

HIDDEN PLASTICS



Time

2 class periods or approximately 60 minutes (This activity works best over the course of two days.)

Grade level

3-7 (can be modified to suit older grades)

Learning Objectives

- Students will learn about everyday items that contain hidden plastics.
- Students will map out the hidden plastic items they use in their homes and everyday lives.
- Students will research how they can replace an item containing hidden plastics that they use every day with a more environmentally friendly one.

Materials

- Hidden Plastics worksheet (attached)
- Hidden Plastics video and infographic (accessible at 10000changes.ca)
- Art supplies for research projects (not included)

Focus Questions

What are hidden plastics? Why do some items have hidden plastic inside them? What everyday items contain hidden plastics? How can I decrease my use of items that use hidden plastics?

Lesson Description

Minds on

Students will be introduced to the term “hidden plastics,” and will participate in an activity that analyzes everyday items which could potentially contain these materials. Students will watch the Hidden Plastics video and explore the associated infographic from the 10,000 Changes website to learn more.

Action

Students will map out the hidden plastics that exist in their home and select one item to research in greater detail. Students will determine how best to replace this item with a more environmentally friendly option. Students will also create a poster or infographic to inform others on how they can replace this item.

Conclusion

Students will share what they learned with their school and community to help educate others on the negative aspects of hidden plastics.

Lesson Implementation

Minds on

Begin with a discussion on the role of plastic in today’s society and the items that students use in their day-to-day lives that are made of plastic. Afterwards, explain to students that there are also items we use in our daily lives that contain plastic that we are not often aware of – these are known as hidden plastics.

Distribute a Hidden Plastics worksheet to students and have students write the name of the item and determine if this item contains hidden plastics. Students may work individually, in pairs, or in small groups.

Afterwards, show the class the Hidden Plastics video found on 10000changes.ca and distribute the accompanying infographic to small groups. Once students have watched the video and reviewed the information on the infographic, allow time for them to go back and update their sheet accordingly.

Created in partnership by Canadian Geographic and the Recycling Council of Ontario, with funding provided by Environment and Climate Change Canada



HIDDEN PLASTICS



Review the worksheet as a class and discuss what students learned from the video. Use guiding questions such as:

- What items surprised you?
- Which items do you own that contain hidden plastics?
- Why do some items have hidden plastic?
- What impact do these hidden plastics have on the environment?
- How can we take action to decrease our use of items containing plastic?

Action

Now that students are familiar with items that contain hidden plastics, inform students that they are going to conduct a small research project on an item that they frequently use and how they can replace it with a more environmentally friendly/plastic-free option. Begin by asking students to make a list of the major rooms in their house and to name the items in those rooms that contain hidden plastics. Alternatively, students can draw a map of their home and highlight the items in each room.

The following day, do a think-pair-share activity with students and have them compare their lists with others. Create a class list of common items.

Inform students that they are going to research how they can replace some hidden plastic items with more environmentally friendly options. Ask students to select one item on their list that they or a member of their family uses every day. Have students use information from the Hidden Plastics video or infographic (or their own research) to explain how this item contains hidden plastic. Next, have students research an alternative(s) that they can use in place of this item. Remind students to keep notes on what makes this replacement different from the current item (and have them double check that the alternative item does not contain hidden plastics). Once students have completed their research, have them design their own infographic or awareness poster to highlight how others can replace this item.

When all projects have been completed, create a gallery walk in your classroom for others to view, or allow time for students to present their projects to the class.

Conclusion and Consolidation

Find a place in your school or community to highlight these projects and create your own awareness campaign. Many people are not familiar with which items contain hidden plastics. Discuss with your students places that they can hang these posters or infographics to help educate others. Examples include school hallways, the library, a local grocery store, pharmacy or shopping centre (be sure to get the necessary approval before hanging these in public places).

Connection to the Canadian Geography Framework

Concepts of Geographic Thinking

- ▷ Patterns and trends
- ▷ Interrelationships
- ▷ Geographic perspective

Inquiry Process

- ▷ Formulate questions
- ▷ Gather and organize
- ▷ Interpret and analyze

Geospatial Skills

- ▷ Foundational elements
- ▷ Spatial representations

*Created in partnership by Canadian Geographic and the Recycling Council of Ontario,
with funding provided by Environment and Climate Change Canada*



Extend Your Geographical Thinking

Conclude your discussion on hidden plastics by going to the 10,000 Changes website (10000changes.ca) and making a pledge to replace one item that contains hidden plastics with an alternative. Pledges can be made individually or as a class. Encourage students to talk to their families about what they learned about hidden plastics and to make a pledge with their family.

Modifications

- In the Minds on activity, the teacher can bring in flyers from the supermarket and/or drugstore and students can circle or cut out items they think are plastic-free and items that are not. This activity can be done to replace the hidden plastics worksheet.
- For older grades: To make this lesson more challenging for older grades, teachers can adapt the student research project to have a larger spectrum. Instead of students selecting one item to research, students can select one business or type of business, identify all the hidden plastics used in this business, and then make a research proposal on how this business can choose more environmentally friendly options.

Assessment Opportunities

- Students will be assessed on their participation in the group discussion about hidden plastics.
- Students will be assessed on their list of hidden plastic items their family uses every day.
- Students will be assessed on their project outcome. Peer assessment or a marked grade by the teacher can be used for this project.

*Created in partnership by Canadian Geographic and the Recycling Council of Ontario,
with funding provided by Environment and Climate Change Canada*

HIDDEN PLASTICS

Hidden plastics worksheet

Place a ✓ or an X in the box provided to determine which items contain hidden plastics. Name each item that you see.

<p>ITEM: _____ <input type="checkbox"/></p> 	<p>ITEM: _____ <input type="checkbox"/></p> 
<p>ITEM: _____ <input type="checkbox"/></p> 	<p>ITEM: _____ <input type="checkbox"/></p> 
<p>ITEM: _____ <input type="checkbox"/></p> 	<p>ITEM: _____ <input type="checkbox"/></p> 
<p>ITEM: _____ <input type="checkbox"/></p> 	<p>ITEM: _____ <input type="checkbox"/></p> 