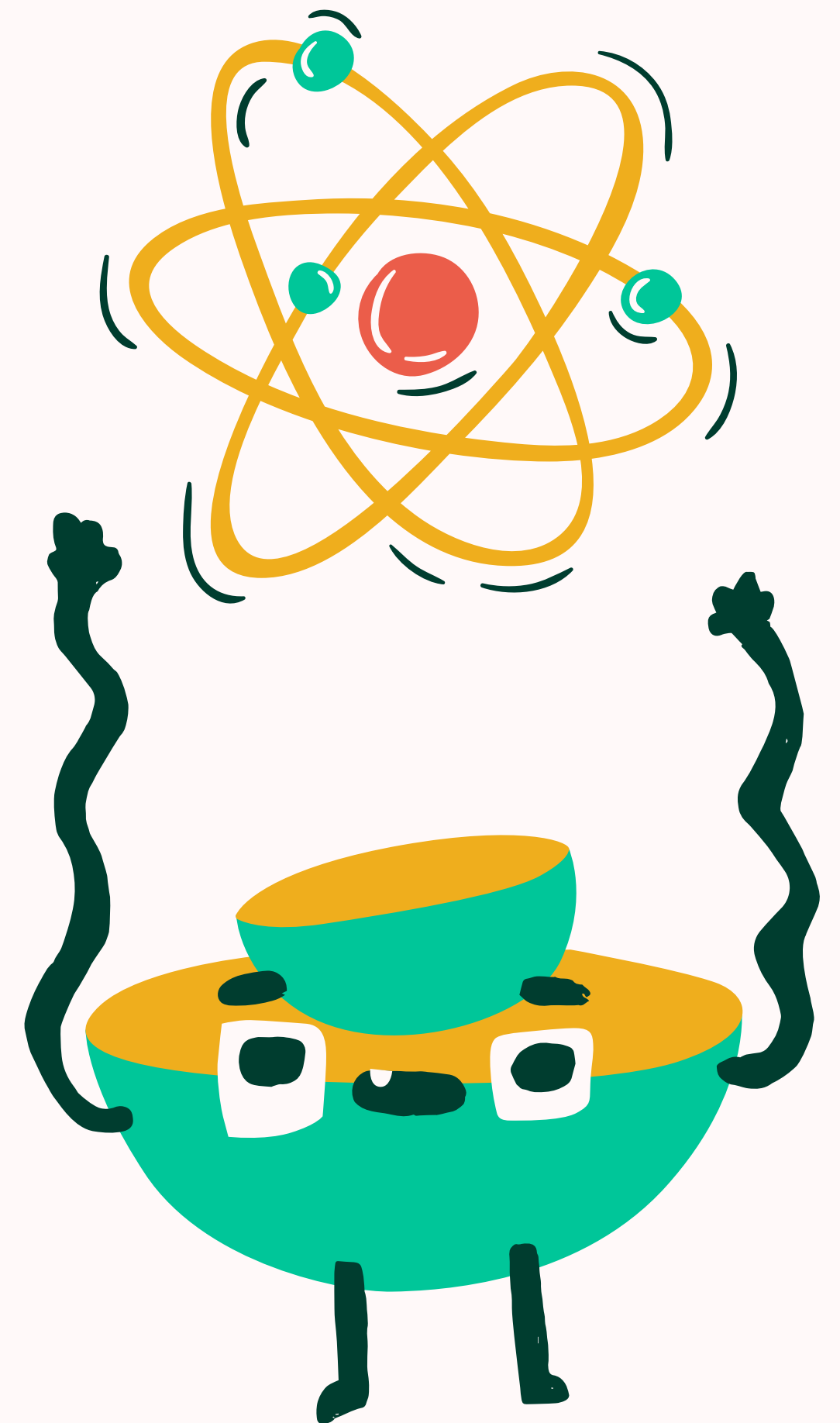


# GRADES 1-5 CURRICULUM

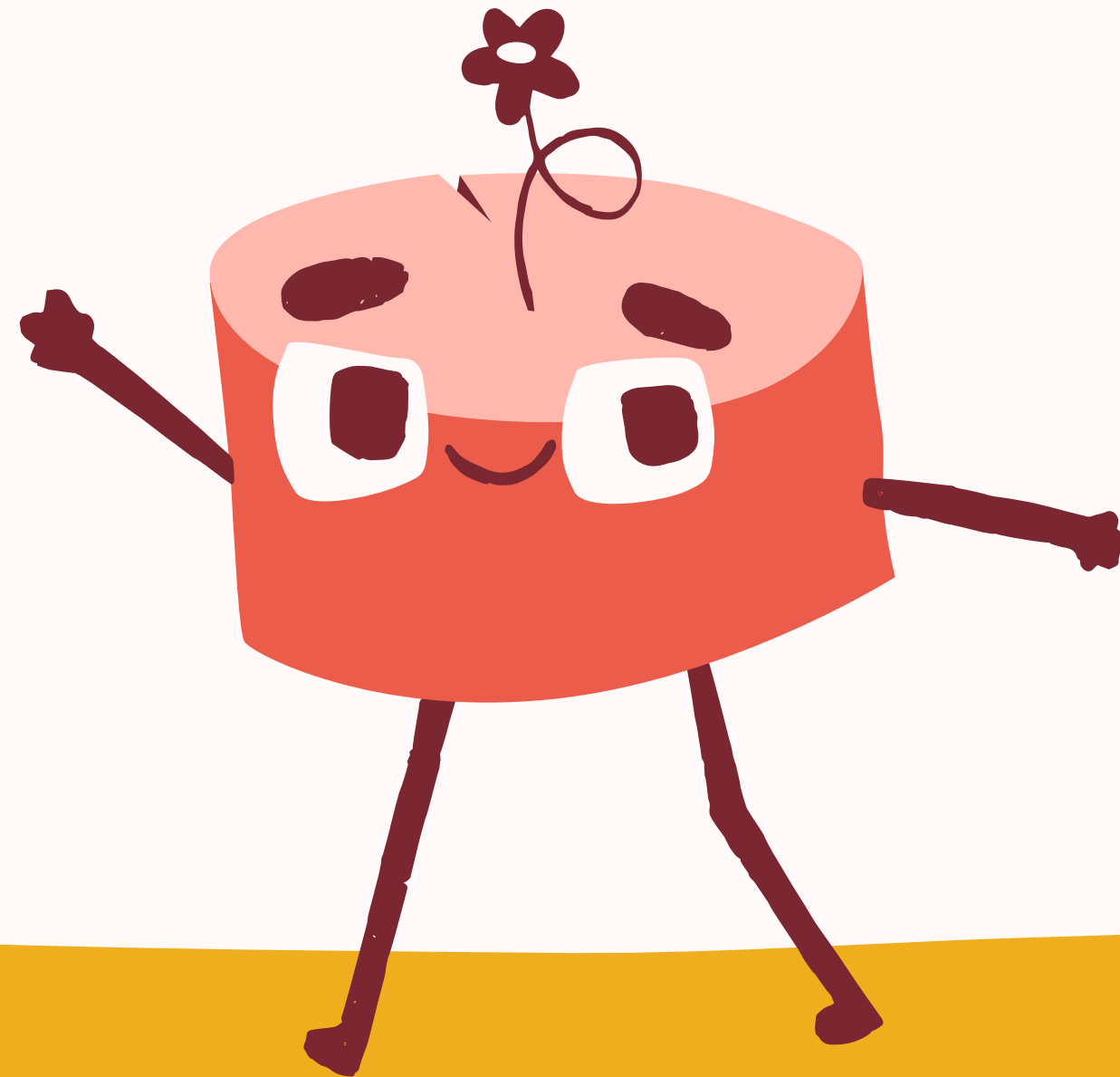
Heritage International School





# 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
- Arts
- Physical Education
- Bible



# 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 Math

## Course Overview

### Unit 1 Number Sense

Compare, count and use operations on numbers up to 50.

### Unit 2 Algebra

Create and interpret patterns with shapes.

### Unit 3 Coding

Create code with sequential events. Understand how changing code affects outcomes.

### Unit 4 Data

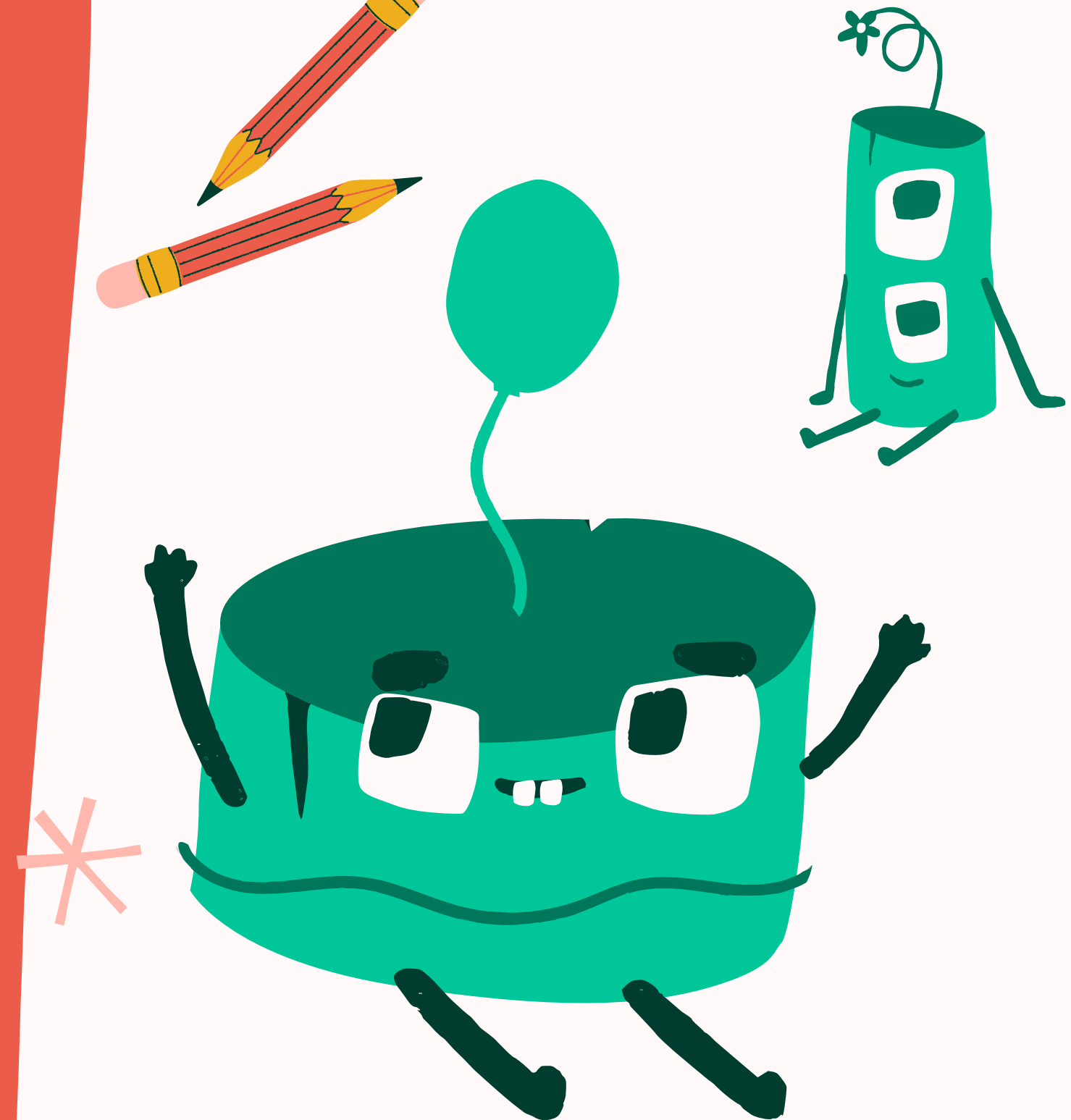
Sort sets of data about people using attributes and create sorting rules. Understand pictographs.

### Unit 5 Spatial Sense

Sort shapes using their attributes  
Measure length of objects  
Read calendars

### Unit 6 Financial Literacy

Understand coins up to 50 cents and bills to 50 dollars and compare them



# Grade 2 Math

## Course Overview

### Unit 1 Number Sense

Compare, count and use operations on numbers up to 200.

### Unit 2 Algebra

Create and interpret patterns with shapes and designs.  
Find pattern rules.

### Unit 3 Coding

Create code with concurrent events.  
Understand how changing code affects outcomes.

