



Unit Premiere

A Cup of Clean Water



IB Instructional Elements

Theme- Our IB curriculum is comprised of six transdisciplinary units that have global significance and offers students the opportunity to explore human experiences.

How the World Works- How humans use their understanding of scientific principles; the impact of scientific and technological advances on society and on the environment.

- **LAA Connection-** Students will learn how people impact society and the environment through technology.

Learner Profile

The Learner Profile is a set of attributes that, taken as a whole, lay the foundation upon which international-mindedness will develop and flourish

- **Communicator-** Understand and express ideas and information confidently and creatively and in a variety of modes of communication. They work effectively and willingly in collaboration with others.
- **LAA Connection-** Students will express their opinions on the issue of water filtration.
- **Open-minded-** They understand and appreciate their own cultures and personal histories, and are open to the perspectives, values and traditions of other individuals and communities.
- **LAA Connection-** Students will maintain an open-mind while working in groups to create a water filtration system.
- **Thinker-** They exercise initiative in applying thinking skills critically and creatively to recognize and approach complex problems, and make reasoned, ethical decisions.
- **LAA Connection-** Students will explore various ways to create a water filtration system and create a budget to market our prototype.

Attitudes

Attitudes are expressions of fundamental values, beliefs and feelings about learning, the environment and people.

- **Appreciation-** Appreciating the wonder and beauty of the world and its people.
- **LAA Connection-** Appreciating how our access to clean water is much easier than that of other countries.
- **Curiosity-** Being curious about the nature of learning, about the world, its people and cultures.
- **LAA Connection-** Students will become curious about access to water throughout the world.
- **Independence-** Thinking and acting independently, making their own judgments based on reasoned argument, and being able to defend their judgments
- **LAA Connection-** Students will make their own judgments based on reason and argument.

Key Concepts

Key Concepts are powerful ideas that have relevance within the subject areas but also transcend them and that students must explore and re-explore in order to develop a coherent, in-depth understanding.

- **Change-** The understanding that change is the process of movement from one state to another. It is universal and inevitable
- **LAA Connection-** Students will learn how scientific principles allow us to change and impact society and the environment.
- **Reflection-** The understanding that there are different ways of knowing, and that it is important to reflect on our conclusions, to consider our methods of reasoning, and the quality and the reliability of the evidence we have considered.
- **LAA Connection-** Students will be continually encouraged to reflect and modify.

Transdisciplinary Skills

These skills are capabilities that students need to demonstrate to succeed in a changing, challenging world, which may be disciplinary or transdisciplinary in nature.

- **Communication skills-** Understand and express ideas and information confidently and creatively in more than one language and in a variety of modes of communication.
- **LAA Connection-** Students will communicate with others about their data findings and market their prototypes.
- **Research skills-** Develop a course of action; writing an outline; devising ways of finding out necessary information.
- **LAA Connection-** Students will draw conclusions from research on wastewater filtration.
- **Thinking skills-** Acquisition of Knowledge, Comprehension, Application, Analysis, Synthesis, Evaluation, Dialectical Thought, Metacognition.
- **LAA Connection-** Students will use math components to design a budget for their prototype.