find common denominators.

The focus shifts to decimals in Unit 3 as students read, write, and compare decimals as well as round and examine the decimal patterns of multiplying and dividing numbers by 10. Students use their place value

understandings to convert within a measurement system, and add and subtract decimals to hundredths.

In Unit 4, students return to the study of multiplication and division strategies, including the standard multiplication algorithm. The teacher formally introduces the algorithm after reviewing the area model and partial products. Students also use the area model and ratio tables to help with understanding long division.

During Unit 5, students extend their understandings of multiplication and division to working with fractions. Early in the unit, students review and extend skills and concepts first introduced in Grade 4 to solidify their understandings of whole number-by-fraction multiplication. Then they use rectangular arrays to model and solve fraction-by-fraction multiplication problems. The end of the unit features an introduction to division of whole numbers by unit fractions, and unit fractions by whole numbers.

Unit 6 formally introduces students to several new geometric concepts, including coordinate graphing and the use of hierarchies to classify two-dimensional shapes by their properties. Students also review volume, working from counting the cubes that will fit into a box to measuring prisms in continuous units and using standard formulas to find their volumes. During Unit 7, students continue their study of division, including its relationship to multiplication. Early in the unit, students find partial quotients as they divide 3- and 4-digit dividends by 2-digit divisors. They also investigate scenarios involving rate, which leads to the strategy of finding equivalent ratios to solve division problems, even when the numbers are fractions.

In the final unit of the year, in collaboration with our STEM team, students design and build scaled model houses that incorporate solar energy features. They begin by investigating different aspects of solar energy, like reflection, absorption, concentration, and ways to collect and store the sun's rays. They analyze their data to inform their own design, using both spreadsheet software and graph paper. While students investigate these science principles, they apply many math skills they've learned throughout the year, including work with fractions, decimals, volume, surface area, conversions within measurement systems, and points in the coordinate plane.

Standards for Mathematical Practice

The standards for mathematical practice from CCSS help us identify the types of thinking behaviors that we can expect and cultivate in our math learners. Below, we have listed some of the key characteristics of Grade 5 Mathematicians.

Perseverance: Fifth Graders consider the meaning of a problem and look for efficient ways to represent and solve it. They apply their understanding of operations with whole numbers, decimals, and fractions, including mixed numbers. They try different approaches when necessary, evaluate whether their solutions make sense in the context of the problem, and use alternative methods to check their answers.

Reasoning: Fifth Graders refine their mathematical communication skills by using words (written and spoken) and symbols (equations and expressions) to clarify their thinking. They support the representations they have made with sketches or objects, and they explain calculations based upon models and properties of operations and rules that generate patterns. They explain and justify their own strategies and solutions. They also ask specific questions to better understand and evaluate other students' reasoning.

Modeling: Fifth Graders represent mathematical situations with numbers, words, sketches, objects, charts, lists, graphs, and equations. They learn to connect these models and explain the connections among them. They use models not only as a way to represent problems, but also as tools for solving them and developing deeper understanding of the mathematics. They also evaluate the utility of models to determine which models are most useful and efficient to solve problems.

Grade 5 Science Unit Descriptions

Web of Life

Students develop an understanding that energy for life is derived from the sun. They learn that the food materials and energy that our bodies use for growth ultimately come from plants. Plants, in turn, derive materials they need for growth, chiefly from air and water and energy from the sun. Throughout the unit, students create and revise models describing the movement of matter among plants, animals, decomposers, and the environment.

Space Exploration

Students develop an understanding that planet Earth is a tiny part of a vast universe that has predictable and observable patterns. They further develop their understanding by inquiring into how relative distance affects the appearance of stars and can be used to explain patterns of motion and change in relation to the sun, moon, and stars. Students also begin to explore how the regular and predictable patterns of motion of Earth and the moon, relative to the sun, can be described as a result of the force of gravity.

Grade 5 Social Studies Unit Descriptions

Human Movement

Students develop an understanding of the idea that human migrations are initiated by many factors and impact societies, economies, and cultures. They further develop their understanding by inquiring into the various perspectives surrounding migration, the positive and negative impacts of migration, and the causes and effects of human migration, both historically and in current day.

Advocacy for Change

Students develop an understanding of the idea that people can impact their society by advocating for change. They further develop their understanding by inquiring into various systems that exist to provide order and services, ways citizens can influence governing bodies, and how citizens contribute to the lives of others. Students then choose a community problem, conduct research, and create a plan for taking action. Finally, students implement their plan by taking action, which could include: speeches, social media posts, videos to inform, political art, etc.