### Unit 4 Data

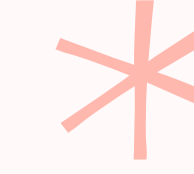
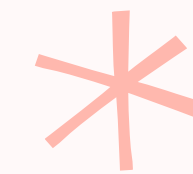
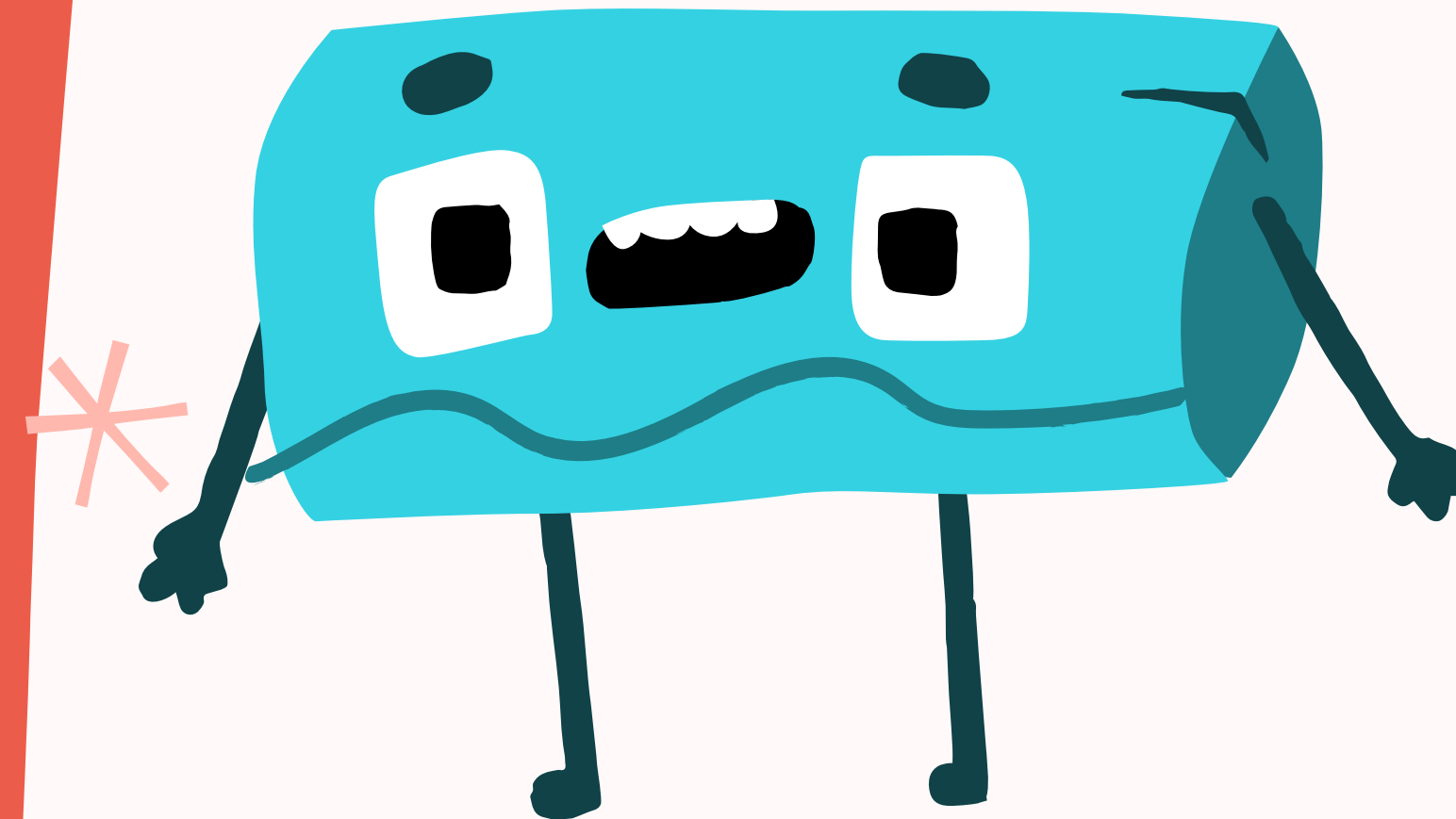
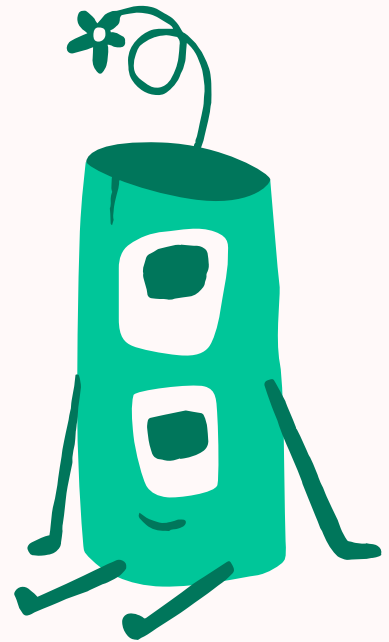
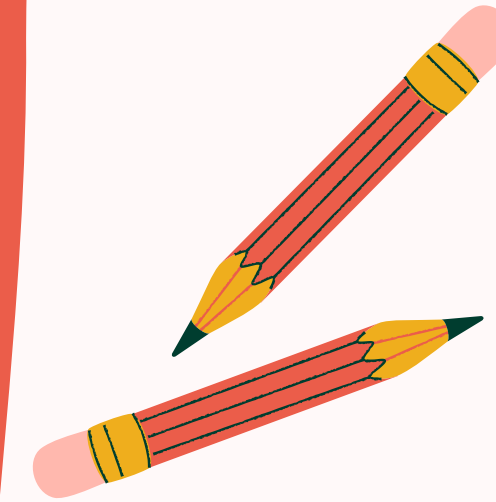
Sort using 2 attributes with tables and logical diagrams.  
(Venn/Carroll)  
Use bar graphs.

### Unit 5 Spatial Sense

Decompose two dimensional shapes and show that the area is the same.  
Use units of time.

### Unit 6 Financial Literacy

Find different ways to represent amounts of money up to 200 cents and 200 dollars.





# Grade 3 Math

## Course Overview

### Unit 1 Number Sense

Compare, count and use operations on numbers up to 1000.

### Unit 4 Data

Use Tree diagrams.  
Create Frequency tables.  
Calculate and explain mean and mode.

### Unit 2 Algebra

Identify missing elements in patterns.  
Create whole number patterns.

