

Chapter 4: It's Easy Being Green!

Inquiry 1: Green me - Wants and Needs

- < **Provocations** – Picture
- < **Question Generation** – Five Whys
- < **Knowledge Building** – Knowledge Building Circle, Critical Thinking Question
- < **Determining Understanding** - Story, Simulation, Books, Videos
- < **Pursuing Learning** – Simulation Game, Needs and Wants Game
- < **Consolidation** – State Elaborate Example Illustrate (SEEI)
- < **Assessment** – I Used to Think... Now I Think... Exit Ticket
- < **Take Action**



A. Provocation:

To hook student interest, introduce the provocation to initiate students' thinking about needs vs wants.

Picture



(Source: Pixabay)

After viewing the picture. Invite students to give the image a title. Display the titles around the image. Then, as a group, invite students to explain why they chose this title for the poster.



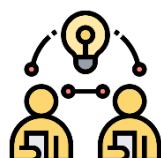
B. Question Generation

At this point in the inquiry, we want to harness students' curiosity and build off of the provocation by generating meaningful questions to continue to drive the learning process.

Use the [Five-Why's](#) by looking at the picture. This strategy helps students deepen their ideas and understanding.

Possible questions:

- Why do people throw things away?
- Why is there a tractor there?
- Why doesn't garbage disappear when buried?
- Why is there garbage in this beautiful field?
- Why does this hurt the climate?



C. Knowledge Building

At this stage, students may be ready to engage in a group knowledge building activity. It will encourage students to open their minds to many alternative ways of thinking about the provocation and ideas that have been generated thus far in the inquiry process.

Engage in a class [Knowledge Building Circles -kindergarten](#) (outside if possible)

Use one of the questions that you generated after the picture activity to do a Knowledge Building Circle.

Possible [Critical Thinking Question](#):

- What can we do to reduce the amount of garbage?



D. Determining Understanding

At this stage of the inquiry, use responses to inform and guide the learning process. They can provide insight into which concepts need clarity, what students are already well informed about, and a general direction that students want to pursue. After the knowledge building circle, simulate a situation to understand the difference between needs and wants.

Simulation

Begin the activity by sharing the book [WALL-E](#)

“When a loveable, lonely robot named WALL•E falls in love with a sophisticated female robot named EVE, he follows his heart all the way into outer space! Young fans will enjoy this Little Golden Book retelling of Disney/Pixar’s WALL•E” ([WALL-E, RH Disney](#)).

OR

Explain that we have created too much garbage and polluted our water so in order to survive, we need to leave planet earth and find another planet. The problem is that we only have one rocketship so we are only allowed to bring 12 things with us.

Have a discussion about our needs and wants and how they can be influenced by our lived experiences and context. This will help students understand that they are similar and different to others. (i.e., both students might want an iPad but one student can’t get one because they don’t have internet, one student might want a new pair of shoes but another student may need a new pair of shoes because theirs are too small)

In pairs, invite the students to look around the classroom and collect 12 things they will need or want to bring on the journey to the new planet.

Possible questions:

- Why do you think this item is important?
- Could you sort the items in order from most important to least important or are they all the same?
- How will this item help you on your journey?

EXTENSIONS:

- **Watch:** [WALL•E’s “Day At Work”](#) (clip)
- **Watch:** [TALKING AND PLAYING WITH MOVIES: WALL-E](#) (study of human impact on earth)

****Note:** The movie is approximately 1 hour and 40 min. You will need to show it in smaller sections to keep the students interested.

These books also speak to needs/wants and how they can be different based on our lived experiences:

- [Those Shoes](#) by [Maribeth Boelts](#), illustrated by [Noah Z. Jones](#):
“All Jeremy wants is a pair of those shoes, the ones everyone at school seems to be wearing. Though Jeremy’s grandma says they don’t have room for “want,” just “need,” when his old shoes fall apart at school, he is more determined than ever to have those shoes, even a thrift-shop pair that are much too small. But sore feet aren’t much fun, and Jeremy soon sees that the things he has — warm boots, a loving grandma, and the chance to help a friend — are worth more than the things he wants.” ([Those Shoes](#): Boelts, Maribeth, Penguin Random House)
- [A Bike like Sergio’s](#) by [Maribeth Boelts](#), illustrated by [Noah Z. Jones](#):

A story about Ruben, who is faced with a difficult choice, and an opportunity to do the right thing when he comes upon a surprise \$100 bill. ([Scholastic](#), A Bike Like Sergio’s)



E. Pursuing Learning

At this stage, students may begin research to pursue their questions, or the following activity could be integrated into the process to ensure that students

have an understanding of foundational climate science.