Experiential Learning Opportunities

Design Studio/MakerSpace

Our Design Studio is a hands-on collaborative work space inside our Elementary School for making, learning, exploring, and sharing. We have a huge variety of high-tech to no-tech tools. This space is open to our student makers and entrepreneurs and have a variety of maker equipment, including laser cutters, soldering irons, hand tools, and even sewing machines. We also have cardboard, Legos and art supplies where children can create something out of nothing! This space is helping to prepare our students with critical 21st century skills in the fields of science, technology, engineering, and math (STEM). Focusing on hands-on learning, students engage with critical thinking skills and learn simple electronics, 3D modeling, robotics, and even woodworking.

Elementary Kitchen

Our Elementary Kitchen is a newly designed space for our Elementary Students to explore, prepare, and cook with food—often food that is grown in our own gardens here at AISC. With careful supervision, children experiment with a range of recipes and make incredible growth in this vital hands-on learning area. These range from basic kitchen skills like using knives and other equipment, to making fresh pasta and pasta sauce to be enjoyed for lunch.

Elementary Garden

Tucked away in prime growing conditions behind the FAC Building are a series of raised garden beds for Elementary classes to adopt in their "adopt-a-garden" project. Classes sign up to adopt a garden which includes preparing the garden beds, seeding, planting, growing, harvesting, and eventually cooking and eating the fruits of their success. Teachers make connections to many curricular areas, in particular, science, math, and visual arts.

Passion Projects

Grade 5 classes, and some other students, engage in Passion Projects for part of their home learning and exploration. Teachers devote some class time, and students use home learning time, for students to embrace their passions and find ways to develop their skills and learning. Passion Projects capture the joy of learning while integrating content areas and "life skills," including reading, writing, and oral communication. Students share their Passion Projects with an audience at set times during the school year, often using technology to reflect and share. These celebrations give students opportunities to showcase their creativity and celebrate their hard work. Passion project topics have included cooking, calligraphy, environmental awareness campaigns, student advocacy, sports, music and creative writing.

Field Trips

Field trips are recognized as important opportunities for learning: a shared social experience that provides the opportunity for students to encounter and explore novel things in an authentic setting. These are some of the best tools we can use to provide every student with real-world experiences. Whether that's a trip to The Farm, Pallikaranai Marsh, Seva Samajam, The Tree Foundation, or the community garden, each experience that a student participates in contributes to their understanding of the world. These experiences provide opportunities for students to see that what they learn within the walls of the classroom can help them solve the problems they see in the world around them. Each experience solidifies learning and supports important academic concepts.

Vision Projects/Vision Week

We believe in the power of Project-Based Learning, which provides learners with the opportunity to investigate and respond to an authentic, engaging, and complex question, problem, or challenge. During Vision Project Week, students in Grades 3–5 will join multi-age teams to work on projects that engage them in solving a real-world problem or answering a complex question. Project frameworks have been created by upper Elementary teachers, specialist teachers, coaches and administrators, and encompass a wide variety of topics or focus areas. Each child in Grades 3–5 will be given an opportunity to select from a menu of these projects to be involved in for a whole week of the year. Each project is run by two to three teachers, supported by teacher assistants and is hosted in a variety of settings, some on the AISC campus, and some off campus. Many projects involve consulting with outside experts who visit campus or via field trips. Project teams will demonstrate their knowledge and skills by developing a public product or presentation for a real audience. As a result, students develop deep content knowledge as well as Vision for an AISC Learning attributes in the context of authentic, meaningful projects.

Student Council

The Elementary Student Council is a group open to all interested students in Grades 4 and 5. The Elementary Student Council's purpose is to help students grow as responsible leaders. Members begin the year by creating working norms for our council to support our goals. At our weekly recess and lunch meetings, students have the opportunity to collaborate and share ideas with their peers. Members also plan and organize various events throughout the year which reach out to the Elementary student body at AISC, and at times, the AISC community, and the community of Chennai.

Roots and Shoots

Our Elementary students care about the environment! Roots and Shoots is an environmentally focused club for students who want to make an impact to help animals, people and the environment. Students collaborate with their club advisors to decide on a problem to address in the local ecosystem, learn about how to help, and take action through service. They also participate in learning field trips to deepen their own understanding and empathy. Roots and Shoots participants have helped raise awareness and

contribute to the improvement of elephant treatment, sea turtle habitats, and other environmental issues. Participation in Roots and Shoots is open to students in Grades 3–5, and is focused on the work of world renowned environmentalist, Jane Goodall.

Learning Celebrations

About twice per year, every AISC student in Grades I to 5 has an opportunity to share their learning through a Learning Celebration. We believe that students need opportunities to share their learning with an audience of parents and peers. We also value students' presentation skills and the development of audience behaviors. These Learning Celebrations are not intended to be polished, highly rehearsed events; rather, they are a snapshot of the in-class learning provided through the students' lens. Students might share the work done in their homeroom classes or their specialists studies. Kindergarten students join us in the second half of the year as audience members, and have at least one opportunity to share.





