



SETTING DIRECTION: *Ontario Faith Frameworks*
For Junior Science & Technology Strands



2026

Catholic Curriculum Corporation



Catholic Curriculum Corporation Opening Message

Our Purpose

The Catholic Curriculum Corporation is a consortium of seventeen Catholic school boards across central and western Ontario. As an important partner in Catholic education, we recognize that Catholic education exists to provide a holistic formation of people as living witnesses of faith. We demonstrate our mission when we engage with, and support, our member boards in sustained, substantive school improvement and student growth that is reflective of a Catholic professional learning community.

Our Mission

Our mission is to build and sustain the Catholic capacity of educators through the development and provision of high quality Catholic curriculum, resources, support and professional development.

Our Vision

Faith Through Learning – A Distinctive Catholic Curriculum

Message from the Executive Director

On behalf of the Catholic Curriculum Corporation, I would like to thank Catherine Shanahan, project lead, and the team of contributors from Halton, Huron-Perth, Toronto and London Catholic District School Boards for their expertise and dedicated efforts in producing this resource. Thanks are also extended to Grant McMurray for his guidance as Curriculum Manager. I would also like to acknowledge the financial support of OECTA in the production of this resource.

This resource encourages students to see how their faith can inform their understanding and use of scientific knowledge. It calls them to become thoughtful stewards, ethical decision makers, and compassionate citizens who recognize that science, when guided by faith, becomes a powerful tool for justice, healing, and hope.

Once again, I offer sincere thanks to those who have supported our teachers with this resource. I wish continued success to all who use this resource while sharing and celebrating our Catholic mission in education.

Ab Falconi,
Executive Director

Setting Direction: Faith Framed Junior Science and Technology Ontario

...the beauty of the universe reflects the infinite beauty of the Creator and ought to inspire the respect and submission of human intellect and will. - *Catechism of the Catholic Church*, par. 341

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Rationale

Science is one of the first ways children begin to make sense of the world God has created. Long before they can explain complex scientific concepts, junior learners naturally ask questions, notice patterns, test ideas, and marvel at the living and non-living world around them. Within the Catholic tradition, this innate curiosity is not merely a developmental stage to be encouraged—it is a gift to be nurtured. Wonder invites students to encounter the order, beauty, and complexity of creation, leading them to recognize God's presence revealed through the natural world.

From St. Francis of Assisi, whose joyful reverence for creation reflected his love of the Creator, to St. Thérèse of Lisieux, who found God in the smallest moments of everyday life, the Catholic tradition reminds us that wonder is often the beginning of both faith and discovery. Through every investigation and observation, students are invited to cultivate gratitude for creation and a deeper appreciation of the Creator. This perspective encourages us, as Catholic educators, to approach scientific learning as a means of forming our students' understanding of—and interest in—the wonders of God's creation.

Setting Direction: Faith Framed Junior Science and Technology seeks to foster this sense of wonder by providing a practical, faith-informed framework for teaching science and technology in Grades 4–6. Rooted in Catholic Social Teaching, each unit is introduced through Scripture, prayer, the witness of the saints, and authentic opportunities to learn from Indigenous Knowledge, recognizing that careful observation of the natural world deepens students' understanding of science and technology, stewardship, and God's creation. Rather than altering curricular expectations, the framework enriches them by embedding a Catholic worldview throughout instruction—Before, During, and After learning—alongside *Growing Success*-aligned assessment practices.

In doing so, it supports students in becoming scientifically literate while fostering awe, gratitude, environmental stewardship, and a growing awareness that caring for creation is an

expression of faith. Grounded in wonder, science and technology become an invitation to discover God's presence in the world He has made and to respond with curiosity, responsibility, and hope.

Project Aspiration

This project aspires to equip Catholic educators with a practical, easy-to-use resource that enriches the Ontario Science and Technology curriculum while nurturing students' natural sense of wonder. By embedding faith-based reflection into the natural rhythm of learning (Before, During, and After), it provides meaningful opportunities for students to encounter God through creation without increasing teacher workload. Through Scripture, Catholic Social Teaching, prayer, the witness of the saints, and respectful engagement with Indigenous Knowledge Systems, students are invited to observe, question, explore, and care for the world around them. In doing so, this resource lays the foundation for scientifically curious learners who approach creation with awe, gratitude, stewardship, and a growing awareness of God's presence in all He has made.

Introduction

At the heart of Catholic education is the formation of the whole person—mind, body, and spirit. This resource grounds each science and technology unit in Catholic Social Teaching (CST), prayer, the lives of saints, and Indigenous Knowledge Systems, recognizing these as meaningful entry points for wonder, reflection, and faith-filled inquiry. Together, these perspectives invite students to explore the natural world with curiosity, gratitude, and respect, while deepening their understanding of creation as a gift from God entrusted to our care.

To support practical implementation, this project begins with diagnostic and anecdotal assessment trackers, helping educators identify and document student thinking through observations and conversations. Self- and peer-assessment templates foster reflection, ownership, and growth. Each framework is scaffolded by grade level and science and technology strand, providing clear faith-based prompts and connections for the Before, During, and After phases of instruction. These supports are explicitly aligned with the Ontario Science and Technology Curriculum (Grades 1–8) and the principles of *Growing Success*, ensuring the resource enriches classroom practice without increasing teacher workload. The result is a ready-to-use, time-efficient tool that nurtures scientifically curious learners who approach creation with wonder, stewardship, and an enduring appreciation for God's presence in the world around them.

