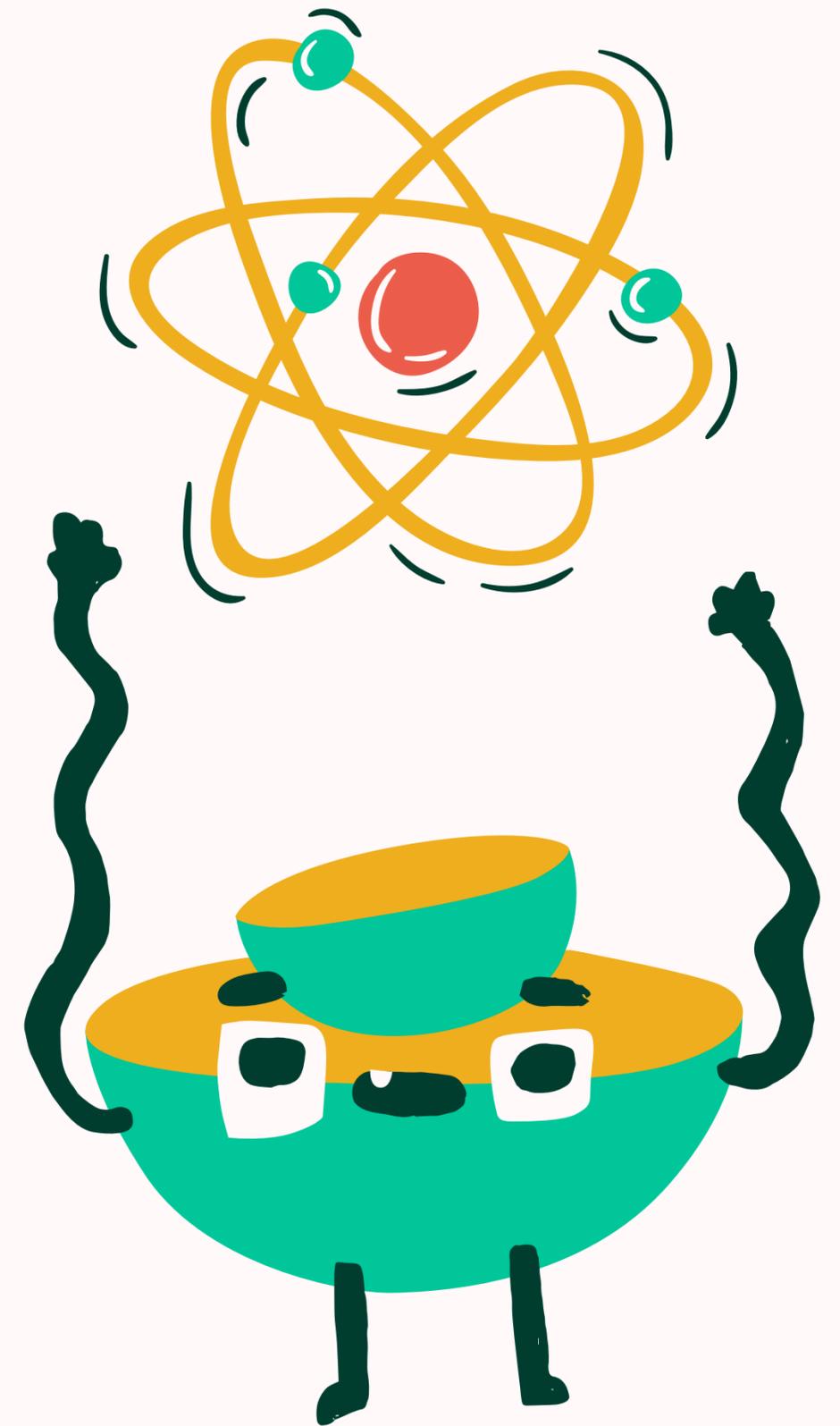


GRADES 1-5 CURRICULUM

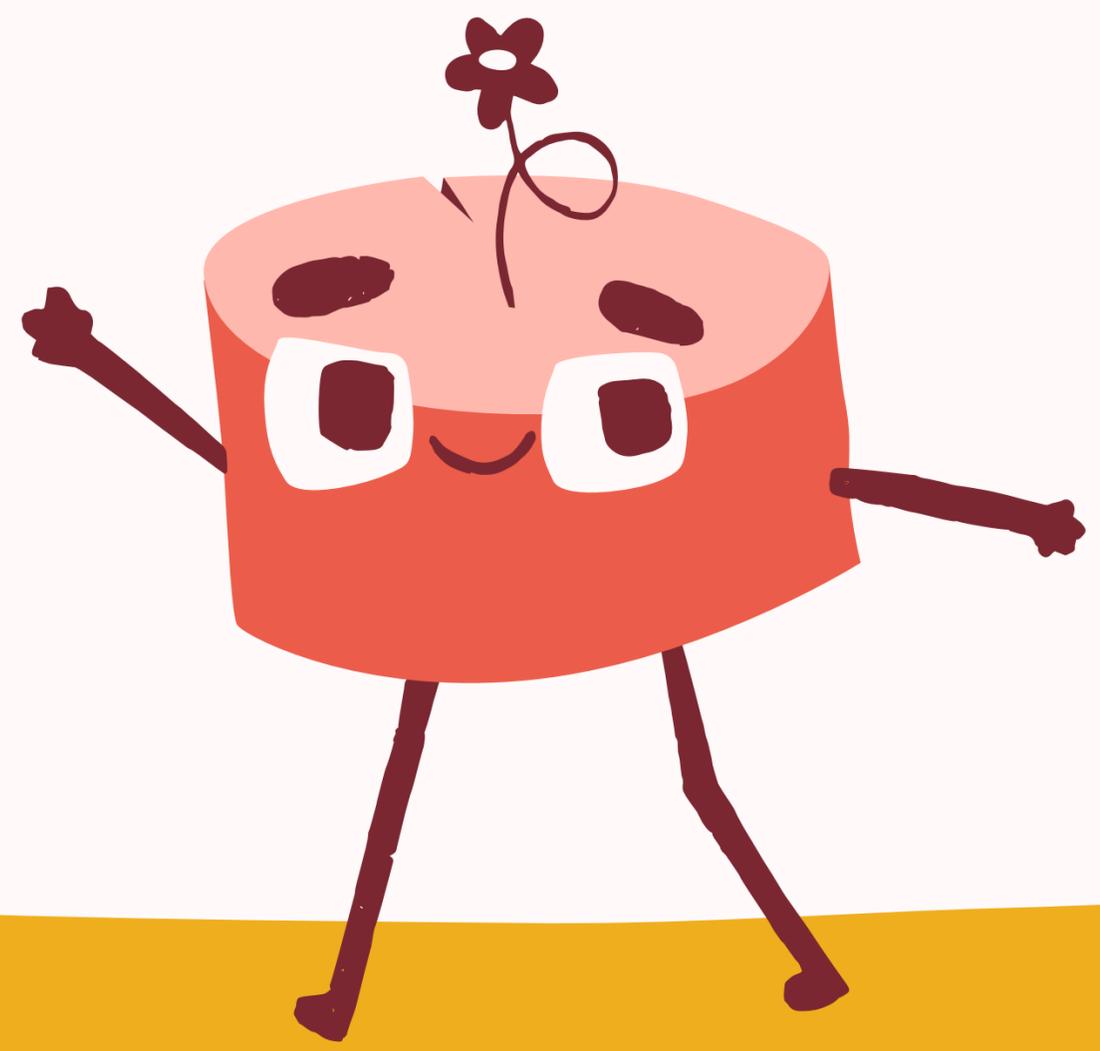
Heritage International School





HI. SCHOOL

Together We make the Different



Lower School (Grade 1 to 5)

The **Lower School Program** at HIS implements young learners to create a strong academic foundation for better development in learning skills such as cooperation, self-expression, respect, and empathy. These fundamental social-emotional learning skills will be enforced in daily classroom curriculum alongside **Systems Thinking, Monitoring and Information Filtering, Bible, English, Math, Science, Physical Education, Computer Literacy, Novel Engineering, Library, Theatre, Music, and Art**. At HIS, we create a positive environment to result in positive relationships with peers and adults infiltrating various community service projects to put our young learners' values into action.

The academic needs of grade 1 are significantly different from that of grade 2 to 5 students. As a result, HIS provides an environment for young learners that will tailor to the needs that best suit our youngest students. These programs balance academic requirements and set stages for children's lifelong love of learning with the help of exploration, play, and collaboration, ultimately preparing them for their next levels of education.

Due to the continuous development of technology around the world, HIS ensures Lower School Students are prepared within their generation through Makerspace and multimedia computer labs. This includes 3D printers, green screen filming walls, and robotics that enhance our STEAM (Science, Technology, Engineering, Arts, and Mathematics) curriculum. HIS private school provides grades 1 through 5 a mixed-age environment. This small group environment provides supplementary attention that encourages students at an early age to learn more about themselves and learn from their peers. These Heritage Core Cultural Norms will instill many more opportunities for our future leaders.

HIS recognizes the need for Elementary students to part-take in after school clubs and activities. Our Educational Enrichment Program allows Elementary level students to participate in hobbies ranging from table tennis to robotics and chess, all unique to HIS.



DIFFERENTIATED LEARNING

Christian Education



STEAM



Monitoring & information Filtering



Systems Thinking



Project-based Learning



CORE CURRICULUM

Grades 1 - 5

- English
- Mathematics / Coding
- Science
- Technology
- French
- Social Study
- Monitoring & Information Filtering
- Systems Thinking
- Novel-Engineering
- Arts
- Physical Education
- Bible Study



English

Grades 1–5