ELEMENTARY SPECIALIST SUBJECT AREA PROGRAMMATIC OVERVIEWS

Physical Education Program Overview

The AISC Elementary PE department strives to ensure that students are involved in a process of self-awareness, self-reflection, and improvement that focuses on the interconnectedness of physical, social, and emotional health in an environment of physical and emotional safety. Through our Physical Education program, students gain an understanding of movement patterns and routines, body and spatial awareness and apply these in physical challenges such as different athletic or sporting contexts. Students engage with different social contexts to learn, practice, apply and enhance their developing movement skills.

Lower Elementary Program Overview

The Lower Elementary Physical Education program develops the foundations of effective movement, social interactions, and intrinsic motivation through the context of physical and movement activities.

Students are encouraged to explore a variety of movement patterns and new social contexts. Students in this program learn the foundational skills of locomotor and manipulative movements while attaining vocabulary and knowledge that contribute to lifelong wellbeing.

Upper Elementary Program Overview

The Upper Elementary Physical Education program fosters student collaboration, strategic thinking, and student autonomy through the context of physical and movement activities. Students are encouraged to step outside of their comfort zones in social, cognitive, and physical challenges that meet the needs of each individual child. Students in this program learn the skills required to perform a variety of movement activities and also learn to understand and practice behaviors that contribute to lifelong wellbeing.

Kindergarten PE Unit Descriptions

Initiative & Collaborative Challenge

Students will be introduced to routines and behaviors for safe and enjoyable participation in Physical Education. Students will participate in games and activities that develop self confidence, cooperative skills, and empathy. Through participation in this unit, students will identify activities, inside and outside of the classroom, that they perform for enjoyment and challenge.

Movement Competency

Students will be introduced to a range of locomotor, stability, and manipulative skills that they will be able to identify and practice for increased coordination, balance, and movement accuracy. Through participation in discrete practice and organized games, students will begin to apply some fundamental movement skills and reflect on how these activities affect their bodies.

Aquatics

The Red Cross Swimming standards provide a framework for students to be appropriately levelled and challenged in aquatic activities. Students will work on various skills, from blowing bubbles to basic rescue techniques and water survival skills while learning and refining the core swimming strokes. Through participation in the Aquatics program, students increase water-related movement competency and gain safety knowledge for enjoyment in and around water.

Grade I PE Unit Descriptions

Initiative & Collaborative Challenge

Students will continue to apply the rules and parameters of participation in individual and group activities during PE lessons. Activities that provide physical and cooperative challenges that are designed to demonstrate positive outcomes. Through participation in challenge activities, students will be introduced to the association of perseverance and resilience to desired solutions.

Movement Competency

Students will continue to refine simple locomotor, stability, and manipulative skills. They will be able to demonstrate increased coordination, balance, and movement accuracy and begin to add speed, strength, and fluency to these movements. Through participation in low organized games, students will begin to apply fundamental movement and equipment manipulative skills.

Aquatics

The Red Cross Swimming standards provide a framework for students to be appropriately levelled and challenged in aquatic activities. Students will work on various skills, from blowing bubbles to basic rescue techniques and water survival skills while learning and refining the core swimming strokes. Through participation in the Aquatics program, students increase water-related movement competency and gain safety knowledge for enjoyment in and around water.

Grade 2 PE Unit Descriptions

Initiative & Collaborative Challenge

Roles and responsibilities of individuals in team challenges. Students will begin to be able to describe and apply the rules and parameters of successful participation in individual and group activities during PE lessons. They will work together in activities that provide physical and cooperative challenges to solve problems designed to demonstrate positive outcomes. Through participation in challenge activities, students will make connections between perseverance, resilience, and desired solutions.

Movement Competency

Students will refine simple, and be introduced, to more complex locomotor, stability, and manipulative skills. They will demonstrate increased coordination, balance, and movement accuracy and begin to add speed, strength, power, and fluency to these movements. Through participation in low organized games, students will begin to apply fundamental movement and equipment manipulative skills with greater precision.

Aquatics

Grade 3 PE Unit Descriptions

Movement Competency

Integrated into each strand of the Upper Elementary PE program is Movement Competency. Students will develop movement and manipulative skills through practice, training, and implementation in both a broad sense and in specific contexts within the other strands of PE. Students will understand themselves as movers, understanding strengths and areas for improvement with respect to the components of fitness. Students will learn, through regular participation, how physical, emotional, and mental health are combined for holistic wellbeing.

Initiative and Collaborative Challenge

Students will participate in individual and group challenge activities that require effective communication of their ideas and managing of emotions to solve problems and create positive outcomes. Students will understand the need for perseverance and the role of individuals in achieving team goals.

Games and Sports

Students will begin to understand a way of categorizing games that have a common tactical approach. Students will participate in small-sided games that require decision making to maintain possession in Territorial Games and maintain a rally in Net Games. Students will begin to understand how space is a key concept in games. Students will continue to develop movement competency through use of equipment related to a specific game or modified sporting context.

