CURRICULUM OVERVIEW

GRADE 2
THE IB PRIMARY YEARS PROGRAM AT AIS

The IB Primary Years Program, for students aged 3 to 12 focuses on the development of the whole child as an inquirer, both in and beyond the classroom. The program incorporates local and global issues into the curriculum, asking students to explore six related, transdisciplinary themes and to consider the links between them. Authentic connections add value to all learning experiences.

PYP students have voice, choice and ownership for their own learning. Choice in where to learn, how to learn and who to learn with helps students to develop agency in their learning. Having space to make mistakes and wrong choices along the way provides students with opportunities to discover themselves as learners. When students have agency, the relationship between the teacher and students becomes a partnership built on trust.

Learning “how to learn” is fundamental to the program and is supported by five categories of interrelated skills - communication skills, self-management skills, research skills, thinking skills, and social skills, referred to as approaches to learning (ATL). These skills are transferable across all contexts and help students to reflect on their learning.

At Atlanta International School, Grades 5K-5, the IB Primary Years program is taught and learned as one cohesive curriculum in two languages. In the Primary School students spend approximately 50 percent of their time in English and 50 percent in French, Spanish or German from 5K to Grade 5. Our students become skilled and knowledgeable through this transdisciplinary program in the main subject areas while acquiring either French, Spanish, English or German as a second language. Our Chinese program in Primary School is a partial immersion program, and the students spend approximately 70 percent of their time in English and 30 percent in Chinese.

For more information on the IBPYP, we recommend a new IB resource referred to as PYP Playlist. It contains a wide range of e-learning resources to help everyone develop a deeper understanding of the program and become more active in supporting student learning.

You may also contact Leonie Ley-Mitchell, IBPYP Coordinator for the Primary School, lley@aischool.org or visit www.ibo.org.
IB LEARNERS STRIVE TO BE

The attributes of the learner profile express the values inherent to the IB continuum of international education: these are the values that should infuse all elements of the programs and, therefore, the culture and ethos of all IB World Schools. IB programs promote the education of the whole person, emphasizing intellectual, personal, emotional and social growth through all domains of knowledge.
<table>
<thead>
<tr>
<th>Who We Are</th>
<th>Sharing the Planet</th>
<th>How the World Works</th>
<th>How We Organize Ourselves</th>
<th>Where We Are in Place and Time</th>
<th>How We Express Ourselves</th>
</tr>
</thead>
<tbody>
<tr>
<td>An inquiry into the nature of the self; beliefs and values; personal, physical, mental, social and spiritual health; human relationships including families, friends, communities, and cultures; rights and responsibilities; what it means to be human.</td>
<td>An inquiry into rights and responsibilities in the struggle to share finite resources with other people and with other living things; communities and the relationships within and between them; access to equal opportunities; peace and conflict resolution.</td>
<td>An inquiry into the natural world and its laws; the interaction between the natural world (physical and biological) and human societies; how humans use their understanding of scientific principles; the impact of scientific and technological advances on society and on the environment.</td>
<td>An inquiry into the interconnectedness of human-made systems and communities; the structure and function of organizations; societal decision-making; economic activities and their impact on humankind and the environment.</td>
<td>An inquiry into orientation in place and time; personal histories; homes and journeys; the discoveries, explorations and migrations of humankind; the relationships between and the interconnectedness of individuals and civilizations, from local and global perspectives.</td>
<td>An inquiry into the ways in which we discover and express ideas, feelings, nature, culture, beliefs and values; the ways in which we reflect on, extend and enjoy our creativity; our appreciation of the aesthetic.</td>
</tr>
<tr>
<td>6 weeks</td>
<td>7 weeks</td>
<td>6 weeks</td>
<td>6 weeks</td>
<td>6 weeks</td>
<td>5 weeks</td>
</tr>
</tbody>
</table>

**Central Idea:**
- Choices we make contribute to our overall well-being
- Central Idea: Children everywhere encounter different challenges and opportunities
- Central Idea: People and animals build a variety of structures to meet their needs
- Central Idea: A city has many systems operating to support the people living in it
- Central Idea: Evidence of the past connects civilizations to each other and to the present
- Central Idea: People increasingly use visual communication to get ideas and information across to an audience

**Key concepts:**
- causation, function, responsibility
- form, function, connection
- form, function, responsibility
- form, function, connection
- function, connection, perspective
- function, connection, perspective