The English Program focuses on skills and concepts previously developed in the lower grades. The program is well balanced and individualized according to the students needs, and provides the students with many opportunities to read for pleasure, for self-interest, and enrichment. The course emphasizes Reading, Reading Comprehension, Creative Writing, Grammar, Spelling and phonics, Word Use and Vocabulary, Oral and Visual Communication. Students will be introduced to novel studies, short stories, poems, articles, letters and plays. Through these different genres the students will develop the skills needed to process, analyse and absorb information and to think clearly, creatively and critically. They will be involved in effectively using writing conventions, spelling and grammar skills. Activities are integrated and students are encouraged to read, recall and reflect while working in a cooperative manner. Independent reading and writing activities are assigned and students are taught to respond to language using oral language skills accurately and effectively. They will be encouraged to use critical and analytical skills in their response to communications media and will use technology skills for research purposes.

Students explore literature through classroom read-aloud, independent reading, literature circles and reading response exercises, both oral and written. Book selection is taught as a skill and students are encouraged to develop their own reading interests.



Grade 1

Number

Students work with numbers up to 50 and begin to develop an understanding of the ways we use numbers. They are also introduced to the idea of fractions, through the context of sharing things equally.

Algebra

Students begin to look at how patterns can be used to make predictions. They also begin to work on the idea that in a number sentence (for example, $2 + 2 = 4$) both sides must be equal to each other. These ideas are foundational to algebra work in later grades. Students will begin to write code to order a sequence of steps. They will also be introduced to mathematical modelling to analyze and create solutions for real-life situations, such as creating a seating arrangement for a class event.

Data

Students begin to develop their understanding about data by setting out to answer a question of interest (for example, "What type of animals do my classmates like?"). They organize this data into categories, and then display this information in order to draw conclusions.

Spatial sense

Students develop their spatial sense as they compare the length, mass and capacity of different objects as well as learn how calendars are organized to describe time. They also learn specific language to describe different shapes.

Financial literacy

Students learn to recognize Canadian coins and bills and compare their values.

Social emotional learning skills and math processes

Students learn about positive motivation, and how to use self talk strategies such as "I've done this before so I know I can do it again" as encouragement that they can do it or to encourage peers when counting.

