

GRADE 5 LEARNING EXPERIENCE

Trash or Treasure: What can we learn from the past?

Summary

Learners will apply critical thinking to compare modern life to that of the past. Students learn about artifacts of Mi'kmaw ancestors uncovered in Nova Scotia. Students will participate in a hands-on activity to predict what future generations may be able to discover about our daily life based on the waste materials we leave behind.

Objective

Students will learn how our use of materials has changed over time, how this impacts the environment and what we can do to help divert waste.

Pre-Activity

CLASS DISCUSSION

DIRECTIONS

Start a class discussion by asking students to suggest ways we can study the past:

- Storytelling, art, songs
- References—books, internet, maps
- Museums
- Artifacts
- Archaeology
- Elders

Ask students to think of day-to-day items and artifacts often found underground by archaeologists.

- Pottery
- Glassware
- Stone tools (e.g. weapon points, knives, scrapers, etc.)

Ask students to guess why these types of artifacts are found, but not others. Are these items the only things that people 'threw out' years ago?

Explain that artifacts do not tell the whole story, because some items (like banana peels) decompose quickly and others break down more slowly, or not at all. So just because banana peels are NOT found in a dig, doesn't mean people did NOT eat them.

Use **Decomposition Times (Appendix 1)** to review and discuss how long it takes various materials to decompose.

MATERIALS

Whiteboard and markers

Appendix 1

Decomposition Times for Various Materials

DURATION

15 min

MAIN LEARNING OUTCOME

GRADE:

5

SUBJECT:

Social Studies



Learners will investigate how we learn about the past, with a focus on Acadians, African Nova Scotians, Gaels, Mi'kmaq, and additional cultures

SKILLS

Investigate

Ask and revise questions; Locate several relevant details to support an answer; organize and compare details; identify relationships and communicate findings.

CROSS-CURRICULAR LINKS

Science



Chemical & Physical Properties

Learners will test how physical and chemical changes affect the properties of matter.

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DISCUSSION FOR SMALL GROUPS

Over hundreds of years, humans have made life more and more convenient. Break students into small groups to brainstorm modern everyday items and what they have replaced from past years. Ask them to think about examples of household products that are currently disposable that would have been reusable in the past.

Examples include:

- Woven baskets vs. plastic bags
- Furs for clothes vs. denim
- Pottery cups vs. disposable cups
- Glass bottles vs. plastic bottles

MI'KMAW PERSPECTIVE - OPTIONS

- 1) Students read about/see slideshow/access video about sources of artifacts and stone used for tools found in Mi'kma'ki. These sites provide evidence of where Mi'kmaq ancestors lived and travelled, over 11,000 years ago. (Source: MikmaweyDebert.ca)

mikmaweydebert.ca/home/ancestors-live-here/debert/a-living-community

mikmaweydebert.ca/home/ancestors-live-here/debert/understanding-and-protecting-the-sites/

- 2) Students watch a news video/ read about an archaeological dig in Shelburne County. (Fort Saint Louis National Historic Site, Port La Tour, NS)

aptnews.ca/2018/07/26/modern-archeological-dig-at-french-settlement-in-nova-scotia-is-from-a-mikmaq-perspective/ (APTN News Report: video and article)

museum.novascotia.ca/blog/tag/katiecottreau-robins (NS Museum Blog of the dig)

Activity

ARCHEOLOGICAL TRASH OR TREASURE

DIRECTIONS

PREPARATION

Have students bring in a few small, household items from their house (with permission from their parents), or from around the classroom. These items will be the “artifacts” for the following activity.

OPTION Each student could search the schoolyard for three pieces of garbage. This would be a great activity for a Schoolyard Cleanup or Earth Day (April 22).

ACTIVITY

Explain to students they are archaeologists living **100 years in the future** who have just discovered these new “strange-looking” artifacts.

Have students imagine they have not seen these objects before. They must examine their objects to determine what each item might have been used for, and what it could tell us about the way the people who used them lived.

Students will use the **Trash or Treasure Activity Sheet (Appendix 2)** to record their notes.

MATERIALS

Small household items

Examples: egg cup, cookie cutter, measuring spoon/cup, shoelaces, clothes pin, paper clips, old keys, hair ties/clips, Mason jar lids

MATERIALS

Appendix 2
Trash or Treasure Activity Sheet

DURATION

30 min

DIRECTIONS DISCUSSION

In small groups, have students share their hypotheses about their items and stories with their classmates.

Post-Activity THEN AND NOW

DIRECTIONS

Imagine in a hundred years where future generations will find our garbage. In landfills? In the oceans? Everywhere? Discuss waste practices of the past compared to today.

Explain that in the past people would often bury garbage in their own backyard. What happened when the human population grew and grew? Landfills were required.

Show the class a video on landfills. What are the issues with landfills? (e.g. methane gas/climate change; too much waste; expensive to build)

LINK TO VIDEO www.youtube.com/watch?v=x4x8HsAhp8U
(08:30 Source: YouTube, SciShow)

CONCLUSION: TAKING ACTION!

Ask students what can be done to reduce our need for landfills and to help the environment. Examples:

- Reduce, reuse and recycle
- Minimize waste
- Avoid disposable items
- Compost food and yard waste

Can these things be done in the classroom? At home? At school? In the community?

OPTION Time-travel waste suggestion box: Students can write letters to future students in their school, explaining the ideas they had to reduce waste during their time. Letters can be kept in a time capsule, to open 10–20 years later.

MI'KMAW PERSPECTIVE — EXTENDED LEARNING OPPORTUNITY

OPTIONS Visit a local archaeological dig if a site tour is available.

Invite an archaeologist who has been part of the dig to come to the school to share with students directly.

LINK Mi'kmawey Debert Education and Outreach (1-877-892-2424, Ext. 271)
www.mikmaweydebert.ca/home/

Assessment

FORMATIVE Observations can be conducted throughout the lesson, including during class discussions and the main activity.

SUMMATIVE (OPTIONAL) Collect and grade the Activity Sheet (Appendix 2)

MATERIALS

DURATION
10 min

MATERIALS

Internet
and projector

**SciShow
YouTube video**
(8.5 min)

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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 welcome feedback from students and teachers on these lesson plans and resources. Please send your feedback to:

Toll-free
1.877.313.7732
info@divertns.ca

APPENDIX 1:

TRASH OR TREASURE: WHAT CAN WE LEARN FROM THE PAST

Decomposition Times for Various Materials

	ITEM	HOW LONG DOES IT LAST ?
1.	Banana Peels	3 - 4 weeks
2.	Cardboard	2 months
3.	Aluminum Pop Can	200 - 500 years
4.	Disposable Diapers	500 years
5.	Plastic Bags	1000 years
6.	Styrofoam	1+ million years
7.	Cigarette Butt	1 - 12 years
8.	Tin Foil	Never/unknown
9.	Plastic Pop Bottles	Never/unknown
10.	Milk Cartons	1 - 5 years



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TRASH OR TREASURE: WHAT CAN WE LEARN FROM THE PAST

Making Inferences from Waste

Waste Object	What I Know About It	What I Infer From It
<p>EXAMPLE:</p> <p>Stretchy elastic circle covered with cloth material.</p> <p>Looks like a modern-day hair elastic.</p>	<p><i>Hair elastics are used to tie hair back (either for fashion or comfort)</i></p>	<p><i>Owner of this item likely had long hair</i></p>