

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=youtu

MATERIALS

World map

Internet access
and projector

DURATION

10 mins

MATERIALS

Fly swatters

Internet access
and projector

DURATION

15 mins
(or longer for
more rounds)

MAIN LEARNING OUTCOME

GRADE:

1 2

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.

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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 See “**Page 169 - 178 Element cards**” at www.mikmaweydebert.ca/home/sharing-our-stories/education-and-outreach/school-curriculum/supplementary-materials-for-teaching-about-the-mikmaq/

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 www.pbs.org/video/how-much-plastic-is-in-the-ocean-jpfpsf/
(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.

MATERIALS

Appendix 1
We are all Related
Element Cards

DURATION

30 min

RESOURCE LINK

Mi'kmawey Debert
Education and
Outreach
1-877-892-2424,
ext. 271

www.mikmaweydebert.ca

MATERIALS

Internet access and
projector, or class
Chromebooks

DURATION

30 min

THE 6 RS

REDUCE

REUSE

RECYCLE

RETHINK

REPAIR

REFUSE

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 (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 (3 rd week)
Earth Day	April 22
Compost Awareness Week	May (1 st full week)
Environment Week	June (1 st full week)

MATERIALS

Poster paper and crayons

Magazines for collage (optional)

DURATION

30 min

MATERIALS

Plastic bag, bottle, water, food colouring

DURATION

30 mins



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

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#NothingWasted

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.

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APPENDIX 1

JELLYFISH VS. PLASTIC BAG

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**. [pronouced, em-set no-gma]*

This activity is adapted from the **Cycles of Life** Lesson Plan provided in Mi'kmawe'l Tan Teli-kina'muemk (Teaching About the Mi'kmaq) © The Mi'kmawey Debert Cultural Centre 2015. The full publication is available for download at: www.mikmaweydebert.ca/home/

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?



 SAP+KM+K	 KITPU	 MIKJIKJ	 LPA'TUJ
 SU'ITE'L	 ALANJ	 JIJAWE'J	 MUIN
 PLAWEJUIMANAQSI	 SAMQWAN	 APLI'KMUJ	 SQOLJ

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