Game

The game below provides students with deliberate and focused opportunities to continue learning about climate change impacts and responses to needs and wants.

Continue the discussion about needs and wants.

1. Inform the students that more people are coming on the rocketship so 6 more items need to be eliminated.
2. With their partner, discuss the reason for keeping those 6 items.
3. Keep telling each pair that they have to eliminate items until they are allowed only one.
4. Discuss and present the reason that they chose that one item with the rest of the class.
5. Display all of the items chosen by the pairs and give each student two post-its with their name on it.
6. Students then place their post it notes beside the two items that they feel are the most important items to bring on the voyage.
7. Reflect on why some items seem to be more important than others.

End the lesson by explaining that they don't have to go on the rocket, but that they should stay here, take care of the planet and make it a more sustainable place for future generations.

Next, play the game [Needs or wants? That is the question! - Bank of Canada Museum](#) to help them solidify their understanding of climate change.

Extension Videos:

- **Needs and Wants for Kids**: A basic description of the differences between needs and wants.
- **Needs vs Wants**: Learn the difference, when it comes to economics, between your needs and your wants.
- **Need vs Want**: Understand how paying attention to your needs helps you work towards your wants.



F. Consolidation

This step is designed to encourage students to integrate and synthesize key ideas. When students make connections and see relationships within and across lessons, it helps them to solidify knowledge and deepen their understanding.

[SEE-I](#) Strategy

- **S- State it**: with the class clearly state and copy the definition of the concepts onto the board. Needs “a need is something you must have to survive” and wants “something that’s nice to have, but you can actually live without”. ([Teaching kids the difference between needs and wants | ASB Blog](#))
- **E- Elaborate**: the student reformulates the definition in his own words.

- **E- Example:** the student gives their own examples of need and want.
- **I- Illustrate:** the student illustrates in a non-linguistic way the image he has for the need and the want.

More experienced students might also be able to find an illustration or even a symbol that makes them think of the concept.

Invite students to share their illustration/symbol together.



Assessment Idea

Teachers will use multiple methods to assess learning at various stages. The following method represents an alternative to the usual tests and can be used after the consolidation stage or at any other time during the lesson to check the level of comprehension of the pupils.

Exit Ticket

Use the [I Used to Think... Now I Think...](#) strategy as your exit ticket.

Have students write one sentence explaining how their thinking about needs and wants have changed (with a personal example) as a result of this inquiry. For younger students, this can be done with the teacher writing down their thoughts after they share them or illustrate them.



Take Action

Allowing time for students to take action is an essential part of the learning process on climate change, as it empowers students and eases their eco anxiety. These ideas for action can be utilized at any point in the learning process, whether it's now or after completing more guided inquiries. Please note that the suggestions are consistent in each chapter.

You might introduce the idea of students taking action by sharing the following YouTube ["Climate Change Song"](#)

Ask the students what they want to do to positively impact climate change in their local community. List their ideas and come up with a plan to put their action in place.

Action can be taken in many different ways, these are some possible Ideas for Taking Action:

- Model green behaviour - use a reusable water bottle, actively recycle, compost, bring your bags to the grocer, bring your mug to the coffee shop, repair things that need mending, buy second-hand when applicable, pack a litterless lunch, use cloth

napkins, use toxic-free cleaners (or make your own), walk or bike instead of driving when possible - these are just some basic ideas. Check out [Ideas to Think Green](#) for more suggestions.