Grade 2

Number

Students work with numbers up to 100. They develop and apply their growing understanding of numbers in various ways, such as solving problems involving addition and subtraction. They continue to work with fractions through the context of sharing things equally.

Algebra

Students use shapes and numbers to continue to learn about patterns and how to extend them. They also learn about equality by adjusting pairs of addition and subtraction statements to make them equal. Students will develop code to move multiple objects from one location to another on a grid at the same time. They will also use mathematical modelling to analyze and create solutions for real-life situations, such as determining the cost of a lunch program.

Data

Students continue to develop their understanding of data as they learn ways to collect, organize, display and interpret more complicated data. They will learn about the likelihood of events happening and how that can be used to make informed decisions, (for example, "If it is likely to rain tomorrow, then I should wear rain boots").

Spatial sense

Students continue to develop their spatial sense as they learn to visualize what different shapes look like when they are turned around or taken apart. They learn to recognize and describe more complex shapes and create simple maps of familiar places. Tools such as rulers will be used to accurately measure the lengths of objects, and timers and clocks are used to measure how much time has passed.

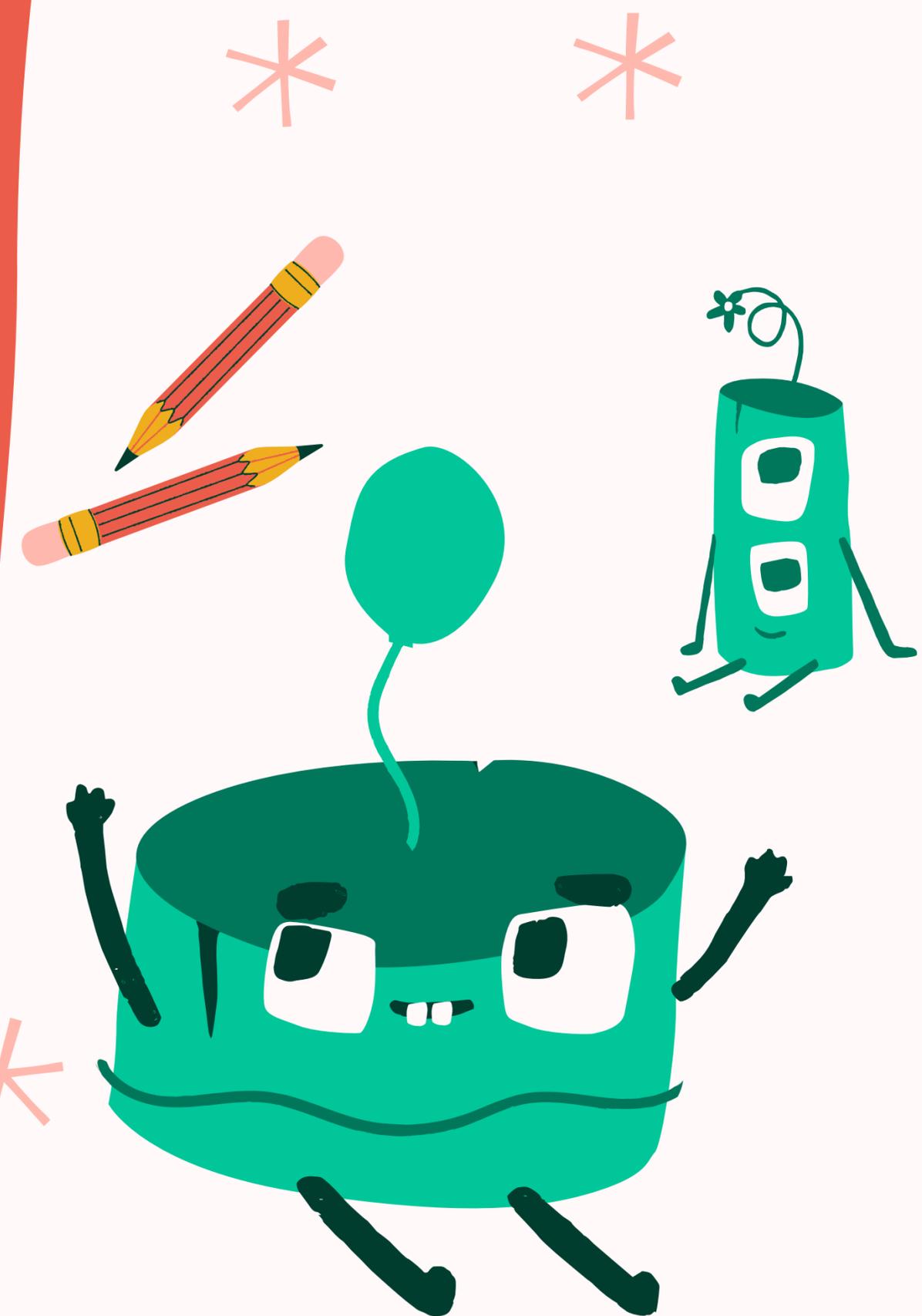
Financial literacy

Students build on their understanding that money has value and identify different ways to represent the same amount of money. For example, how different combinations of coins can add up to \$1, and how different combinations of loonies, toonies and bills can add up to \$100.

Social emotional learning skills and math processes

Students practise critical and creative thinking. For example, in financial literacy as students are learning to break down different denominations of money and select different tools and strategies such as making lists of different money combinations, drawing pictures of different groupings and using manipulatives to break down amounts in different ways.

Math



Grade 3

Number

Students work with numbers up to 1,000 and learn how to break down numbers in different ways. For example, how the number 225 can be described as $200 + 20 + 5$ or 2 hundreds, 2 tens, and 5 ones. Students learn that fractions can be represented in more than one way – for example, one-half can be thought of as two one-fourths. Multiplication is introduced using rows and columns, and students are expected to know $\times 2$, $\times 5$ and $\times 10$.