**Related concepts:**
- health, systems, well-being, influence, decision making
- rights and responsibilities, scarcity, aid, resources, equality
- properties of building materials, forces, interdependence
- similarities and differences, systems, citizenship, government, change
- structure, civilization, evidence, interpretation, history, similarities and differences
- communication, expression, illustration, interpretation

**Lines of Inquiry:**
- Health and well-being
- The way our bodies work
- Choices we make that affect our health
- Human rights and responsibilities
- Scarcity and distribution of resources
- Access to opportunities
- The process, materials and tools involved in building
- Effects of the environment
- Purpose of building
- Characteristics of the city we live in
- Systems that operate within a city
- Responsibility as a citizen
- The structure of a civilization
- Similarities and differences among civilizations
- Gathering and interpretation of artifacts
- How to express information visually
- People's responses to visual communication
- The role of technology in today's visual communication
Language

At AIS, Grades 5K-5, students learn in two languages. The Language curriculum addresses language learning in all languages taught in AIS Primary School. Language is being taught, through the realistic context of the units of inquiry. In addition some aspects of the language curriculum might be taught as a stand alone following the principles of the PYP, using a constructivist, inquiry based approach. At AIS, we do not use any textbooks across any of the languages. However, we do believe in the workshop approach to teach reading and writing and in learning how to spell using patterns within words.

Language learning is arranged into three main strands:

- **Oral language**: listening and speaking,
- **written language**: reading and writing and
- **visual language**: viewing and presenting.

The language learning process is non-linear and, different learners have different proficiency levels and needs although they might be in the same class or have the same age. AIS learning outcomes are a description of this language learning process. The specific outcomes for a grade level describe what most learners are able to do by the end of this grade level in their first language. Some learners will have already moved on and are able to work towards the next phase and others might need more time to attain the targets set out. The assessments of the language outcomes are helping teachers decide how to set specific individual learning goals for their students. The individual progression of the child in each language is shared with parents in parent teacher conferences and the report cards.

<table>
<thead>
<tr>
<th>Oral Communication – Listening and Speaking</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Learning Outcomes</strong></td>
</tr>
<tr>
<td>Listens attentively and considerately</td>
</tr>
<tr>
<td>Shows respect for the contributions of others</td>
</tr>
<tr>
<td>Listens with focus to the conversation at hand for longer periods of time</td>
</tr>
<tr>
<td>Listens carefully for a variety of purposes</td>
</tr>
<tr>
<td>Offers responses</td>
</tr>
<tr>
<td>Responds with relevant questions and comments</td>
</tr>
<tr>
<td>Recalls sequences of events and other literary forms and remembers important details</td>
</tr>
<tr>
<td>Follows multi-step directions</td>
</tr>
<tr>
<td>Speaks clearly, with appropriate expression</td>
</tr>
<tr>
<td>Speaks confidently for different purposes and audiences</td>
</tr>
<tr>
<td>Considers projection, eye contact</td>
</tr>
<tr>
<td>Expresses ideas, knowledge, feelings and opinions,</td>
</tr>
<tr>
<td>Expresses self clearly and concisely</td>
</tr>
<tr>
<td>Communicates with increasing confidence and detail</td>
</tr>
<tr>
<td>Presents and explains information sequentially</td>
</tr>
<tr>
<td>respecting the contribution of others</td>
</tr>
<tr>
<td>----------------------------------------</td>
</tr>
<tr>
<td>Asks relevant questions</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Written Communication – Reading and Writing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Learning Outcomes</strong></td>
</tr>
</tbody>
</table>