Lifestyle & Recreational

Lifestyle and recreational activities are those which can enhance health and wellbeing across the lifespan. They include individual, group and active recreation activities. The specific context of these activities vary from year to year in the PE program and are determined by a combination of factors including student interest, teacher specialty, and geographic and cultural opportunities. Examples of these activities include but are not limited to distance running, cycling, skating, sprinting, pilates, kayaking, badminton, swimming, outdoor adventure, and rock climbing.

Aquatics

Grade 4 PE Unit Description

Movement Competency

Integrated into each strand of the Upper Elementary PE program is Movement Competency. Students will develop movement and manipulative skills through practice, training and implementation in both a broad sense and in specific contexts within the other strands of PE. Students will understand themselves as movers, understanding strengths and areas for improvement with respect to the components of fitness. Students will learn, through regular participation, how physical, emotional, and mental health are combined for holistic wellbeing.

Initiative and Collaborative Challenge

Students will participate in challenge activities that will require them to use a range of problem solving activities, making decisions as an individual and a group member. Students will refine communication strategies to effectively make positive contributions towards desired outcomes in individual and group activities.

Games and Sports

Students will continue to explore the categorizing of games that have common tactical approaches. Students will participate in small-sided games that require decision making to set up an attack, then win a point in Territorial and Net Games. In Striking and Fielding small-sided games, students will utilize and defend available space depending on the team role. Students will continue to refine their movement competency through the use of equipment related to a specific game or modified sporting context.

Lifestyle & Recreational

Lifestyle and recreational activities are those which can enhance health and wellbeing across the lifespan. They include individual, group and active recreation activities. The specific context of these activities vary from year to year in the PE program and are determined by a combination of factors, including student interest, teacher specialty, and geographic and cultural opportunities. Examples of these activities include but not limited to parkour, cycling, skating, resistance training, pilates, CrossFit, kayaking, outdoor adventure, and rock climbing.

Aquatics

Grade 5 PE Unit Descriptions

Movement Competency

Integrated into each strand of the Upper Elementary PE program is Movement Competency. Students will develop movement and manipulative skills through practice, training and implementation in both a broad sense and in specific contexts within the other strands of PE. Students will understand themselves as movers, understanding strengths and areas for improvement with respect to the components of fitness. Students will learn—through regular participation—how physical, emotional, and mental health are combined for holistic wellbeing.

Initiative and Collaborative Challenge

Students will participate in challenge activities that will require them to consider differing points of view when developing solutions. They will be required to communicate ideas confidently, make informed decisions, and accept consequences of the decisions made. Students will understand the need to behave in a manner that enhances their own contribution and one that values the cooperation of others.

Games and Sports

Through a tactic to skill approach to Games, students will strategically apply movement and manipulative skills with greater refinement. Students will understand the relationship between attackers and defenders through small-sided and lead-in games. Students will be introduced to more specific skills and rules from known sports.

Lifestyle & Recreational

Lifestyle and recreational activities are those which can enhance health and wellbeing across the lifespan. They include individual, group and active recreational activities. The specific context of these activities vary from year to year in the PE program and are determined by a combination of factors, including student interest, teacher specialty, and geographic and cultural opportunities. Examples of these activities include but not limited to parkour, cycling, skating, resistance training, pilates, CrossFit, kayaking, outdoor adventure, and rock climbing.

Aquatics



DANCE AND GYMNASTICS

Dance Program Overview

Through creative dance, a concept-driven dance genre that combines the mastery of movement with the artistry of expression, students will develop a basic movement and dance vocabulary, body awareness, body control, coordination, strength, and flexibility to confidently communicate using the body. This whole-body approach allows for effective artistic expression and injury-free dancers. We will also investigate what influences choice-making in creating choreography. Through the elements of dance, dance improvisation, and other choreographic devices, students will create movement which will be incorporated into future choreography.

Lower Elementary Dance and Gymnastics Program Description

K-Grade 2 students will begin this unit by focusing on body control, awareness, alignment, and coordination. Once these introductory concepts are established, students will then consider the many different shapes, parts, relationships, directions, levels, and pathways the body can move in space. Our five-part class structure will include an introduction to the day's concept followed by a warm-up, concept exploration, technique, choreography, and a cool-down where students will have the opportunity to reflect on the day's lesson. As students progress through the Lower Elementary dance program, there will be an increasing focus on student-led components as well as an increasing difficulty in dance technique and choreography.

Upper Elementary Dance and Gymnastics Unit Description

Students in Grades 3–5 will begin this unit with a focus on physical conditioning, flexibility, strength, endurance, and complex technique study. After a brief review of the previously taught concepts of body, space, time, and energy, students will then undertake the task of adding expression to make their movements come to life. Students must investigate where choreographers get ideas for dances and how dancers work with space, time, and energy to communicate artistic expression. We will use literature, poetry, musical lyrics, pictures, and dance history as a stimulus for choreography. Students will experience the ongoing dance-making cycle of presentation, analyzation, reflection, and revision as a way to create their best artistic work.