The Role of Catholic Social Teaching (CST)

Catholic Social Teaching (CST) provides a faith-filled lens through which junior students can explore the wonders of God's creation while developing a growing sense of responsibility for one another and the world around them. Rooted in the dignity of every person and our shared call to care for creation, CST helps students recognize that scientific inquiry is not only about understanding how the world works, but also about discovering how we are called to live within it. Each principle provides meaningful opportunities to connect the Ontario Science and Technology curriculum with faith, wonder, stewardship, and service.

1. Life and Dignity of the Human Person

As students explore living things, habitats, and human body systems, they learn that every person is created in the image and likeness of God and deserves dignity, care, and respect.

2. Call to Family, Community, and Participation

Through investigations of local ecosystems, energy, and everyday technologies, students recognize that scientific knowledge can strengthen communities and encourage everyone to contribute to the common good.

3. Rights and Responsibilities

As students learn about natural resources, waste, and environmental stewardship, they develop an understanding that caring for God's creation is both a gift and a responsibility shared by all.

4. Option for the Poor and Vulnerable

Students explore how access to clean water, healthy environments, and appropriate technologies can affect people's well-being, encouraging empathy and a desire to care for those most in need.

5. Dignity of Work and the Rights of Workers

Through design challenges, engineering tasks, and problem-solving, students come to appreciate creativity, perseverance, collaboration, and the value of work that serves others.

6. Solidarity

Investigations into ecosystems, weather, and environmental change help students understand that their actions affect people, animals, and environments beyond their own community, fostering a sense of global responsibility.

7. Care for God's Creation

Throughout every science strand, students are invited to wonder at the beauty and complexity of creation while developing the knowledge and skills to become faithful stewards of our common home.

By rooting each strand in Catholic Social Teaching, science becomes an opportunity to nurture curiosity, gratitude, compassion, and stewardship. Students come to see scientific learning as a way of growing in both knowledge and faith while responding to God's call to care for creation and one another.

Anchoring in Scripture

Scripture invites us to see the world through the eyes of faith. In *Setting Direction: Faith Framed Junior Science and Technology*, carefully selected Bible passages serve as anchors for each unit, helping students recognize the beauty, order, and purpose woven throughout God's creation. Aligned with each unit's scientific focus and Catholic Social Teaching theme, these passages nurture curiosity, wonder, gratitude, and a growing appreciation for the Creator.

Each Scripture anchor encourages students to see scientific exploration as an opportunity to discover God's presence in the world around them. Whether investigating living things, Earth's

systems, energy, or matter, students are invited to observe carefully, ask thoughtful questions, and reflect on their role as faithful stewards of creation.

Teachers will find curated Scripture passages accompanied by guiding questions, prayer, and age-appropriate reflection prompts that support meaningful integration throughout classroom learning. These anchors foster theological literacy while helping students connect scientific discovery with faith, everyday experience, and a sense of wonder.

By rooting science and technology education in Scripture, we remind students that every discovery offers another opportunity to appreciate God's creation. As they grow in knowledge, they are also invited to grow in gratitude, stewardship, and love for the world God has entrusted to our care.

The Purpose of Prayer

Each framework within *Setting Direction: Faith Framed Junior Science and Technology* begins and ends in prayer—not as an add-on, but as a meaningful part of the learning journey. Prayer invites students to pause, give thanks, and recognize that every scientific discovery is an opportunity to appreciate the beauty and wonder of God's creation.

Opening prayers prepare students to enter their investigations with curiosity, gratitude, and reverence for the world around them. They encourage children to see science and technology not simply as subjects to study, but as ways of discovering God's presence through creation and exploring the gifts He has given us to learn, question, and grow.

Closing prayers provide time for reflection, helping students consider how what they have learned inspires them to care for creation and for one another. Whether focused on living things, Earth's systems, energy, matter, or innovation, each prayer reinforces the values of Catholic Social Teaching, reminding students that knowledge is best expressed through gratitude, stewardship, and loving action.

Together, these moments of prayer help cultivate a classroom community rooted in faith, wonder, and respect for creation. They encourage students to see science and technology as an invitation to grow in both knowledge and faith while caring for the world God has entrusted to us.

The Wonder of The Saints

The lives of the saints remind us that holiness is discovered not only in extraordinary moments, but also through wonder, curiosity, and faithful attention to God's presence in everyday life. Throughout history, saints have found God in the beauty of creation, the rhythms of nature, acts of service, and the pursuit of truth. Their witness inspires students to look beyond scientific facts and discover the deeper meaning and purpose woven throughout God's world.

Each framework introduces a saint whose life reflects the scientific focus and Catholic Social Teaching theme of the unit. Rather than serving as historical figures alone, these saints become companions in learning, inviting students to wonder, ask questions, care for creation, and grow in faith through their exploration of the natural world.

By encountering the lives of the saints alongside scientific inquiry, students come to recognize that wonder can lead to discovery, gratitude can lead to stewardship, and faith can shape the way we understand and care for God's creation. In this way, the saints encourage students to see science and technology not simply as subjects to be studied, but as opportunities to grow closer to God through the world He has made.