- Collect rainwater for the garden
- Compost your kitchen waste
- Try more plant-based foods
- Enrol in the EcoSchools program The core of the EcoSchools program is the EcoSchools Certification Application (ECA), our bilingual, online application platform that enables schools across the country to create and implement a customized environmental action plan that meets the needs of their community. At the end of each year, school plans are submitted and assessed by EcoSchools staff, and schools are awarded a certification level ranging from Bronze to Platinum.
- Do some of the [Eco-Activities | Earth Rangers: Where kids go to save animals!](#) to reduce our impact on the environment
- Develop a plan to conserve energy at home and/or at school and communicate this to this to the rest of the student body
- Enter one of the Little Inventors Climate Champions invention challenges offered by the Child Rights International Network. At [Little Inventors Events](#) you can find current, past and upcoming events such as Climate Champion Inventions and Protect Our Oceans Mission. It's worth exploring prior contests so students can see what other students across the globe have designed.
- The Little Inventors site (<https://www.littleinventors.org/>) also provides a variety of mini challenges under the heading "Challenges" with many related to the environment and climate change. Students can upload their creation to the site and hope it gets published and/or complete to share with the class or upload to a class' shared Google document. Here are some relevant mini challenges:
 - [Challenge to Protect Nature](#)
 - [Invention to Protect Trees & Wildlife](#)
 - [Make Sustainable Energy Through Exercise](#)
 - [Invention to Waste Less Food](#)

Action Project Examples

"BABY BITES FOR SUSTAINABLE FOOD PRODUCTION"- Sydney Academy- ON (2021)
K-6

- This class learned about the impacts food production has on our planet and the limited food production of fresh produce in their region. Each student was provided with the materials needed to grow a tomato plant and some herbs. The students were asked to take it home with a plan to care for it and have a harvest in their homes over the summer. [See their project here.](#)

"CLOTHING SWAP AND CLOTHING INDUSTRY POLLUTION"- Port Elgin Regional School- NB (2021) K-1

- This class did an action project of a clothing swap to try to help reduce, reuse and recycle. They also did some research to see what materials are best for

the earth. They want to encourage others to do clothing swaps and try to reduce the amount of clothing everyone uses. [See their project here.](#)

“SUSTAINABILITY AT HOME CHALLENGE”-St. Mary Catholic Elementary School-ON (2021) AGE

- The teachers at St Mary developed an educational program to deliver to students virtually through their classroom teachers that involved a presentation, supporting activities and an at-home challenge. The goal was to have students submit photos, videos, drawings and written descriptions of the things they were doing at home to live more sustainably. As a result of participation all students will receive a St. Mary Grafton reusable water bottle to use at home or at school. [See their project here.](#)

*How could you use these great examples to come up with action projects with your K-2 students?

Earth Rangers Examples:

- [Eco-Activity #187: Snack like a Rabbit! | Earth Rangers: Where kids go to save animals!](#)
- [Eco-Activity: Make a difference with just ONE tree! | Earth Rangers: Where kids go to save animals!](#)
- [Eco-Activity: Eliminate energy-wasters in your home | Earth Rangers: Where kids go to save animals](#)

[National GOOS paper Day](#)

- **GOOS stands for Good On One Side.** GOOS paper is paper that has been used on one side, but is still blank and usable on the other side. Using GOOS paper means ensuring both sides of a piece of paper are used before it is recycled.
- A GOOS paper bin collects and stores your GOOS paper in a convenient and accessible place to help ensure it can be used easily. Get creative and decorate your GOOS bins with a “goose” theme or other eye-catching styles.
- Join students, teachers, workplaces, and families across the country on the **first Thursday in April** to celebrate National GOOS Paper Day.
- On this day of action, get creative as you learn about responsible paper use and promote effective ways to reduce, reuse, and recycle paper.

[The \[Roberta\] Bondar Challenge](#)

- Dr. Roberta Bondar is unique, not just for being the world’s first neurologist in space, the first Canadian woman in space, or for her pioneering space medicine research. Academically one of the most distinguished astronauts to have flown in space, Dr. Bondar is also the only astronaut to use fine art photography to explore and reveal Earth’s natural environment from the surface.
- The Bondar Challenge is an opportunity for students to learn about the art of photography and to discover new perspectives on nature through a camera lens. The challenge is designed for students aged 6-18. Student entries will be judged in one of

three age categories: 6-10; 11-14; or 15-18.

[Bullfrog Power Community Projects](#)

- Activists and organizers across the country are working to transition their communities away from fossil fuels. We created our community-based green energy project grants to provide critical funding for these local efforts.
- All bullfrog powered customers help fund these small-scale, community-led projects, including solar panels on schools and in Indigenous communities, education and training programs, and a cleantech accelerator.
- Some examples of education-related initiatives, including Canadian Rockies Public School solar project can be found at the link above.