### Unit 5 Spatial Sense

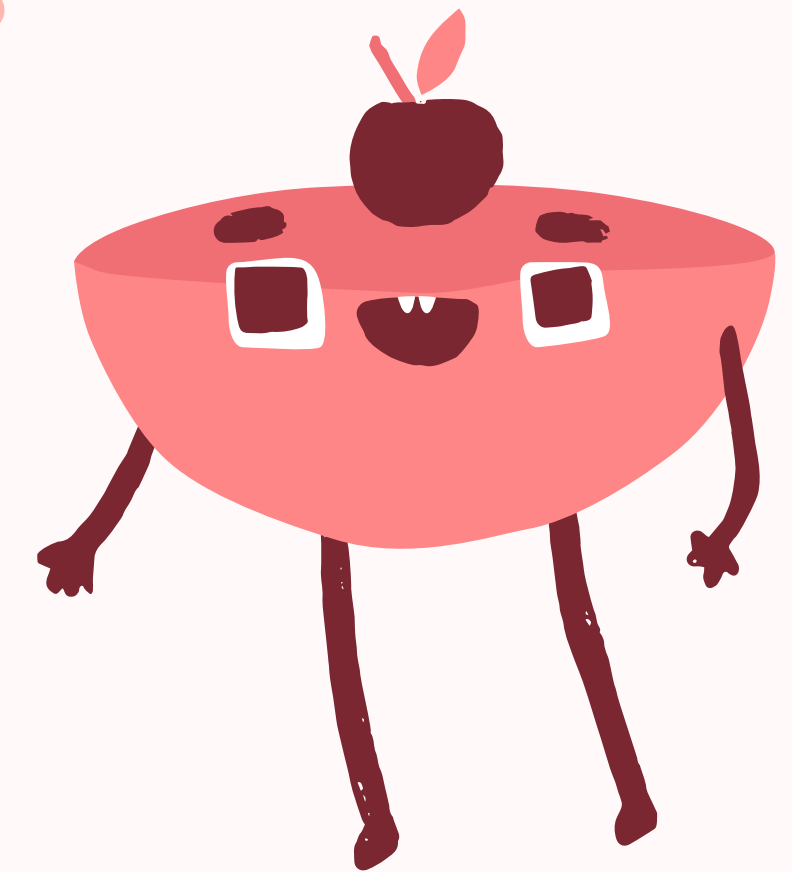
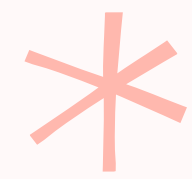
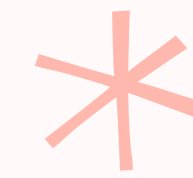
Identify 3D shapes (cubes, prisms, pyramids etc.)  
Convert metric units.  
Read clocks.

### Unit 3 Coding

Create code with repeating events.  
Understand how changing code affects outcomes.

### Unit 6 Financial Literacy

Estimate and calculate change required for simple cash transactions under 1 dollar.



# Grade 4 Math

## Course Overview

### Unit 1 Number Sense

Compare, count and use operations on numbers up to 10,000 and describe their use.

### Unit 4 Data

Distinguish between qualitative and quantitative data. Create stem and leaf plots.

### Unit 2 Algebra

Identify, extend, create and predict patterns in real-life contexts.

### Unit 5 Spatial Sense

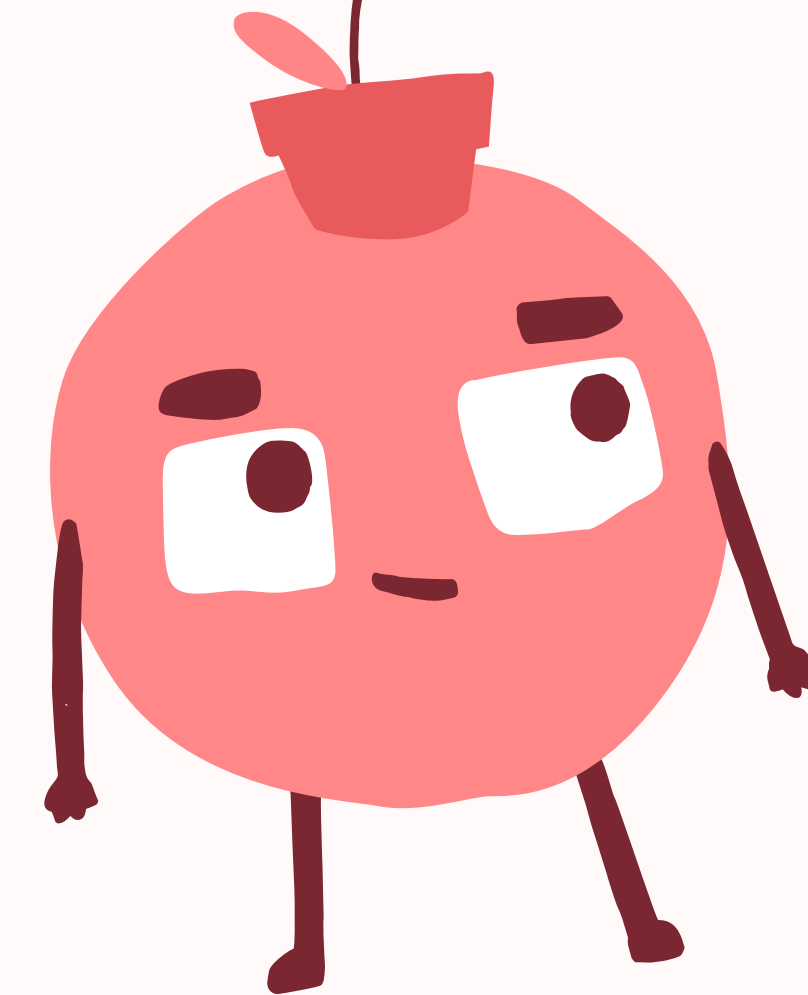
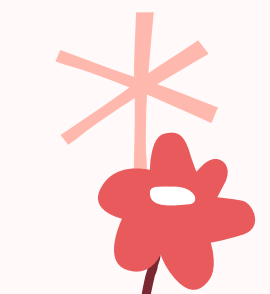
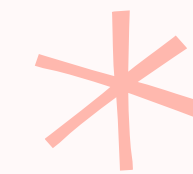
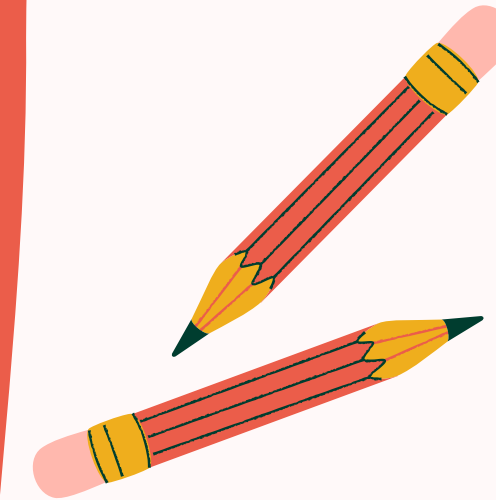
Plot coordinates in the quadrants of a Cartesian plane. Work with angles, parallel and perpendicular lines.