The Knowledge of Indigenous Peoples

For thousands of years, Indigenous Peoples have developed deep knowledge of the natural world through careful observation, lived experience, and a profound respect for the land. Their knowledge reflects an understanding of the interconnectedness of all living things and the responsibility each generation shares in caring for the environment. These perspectives enrich students' scientific learning by encouraging them to observe closely, ask thoughtful questions, and appreciate the relationships that exist within the natural world.

Each framework provides authentic opportunities for students to learn from Indigenous perspectives that are meaningfully connected to the Ontario Science and Technology curriculum. Whether exploring local ecosystems, seasonal changes, plants and animals, water, or the night sky, students discover how generations of careful observation have shaped Indigenous knowledge and continue to contribute to our understanding of the world today.

For Catholic learners, these experiences deepen their appreciation for God's creation and reinforce our shared call to stewardship. By learning from the knowledge of Indigenous Peoples alongside scientific inquiry, students grow in wonder, gratitude, and respect for the gifts of creation while recognizing their responsibility to care for our common home with wisdom, compassion, and hope.

Growing Success and Assessment

In Catholic education, assessment is not just a tool for measuring learning—it's a practice that supports student growth in knowledge, discernment, and moral decision-making. This resource aligns closely with the *Growing Success* document by embedding faith-framed science instruction into a balanced assessment approach that supports all learners.

Each strand-specific framework is designed to integrate:

- **Assessment for Learning** through diagnostic tools and anecdotal trackers that help educators identify students' prior understanding, misconceptions, and values-based thinking. These support planning and differentiation right from the start.
- **Assessment as Learning** by providing scaffolded peer and self-assessment opportunities rooted in Catholic Social Teaching. These reflective practices help students monitor their own thinking, make connections between faith and science, and grow as responsible, ethical learners.
- **Assessment of Learning** through final evaluative tasks that invite students to demonstrate their scientific understanding in ways that reflect Catholic values—showing not only what they've learned, but how that learning moves them toward justice, stewardship, and service.

This approach makes space for the whole learner. It affirms that academic achievement and faith formation can—and should—develop together, with assessment acting as a bridge between knowing, believing, and becoming.

Assessment Toolkit

The Assessment Toolkit is a practical, easy-to-use collection of resources designed to support Catholic educators in tracking student growth while nurturing wonder, curiosity, and faith-filled scientific inquiry. Aligned with *Growing Success* and rooted in Catholic Social Teaching, the toolkit includes:

- **Anecdotal Tracker with Look-Fors**
An observational organizer that helps teachers document student thinking, participation, and meaningful connections between science, faith, and God's creation. The embedded look-fors highlight moments of wonder, reflection, stewardship, and scientific inquiry.
- **Self-Assessment Reflection**
A guided template that invites students to reflect on their learning, celebrate their discoveries, identify new questions, and consider how they can care for God's creation.
- **Peer Assessment**
A simple but effective tool that encourages meaningful peer feedback, respectful collaboration, and shared responsibility while learning together.

This toolkit supports assessment *for, as, and of* learning, and ensures that evaluation practices are consistent, student-centered, and aligned with *Growing Success*—all while honoring the whole learner: mind, body, and spirit.



ASSESSMENT TOOLKIT

Anecdotal Tracker and Look Fors

Observation For/As Date: Lesson:	Look For: Student connecting a science and/or technology concept to God's creation through wonder, curiosity, or stewardship.	Look For: Student referencing prayer, Scripture, a saint, or Indigenous knowledge in their reflections, observations, or explanations.	Look For: Student asking thoughtful questions, expressing awe or gratitude, or identifying ways to care for God's creation.
Student Name: Anecdotal Note:	☐ E–Excellent: Consistently demonstrates thoughtful & independent connections. ☐ G–Good: Frequently demonstrates meaningful connections. ☐ S–Satisfactory: Sometimes demonstrates with prompting. ☐ N–Needs Improvement: Rarely demonstrates; minimal engagement	☐ E–Excellent: Consistently demonstrates thoughtful & independent connections. ☐ G–Good: Frequently demonstrates meaningful connections. ☐ S–Satisfactory: Sometimes demonstrates with prompting. ☐ N–Needs Improvement: Rarely demonstrates; minimal engagement	☐ E–Excellent: Consistently demonstrates thoughtful & independent connections. ☐ G–Good: Frequently demonstrates meaningful connections. ☐ S–Satisfactory: Sometimes demonstrates with prompting. ☐ N–Needs Improvement: Rarely demonstrates; minimal engagement

Observation For/As Date: Lesson:	Look For: Student connecting a science and/or technology concept to God's creation through wonder, curiosity, or stewardship.	Look For: Student referencing prayer, Scripture, a saint, or Indigenous knowledge in their reflections, observations, or explanations.	Look For: Student asking thoughtful questions, expressing awe or gratitude, or identifying ways to care for God's creation.
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Self-Assessment and Reflection