| Approaches reading with confidence and a positive attitude | Participates in daily reading for instructional and independent purposes  
Reads willingly for sustained periods of time (15 minutes)  
Chooses a variety of reading materials |
|-----------------------------------------------------------|
| Explain common text features                              | Uses headings, illustrations, table of contents, indexes, charts, captions, glossary, bibliography to help locate information in a book  
Distinguishes between and uses different types of text  
Recognizes fiction and non-fiction text  
Uses dictionary, atlas, and basic thesauruses  
Alphabetizes to the third letter  
Locates author and illustrator  
Beginning to record bibliographic information and recognizes that resources need to be given credit  
Beginning to paraphrase information |
| Understands more complex sound-symbol relationships       | Associates digraphs, blends and diphthongs with appropriate letters and uses them to decode new words  
Consistently distinguishes beginning, middle and ending sounds  
Distinguishes long and short vowel sounds  
Identifies and generates words with similar sound patterns (homophones) |
| Distinguish sounds in words                              | Uses context, pictures, phonetic cues and word patterns to decode unfamiliar words  
Beginning to use research and word walls for unfamiliar words |
| Uses a range of reading strategies effectively to decode text | Uses context, pictures, phonetic cues and word patterns to decode unfamiliar words  
Beginning to use research and word walls for unfamiliar words |
| Read and responds appropriately to a variety of texts     | Interprets information from texts, charts, diagrams and graphs  
Reads, understands and follows simple written directions  
Makes meaningful predictions, inferences and conclusions |
<table>
<thead>
<tr>
<th><strong>Reading and Comprehension</strong></th>
<th><strong>Writing and Editing</strong></th>
</tr>
</thead>
</table>
| Links reading to prior knowledge and personal experience  
Asks text related questions and revisits text to find answers  
Identifies the main idea, supporting details, plot, character, setting  
Summarizes and retells a story in sequential order | **Reads texts aloud with confidence, fluency and some expression**  
Pays attention to punctuation to determine pace  
Reads with increasing expression |
| **Approaches writing with confidence and a positive attitude**  
Takes initiative to write independently  
Starts to write quietly and quickly  
Develops ideas in writing | **Approaches writing with confidence and a positive attitude**  
Takes initiative to write independently  
Starts to write quietly and quickly  
Develops ideas in writing |
| **Writes legibly in a consistent style**  
Uses lines appropriately  
Uses correct letter formation | **Uses appropriate capitalization and end punctuation consistently**  
Uses periods, question marks, exclamation marks at the end of sentences  
Consistently uses upper and lower case letters appropriately |
| **Begins to use parts of the writing process to produce increasingly coherent and organized texts**  
**Constructs a simple paragraph**  
**Uses appropriate capitalization and end punctuation consistently**  
**Uses complete sentences with appropriate word order**  
**Increasingly uses conventional spellings for common words** | **Begins to use known criteria, rubrics and checklists to assess and improve own writing (Six Traits)**  
**Begins to apply Six Traits of Writing: ideas, organization, voice, word choice, sentence fluency, conventions**  
**Pre-writes by making a simple plan**  
**Uses content specific vocabulary**  
**Begins to revise and edit own work**  
**Publishes own work**  
**Groups ideas and related information and maintains focus**  
**Begins to build an understanding of subject and predicate**  
**Applies known spelling patterns to unfamiliar words**  
**Spells familiar words correctly**  
**Accurately spells some high-frequency words** |
Visual Communication – Viewing and Presenting

<table>
<thead>
<tr>
<th>Learning Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Views and uses visual texts to gain and present information</strong></td>
</tr>
<tr>
<td>Attends to visual information, showing understanding through discussion, role play and illustration</td>
</tr>
<tr>
<td>Discusses their own feelings in response to visual messages</td>
</tr>
<tr>
<td>Recognizes and names familiar visual text (advertising, logos, labels, signs, billboards, drama)</td>
</tr>
<tr>
<td>Begins to become familiar with the terminology of visual text (features, layout, border, frame...)</td>
</tr>
<tr>
<td>Observes and discusses illustrations in picture books/reference books, commenting on information being conveyed</td>
</tr>
<tr>
<td>Observes that visual images have been created to achieve a particular purpose (Advertisements)</td>
</tr>
<tr>
<td>Recognizes ICT iconography and follows prompts to access programs or devices</td>
</tr>
<tr>
<td>Begins to use the internet to access relevant information with teacher guidance</td>
</tr>
<tr>
<td><strong>Creates presentations using visual text to communicate ideas, stories and convey information</strong></td>
</tr>
<tr>
<td>Uses action and body language to reinforce and add meaning to presentation</td>
</tr>
<tr>
<td>Uses role play/drama to convey ideas and information</td>
</tr>
<tr>
<td>Includes shapes, symbols and colors in their own presentations to reinforce and add meaning to presentation</td>
</tr>
<tr>
<td><strong>Becomes familiar with and uses appropriate technologies</strong></td>
</tr>
</tbody>
</table>

Mathematics

At AIS, Primary School students learn in two languages. Our students are given the opportunity to construct, transfer, and apply mathematical understanding in all languages taught at AIS. Math is being taught, whenever possible, through the realistic context of the units of inquiry; if the direct teaching of mathematics in a unit of inquiry is not feasible it is taught as a stand alone following the principles of the PYP, using a constructivist, inquiry based approach. At AIS, we do not use any math textbooks across any of the languages.

Math is arranged into five main strands: data handling, measurement, shape and space, pattern and function, and number. For each of these strands we have identified specific learning outcomes. These outcomes describe what most learners are able to do by the end of any given grade level. Different learners have different proficiency levels and needs, although they might be in the same class or have the same age. Some learners
will have already moved on and are able to work towards the next phase and others might need more time to attain the targets set out. The acquisition of mathematical understanding must be seen as a continuum along which each individual student progresses at his/her own speed.