### Unit 3 Coding

Create code with nested events. Understand how changing code affects outcomes.

### Unit 6 Financial Literacy

Identify various methods of payment. Understand saving, earning, investing and donating.



# Grade 5 Math

## Course Overview

### Unit 1 Number Sense

Read, represent, compose and decompose whole numbers up to 100,000.

### Unit 2 Algebra

Identify and describe repeating, growing and shrinking patterns. Work with decimals

### Unit 3 Coding

Solve problems and create computational representations of mathematical events

### Unit 4 Data

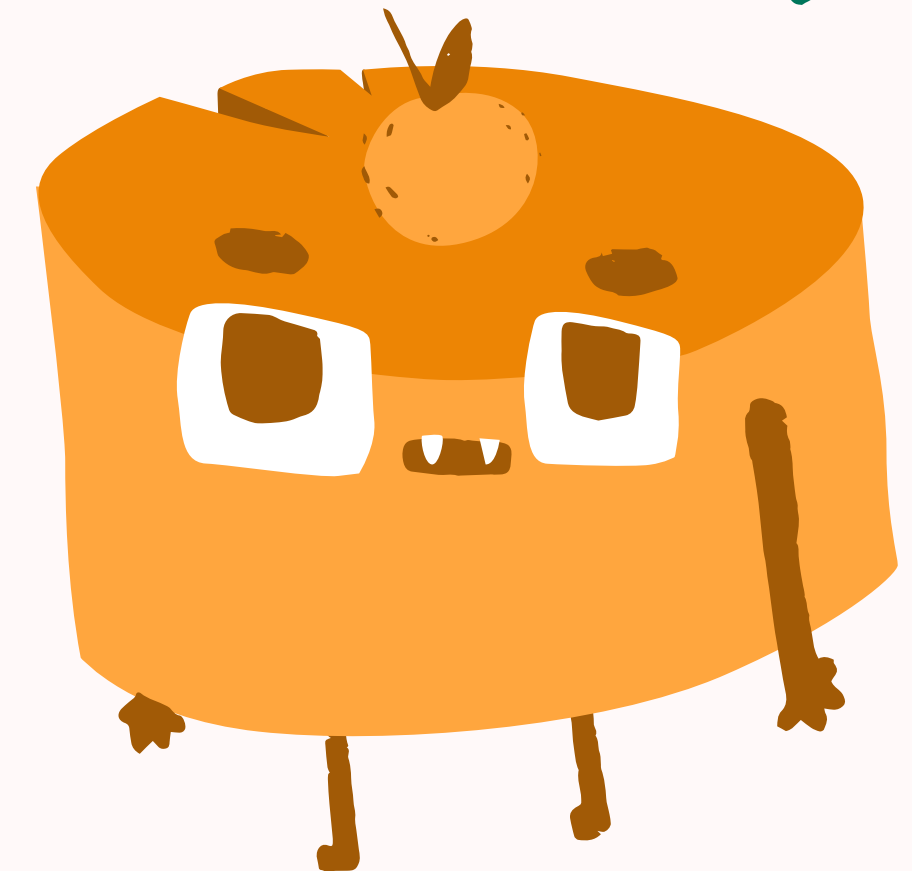
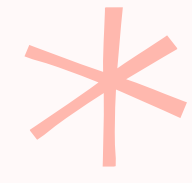
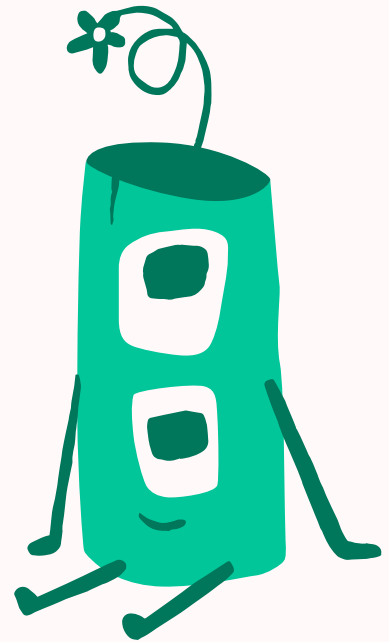
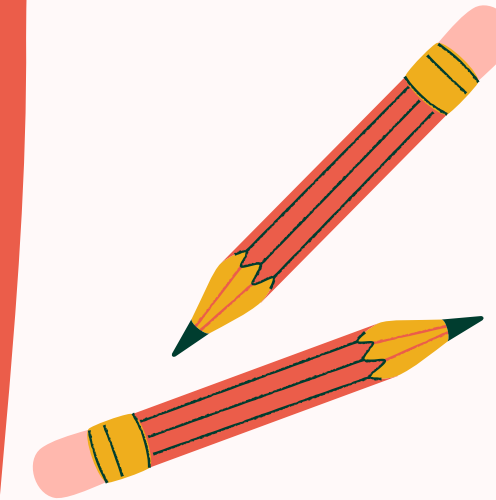
Explain various sampling techniques. Select suitable graphs to display data.

### Unit 5 Spatial Sense

Identify geometric properties of triangles, rectangles and parallelograms. Perform transformations.

### Unit 6 Financial Literacy

Design sample budgets to manage finances. Describe the type of taxes collected in Canada.