Reflection As/Of Date: Name: Science Unit:	I am proud that: In the space below, describe something you discovered or learned about God's creation during this science unit.	I am wondering: In the space below, describe something you are still curious about or would like to explore.	I can be a steward: In the space below, Describe one way you can be a good steward of God's creation using what you learned.
Answer fully: Please check off all of the expectations that your response meet: ☐ I used proper spelling, capital letters and punctuation.. ☐ I wrote in complete sentences. ☐ My handwriting is neat and easy to read. ☐ I answered every part of the question. ☐ I explained my thinking using examples from my learning.			
Unit Achievement Student Self-Assessment: Please check off the levels you met during this unit of study.	During Discussions: Level 4 – Excellent: ☐ I took initiative in discussions, reflections, and group tasks. Level 3 – Good: ☐ I shared ideas and stayed engaged in most activities. Level 2 – Satisfactory: ☐ I participated with reminders or prompting. Level 1 – Needs Improvement: ☐ I was often off-task or quiet during activities.	During Group Work: Level 4 – Excellent: ☐ I took initiative and led my group. Level 3 – Good: ☐ I shared ideas and stayed involved in group tasks. Level 2 – Satisfactory: ☐ I joined in group work when reminded/prompted. Level 1 – Needs Improvement: ☐ I was quiet/off-task/didn't contribute during group work.	During Independent Work: Level 4 – Excellent: ☐ I stayed focused, managed my time well, and worked independently without reminders. Level 3 – Good: ☐ I worked on my own and stayed mostly focused. Level 2 – Satisfactory: ☐ I needed reminders to stay on task or complete work. Level 1 – Needs Improvement: ☐ I had trouble staying focused or finishing work on my own.
Teacher Suggested Next Steps:			

Peer-Assessment of Collaboration

Assessment As/Of Date: Name: Peer Name:	Participation: In the space below, describe your peer's level of participation during group project work.	Responsibility: In the space below, describe the ways in which your peer did, or did not, take responsibility during the project.	Contribution: In the space below, describe your peer's contribution to the final project (parts they completed, roles they took in the group).
Peer Checklist: Please check all skills your peer demonstrated: ☐ Stayed focused on task ☐ Shared ideas ☐ Helped other members ☐ Came prepared ☐ Participated equally ☐ Met deadlines ☐ Completed my part of the work ☐ Listened to feedback			
Project Achievement Peer-Assessment: Please check off the levels your peer met during this project. Peer Suggested Next Steps:	Participation: Level 4 – Excellent: ☐ They took initiative in discussions, reflections, and group tasks. Level 3 – Good: ☐ They shared ideas and stayed engaged in most activities. Level 2 – Satisfactory: ☐ They participated with reminders or prompting. Level 1 – Needs Improvement: ☐ They were often off-task or quiet during activities.	Responsibility: Level 4 – Excellent: ☐ They took initiative and led the group. Level 3 – Good: ☐ They positively shared ideas and stayed involved in all group tasks. Level 2 – Satisfactory: ☐ They needed reminders. Level 1 – Needs Improvement: ☐ They demonstrated little to no responsibility and, or, were negative.	Contribution: Level 4 – Excellent: ☐ They contributed a majority of the work. Level 3 – Good: ☐ They contributed an equal amount of work. Level 2 – Satisfactory: ☐ They contributed less work Level 1 – Needs Improvement: ☐ They contributed very little or no work.



DELIVERABLES ACCESS LINKS

[GRADE 4 ONTARIO \(79 Pages\): Strands B,C,D,E](#)

[GRADE 5 ONTARIO \(81 Pages\): Strands B,C,D,E](#)

[GRADE 6 ONTARIO \(82 Pages\): Strands B,C,D,E](#)



CONCLUSION & ANNOTATED BIBLIOGRAPHY

Conclusion

This resource is designed as a supplementary, supportive framework for delivering Ontario's Grades 4–6 Science and Technology curriculum through a Catholic faith lens. It enriches the existing curriculum. Organized by strand and grade level, the framework provides practical faith-inspired connections that complement teachers' current practice, inviting students to encounter God's presence through the wonder of scientific discovery and the beauty of creation.

Rather than prescribing a fixed scope and sequence, this resource offers a flexible collection of modular prompts, reflections, assessment tools, and learning experiences that can be seamlessly integrated into existing units. Each framework is organized around the Before, During, and After phases of learning, allowing educators to incorporate Scripture, prayer, Catholic Social Teaching, the witness of the saints, and the knowledge of Indigenous Peoples in ways that best support their students and instructional goals. The resource is intended to enhance—not increase—teacher workload, while preserving full flexibility in lesson design and pacing.

A hallmark of the framework is its intentional integration of Catholic faith throughout scientific inquiry. Every strand includes opportunities for students to connect scientific learning with Scripture, prayer, Catholic Social Teaching, the lives of the saints, and Indigenous perspectives that foster respect for the natural world. Whether exploring habitats, forces, light and sound, rocks and minerals, or Earth's changing systems, students are invited to wonder, observe, investigate, and reflect on God's creation while developing an appreciation for their responsibility as faithful stewards of our common home.

To support meaningful learning, each framework follows a familiar lesson sequence of Minds On, Application, Reflection, and Prayer. These components naturally align with the Before, During, and After phases of learning, embedding faith into the rhythm of science instruction without replacing hands-on inquiry or curriculum expectations. Opening activities spark curiosity through Scripture, the saints, or Indigenous perspectives; investigations encourage scientific exploration; and reflection and prayer invite students to respond with gratitude, wonder, and stewardship.

Ultimately, *Faith Framed Junior Science and Technology* is designed to be a flexible companion to Ontario's Grades 4–6 Science and Technology curriculum. Teachers are encouraged to adapt and use the framework in ways that best meet the needs of their students, enriching science learning through authentic faith connections rather than adding another program to teach. The goal is to nurture children who see scientific inquiry as an opportunity to discover the beauty of God's creation, grow in curiosity and gratitude, and respond with wonder, responsibility, and care for the world entrusted to them.