GYMNASTICS

Gymnastics Overview

Students will be introduced to Gymnastics and apply previously learned concepts of control, flexibility, coordination, strength, and endurance to an apparatus. Students will work to steadily progress through skills including rolls, handstands, jumps, leaps, turns, holds, casts, and mounts on the bars, floor, beam, and vault. The USA Gymnastics Junior Olympics Program Levels I—4 is used as a benchmark for these progressions. The end of the unit will culminate with the creation of a short routine on an apparatus of the student's choice.

Lower Elementary Unit Description

Students in grades K–2 will work on gaining the body control, coordination, and endurance needed to safely undertake an apparatus. Students at this level will first work to perform a forward roll, backward roll, handstand on the wall, and cartwheel on the flat surface of the mat. When ready, students will then move to performing these skills on various gymnastics apparatus.

Upper Elementary Unit Description

Students in Grades 3–5 will work on strength, flexibility, alignment, and proper technique to tackle more difficult skills on both flat and raised surfaces including bars, rings, and vault. Specifically, students at this level will work on performing each skill with expression and confidence. After considering all platforms and safely progressing through each level, students will have the opportunity to create an individualized routine on an apparatus of choice.

Art

Art Program Overview

The aim of the AISC Visual Arts program is to build confidence and creativity by providing an authentic studio-based environment. Through personal choices, students are encouraged to explore and experiment, enabling them to develop their technical and conceptual skills. Through inquiry and investigation, we help students to find their personal voice in the creation of their own original artwork. The Elementary

art curriculum is based on the National Core Art Standards, which integrates the processes, skills and knowledge, and criteria for successful learning for arts education. This outcomes-based approach to teaching and learning in the arts emanates from artistic processes: planning, creating, and responding. Art lessons are adapted to the developmental level of each grade, beginning with basic skills and concepts in the early years and graduating to more sophisticated and challenging lessons and concepts in the upper grades.

Lower Elementary Art Overview

In Grades K–2, students are guided through imaginative art experiences which develop their creativity, curiosity, and love of learning art. Students are introduced to the elements and principles of art and begin experimenting with a variety of mediums. They explore connections between art and academic disciplines, creating awareness of how the world is interconnected. The Lower Elementary curriculum also fosters the development of students' abilities to observe and discuss artworks created by various cultures and master artists.

Kindergarten Art Unit Descriptions

Uniqueness of Me

Students express their uniqueness through a self-portrait project infusing their likes in revealing their identity. They learn observational drawing to represent their facial features. They also explore and experiment with colors to express their feelings in the artwork.

What do I see ...?

Students experiment and play with materials and techniques to reveal personal observational perspectives in their artworks. Artistic point of view is reflected in students' works of art.

Art in Action

Students will connect art and science through movement. They are exposed to a variety of art mediums and techniques to understand the concept of creating art through movement.

Our Environment

Through experimentation, students continue to build skills in various media. They create art that represents the natural environment.

Grade I Art Unit Descriptions

Realism

Students use observation and investigation in preparation for making a work of art. They compare images that represent the same subject.

Light and Sound All Around

Students demonstrate safe and proper procedures for using materials, tools, and equipment while making art. They classify artwork based on different reasons for preferences.

Homes for Animals

Students explore the uses of materials and tools to create works of art or design. They interpret art by categorizing subject matter and identifying the characteristics of form.

Imagination

Students develop understanding of the concept of organic and geometric shapes as well as textures. They engage collaboratively in exploration and imaginative play with materials.

Grade 2 Art Unit Descriptions

Personal Identity

Students create works of art about events in their home. They make art or design with various materials and tools to explore personal interests, questions, and curiosity.

Properties of Materials

Students explore materials through art mediums that change (glass, clay, paper, metal). They repurpose objects to make something new.

The Natural World

Students perceive and describe aesthetic characteristics of one's natural world and constructed environment. They brainstorm collaboratively multiple approaches to an art or design problem.

Interdependence

Students will synthesize and relate knowledge and personal experiences to make art or design for their SEVAI project. They discuss and reflect with peers about choices made in creating artwork.

Upper Elementary Art Overview

In Grades 3–5, students are engaged in more sophisticated and challenging explorations which further develop their creativity, curiosity, and love of learning art. Students expand their ability to use the elements and principles of art and extend their understanding of mediums in their artwork. They continue making connections between art and academic disciplines, gaining a deeper understanding of the interconnectedness of our world. There is a balance in the curriculum between investigating and making, which are the practical aspects of creating art, and knowledge, and understanding in which students observe, analyze, and discuss artworks created by various cultures and master artists.

