WE ARE BAZ!
How do we tell the story of Resilience?

Grade 8 Curriculum Letter
April - June 2021

Essential Question - **How have advancements throughout history impacted cultural resilience?**

For the final learning cycle, grade 8 students will continue to use the NASA International Space Station as an educational provocation, specifically focusing on the VIPER rover. This lunar rover will be exploring ice water and will bridge our learning to enable students to explore the importance of water, where our water comes from, and how we can protect it.

All of our learning experiences will be anchored in our essential question.

Connections to Indigenous Ways of Knowing

Nipi pimitisiwin (Cree- Water is Life)

Through hands-on, land-based learning, students will be exploring the concept of expansion, adaptation, and resilience.

Students will continue to explore Indigenous Knowledge systems and the role Indigenous voices have in bringing attention to global issues, such as water protection.

RESULTS/Social/Emotional Learning
A focus for student growth during this learning cycle will be:

Personal development - Create personal, academic learning goals. Identify areas they require support to ensure they are meeting their goals and demonstrating resilience in their learning.

Character - Demonstrating the **We Are Baz** culture by creating a community of belonging, showing respect, and making responsible decisions.

Citizenship -Honoring the diversity of the learners around them while collaborating on learning tasks.

Humanities
Throughout our third and final learning cycle students will explore the themes of expansion and adaptation with a focus on water and how it shapes our worldview. Through the lens of Space Exploration, students will be conducting a variety of analyses of the impacts on society of discovering water in space and how we view the world as we venture out farther into the universe. Using a spiral approach to learning, historical societies will be continually revisited throughout the learning cycle, deepening students' understanding and building on their prior knowledge from the first two learning cycles.

Through the lens of resiliency, students will explore the influence of intercultural contact and expansion on Meiji Japan, Renaissance Europe, and the Indigenous people of the Americas. Students will also consider the impact of imperialism and the European colonial worldview on the Indigenous people of Canada and the resilience with which Indigenous culture has persisted throughout time.

Noting the transformations through time that have led us to venture out into space, students will demonstrate their understanding of how cultural advancements impact society and alter worldview. Students will apply their knowledge to cross-curricular projects focusing on space exploration, imagining that they are venturing out into our solar system in search of new resources. Spiraling back to concepts studied earlier in the learning cycle, students will make connections between how the demand for resources shaped the European worldview and began the process of colonization and how our own desire for resources is changing our worldview.

All curricular areas will maintain a focus on literacy. Students will be introduced to diverse texts to allow them to expand their understanding of the world and make personal connections to literature. Students will continue to use a variety of comprehension strategies such as text annotation to investigate and analyze specific worldview elements within the content we investigate.

To enhance communication skills, students will explore character development through narrative writing, improve the unity and coherence of their paragraph structure, and manage information in their own expository writing by making claims, providing strong evidence, and supporting their opinion with strong reasoning. Students will continue to be encouraged to use multimedia (video, podcast, slide presentation), oral expression, art, and interpretive forms that best suit their learning and desire for self-expression.

Mathematics

We will be focusing on Geometry during the last part of our school year. In specific we will be measuring and working with a variety of different prisms and cylinders. We will be looking at characteristics which allow us to identify their nets (2-dimensional representation. They will need to demonstrate an understanding of surface area and volume of each of these 3-dimensional shapes.

During the Translations section of Geometry, students will investigate Rotations (turns), Reflections (flips), and Transformations(slides) of 2-D shapes. We will investigate examples of these in real life scenarios and in nature.

Throughout this section of our Mathematics curriculum we will look for ways to tie our understanding of shape, surface area, and volume to our larger project. We will take the opportunity to calculate volumes and areas required for comfortable living and attempt to make this part of the design.

Science

During Science we will finish up the units on Mix and Flow of Matter, Light and Optics, Fresh and Salt Water Ecosystems, Mechanical Systems, Cells and Systems. In particular, we will be looking at present-day technologies with each of these topics and discuss future applications. In specific we will be focusing on two major projects which both connect to our overarching question around living and exploring space.

The first project is split into two parts. During the first part, students will explore force acting upon and object and then build a bottle rocket. We will be discussing how we can harness these forces in such a way as to do work. The second part of this project includes designing a living and working space for members of a team going on a six-month space trip to Mars. During this project we will be looking at meeting our various needs as a human being and how these needs can be met during this trip. This fits in well with our Cells and Systems Unit and tie ins to that area of the curriculum will be made.

The second project will be looking more at meeting our needs after we reach our destination. We will be looking at different ways of water purification and come up with ideas around this subject. In specific we will be looking at ways in which different species of plants can be used to purify any water which we might have. In doing this unit we will be constructing a water

purification model which is designed to remove common impurities such as phosphates and nitrates.

Students will be evaluated on their ability to work in small groups towards a goal. They will also need to be able to describe their learning about the needs of our body and how we can meet those needs during a space trip. Included in this will be our needs around water, food, recreation, sleep, and movement.

Assessment

The teacher will utilize a variety of formative and summative assessment tools to assess student achievement. Students will be provided with various opportunities to demonstrate their knowledge, skills, attitudes and learning. Students will be given feedback often, along with opportunities to improve on and refine the skills we will be developing.

Through conversations and observations teachers will be creating a safe space for students to express themselves comfortably in order for students to build their self-advocacy capacity, while also identifying their own individual learning needs. Through the use of visual journals students will practice visual thinking routines and teachers will have a running record of evidence that will provide opportunities to assess and respond to learning needs accordingly throughout the year.

Utilizing project based learning our students will expand on their learning and challenge themselves to create projects that are of interest to them, and relevant to their lives. In preparation for high school and later post-secondary or professional life, students will be prepared to undertake quizzes and tests throughout the year to check their learning.