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<https://www.amnh.org/explore/ology/biodiversity/web-of-life/activity-instructions>

A visual biodiversity activity demonstrating how organisms within an ecosystem are connected. Supports Grade 4 learning about habitats, food chains, food webs, biodiversity, and interdependence while encouraging students to recognize relationships within creation.

Anishinabek Nation. *Ezhi-nawending: How We Are Related*. Accessed August 2026.

<https://anishinabek.ca/education-resources/treaty-education-home/>

An Indigenous-created elementary resource introducing Anishinaabe relationships, responsibilities, community, and ways of knowing. Provides culturally grounded Ontario context for exploring relationships among people, land, living things, materials, and community.

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A searchable Catholic edition of the Bible. Enables quick retrieval of relevant Scripture for lesson openings, reflections, prayers, and thematic connections across science units.

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Faith-based classroom resources connecting creation, stewardship, environmental responsibility, justice, and Catholic Social Teaching. Useful for developing age-appropriate applications of faith to scientific and technological issues.

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A student-friendly explanation of the principles of Catholic Social Teaching, with examples and educational activities. Supports integration of themes such as human dignity, solidarity, stewardship, participation, rights and responsibilities, and care for creation.

CAFOD. *Laudato Si' for Children*. Accessed August 2026.

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CAFOD. *Water Resources for Young People*. Accessed August 2026.

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A Canadian collection of astronomy activities, games, videos, infographics, and classroom tools. Supports Grade 6 learning about planets, the Moon, stars, eclipses, telescopes, the solar system, and space exploration.

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An accessible Catholic resource explaining how human rights are connected to responsibilities toward other people, families, communities, and the common good. Supports faith integration in science units involving health, structures, technology, electricity, and responsible decision-making.

CatholicSaints.Info. *Saints and Angels Database*. Accessed July 2, 2026.

<https://catholicsaints.info/>

A comprehensive database of saints and blessed offering biographies, feast days, patronages, and historical information. Useful for identifying saints whose lives provide meaningful connections to science, technology, health, work, stewardship, service, and the natural world.

Development and Peace – Caritas Canada. *Education Resources*. Accessed August 2026.

<https://devp.org/en/education/>

Canadian Catholic educational resources addressing solidarity, human dignity, environmental stewardship, justice, work, natural resources, and the common good. Supports connections between scientific learning and real-world Catholic Social Teaching.

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<https://energy4me.org/>

Student-facing educational activities introducing renewable and non-renewable energy, conservation, energy sources, and the ways people use energy in everyday life. Supports Grade 5 investigation of energy use and responsible resource choices.

Francis, M., & Vansickle, S. “Gana'Jôh: Haudenosaunee Pedagogies of the Drum.” *World Futures*, vol. 74, nos. 7–8, 2018, pp. 490–502.

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Brock University PDF:

<https://brocku.ca/social-sciences/wp-content/uploads/sites/27/Haudenosaunee-Pedagogies.pdf>

A peer-reviewed scholarly examination of Haudenosaunee pedagogies associated with the drum. Provides academic grounding for understanding drum teachings as culturally situated knowledge and helps avoid treating Indigenous drumming as a generalized or pan-Indigenous practice.

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Provides narrative biographies of saints accompanied by reflections on their lives and virtues. Useful for developing accessible saint connections related to creation, science, health, service, work, technology, and learning.

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<https://education.minecraft.net/en-us/lessons/manito-ahbee-aki>

An Anishinaabe digital learning experience developed with Indigenous educators and Knowledge Keepers. Students explore relationships with land, food, medicines, community, traditional technologies, materials, and the natural world.

Mining Matters. *Classroom Resource Kits.* Accessed August 2026.

<https://miningmatters.ca/classroom-resource-kits>

Canadian classroom resources and investigations exploring rock and mineral identification, mineral testing, soil, erosion, mining, and the responsible use of Earth's resources. Supports Grade 4 Rocks, Minerals, and Geological Processes.

Mississaugas of the Credit First Nation. *Official Website.* Accessed August 2026.

<https://mncfn.ca/>

The official website of the Mississaugas of the Credit First Nation. Provides authoritative information about the Nation's history, culture, community, treaties, and relationship with the land and is an appropriate source for locally relevant Anishinaabe context in Halton-area Catholic education.

NASA. *Go to the Head of the Solar System.* Accessed August 2026.

<https://www.nasa.gov/stem-content/go-to-the-head-of-the-solar-system-game/>

An educational game designed for students in Grades 5–8 in which learners apply their knowledge of planets, moons, and other celestial objects while moving through the solar system. Supports Grade 6 consolidation of solar-system concepts.

NASA Climate Kids. *NASA's Eyes on the Earth.* Accessed July 10, 2026.

<https://climatekids.nasa.gov/>

An educational portal explaining Earth science, climate change, energy, greenhouse gases, renewable resources, and sustainability for younger learners. Supports discussions about environmental stewardship and global responsibility for creation.

National Centre for Collaboration in Indigenous Education (NCCIE). *Lessons of the Drum.*

Accessed August 2026.

<https://www.nccie.ca/lessonplan/lessons-of-the-drum/>

An Indigenous education resource emphasizing the importance of learning drum teachings through appropriate cultural protocols and local Elders or Knowledge Keepers. Provides educators with guidance for approaching Indigenous cultural knowledge respectfully.

National Centre for Collaboration in Indigenous Education (NCCIE). *Medicine Walk.*

Accessed August 2026.