The assessment of the math outcomes is helping teachers decide how to set specific individual learning goals for their students. The individual progression of each child in math is shared with parents in parent teacher conferences and the report cards.

**Data Handling**

Data handling allows us to make a summary of what we know about the world and to make inferences about what we do not know.

Data can be collected, organized, represented and summarized in a variety of ways to highlight similarities, differences and trends; the chosen format should illustrate the information without bias or distortion.

Probability can be expressed qualitatively by using terms such as “unlikely”, “certain,” or “impossible.” It can be expressed quantitatively on a numerical scale.

**Measurement**

To measure is to attach a number to a quantity using a chosen unit. Since the attributes being measured are continuous, ways must be found to deal with quantities that fall between numbers. It is important to know how accurate a measurement needs to be or can ever be.

**Shape and Space**

The regions, paths and boundaries of natural space can be described by shape. An understanding of the interrelationships of shape allows us to interpret, understand and appreciate our two-dimensional (2D) and three-dimensional (3D) world.

**Pattern and Function**

To identify pattern is to begin to understand how mathematics applies to the world in which we live. The repetitive features of patterns can be identified and described as generalized rules called “functions”. This builds a foundation for the later study of algebra.

**Number**

Our number system is a language for describing quantities and the relationships between quantities. For example, the value attributed to a digit depends on its place within a base system.

Numbers are used to interpret information, make decisions and solve problems. For example, the operations of addition, subtraction, multiplication and division are related to one another and are used to process information in order to solve problems. The degree of precision needed in calculation depends on how the result will be used.
# Number

Understands numbers, ways of representing numbers, relationships among numbers, and number systems  
Computes accurately and makes reasonable estimates  
Understands meaning of operations and how they relate to each other

<table>
<thead>
<tr>
<th>Concepts</th>
<th>Learning Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Counting and Cardinality</strong></td>
<td>Counts verbally by 2, 3, 4, 5, 10, and 25 up to 100 (3 and 4 up to 30 and 40 respectively)</td>
</tr>
<tr>
<td><strong>Ordering and comparing</strong></td>
<td>Compares and orders whole number sentences using terms and symbols greater than, less than, and equal to (&lt;, &gt;, =)</td>
</tr>
</tbody>
</table>
| **Place Value**              | Recognizes, reads and writes numbers up to 100s  
Identifies place value of the digits up to 100s, using the base 10 place value system  
Recognize how numbers alternate between odd and even.  
Identifies and describes the characteristics of even and odd numbers  
Rounds numbers to the nearest 10 |
| **Parts and wholes**         | Investigates the fractions half, quarter, and third as parts of wholes                                                                               |
| **Operations and Algebraic Thinking** | Adds up to 100 with/without regrouping  
Subtracts up to 100 with/without regrouping  
Multiplies 1-digit numbers by 1-digit numbers  
Develops strategies to memorize multiplication facts for 1, 2, 3, 4, 5, and 10  
Models multiplication as an array  
Divides one-digit numbers by a one-digit number |


# Measurement

Understands measurable attributes of objects and the units, systems, and processes of measurement  
Applies appropriate techniques and tools to determine measurement

<table>
<thead>
<tr>
<th>Concepts</th>
<th>Learning Outcomes</th>
</tr>
</thead>
</table>
| Time                                          | Recognizes that time is measured using universal unit of measure, e.g. years, months, days, hours, minutes, and seconds  
|                                               | Estimates and compares lengths of time, e.g. second, minute, hour  
|                                               | Uses timelines in units of inquiry and other real-life situations  
|                                               | Recognizes the difference between an analog and a digital clock  
|                                               | Reads digital format of time notation to tell time to the hour and half hour  
|                                               | Uses a.m. and p.m.  |
| Standard unit of length (US standard – E; metric – L) | Identifies and uses standard tools to measure length to the nearest inch and centimeter  
|                                               | Understands relationship between units, e.g. meters, centimeters, and millimeters/feet, inches  |
| Standard unit of temperature (US standard – E; metric – L) | Uses a thermometer to record temperature using Celsius and Fahrenheit scales  
|                                               | Reads and interprets the temperature on a thermometer, e.g. understand that a dash usually means 2 degrees  |
| Money                                         | Combines a range of coins to demonstrate equivalence of value  
|                                               | Determines the number of each denomination required to form $1 in value  
|                                               | Recognizes and writes cent and dollar notation  |
Shape and Space