Algebra

Students learn to identify and describe what repeats in a pattern, such as when a specific event happens every Monday, or when a number sequence goes up by 2 each time. Students begin to identify multiplication and division equations that are equal, such as 3×4 and $6 \div 2$. Students will write code to perform a repeating operation, such as a repeating number pattern. They will also use mathematical modelling to analyze and create possible solutions for real-life situations, such as raising funds for a charity.

Data

Students continue to develop their understanding of data. They learn more ways to collect, organize, display and interpret data involving larger numbers. They start to use scales on their graphs so they can represent larger data collections and use averages to make comparisons of data.

Spatial sense

Students continue to develop their spatial sense as they recognize and describe three-dimensional objects and imagine what these objects would look like if they were taken apart or flipped around. Students continue to measure length and are introduced to measuring the weight of an object or how much it holds. They measure area and compare it to length, as well as learn how to tell time on both digital and analog clocks.

Financial literacy

Students continue to develop their understanding of money by calculating the change required for simple transactions involving whole-dollar amounts.

Social-emotional learning skills and mathematical processes

Students identify and learn to manage emotions that they may feel such as pride, confusion, fear and excitement. For example, in algebra as they create and execute code that represents a mathematical situation.

Grade 4

Number

Students work with numbers up to 10,000 and are introduced to decimals. They learn how decimal numbers are used in real-life, such as taking a person's temperature on a thermometer and when making and recording precise measurements. Students will begin to divide two- and three-digit whole numbers by one-digit whole number and are expected to know multiplication facts from 1×1 to 10×10 . They also begin to solve problems that require more than one operation with whole numbers.

Algebra

Students build their knowledge of patterning as they begin to classify patterns as repeating or increasing. They also begin to determine the values that make algebraic statements true – for example, if $n + 3 = 10$, then n must be 7. Students learn to write and read code to create geometric designs. They will also use the modelling process to analyze and create solutions for real-life situations, such as raising money through a walk-a-thon.

Data

Developing an understanding of data continues as students collect, organize and display two or more data sets using frequency tables and multiple-bar graphs. Students begin to learn how to create an infographic, so that they can tell a story about data.

Spatial sense

Students learn the characteristics and properties of a rectangle, one of the most common shapes in our everyday life. Students learn how to determine the area of a rectangle and the relationship between the various units in the metric system – a measurement system used throughout Canada and most of the world.

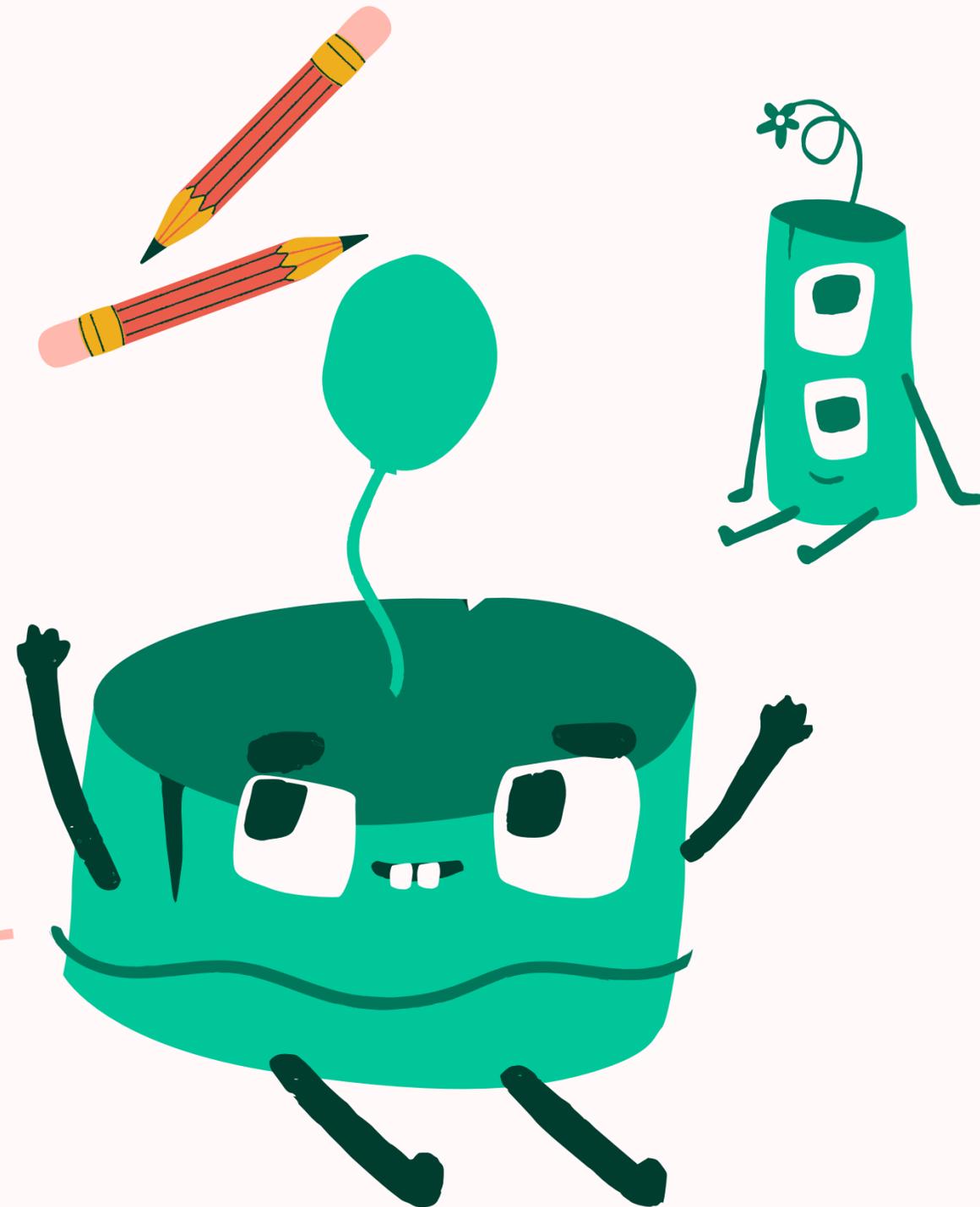
Financial literacy

Students learn that there are different ways to pay for goods and services. Students also learn how consumers determine whether an item is good value for the price.