# \* 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.

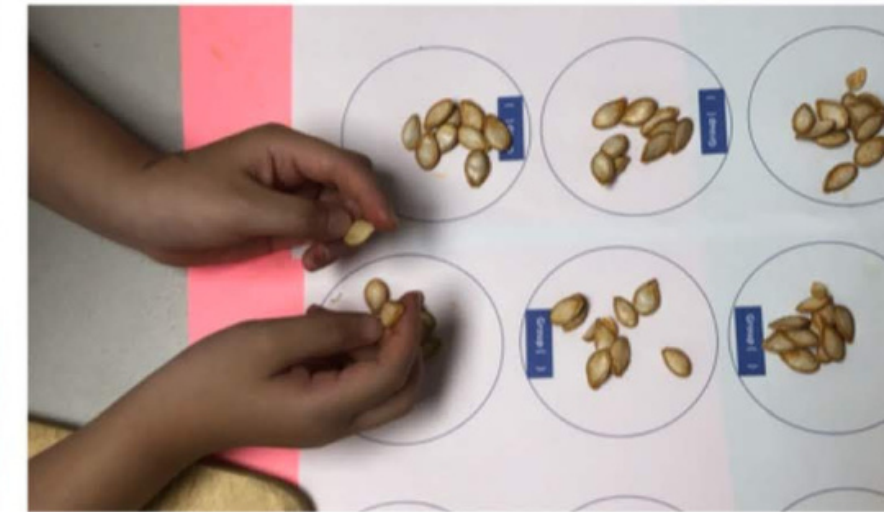


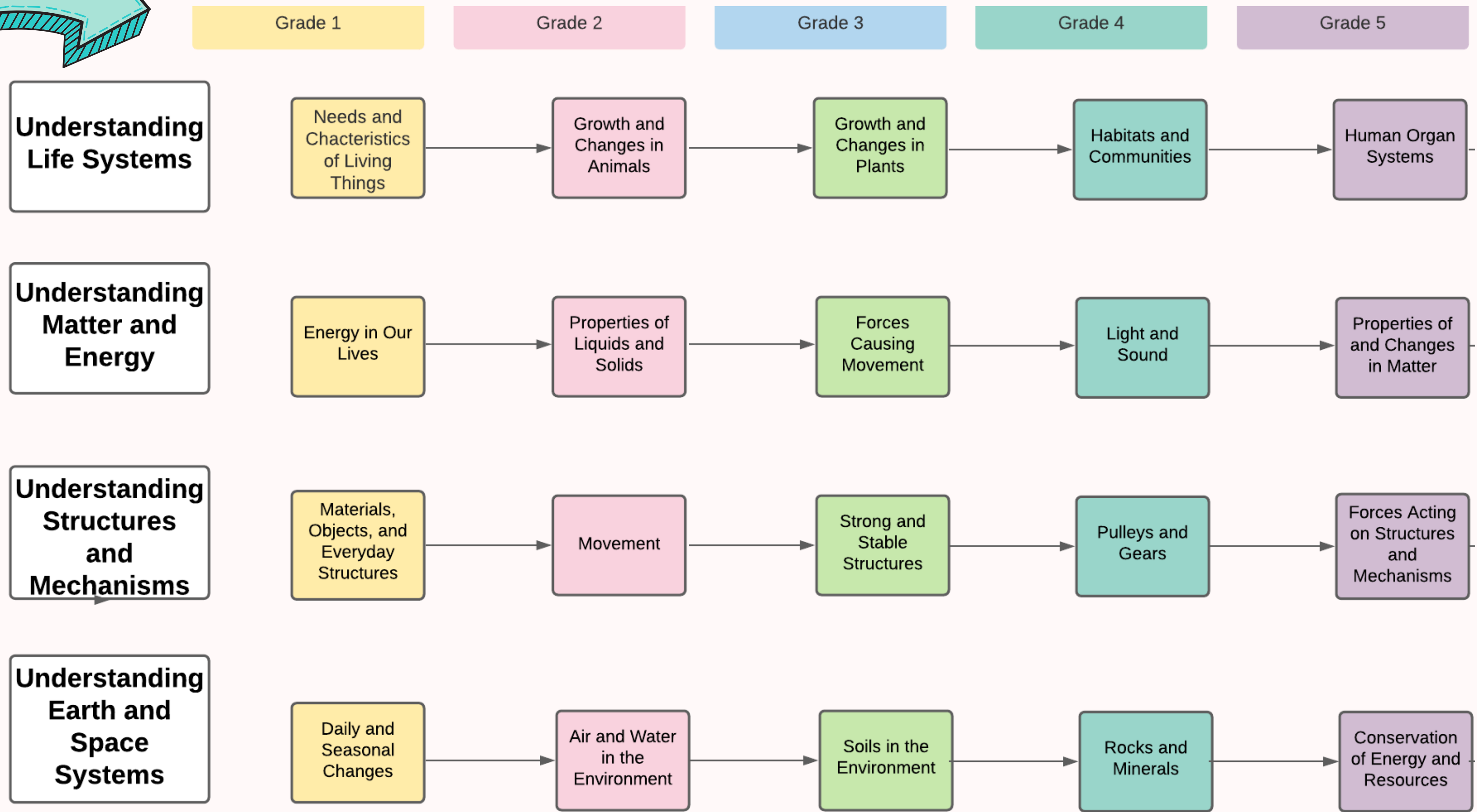
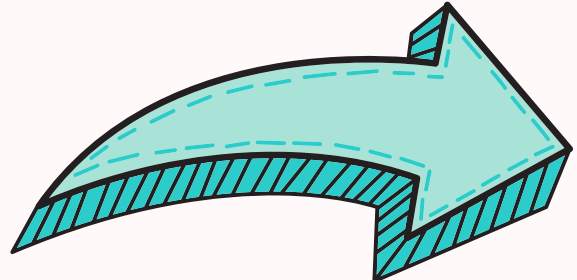
# \* Technology

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





# \* Inquiry-Based Learning

ASKING OWN CURIOUS QUESTIONS  
ENGAGE - EXPLORE- EXPLAIN- EXTEND -EVALUATE

# \* Hands-On Learning

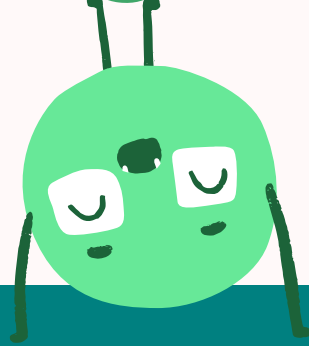
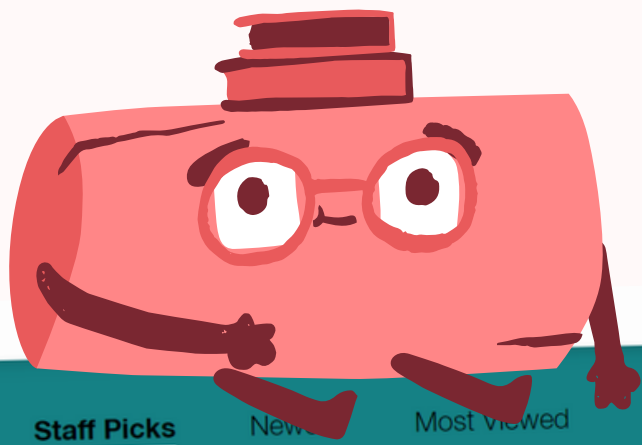
EXPLORING CONTENT THROUGH THE FIVE SENSES!

# \* Real-Life Connections

APPLYING SCIENTIFIC KNOWLEDGE IN REAL LIFE



# Science Class



A screenshot of the biointeractive.org website. It features a 'Featured' sidebar on the left and a main content area with three articles: 'Data Explorer', 'Evaluating Science in the News', and 'Scientist Role Models'. The website has a teal header with navigation links like 'Classroom Resources', 'Planning Tools', and 'Professional Development'.