Explores characteristics and properties of two- and three-dimensional geometric shapes
Specifies locations and describes spatial relationships using coordinate geometry
Uses visualization and spatial reasoning to solve problems

<table>
<thead>
<tr>
<th>Concepts</th>
<th>Learning Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coordinates</td>
<td>Locates features on a grid using coordinates (linked to city unit)</td>
</tr>
<tr>
<td>2 D shapes</td>
<td>Draws 2D shapes: square, rectangle, and triangle, using ruler</td>
</tr>
<tr>
<td></td>
<td>Describes attributes and parts of shapes, e.g. sides, number of corners, length of sides</td>
</tr>
<tr>
<td>3 D shapes</td>
<td>Sorts, describes, and compares 3D shapes, e.g. cube, rectangular prism, cylinder, sphere, pyramid</td>
</tr>
<tr>
<td></td>
<td>Identifies 2D faces of 3D figures, e.g. squares on the cube</td>
</tr>
<tr>
<td></td>
<td>Uses appropriate language to talk about shapes, e.g. corners, sides, faces</td>
</tr>
<tr>
<td>Symmetry</td>
<td>Identifies symmetry in two-dimensional shapes</td>
</tr>
<tr>
<td>Congruency</td>
<td>Recognizes congruent shapes</td>
</tr>
<tr>
<td>Lines</td>
<td>Recognizes parallel, perpendicular, and intersecting lines and line segments</td>
</tr>
</tbody>
</table>

Pattern and Function

Understands patterns, relations, and functions
Describes, extends, and creates patterns

<table>
<thead>
<tr>
<th>Concepts</th>
<th>Learning Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Find, describe, and represent patterns</td>
<td>Identifies and describes repeating, growing and shrinking number patterns on the number line/hundreds chart</td>
</tr>
<tr>
<td></td>
<td>Identifies and describes patterns in numbers, e.g. skip counting, odd and even numbers</td>
</tr>
</tbody>
</table>
Extend and create patterns

<table>
<thead>
<tr>
<th>Concept</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create patterns</td>
<td>Creates, extends and explains repeating, growing and shrinking number patterns up to 100</td>
</tr>
</tbody>
</table>

Function

<table>
<thead>
<tr>
<th>Concept</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify rule</td>
<td>Identifies a rule for a number pattern (addition and subtraction)</td>
</tr>
<tr>
<td>Predict next</td>
<td>Predicts what comes next in number pattern</td>
</tr>
</tbody>
</table>

Commutative, associative, and distributive properties of operations

<table>
<thead>
<tr>
<th>Concept</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recognize relationship</td>
<td>Recognizes the inverse relationship between addition and subtraction to include fact families</td>
</tr>
<tr>
<td>Use properties</td>
<td>Uses the commutative property of addition and multiplication</td>
</tr>
</tbody>
</table>

Data Handling

<table>
<thead>
<tr>
<th>Concept</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collect data</td>
<td>Collects, organizes, and displays relevant data to answer questions</td>
</tr>
<tr>
<td>Make inferences</td>
<td>Makes inferences and predictions that are based on data</td>
</tr>
<tr>
<td>Explore probability</td>
<td>Explores the basic concepts of probability</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Concepts</th>
<th>Learning Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collecting data</td>
<td>Uses observations to gather data linked to unit of inquiry</td>
</tr>
<tr>
<td></td>
<td>Gathers data to answer a question</td>
</tr>
<tr>
<td>Representing data</td>
<td>Represents data through tally marks and bar graphs</td>
</tr>
<tr>
<td>Analyzing data</td>
<td>Poses and answers questions about data</td>
</tr>
<tr>
<td></td>
<td>Identifies the highest/lowest and most/least numbers in a data set</td>
</tr>
<tr>
<td>Probability</td>
<td>Understands the concept of chance in daily events, e.g. impossible, less likely, maybe, most likely, certain</td>
</tr>
</tbody>
</table>

Science

Science at AIS is taught entirely within the PYP Program of Inquiry. We have drawn on a number of documents in the process of refining our scope and sequence. Major conceptual ideas are developed over the entire primary curriculum, and inquiry is the main approach in the organization and selection of students’ activities. We have developed the Science Strands from the IBPYP Science Scope and Sequence documentation as well as international and national curriculum standards. These documents have provided guidance in designing the Program of Inquiry for AIS and ensuring a balance of the significant strands of Science. They are:
Living Things
The study of the characteristics, systems and behaviors of humans and other animals, and of plants; the interactions and relationships between and among them, and with their environment.