Social emotional learning skills and mathematical processes

To learn about positive motivation, students will use a variety of tools and strategies in spatial sense as they try different non-standard units to measure the area of a table top, adjusting as they go in order to reach a solution.

Math



Grade 6

Number

Students continue to work with numbers up to 100,000. Students are introduced to per cents and continue to build their understanding of decimals and fractions. Students are introduced to adding and subtracting fractions with the same denominator. Students are expected to know multiplication facts from 0×0 to 12×12 . They also solve problems involving more than one operation with whole and decimal numbers.

Algebra

Students continue to classify patterns as repeating, growing and shrinking. Students begin to write and solve algebraic equations involving whole numbers, such as $3 + x = 24 - 5$. Students apply their understanding of multiplication and ratios to create and execute code for patterns that grow. They use the process of mathematical modelling to solve problems drawn from real-life, such as creating a design for a school playground and calculating how much the play structures they have chosen would cost.

Data

Students learn about the importance of using various sampling techniques to get “good” data. They create infographics and learn how to identify when graphs are misleading. Students begin to use experiments to understand the concept of probability.

Spatial sense

The development of spatial sense continues as students study the triangle. Students learn the characteristics and properties of different kinds of triangles, including their angles and measurements. Work continues in understanding and using the metric system to measure length, area, mass and capacity, and to convert from larger units to smaller ones.

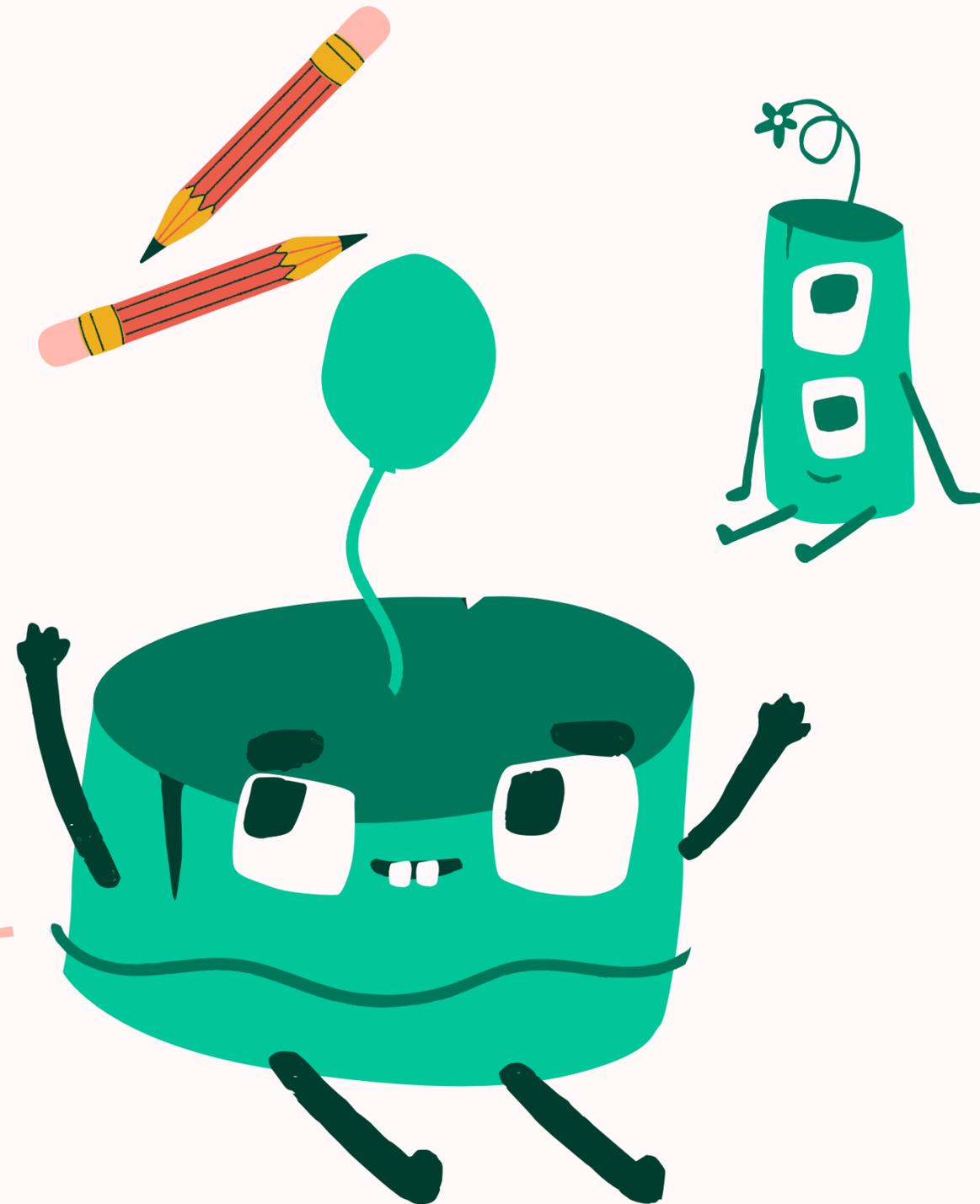
Financial literacy

Students learn about different ways to transfer money between people and organizations, such as e-transfers and cheques. They calculate the total cost and change required for cash transactions involving items priced in dollars and cents, using mental math and other strategies. Students learn how to determine the best value for an item – for example, five apples for \$1.00 versus three apples for 75 cents. Students prepare basic budgets and learn about the concepts of credit and debt.

Social emotional learning skills and mathematical processes

Students continue to develop healthy relationship skills while working with numbers. Students play games with classmates that involve fractions, decimals and whole numbers. They also learn how to have positive interactions and be patient with others as students take different amounts of time to figure out the answer when it is their turn.