<https://www.nccie.ca/lessonplan/medicine-walk/>

An Indigenous education resource exploring medicines, land-based knowledge, traditional healing, and the role of Elders and traditional healers in community health. Supports Grade 5 connections among body systems, health, well-being, plants, and Anishinaabe knowledge.

National Centre for Collaboration in Indigenous Education (NCCIE). *Ziinzibaakwadgummig: The Sugar Bush.* Accessed August 2026.

<https://www.nccie.ca/videos/ziinzibaakwadgummig-the-sugar-bush/>

An Indigenous digital resource centred on Anishinaabe maple sugaring. Students explore maple trees, sap collection, seasonal knowledge, heat-energy transformations, natural resources, and relationships between Indigenous knowledge and environmental change.

National Geographic Kids. *Nature and Habitats.* Accessed August 2026.

<https://kids.nationalgeographic.com/nature>

Student-friendly articles, photographs, and videos introducing habitats, ecosystems, animals, biodiversity, and conservation. Supports Grade 4 investigations of habitats and communities and provides accessible real-world examples for young learners.

Natural Resources Canada. *Energy Sources.* Accessed August 2026.

<https://natural-resources.canada.ca/energy-sources>

A Canadian government resource exploring renewable and non-renewable energy sources, including hydroelectricity, solar energy, wind, bioenergy, and fossil fuels. Supports connections between energy choices, Canadian communities, natural resources, and environmental responsibility.

Northern Lights Collaborative. *Ojibwe Constellations & Seasons Unit.* Accessed August 2026.

<https://northern-lights.umn.edu/resources/constellations-seasons-unit>

A Grades 5–7 learning resource combining Ojibwe star knowledge, astronomy, seasonal constellations, Earth's movement, storytelling, and coding. Supports respectful exploration of Indigenous sky knowledge within the Grade 6 Space unit.

Ontario Ministry of Education. *The Ontario Curriculum, Grades 1–8: Science and Technology* (2022). Accessed July 3, 2026.

<https://assets-us-01.kc-usercontent.com/fbd574c4-da36-0066-a0c5-849ffb2de96e/2674c944-8ede-43d8-aa39-55156a0468ac/The%20Ontario%20Curriculum%20Grades%201%E2%80%938%E2%80%9393%20Science%20and%20Technology%202022.pdf>

The official provincial curriculum document outlining overall and specific expectations for Grades 1–8 Science and Technology. Provides the curricular foundation for the Grade 4, Grade 5, and Grade 6 Faith Framed unit frameworks and assessments.

Ontario Ministry of Natural Resources and Forestry. *Black Bear Ecology: Life Systems – Habitats and Communities, Grade 4 Teacher Guide*. Accessed August 2026.

<https://files.ontario.ca/mnrf-cr-black-bear-ecology-life-systems-habitats-and-communities-guide-for-grade-4-teachers-en-2019-04-23.pdf>

An Ontario curriculum-connected resource exploring habitats, food webs, biodiversity, human impacts, and environmental stewardship through inquiry-based learning. Supports the Grade 4 Habitats and Communities strand.

Ontario Native Women's Association (ONWA). *Virtual Drum Book*. Accessed August 2026.

<https://www.onwa.ca/drum-book>

An Indigenous-created educational resource featuring Anishinaabe drum songs and teachings. Provides culturally grounded information about the significance of drums within Anishinaabe contexts.

Ontario Parks. *Firekeeping: Caring for Shkode*. Accessed August 2026.

<https://blog.ontarioparks.ca/firekeeping/>

An Anishinaabe resource written by Kayl Commanda of Nipissing First Nation about experiences and teachings as a firekeeper. Introduces Shkode, Anishinaabemowin vocabulary, responsibilities associated with firekeeping, and respectful relationships with fire.

Ontario Science Centre. *Animal Sounds*. Accessed August 2026.

<https://www.ontariosciencecentre.ca/teachers-plus-students/teacher-resources/curriculum-resources/animal-sounds>

An Ontario curriculum-connected Grade 4 resource examining how animals produce and use sound, including bird calls, communication, and echolocation. Supports learning about vibrations, natural sounds, communication, and the properties of sound.

Ontario Science Centre. *Levers*. Accessed August 2026.

<https://www.ontariosciencecentre.ca/teachers-plus-students/teacher-resources/curriculum-resources/levers>

An Ontario curriculum-connected resource introducing levers as simple machines. Includes activities investigating how levers change force and movement and supports Grade 4 learning about machines and their mechanisms.

PhET Interactive Simulations. *Bending Light*. Accessed August 2026.

https://phet.colorado.edu/sims/html/bending-light/latest/bending-light_all.html

An interactive simulation allowing students to investigate reflection, refraction, prisms, and the behaviour of light as it travels through different materials. Supports inquiry-based learning in Grade 4 Light and Sound.

PhET Interactive Simulations. *Circuit Construction Kit: DC*. Accessed August 2026.

https://phet.colorado.edu/sims/html/circuit-construction-kit-dc/latest/circuit-construction-kit-dc_en.html

An interactive simulation allowing students to construct and test electrical circuits using batteries, wires, bulbs, switches, and resistors. Supports Grade 6 learning about current electricity, conductors, resistance, complete circuits, and series and parallel arrangements.

PhET Interactive Simulations. *Energy Forms and Changes*. Accessed August 2026.