Earth and Space
The study of planet Earth and its position in the universe, particularly its relationship with the sun; the systems, distinctive features and natural phenomena that shape and identify the planet; the infinite and finite resources of the planet.

Materials and Matter
The study of the properties, behaviors and uses of materials, both natural and human-made; the origins of human-made materials and how they are manipulated to suit a purpose.

Forces and Energy
The study of energy, its origins, storage and transfer, and the work it can do; the study of forces; the application of scientific understanding through inventions and machines.

The following table outlines the scientific lines of inquiry students will experience in Grade 2:

<table>
<thead>
<tr>
<th>Strand</th>
<th>Central idea</th>
<th>Lines of Inquiry</th>
</tr>
</thead>
</table>
| Forces and Energy             | Evidence of the past connects civilizations to each other and to the present| The structure of a civilization  
Similarities and differences between civilizations  
Gathering and interpreting of artifacts |
| Materials and Matter          |                                                                             |                                                                                 |
| Learning Outcomes             |                                                                             |                                                                                 |
| Forces and energy             | ● explore the effect of friction on movement through experimenting with toys and objects on various surfaces (linked to building of pyramids)  
● investigate how simple machines allow humans to move objects with less force than otherwise would be needed |                                                                                 |
| Materials and matter          | ● explain how desiccation can be used to preserve a body, i.e. Egyptian mummies |                                                                                 |
| Living Things                 |                                                                             |                                                                                 |
| Material and Matter           | People and animals build a variety of structures to meet their needs         | The process, materials and tools involved in building  
Effects of the environment  
Purpose of building            |
| Forces and Energy             |                                                                             |                                                                                 |
| Earth and Space               |                                                                             |                                                                                 |
| Learning Outcomes             |                                                                             |                                                                                 |
| Living things                 |                                                                             |                                                                                 |
• recognize that environments have different characteristics

**Materials and matter**
• distinguish between objects and materials found in nature and those made by humans
• identify building materials for building homes
• explore how different materials may be used in the construction of homes suited to their environments
• explain how and why certain materials are used in human structures and in animal structures

**Earth and space**
• describe the natural features of local and other environments
• describe ways in which humans use the natural environment

**Forces and energy**
• investigate how to build strong and stable structures

<table>
<thead>
<tr>
<th>Living Things</th>
<th>Forces and Energy</th>
<th>Health and wellbeing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choices we make contribute to our overall well-being</td>
<td>The way our bodies work</td>
<td>Choices we make that affect our health</td>
</tr>
</tbody>
</table>

**Learning Outcomes**

**Living Things**
• explain what humans should do to stay healthy, i.e. food choices, regular exercise, enough sleep, good hygiene
• identify different food groups
• explain how maintaining good hygiene can help to prevent illness
• identify the location and basic function of major parts of the human body, including sense organs
• describe the characteristics of a healthy environment

**Forces and energy**
• recognize that temperature is a measurement of how hot something is

**Social Studies**

Social Studies at AIS are taught entirely within the PYP Program of Inquiry. We have drawn on a number of documents in the process of refining our scope and sequence. Major conceptual ideas are developed over the entire primary curriculum, and inquiry is the main approach in the organization and selection of students’ activities. We have developed the Social Studies Strands from the IBPYP Scope and Sequence documentation as well as international and national curriculum standards. These documents have provided guidance in designing the Program of Inquiry for AIS and ensuring a balance of the significant strands of Social Studies.

**Human systems and economic activities**
The study of how and why people construct organizations and systems; the ways in which people connect locally and globally; the distribution of power and authority.
Social organization and culture
The study of people, communities, cultures and societies; the ways in which individuals, groups and societies interact with each other.

Continuity and change through time
The study of the relationships between people and events through time; the past, its influences on the present and its implications for the future; people who have shaped the future through their actions.

Human and natural environments
The study of the distinctive features that give a place its identity; how people adapt to and alter their environment; how people experience and represent place; the impact of natural disasters on people and the built environment.

Resources and the environment
The interaction between people and the environment; the study of how humans allocate and manage resources; the positive and negative effects of this management; the impact of scientific and technological developments on the environment.

Although these strands are considered separately, in practice they are inextricably linked. Social studies is essentially about people: how they think, feel and act; how they interact with each other; their beliefs, aspirations and pleasures; the problems they have to face; how and where they live (or lived); how they interact with their environment, the work they do and how they organize themselves.