Math



* Science

Students in science class will be taught to recognize the hand of God in the creation around them. Through various studies of science, students will come to recognize the orderliness and complexity of God's world. They will be challenged as stewards of His creation and come to not only articulate the positive and negative effects we have on the physical world, but also to develop an attitude of care and respect for all of creation. In addition to this, the students will also learn to recognize and appreciate the wide variety of God-given talents and abilities of each member of the class.

In achieving this vision, students must:

- Acquire understanding of the interrelationships among science, technology and society;
- Develop understanding of important science concepts, processes and ideas;
- Solve problems and apply scientific principles.

* Technology

Technology is also a way of knowing, and is also a process of exploration and experimentation. Technology is both a form of knowledge that uses concepts and skills from other disciplines (including science) and the application of this knowledge to meet an identified need or to solve a specific problem using materials, energy, and tools (including computers). Technological methods consist of inventing or modifying devices, structures, systems, and/or processes.

An understanding of the nature of technology includes knowing the following:

- what technology is, in its broadest terms (much more than the knowledge and skills related to computers and their applications)
- how technology and science are interrelated
- how thinking about technology's benefits, costs, and risks can contribute to using it wisely



Social Study



French

An understanding of how God has worked in the lives of all people through the ages is critical to a student's ability to actively engage society.

Developing a sense of who I am, and Who we are,

Where have I come from? What makes me belong? Where are we now? How can I contribute to society?

Students will work towards:

- developing an understanding of responsible citizenship;
- developing an understanding of the diversity within local, national, and global communities, both past and present;
- developing an understanding of interrelationships within and between the natural environment and human communities;
- developing the knowledge, understanding, and skills that lay the foundation for future studies in geography, history, economics, law, and politics;
- developing the personal attributes that foster curiosity and the skills that enable them to investigate developments, events, and issues.

In all French as a second language programs, students realize the vision of the FSL curriculum as they strive to:

- use French to communicate and interact effectively in a variety of social settings;
- learn about Canada, its two official languages, and other cultures;
- appreciate and acknowledge the interconnectedness and interdependence of the global community;
- be responsible for their own learning, as they work independently and in groups;
- use effective language learning strategies;
- become lifelong language learners for personal growth and for active participation as world citizens



Monitoring and Information *

'CRITICAL THINKING' is one of the core competencies required for future social talent. Critical thinking refers to the process of reasoning or the ability to distinguish the suitability and incompatibility of information materials. The reason why critical thinking is emphasized is because society needs the ability to analyze and solve problems in an unbiased attitude in the flood of information.

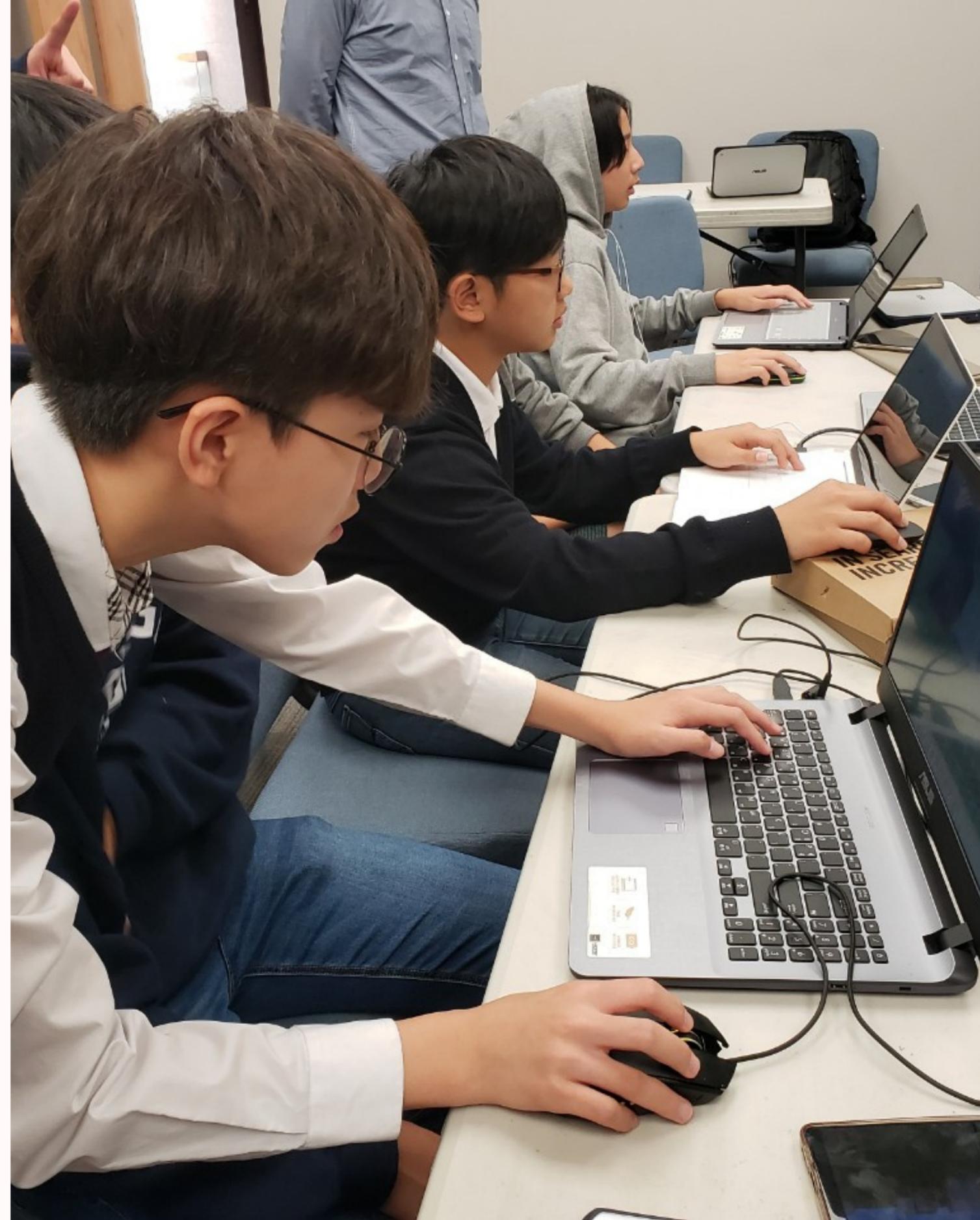
Learning content

- Understanding Monitoring
- How to Monitor
- STEEPS Technique
- Understanding INFORMATION FILTERING
- FACT & SCORE Extraction
- Result of Monitoring