Grade 3 Art Unit Descriptions

Legacies of the Past

Students will identify and explain how and where different cultures record and illustrate stories and history of life through art. They will determine messages communicated by an image.

Changing the World

Students will visually explore ways to change our world by elaborating on imaginative ideas. They will include details in an artwork to enhance emerging meaning.

Ecosystems

Students will create personally satisfying artwork using a variety of artistic processes and materials. Students interpret art by analyzing use of media to create subject matter, characteristics of form, and mood

Children's Rights

Students will speculate about processes an artist uses to create a work of art. They will recognize that responses to art change depending on knowledge of the time and place in which it was made.

Grade 4 Art Unit Descriptions

Making a Difference

Students will explore multiple approaches to a creative art or design problem. They will create works of art that reflect community cultural traditions.

Natural Disasters

Students will learn about the care of materials, tools and equipment. They will interpret art by referring to contextual information, and analyzing relevant subject matter, characteristics of form, and use of media.

Global Trade

Students will set goals and create artwork that is meaningful. They will document, describe and represent regional constructed environments.

Sound Waves

Students will explore and invent art-making techniques and approaches. They will revise artwork on the basis of insights gained through peer discussion.

Grade 5 Art Unit Descriptions

Migration

Students will create artwork that explores the migration topic. They will identify and demonstrate diverse methods of artistic investigation to choose an approach for beginning a work of art.

Space Exploration

Students will find their inspiration through observations about space. They will experiment and develop skills in multiple artmaking techniques and approaches through practice. They will compare their interpretations of works of art with the interpretation of others.

Advocacy For Change

Students will identify and analyze cultural associations suggested by visual imagery and produce artwork with a message. They will identify how art is used to inform or change beliefs, values, or behaviors of an individual or society.

Geometry

Students will create artwork inspired by this mathematical theme. They will apply formal and conceptual vocabularies of art and design to view surroundings in new ways through artmaking. Students will combine ideas to generate innovative ideas for artmaking.





MUSIC

Lower Elementary Music Overview

In Grades K–2, students are invited to develop an awareness for all cultures of music, an intellectual curiosity, and a desire for love and lifelong learning in music. They will acquire basic skills and knowledge to create music of varying forms, and analyze music created by peers. They will create music using a variety of instruments in a child-centred classroom, considering the learning styles and particular interests of each child. The Music program follows the California Standards and uses the pedagogies found in Orff Schulwerk, Kodaly, and Feierabend Fundamentals. Units in the Lower Elementary Music Course are connected and overlapping, allowing for student choice and voice into the elements of a rich musical environment.

Lower Elementary Music Unit Descriptions

Music Fundamentals and Exploration

Students are introduced to "solfege" and the basics of melody. Students will explore varying instruments to make music, with varying dynamics, pitch, rhythms, and tempos. Using basic instruments (the voice, body percussion and percussion instruments), students will explore basic concepts of rhythm, dynamics, harmony, tone color, texture, and form.

Concert and Performance Preparation

Students will develop aptitudes for performing on stage, in front of audiences, and as part of an ensemble. They will inquire what skills make a performer dynamic for their audience as well as contribute in a positive way to their group. Students will have the opportunity to build confidence as performers, and understand how to appropriately be an audience member.

Music Composition and Improvisation

Students will develop original pieces of music, both written and "in the moment." Students will compose pieces of vocal, instrumental, or other chosen medium. Throughout this unit, students will learn that music has form and structure as well as begin to develop their identity as a composer. Students will practice skills of asking and providing feedback to peers on their specific pieces. Students will work to analyze feedback, making choice adaptations to their original compositions.

Artistry and Expressive Communication

Students will apply developed skill sets from the Music Fundamentals & Exploration and Music Composition & Improvisation Units to further their impact as a performer. This unit invites students to explore their development as a solo performer, building on their skills gained from Concert Preparation, as an ensemble member.

Cultural Awareness and Diversity

Students explore instrumental, vocal, rhythmic, and other pieces of music from varying cultures around the world. They work to develop an appreciation for the diversity in music, as an expression of culture.

Upper Elementary Music Overview

The aim of the Upper Elementary Music Program is to provide an avenue for each child's individual need for self expression, building on the fundamental music skills and knowledge they have from Lower Elementary. Through continued inquiry into understanding music as art, students are able to hear, speak and think in the medium of music. Units in the Upper Elementary Music Program are focused on refining individual talent, as well as exploring future areas of interest. Time is structured to allow for content and concept building, rehearsal, and reflection. The music program follows the California Standards and uses the pedagogies found in Orff Schulwerk and Kodaly.