<https://www.biointeractive.org/>

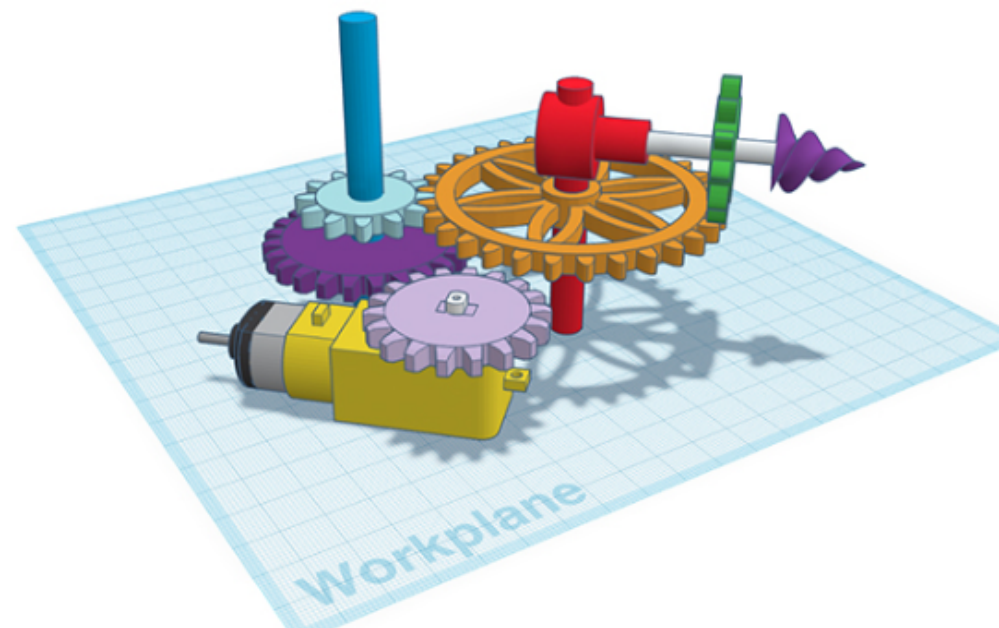
A screenshot of the BrainPOP website. It has a teal header with the BrainPOP logo and a search bar. The main content area is titled 'Science: How the World Works' and lists various science units: Cellular Life and Genetics, Diversity of Life, Climate Change, Earth System, Ecology and Behavior, and Energy. A blue character is visible at the top of the page.

<https://www.brainpop.com>

<https://www.tinkercad.com>



**From mind to design in minutes**  
Tinkercad is a free, easy-to-use web app that equips the next generation of designers and engineers with the foundational skills for innovation: 3D design, electronics, and coding!



and many more..