Systems Thinking *

At elementary level, to understand systems they already know in terms of family, nature and the elementary program (as whole), requires the capacity to understand how relationships and interactions between parts result in dynamic behavior of whole systems. Rather than emphasizing the complexity, it is important to break down the concepts of the systems in which they are a part of. Systems thinking is not another subject added to the curriculum; instead it is a tool you use to model and understand interrelationships in the curriculum, including literature, social studies, science, language, mathematics, the arts, and school citizenship. Teachers should leverage the natural curiosity and tendency to ask questions of elementary level students to help children develop the skill of analyzing and creating systems



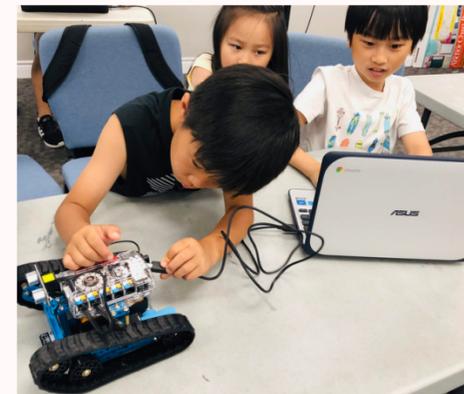
Novel Engineering



It is an innovative approach to integrate engineering and literacy.

Students learn the engineering design process through novel engineering (a literacy-based approach to teaching engineering skills). The characters of a story become the clients and students pull from the text to scope problems that need solving and to set constraints as they engage in engineering design. Teachers play a pivotal role in supporting their students' engagement by providing a supportive, responsive environment that will allow students to build on their ideas as they work on complex problems. Instead of prescribing a particular solution or process for students, teaching engineering involves listening to, understanding, and responding to student thinking. Design is about realizing the ideas of individuals and Novel Engineering gives students the space to explore their ideas through design projects

1. Read a book and identify Problems
2. Scope problems and brainstorm solutions
3. Design a solution
4. Get feedback
5. Improve designs
6. Teams can either present their final solution or reflections on their process to the class write a story that includes their solution or make an advertisement for their solution

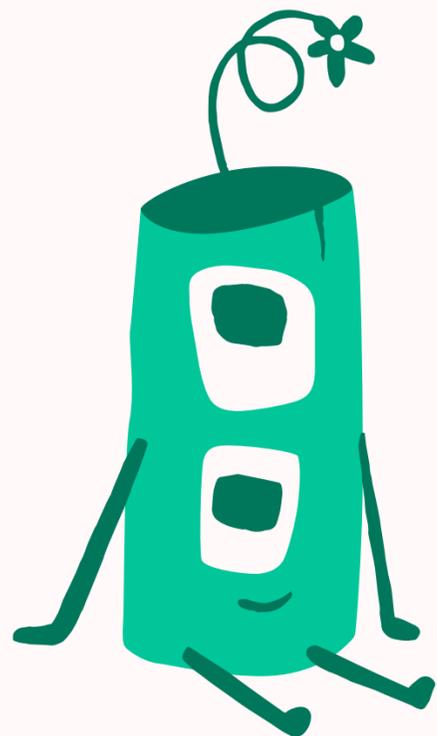


Arts

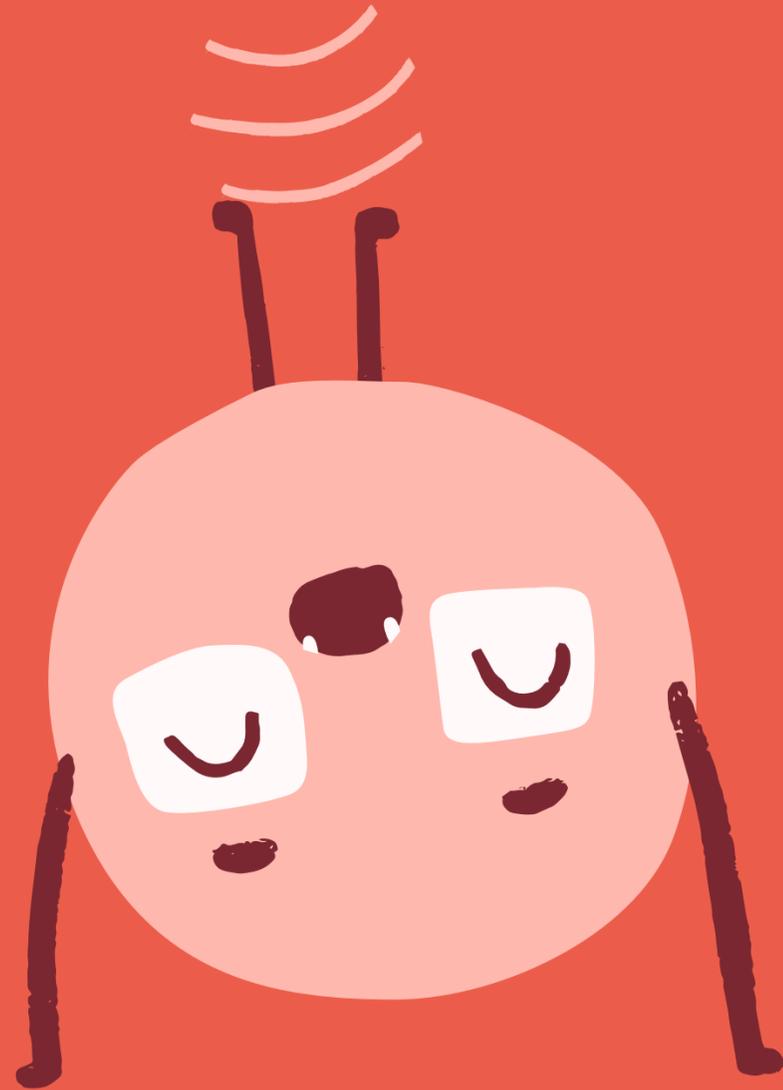


The elementary art program gives a structured opportunity for the students to develop their skills, confidence, and joy in creating works of art. Students develop their decision-making and problem-solving skills as they manipulate different media used in creating visual works of art. The art program gives the opportunity to study God as the Creator and His creation as inspiration to our student artists.