<https://phet.colorado.edu/en/simulations/energy-forms-and-changes>

An interactive simulation in which students create energy systems and observe transfers and transformations among thermal, mechanical, electrical, and light energy. Supports Grade 5 learning about energy conservation and transformation.

PhET Interactive Simulations. *States of Matter: Basics*. Accessed August 2026.

<https://phet.colorado.edu/en/simulations/states-of-matter-basics>

An interactive simulation in which students heat and cool substances and observe particle behaviour as materials change among solid, liquid, and gaseous states. Supports Grade 5 learning about the properties of and changes in matter.

PhET Interactive Simulations. *Wave on a String*. Accessed August 2026.

https://phet.colorado.edu/sims/html/wave-on-a-string/latest/wave-on-a-string_en.html

An interactive simulation that allows students to observe wave behaviour while changing frequency, amplitude, and tension. Provides a visual introduction to vibrations and wave motion for Grade 4 Sound learning.

Phillips, R. *Indigenous Drums: Culture*. Accessed August 2026.

<https://indigenousdrums.ca/en/about-drumming/culture/>

Provides background information about the cultural significance of drums across Indigenous Nations in Canada. Useful as a broad introductory resource but should be paired with Nation-specific sources when discussing particular teachings or cultural practices.

Queen's University Library. *Grade 4: Rocks & Minerals*. Accessed August 2026.

<https://guides.library.queensu.ca/pj-science/grade-4/rocks-minerals>

A curated collection of books, videos, activities, and inquiry resources aligned with the Ontario Grade 4 Science curriculum. Supports learning about rocks, minerals, geological processes, properties, uses, and Earth's resources.

Queen's University Science Rendezvous. *Simple Machines Lesson Plans.* Accessed August 2026.
<https://www.queensu.ca/science-rendezvous/resources/science-tech>

A Canadian collection of lesson plans, presentations, worksheets, and hands-on investigations exploring levers, pulleys, inclined planes, wheels and axles, screws, and wedges. Supports inquiry and engineering design in Grade 4 Machines and Their Mechanisms.

Royal Ontario Museum. *Museum Minecraft: Rocks & Minerals.* Accessed August 2026.
<https://www.rom.on.ca/learn/resources/museum-minecraft-rocks-minerals-guided-virtual-or-self-guided-virtual>

A Grade 4 virtual learning experience exploring rocks, minerals, fossils, the rock cycle, Indigenous uses of geological resources, mining, and environmental impacts. Supports connections between geological science and responsible use of Earth's resources.

Sault Ste. Marie Tribe of Chippewa Indians. *Anishinaabe Teachings of the Eagle (Migizi).* Accessed August 2026.
<https://www.saulttribe.com/newsroom/209-cultural-news/6938-anishinaabe-teachings-of-the-eagle-migizi>

An Anishinaabe-created cultural resource exploring Migizi's relationship to the Creator, prayer, spirituality, feathers, and community responsibilities. Provides culturally grounded context for Anishinaabe teachings connected to the eagle.

Science News Explores. *Science News for Students.* Accessed July 11, 2026.
<https://www.snexplores.org/>

Provides current, age-appropriate science articles linking classroom concepts to real-world research and discoveries. Encourages critical thinking about scientific knowledge, technology, society, and the common good.

Science North. *Grade 4 Science Resources.* Accessed August 2026.
<https://schools.sciencenorth.ca/grade-4>

Canadian science resources containing curriculum-connected lessons and activities. Includes learning experiences combining coding, sound, vibrations, and technological design appropriate for Grade 4 Science and Technology.

Science World. *Backyard Biodiversity.* Accessed August 2026.
<https://www.scienceworld.ca/resource/backyard-biodiversity/>

A Canadian collection of hands-on activities exploring biodiversity within students' own communities. Includes food-web activities, habitat investigations, bird and insect observations, and neighbourhood biodiversity exploration.

Science World. *Circuit Tag.* Accessed August 2026.
<https://www.scienceworld.ca/resource/circuit-tag/>

An active classroom investigation in which students model the movement of electrons through electrical circuits. Supports Grade 6 understanding of open and closed circuits, conductors, current electricity, and what happens when a circuit is interrupted.

Science World. *Current Electricity*. Accessed August 2026.

<https://www.scienceworld.ca/resource/current-electricity/>

A Canadian collection of hands-on investigations exploring current electricity and electrical circuits. Students build circuits, test conductivity, investigate series and parallel circuits, and apply their knowledge through technological challenges.

Science World. *Flight*. Accessed August 2026.

<https://www.scienceworld.ca/resource/flight/>

A Canadian collection of hands-on activities exploring lift, gravity, thrust, drag, air pressure, aerodynamics, flying organisms, aircraft design, parachutes, and gliders. Supports Grade 6 learning about the scientific principles that make flight possible.

Science World. *Insect Biodiversity Survey*. Accessed August 2026.

<https://www.scienceworld.ca/resource/bug-diversity-hunt/>

A place-based investigation in which students observe and record insects in a local habitat. Encourages consideration of species diversity, ecosystem health, environmental conditions, and the role biodiversity plays in ecosystem resilience.

Science World. *Paper Circuits*. Accessed August 2026.

<https://www.scienceworld.ca/resource/paper-circuits/>

A hands-on STEM activity using copper tape, LEDs, and batteries to create functional electrical circuits. Supports Grade 6 investigation of circuit components, switches, troubleshooting, series and parallel circuits, and technological design.