Upper Elementary Music Unit Descriptions

Music Fundamentals and Structure

Structure creates order and clarity in music. Students are given structured and guided opportunities to explore and understand the building blocks of music. How do tempo, dynamics, rhythm, and beat complement and support melody? How do vocal music and instrumental music work together? How

can our vocal instrument demonstrate pitch proficiency in coordination with instrumental music? During this unit and throughout the year, students play a variety of instruments—pitched and unpitched—to add accompaniment to demonstrate the various elements of music, as well as demonstrate various rhythm patterns.

Concert Preparation and Performance

Music is one of the oldest forms of cultural expression and communication. Students will engage in formal and informal performances, reflecting on their growth. What collaborative steps should be taken to produce a quality performance? What is the role of rehearsal? How can performing as an ensemble, and performing individually, communicate meaning to an audience?

Composition and Improvisation

Students will explore the potential to elicit a response through the notation of music. Through composing and improvising, you learn to connect ideas with symbols, sound patterns, and musical elements. Composition and improvisation are grounded in prior knowledge and personal experience. Manipulation of the elements creates individuality in music. What inspires musical creation? When is one's creative work ready to share?

Instrumental Technique

Students will explore the techniques and skills needed to learn an instrument. They will be invited to learn to play the recorder and other instruments, demonstrating simple songs, and exploring playing in harmony. Students will learn to read and notate music, perform melodies from the treble clef, and improvise endings using traditional notation. Are there other ways of notating or reading music? Is it connected to culture or history, or both





INDIAN STUDIES

Indian Studies Overview

The aim of Elementary Indian Studies is to provide students with opportunities to explore, investigate, and inquire into their host country. With a focus on experiential learning and our Vision of an AISC Learner, students build understanding and appreciation for our diverse cultural and geographical environment through art, literature, cooking, music, and movement.

Grade I Unit Descriptions

Holidays and Celebrations in India

In this opening unit, Grade I students explore different Indian holidays and celebrations. They identify the customs surrounding these holidays. They learn to design pookalams, colorful arrangements of colors and flowers on the floor, believed to welcome in happiness and prosperity as per the Onam tradition.

Traditional Musical Instruments

Students investigate different traditional instruments of Tamil Nadu. They learn to ask essential questions to find out about the significance, purpose, and history of these traditional instruments. This unit will also give our students an opportunity to interview and engage with local musicians.

Indian Folktales and Fables

In this final unit, students learn about the importance of Indian folklore and how they have entertained and enlightened generations. Throughout this unit, students will try to find the "moral" of each folktale and see how best we can apply it in our daily life, instilling values such as friendship, honesty, and respect.

Grade 2 Unit Descriptions

Exploring the Diverse Art Forms of India

Students in Grade 2 start their year examining different art forms in India. They inquire into the tradition of designing kolams and their cultural significance. Students learn to make simple kolams and then design their very own using their understanding of this ancient art form.

Investigating Tamil Nadu Trees and Plants

In the second unit, students learn to articulate questions while inquiring into the plants and trees that grow in Tamil Nadu. They conduct investigations by exploring the flora at AISC and in their neighbourhoods in Chennai. Students will learn to integrate their research skills into becoming experts on their chosen plant or tree and communicate their learnings and findings with their class.

Culture of Flying Kites in India

In this final unit, students explore the culture of kites and kite flying in India. They learn the art of kite making from local kite makers in Chennai and then design their own kites at the Discovery Lab.

Grade 3 FLEX Program Overview

Throughout the 3rd Grade FLEX Program, students have the opportunity to learn Spanish, French, and Indian Studies for one rotation each year.

World Language FLEX - French

During their time together in French class, students will be exposed to the French language and Francophone culture. Through the exploratory nature of this rotation, students will dive into the beginning stages of learning French. Students will learn some basic conversational language, greetings, expressions, and autobiographical questions and responses. They will also learn how to express likes and dislikes by creating a personalized French vocabulary repertoire through inquiry-based research and proper usage of dictionary resources.

World Language FLEX - Spanish

In World Language Spanish class, students will be exposed to the Spanish language and Hispanic cultures. In this exploratory class, students will learn some basic conversational language and expressions as well as

some thematic vocabulary. Students will personalize their learning using an inquiry approach to discover vocabulary relevant to their own likes and dislikes. Students will also learn how to have a basic conversation in Spanish by asking and answering simple autobiographical questions.

Indian Studies FLEX

Students connect their learning from Social Studies to their experiences in India. Grade 3 works in three units: Investigating the Monuments and Structures of India, Flags and Their Significance, and Exploring South Indian Cuisine. In this first unit, Grade 3 students explore how the past is commemorated in the present, through structures and monuments in Chennai. Investigations of temples, statues and other buildings of significance allow for rich analysis of how the past has influenced the present here in India. Students engage in a design project for their own structure of significance, reflecting on their experience in our host country. In the second unit, students will understand why every independent country has its own unique flag. Students will study their home country flags and the elements of the flag and develop a deeper understanding of the country's culture and values. After making their observations, students will focus on the Indian flag and find the meanings behind the elements and symbols on the Indian flag. They will brainstorm values that they consider important to them and design a class flag. In the final unit of Grade 3, students explore a wide variety of vegetarian and non-vegetarian dishes with each state holding its own uniqueness and food habits. They will visit our school TAJ Kitchen and experiment making different delicacies with Indian spices and herbs.



