GRADE 1–2 LEARNING EXPERIENCE

Jellyfish vs. Plastic Bag

Summary
Students will learn about the epidemic of plastic waste in the oceans, and its impact on wildlife. After learning how sea turtles often mistake plastic bags for jellyfish, students will brainstorm ways to keep our oceans clean by reducing and recycling plastics. Students consider the Mi’kmaw concept of msit no’kmaq [pronounced, em-set no-gma]—we are all related.

Objective
To create awareness of the impact of plastics on the environment and drive behaviour change, with a focus on the interconnectedness of all nature and creatures in Mi’kmaw culture.

Pre-Activity

“JELLYFISH” OR “PLASTIC BAG” GAME

DIRECTIONS
There is an epidemic of plastic in our oceans. Using a map, explain that there is a “garbage island” the size of Québec swirling in the Pacific Ocean.

The “garbage island” is mostly micro plastic—but before it becomes “micro,” the plastic enters the ocean as bags and other waste.

Explain that wildlife, including sea turtles, often mistake plastic bags for jellyfish and they eat them. This can cause animals to become very ill and even die.

GAME
Ask for two volunteers to play the “plastic bag or jellyfish” game. Each student pretends they are a sea turtle. When they see a jellyfish appear on screen, they hit it with their fly swatter to receive a point. If a plastic bag appears and they swat it, they lose a point. The player with the most points wins.

Have a student or teacher keep score. Each round takes 90 seconds. Play as many rounds as desired. The Divert NS YouTube channel has a link to the game: www.youtube.com/watch?v=AwXVw4oyTmU&feature=youtube

MAIN LEARNING OUTCOME

GRADE: 

SUBJECT:
Social Studies

(Gr 1) Learners will implement age-appropriate actions for responsible behaviour in caring for the environment.

SKILLS
Investigate
Ask a question; locate 4–5 obvious details to support an answer; communicate findings.

CROSS-CURRICULAR LINKS

English Language Arts
(Gr 2) Learners will interact using effective oral language skills considering audience, purpose and situation.

Art
(Gr 1–2) Outcome 1
Students will explore and manipulate a range of materials, technologies, and processes to create a variety of artworks that express feelings, ideas, and understandings.
**Activity**

**WE ARE ALL RELATED**

**DIRECTIONS**

**ROLE PLAY WITH ELEMENT CARDS**

**MI'KMAW PERSPECTIVE** — Introduce the Mi'kmaw phrase *msit no'kmaq* [pronounced, *em-set no-gma*]—*we are all related*. Then, students explore this concept of how the earth and all its creatures are connected using the *We are all Related* element cards (Appendix 1).

Divide the class into groups, and give each group a card, (or print multiple sheets and give each student an element card).

Thinking of themselves as that element, students will consider the questions: What do I eat? What eats me? How am I related to the other elements? What happens if another element gets sick? How does plastic pollution in the water affect the elements?

Break class into groups of five or six. One group at a time, have students act out how they are each related by linking arms with the elements they are connected with. For groups with soil or water cards, the connection chain will not be simple!

**EXTENDED LEARNING OPPORTUNITY**

Students can research facts about their element and share with the class.

The full set element cards (45 cards), with Mi'kmaw and English name translations can be downloaded through the Mi'kmawey Debert website:

**LINK**  

**LISTENING AND DISCUSSION**

Watch the PBS video *How Much Plastic is in the Ocean?* to learn about plastics making their way into the earth's oceans and how we can make a difference.

Before watching the video, discuss and define some key vocabulary words.

**DECOMPOSE**  DEBRIS  **GREAT PACIFIC GARBAGE PATCH**  
**FOOD CHAIN**  SYNTHETIC  **TOXINS**  **REDUCE**  **REUSE**  
**RECYCLE**  **RETHINK**  **REPAIR**  **REFUSE**

**LINK**  
(04:43 / PBS “It’s Okay to be Smart” videos 2017)

**OPTION**  
Ask students to raise their hands when they hear these key words during the video.

After watching the video, have students sit in a circle giving each the opportunity to share in turn: “What things do we use that are plastic?”

After the students have shared, lead a discussion on how we can use the “6 Rs” in the video to reduce plastic getting into landfills and our oceans.
**Post-Activity**

**CREATE A POSTER OR JELLYFISH**

**DIRECTIONS**

**OPTION 1**

Have the students create a poster that shows their element and the other elements it is connected to. Students can move beyond the elements from the cards and show other parts of nature that interact with their element.

**SAMPLE APPROACH:** Cut out the element from old magazines, glue it to a page, and have the students use markers or crayons to create their picture or diagram around it.

**OPTION 2**

Create a “Jellyfish in a bottle” craft. Link to instruction video:

**LINK**  [www.pbs.org/parents/crafts-and-experiments/make-an-upcycled-jellyfish](http://www.pbs.org/parents/crafts-and-experiments/make-an-upcycled-jellyfish) (PBS kids)

After the jellyfish live in the classroom for a week, make sure to take apart the craft and recycle the materials.

**Assessment**

**FORMATIVE**  Evaluate student comprehension through monitoring class discussions and activities.

**SUMMATIVE (OPTIONAL)**  Option to use evaluation rubric to evaluate posters created by students.

**ENVIRONMENTAL EVENTS**

There are many great opportunities throughout the year to highlight the 3Rs in the classroom. Check out these annual events:

- **Waste Reduction Week**  October (3rd week)
- **Earth Day**  April 22
- **Compost Awareness Week**  May (1st full week)
- **Environment Week**  June (1st full week)

**WASTE REDUCTION EDUCATORS**

Divert NS provides funding to municipalities to deliver waste reduction education to schools across the province. Your local waste reduction educator(s) provides the following services, and more, free of charge!

- classroom presentations
- green team set up
- advice on bins and signage
- tours of local waste facilities
- school waste audits

To find out more, visit divertns.ca

**ABOUT DIVERT NS**

Divert NS is a not-for-profit organization championing recycling in Nova Scotia. For over 20 years we’ve helped build a culture of recycling through environmental stewardship, education, and innovation. Divert NS operates the **Beverage Container Deposit–Refund Program** and the **Used Tire Management Program**. In addition, we work in collaboration with government, industry, and academia to divert waste-resources from landfill. Divert NS, in partnership with municipalities, delivers education and awareness programs to schools, businesses, and community groups. Divert NS also works to develop stewardship agreements and funds innovative research and development initiatives.
### We are all related

This activity uses a selection of element cards (animals, plants, fish, water, and soil) and allows students to create a cycle of life with each other. The purpose is to explore the Mi'kmaw concept of **msit no’kmaq**—we are all related. [pronounced, em-set no-gma]

#### QUESTIONS:

What do I eat? What eats me? How am I related to the other elements?

What happens if one of the elements gets sick from pollution?

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<thead>
<tr>
<th>SAP+KM+K</th>
<th>KITPU</th>
<th>MIKJIKJ</th>
<th>LPA’TUJ</th>
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<tr>
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<td>APLI’KMUJ</td>
<td>SQOLJ</td>
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</tbody>
</table>

The full set element cards (45 cards), with Mi'kmaw and English names, can be downloaded through the Mi'kmawey Debert website: www.mikmaweydebert.ca/home/wp-content/uploads/2015/06/Pg_169_178_GRA_ElementCards.pdf