The following table outlines the social studies lines of inquiry students will experience in Grade 2:

<table>
<thead>
<tr>
<th>Strand</th>
<th>Central idea</th>
<th>Lines of Inquiry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Organization and Culture</td>
<td>Children everywhere encounter different challenges and opportunities</td>
<td>Human rights and responsibilities</td>
</tr>
<tr>
<td>Resources and the Environment</td>
<td></td>
<td>Scarcity and distribution of resources</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Access to opportunities</td>
</tr>
</tbody>
</table>

Learning Outcomes
Social organization and culture
- identify countries of personal or familial significance, and locate them on a globe or a map
- explain how everybody has roles and responsibilities within families
- discuss and explore stories from the lives of people who have made a contribution to local and/or national life and to the lives of people in other countries
- explore issues relating to children’s rights, roles and responsibilities in relation to
his or her own and other cultures
● analyze a variety of sources that describes the risks and challenges that children face
● describe how organizations and individuals meet the needs and want of children
● compare and contrast cultural characteristics of different regions and people, i.e. use of environment and resources, technology, food, shelter, beliefs and customs, schooling, etc.

**Resources and the environment**
● list practices that could be used to maintain natural resources at home and at school

| Human systems and economic activities | People increasingly use visual communication to get ideas and information across to an audience | How to express information visually
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>People's responses to visual communication</td>
</tr>
<tr>
<td></td>
<td>The role of technology in today's visual communication</td>
</tr>
</tbody>
</table>

**Learning Outcomes**
- Human systems and economic activities
  - explore a variety of signs and symbols and interpret their messages
  - describe a variety of ways to communicate meaning

| Human and Natural Environments | A city has many systems operating to support the people living in it | Characteristics of the city we live in
<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Human Systems and Economic Activities</td>
<td>Systems that operate within a city</td>
<td>Our responsibility as a citizen</td>
</tr>
</tbody>
</table>

**Learning Outcomes**
- Human and natural environments
  - demonstrate an understanding of the basic elements of a map
  - identify some distinct areas in the local community
  - compare and contrast life in the city and in the country

**Human systems and economic activities**
- identify and describe the functions of various public places in the community
- describe how various public places serve the needs of people in a community
- identify ways in which people depend on systems operating within a city
- explain how cities change depending on the needs of the people
- identify sources and purposes of authority in various settings, i.e. mayor, president, principal, headmaster, etc.
- explain the rights and responsibilities of the individual in relation to his/her social group, including the characteristics of good citizens
- identify community leaders, local and national government officials

**Continuity and Change through Time**
- Evidence of the past connects civilizations to each other and to the present
- The structure of a civilization

- Similarities and differences between civilizations
Gathering and interpreting of artifacts

### Learning Outcomes

**Continuity and change through time**
- describe how people, artifacts and documents represent links to the past and how they are sources of data from which historical accounts are constructed
- organize historical events sequentially using a timeline
- investigate past civilizations and discover how these civilizations have/have not changed over time and why
- identify contributions of ancient civilizations to present/modern day life
- use a map to show geographical locations of civilizations studied

### Personal and Social Education

PSE is concerned with the ongoing development and growth of our students in respect to feelings, beliefs and behaviors and how they interrelate. PSE is included in the curriculum in order to help students develop and understanding of how to manage and communicate their feelings; understand how their choices and practices can maintain their health and safety; develop an awareness of social norms and perspectives; build relationships and develop an appreciation of commonalities and differences; develop strategies to resolve conflicts; recognize rights and responsibilities towards others and the environment and develop self management strategies to become successful learners. PSE is an essential and integral part of the curriculum; it is transdisciplinary in nature, yet needs to be thoroughly planned and carefully implemented. The students will develop knowledge and understanding in the three strands of **identity, active living, and interactions**.

Grade 2 students continue to develop a healthy sense of self by learning multiple emotions must be managed at the same time and that positive self-talk is key to all aspects of self-growth. Students begin to think about their own thinking and the cultural considerations of one’s own thinking as well as that of others. Students continue to learn about group membership and roles through classroom tasks and problem-solving, the study of various forms of families, and the investigation of responsibilities of both local and global citizenry. Students are introduced to the concept that friendships have disagreements and that resolution comes from a focus on solutions rather than being right. Students can identify basic health and safety practices when in public and can describe basic steps to take to keep their bodies safe from unwanted touch.

### Physical Education

Physical Education is concerned with the physical, social, personal and emotional aspects of our students’ development. It gives students the opportunity to learn about movement and through movement. Skills are developed through a wide variety of physical activities, designed to ensure maximum participation by all. The PE program also provides opportunities for cooperation, teamwork, decision-making and problem solving. The students will develop knowledge and understanding in the strands of
health-related activities, body control and spatial awareness, athletic activities, games, movement to music and adventure challenge.