The study of music at HIS exists to guide students to develop their musical abilities and talents to honor and worship our Lord Jesus Christ. Students are exposed to music history, theory, performance techniques, and praise and worship.



Bible

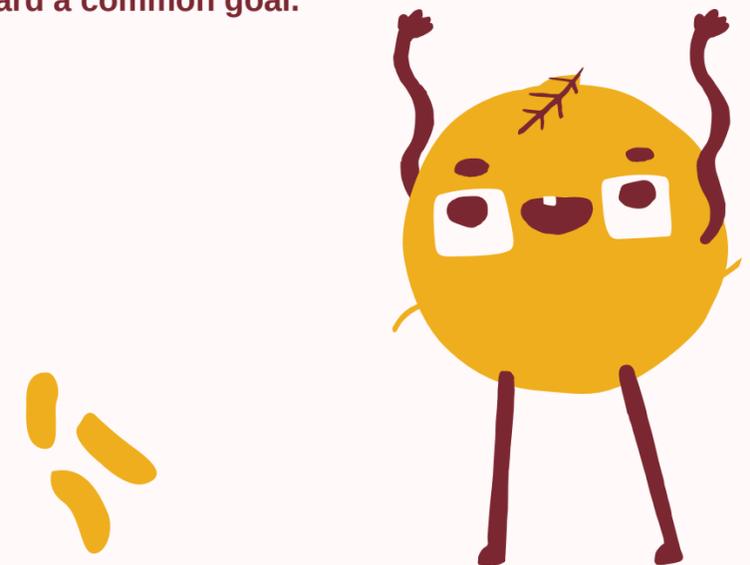


Physical Education

The primary focus of the Bible course is the application of biblical truths in the lives of students. Our goal is that students will develop a growing, maturing, personal relationship with God, and that they will demonstrate discernment in life choices through a biblical worldview. Students are also involved in weekly chapel services.



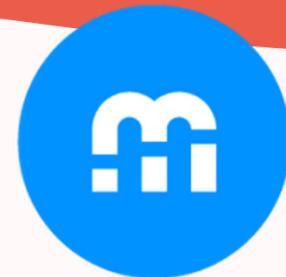
Our goal is to develop a lifelong habit of physical activity by teaching skills related to endurance, flexibility, motor skills, and fundamental skills related to games and sports. Teamwork, appreciation of the gifts of others, and sportsmanship are all key in developing a sense of one body working toward a common goal.



Additional Resources

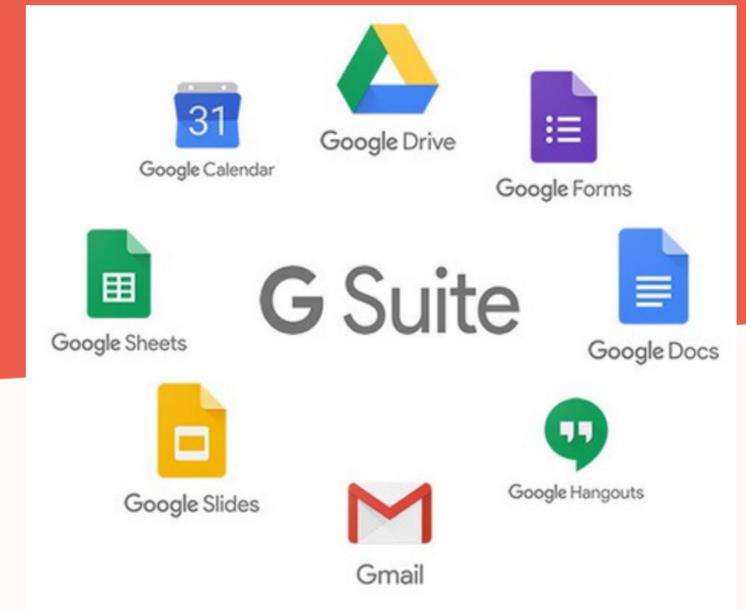


Edsby is an online information system that can easily communicate students/teachers/parents together. Teachers use Edsby as an organization tool to post notes, assignments, web links, resources, grade information, feedback, and more.



myBlueprint

Students actively learn about their interests, skills, passions, and feelings, and document what they discover about themselves in pictures, videos, and journals



G Suite for Education, previously referred to as Google Apps for Education, includes free, web-based programs like document creation tools, shared calendars, and collaboration tools. This service is available through an agreement between Google and Heritage International Schools.

Class Schedule

(Online Class Sample)



**Monday to
Thursday**



09:00 – 09:20 Devotion
09:30 – 10:30 Class 1
10:35– 11:25 Class 2
11:30 – 12:15 Class 3
12:15 – 01:00 Lunch
01:00 – 01:45 Class 4
01:50 – 02:35 Class 5
02:40 – 03:25 Skills
03:30 – 04:15 Skills

Friday



09:00 – 09:20 Devotion
09:30 – 12:15 PBL (Project-based Learning)

12:00 – 01:00 Lunch

01:00 – 02:35 PBL / Reading / Student & teacher
Conference
02:40 – 03:25 Skills
03:30 – 04:15 Skills



HERITAGE'S CLUBS

Robotic, Orchestra, Music band, Auto CAD, Adobe,
Coding, Sports and more