# 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



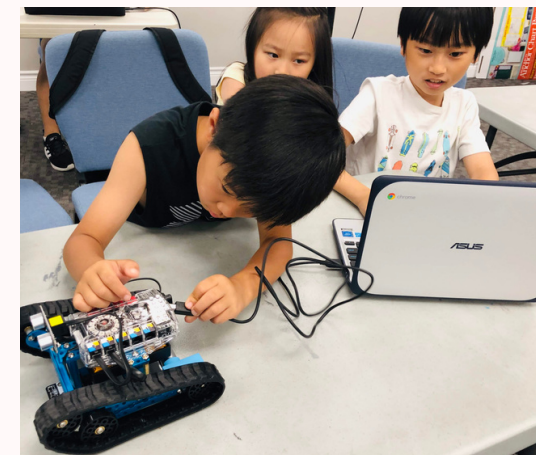
# Novel Engineering



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

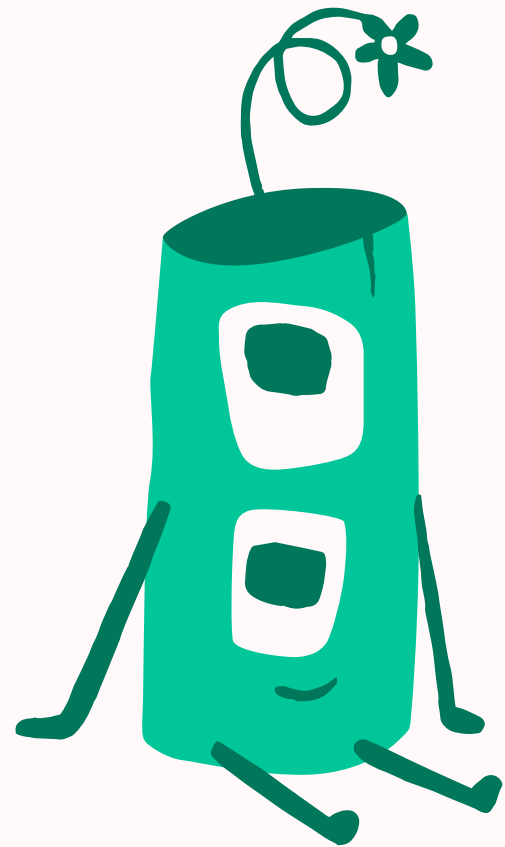


# Arts

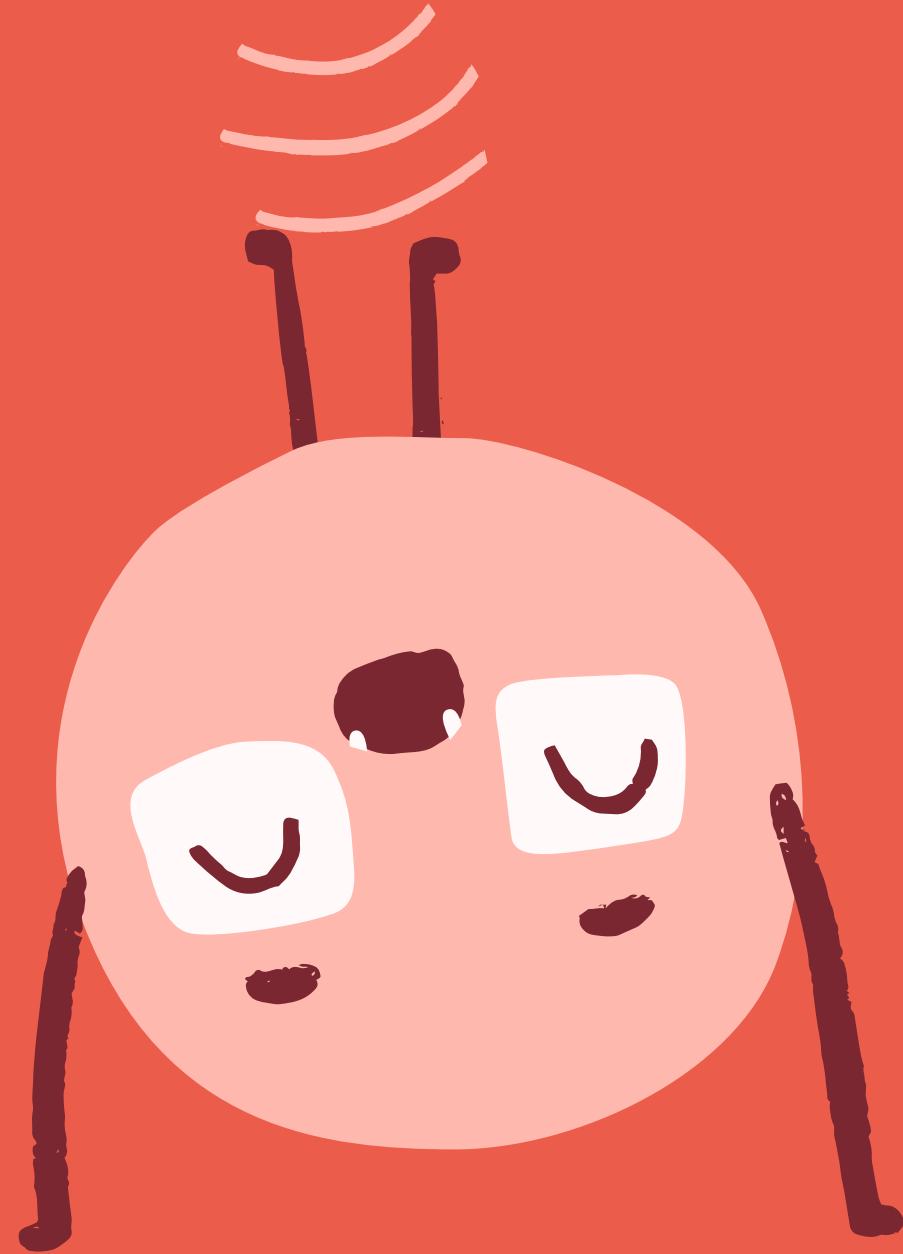


The elementary art program gives a structured opportunity for the students to develop their skills, confidence, and joy in creating works of art. Students develop their decision-making and problem-solving skills as they manipulate different media used in creating visual works of art. The art program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

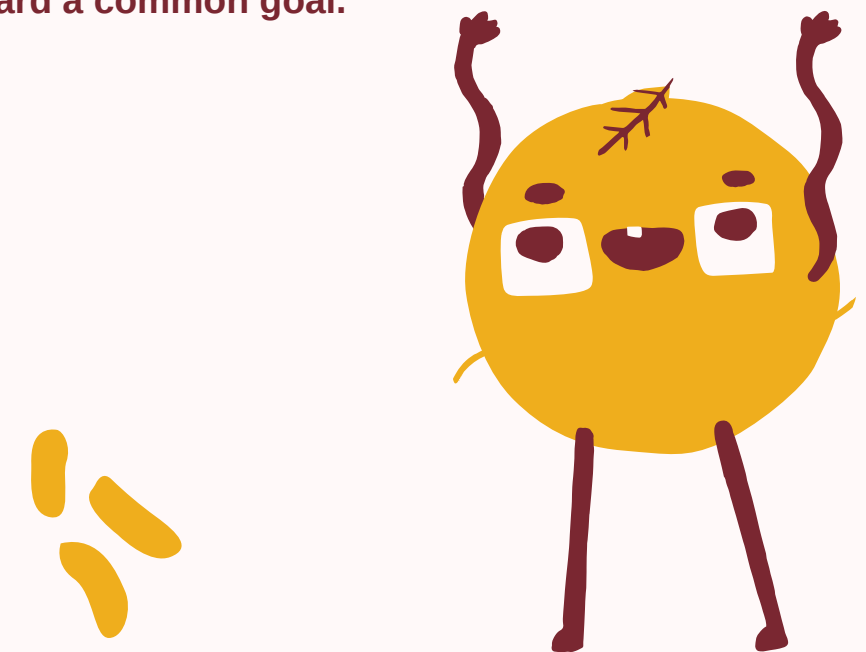


# Physical Education

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

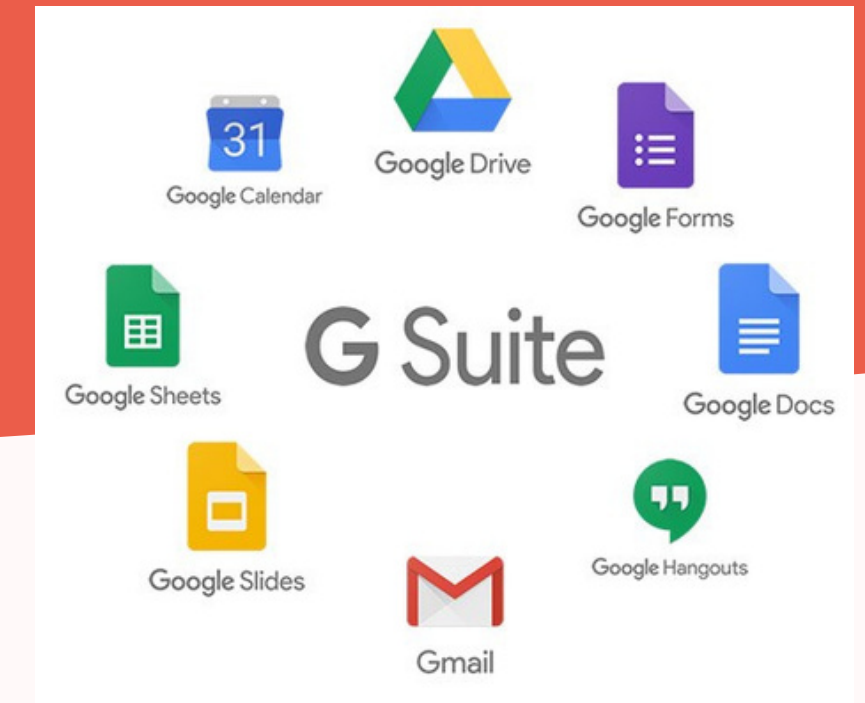


Edsby is an online information system that can easily communicate students/teachers/parents together. Teachers use Edsby as an organization tool to post notes, assignments, web links, resources, grade information, feedback, and more.



**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.

# HERITAGE'S CLUBS

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