Science World. *Paper Plane Flying Contest*. Accessed August 2026.

<https://www.scienceworld.ca/resource/paper-plane-flying-contest/>

An engineering investigation in which students design, build, test, and modify paper airplanes. Supports application of Grade 6 concepts involving lift, gravity, thrust, drag, mass, aerodynamics, and design.

Science World. *Space Travel*. Accessed August 2026.

<https://www.scienceworld.ca/resource/exploring-space/>

A Canadian collection of hands-on space-science activities involving gravity, microgravity, astronaut needs, mission planning, and technological design. Encourages students to consider the advantages and limitations of human and robotic space exploration.

Science World. *Supportive Shapes*. Accessed August 2026.

<https://www.scienceworld.ca/resource/supportive-shapes/>

A Canadian STEM investigation in which students experiment with structural shapes and investigate how geometry affects strength, stability, and resistance to forces. Supports Grade 5 Structures and Mechanisms.

The Elements. *Sacred Fire Teachings*. Accessed August 2026.

<https://aeswellnessportal.ca/Uploads/Documents/Elements%20K%20to%204.pdf>

An Indigenous educational resource introducing the significance of Sacred Fire within Anishinaabe communities, culture, ceremony, and protocols. Encourages learning from Elders and Knowledge Keepers while emphasizing relationships with fire, respect, responsibility, and community.

The Science Playground. *Animal Kingdom Classification.* Accessed August 2026.

<https://thescience-playground.com/animal-kingdom-classification/>

An interactive classification activity in which students identify and group animals according to observable characteristics. Supports Grade 6 learning about classification systems and the diversity of organisms.

TVO Learn. *Grade 4 Science and Technology.* Accessed August 2026.

<https://tvolearn.com/pages/grade-4-science-and-technology>

Free Ontario learning resources aligned with the Grade 4 Science and Technology curriculum. Provides digital activities supporting Habitats and Communities, Light and Sound, Machines and Their Mechanisms, and Rocks, Minerals, and Geological Processes.

TVO Learn. *Grade 5 Science and Technology.* Accessed August 2026.

<https://tvolearn.com/pages/grade-5-science-and-technology>

Free Ontario learning activities aligned with Grade 5 Science and Technology. Supports learning about Human Health and Body Systems, Properties of and Changes in Matter, Forces Acting on Structures, and Conservation of Energy and Resources.

TVO Learn. *Grade 6 Science and Technology.* Accessed August 2026.

<https://tvolearn.com/pages/grade-6-science-and-technology>

Free Ontario learning activities aligned with Grade 6 Science and Technology. Supports Biodiversity, Electrical Phenomena and Devices, Flight, Space, scientific inquiry, and responsible technological decision-making.

United States Conference of Catholic Bishops (USCCB). *Seven Themes of Catholic Social Teaching.* Accessed July 4, 2026.

<https://www.usccb.org/beliefs-and-teachings/what-we-believe/catholic-social-teaching/seven-themes-of-catholic-social-teaching>

An authoritative overview of Catholic Social Teaching themes, including Life and Dignity of the Human Person, Call to Family, Community and Participation, Rights and Responsibilities, Solidarity, the Dignity of Work, and Care for God's Creation. Provides a theological foundation for the Faith Framed Science project.

United States Geological Survey. *Interactive Water Cycle.* Accessed August 2026.

<https://www.usgs.gov/water-science-school/science/interactive-water-cycle-diagrams-kids>

An interactive educational resource exploring evaporation, condensation, precipitation, runoff, groundwater, and other processes in the water cycle. Supports Grade 5 understanding of changes of state and the movement of water through natural systems.

University of Toronto Engineering Outreach. *Ontario Curriculum Resources.* Accessed August 2026.

<https://outreach.engineering.utoronto.ca/educators/resources/>

A searchable collection of engineering activities and classroom resources aligned with Ontario science curriculum. Supports inquiry, engineering design, technological problem-solving, structures, mechanisms, forces, and applications of scientific knowledge.

Universe & More. *Crack the Circuit.* Accessed August 2026.

<https://universeandmore.com/crack-the-circuit/>

An interactive circuit game that challenges students to apply their understanding of electrical circuits while solving increasingly complex problems. Supports Grade 6 electrical learning through experimentation and problem-solving.

Vatican Observatory. *Faith & Science Resource Center.* Accessed August 2026.

<https://www.vaticanobservatory.org/education/faith-science-resource-center/>

A Catholic educational collection containing articles, videos, audio resources, and materials exploring astronomy, cosmology, Scripture, creation, Catholic scientists, and the relationship between faith and scientific discovery. Particularly useful for supporting Catholic integration within the Grade 6 Space unit.

Waasa-Inaabidaa. *We Look in All Directions.* Accessed August 2026.

<https://www.d.umn.edu/cla/faculty/tbacig/studproj/is3099/adarring/page3.htm>

An educational resource providing historical and cultural context related to Anishinaabe life and knowledge. Useful as supplementary background when used alongside contemporary Indigenous-created and Nation-specific sources.

Water First. *Digital Water Education Resources.* Accessed August 2026.

<https://waterfirst.ngo/what-we-do/school-water/education-resources/>

Canadian educational resources developed to support water-science education with First Nations schools and communities. Students explore water systems, water quality, relationships with water, and Indigenous perspectives through interactive and multimedia learning.

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