WORLD LANGUAGE GRADES 4 & 5

French and Spanish

The Elementary World Language Program at AISC is an academic program based on the American Council on the Teaching of Foreign Languages (ACTFL) World Language Standards. The languages offered to Grades 4 and 5 students are French and Spanish. The program strives to inspire a love for language learning, enabling students to communicate with confidence in the target language and to develop a foundation for intercultural awareness that will foster international understanding. Students begin to develop skills to communicate in a foreign language through a thematic and inquiry-based program.

A variety of formative and summative assessments, such as interactive roleplay and audio/visual presentations and projects, are used to measure student progress.

The curriculum is designed for novice-level learners and facilitates interpersonal communication. While each unit introduces new vocabulary and sentence patterns, there are also many opportunities for students to build upon previously learned language. Students are introduced to the history, traditions and customs of Francophone and Hispanic countries and begin to identify similarities and differences between those cultures and their own.

English

This class is offered to students in Grades 3, 4 or 5 who are new to English. Small class sizes offer targeted instruction for developing social and instructional speaking and listening skills. Students practice asking and answering questions and expressing their ideas. As students show developing proficiency with English, they have the opportunity to transfer to Spanish or French.

Grade 4 Unit Descriptions

In Grade 4, there are three units of study in which students start to expand their communication skills through questioning and responding orally, and in writing.

My Friends

In this unit, students review names and descriptions of school objects. They expand upon the basic introductory questions learned in Grade 3 in order to introduce themselves and their friends in the target language. They are able to describe their names, where they are from, how old they are, what they like, and the weather.

My Family

In this unit, students learn how to name and describe personal details about their own lives and those of family members. Students become more proficient with introducing themselves and people they know, as well as appropriately asking and answering basic questions and adding to their repertoire of vocabulary

when describing one's self in this context.

My Home

In this unit, students learn to name and describe rooms of a house, some common household objects, and placement using prepositions. They ask and answer questions about where they live, what their houses are like, and what they do in their homes.

Grade 5 Unit Descriptions

In Grade 5, there are three units of study,in which students are encouraged to elaborate their responses orally and in writing.

A Week at School

In this unit, students learn to name and describe school subjects, make a personalized weekly school schedule, and have a conversation about a week at school. They learn how to understand and apply sequencing words to describe their schedule. They also learn to tell time and express preferences for particular subjects.

My Routine(s)

In this unit, students focus on talking about themselves, their families, their routines, and their weekend activities in the target language. They describe their daily routines and leisure activities while also paying attention to sequencing their actions. They are able to add specific details about their daily routines, such as at what time, with whom, where and why they do certain activities. Students revisit and deepen their ability to describe where they live and where they do different activities. Students choose from a variety of technology to showcase their ability to describe their weekend in the target language.

My Community

In this unit, students learn to name and describe places in a community. They expand on the concept of including more details when speaking and writing about where different key locations are situated within their community, as well as what activities they do in those locations. Students ask and answer questions about their communities as well as the activities and events that take place there.

DIGITAL CITIZENSHIP

A digital citizen knows how to harness the power of technology safely, respectfully, and responsibly.

Overview

Digital Citizenship is divided into two categories: Behavior and Ethical Decision Making and Information Literacy.

Behavior and Ethical Decision Making

Students learn about how to avoid risky situations on the internet. They learn the difference between private and personal information. Students practice communicating responsibly and respectfully on the internet and in their digital community.

Information and Technological Literacy

Students learn to search the internet and evaluate websites. They also learn about copyright laws and plagiarism. Our students become technologically literate by using many forms of technology for learning. Throughout our curriculum, students will engage with Robotics, Hour of Code and Digital Storytelling.

Lower Elementary

Students learn about internet safety, privacy and security, and relationships and communication. There is a focus on exploring websites that are safe and suggested by an adult. They also learn about what information is safe to post online and what information needs to remain private. Students learn about how to communicate with their peers respectfully online. Information literacy is interwoven in curricular units.

Upper Elementary

Students learn about internet safety, how to build strong passwords, and cyberbullying. They also receive instruction on how to build a positive digital footprint. In Fifth Grade, students explore self image and how the media influences our views. Information literacy is interwoven throughout curricular units.

Notes:	
	_





AMERICAN INTERNATIONAL SCHOOL CHENNAI

100 Feet Road, Taramani, Chennai - 600 113, INDIA P: +91-44-2254-9000 | F: +91-44-2254-9001 | W: www.aischennai.org