In Lower Primary, students are reinforcing sport specific techniques in speed of execution, precision, and power. They become more aware of the elements and benefits of a healthy lifestyle and the importance of physical activity in their daily lives. They develop an awareness of space, direction and levels in relation to others and their environment. Students develop gymnastic and dance skills, involving agility, flexibility, strength, rhythmic response and coordination. They participate in different cooperative and oppositional sports, individually and in teams.

Music

The goal of music education is to enable every student to achieve a prescribed level of success in understanding and creating music. Our desire is to provide an opportunity for joyful and meaningful expression through singing, moving, and playing instruments, individually and in cooperation with others. The philosophies and methodologies of Zoltan Kodaly and Carl Orff form the framework of music education at AIS. In Lower Primary, singing and movement is emphasized through the study of melody and rhythm, which also includes developing reading and simple notation skills. Music to support the program of inquiry is also core to the curriculum, extending knowledge, language, and understanding of culture.

Art

Visual art includes the development of creative skills, verbal and non-verbal expression, an awareness of the perspectives of others and aesthetic appreciation. Through visual arts, students can begin to construct an understanding of their community, their environment, their own feelings and emotions, and to develop their cultural awareness. In visual arts class students will develop knowledge and understanding in creative processes, elements and principles of art and design, reflection and appreciation and visual art in society. In Grade 2, students will focus on the elements of art and the creative process. They will discover and develop their own preferences and individual interest by exploring a wide variety of materials, tools and media. Students are exposed to and will respond to artifacts and artwork of varied origins and begin to reflect on their own and others’ artwork.

Library

AIS Library strives to complement the curriculum, and to enhance the learning experience of every student through resources and instruction by providing information access and promoting information literacy to enhance the joy of learning and purposeful effort for students, faculty, and staff. Grade 2 has library classes, which includes library vocabulary, library organization of fiction and nonfiction books, use of the library catalog and use of nonfiction books as information resources. In addition, students practice using the library independently to borrow books.
Learning with Technology

We believe in providing our students with the right tool for each learning activity they are involved in. Sometimes this is paper & pencil, sometimes it is a model or a building block, and there are times when having a digital tool and access to the internet provides the best learning opportunity. We have made a commitment to provide both our students and teachers with digital tools that are age-appropriate, and provide opportunities for creative and critical thinking.

In 1st, 2nd and 3rd grades our students are provided with their own personalized iPad which they use to document their learning, and to access digital research, reading and math resources. Beyond providing iPads and MacBooks for students, each classroom has an interactive whiteboard, and our teachers have access to a variety of robotics and electronic equipment that can add to the learning experience for students.

Our approach to the use of technology in the classroom is focused on balance. A balance between screen time, discussions with other students, and opportunities for making meaning through physical manipulatives. To help ensure we have such a balance, our teachers are supported by Digital and STEAM (Science, Technology, Engineering, Art, Mathematics) Coaches who help to provide engaging and authentic learning experiences using the available technology, as well as our purpose-built maker space.

Ensuring that our students have a safe experience online is very important to us, and we have a comprehensive digital citizenship program which is implemented across all grade levels by our teachers and Digital and STEAM coaches. We also have parent coffee mornings during the year to help our parent community navigate the use of digital devices in their home context as well.

English as an additional language (EAL)

Although the AIS Primary School is based on a dual-language immersion model of education, whereby the English grade level classroom provides enriched language instruction and is sensitive to non-native speakers’ needs, students with two or fewer years of English language instruction will usually need more intensive, small group language instruction. The EAL program ensures newcomers and others with limited acquisition of English skills access to the English language and curriculum, as well as supports English grade level teachers so they can continue to provide a challenging program for all students in the English program.

Assessment

In keeping with the school's assessment principles and the spirit of the IB Primary Years Program, assessment in the Primary School is geared toward improving, rather than simply documenting, student performance. The use of assessment to judge the
effectiveness of both teaching and learning processes is essential to allow teachers and students to identify their strengths and weaknesses and the effectiveness of the program.

It is especially important at AIS, where students have contact with a number of teachers, that all of these teachers be involved in using a variety of assessment strategies. The information gathered is appropriately shared to promote the learning partnership of students, teachers, and parents.

The reporting cycle includes two written progress reports, one parent teacher conference, a three way conference combined with a student led conference, and a final report card at the end of the school year. *(AIS Assessment Policy)*