

LESSON 2.1



RECYCLING IN YOUR COMMUNITY

Objective:

Students will apply their acquired knowledge of different types of plastic and learn about which items are recyclable in their community. NOTE: This may be in their city, county, town, village, etc. depending on what municipal level manages the community's recycling program. Students will take this new knowledge and creatively think of alternative items that could be used or invent new items to serve the same purpose to reduce the amount of plastic items that enter the waste stream.

Instructions:

1. Watch PBS News Hour Video: [Why it will take more than basic recycling to cut back on plastic](#)
 - a. Discuss takeaways, questions, and surprises from the video as a class, encouraging students to think about how the recycling process impacts populations around the world in different ways.
2. Complete the first three columns in the My Community's Recycling Chart.
3. Have students look up their local recycling guidelines to learn if the items on their list are recyclable in their community and complete the fourth column in the My Community's Recycling Chart.
 - Check Recycle Right New York for your local guidelines <https://recyclerightny.org/local-recycling-guidelines>
 - *Tip: If you can't find your local recycling guidelines, try searching for "waste management in (fill in the name of your community)" or "recycling in (fill in the name of your community)."*
 - Use the Recycling in My Community Response Questions to guide students' research.
 - *Optional activity: go through your class' or home recycling bin and make sure everything is correctly sorted. Separate out the non-recyclable items.*
4. For the items that are not recyclable in the My Community's Recycling Chart,
 - Discuss with students what alternatives exist that would allow people to Refuse (not accept or use an alternative to a plastic item),

GRADE LEVEL	TIME
	
6-8, 9-12	60-90 MINUTES



Materials:

- Various recyclable and non-recyclable items
- Craft supplies – tape, scissors, paper, etc.
- My Community's Recycling Chart
- Recycling in My Community Response Questions
- PBS News Hour Video: [Why it will take more than basic recycling to cut back on plastic](#)



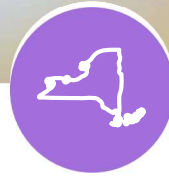
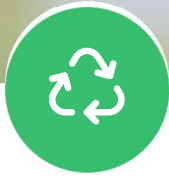
Notes:



Learning Standards:

SCI:
MS-ETS1-1, HS-ETS1-1

GLLP: 6, 8

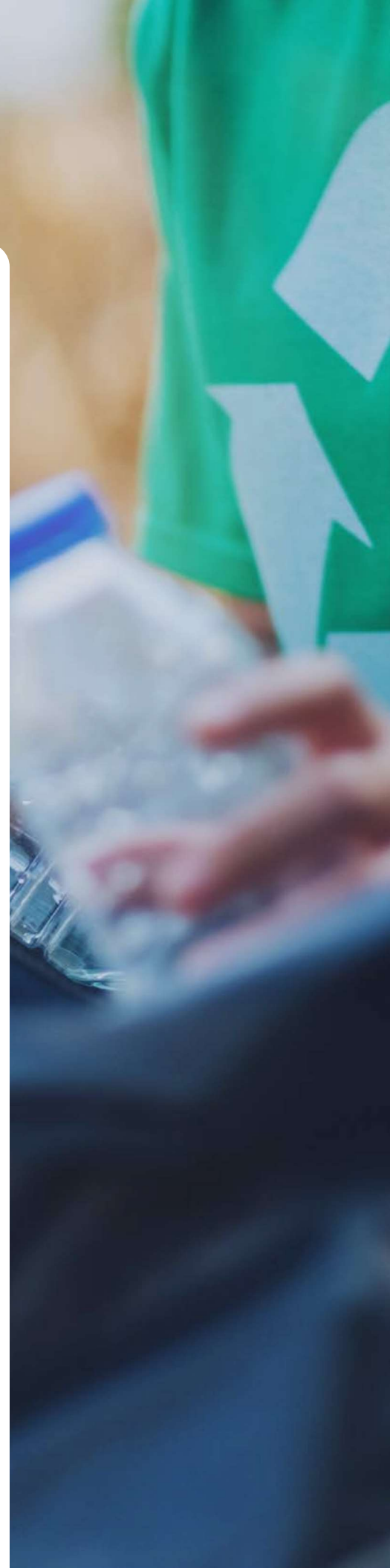


Reduce (decrease the frequency or amount of a plastic item(s)' use) or Reuse (use a plastic item multiple times) this item, so it wouldn't end up in a landfill or as plastic pollution.

- Ask students what potential barriers may exist that would keep people from recycling or being able to use more sustainable options?
- Have students place their ideas in the fifth column of the My Community's Recycling Chart.

5. For one item that is not recyclable in My Community's Recycling Chart, have students invent a new product or adapt an existing product that could replace this nonrecyclable item using the invention process:

- *Concept phase:* Identify a problem, conduct research and brainstorm solutions. Identify the criteria (requirements) and constraints (limitations) for the design.
- *Design phase:* Create a plan, calculate costs, select the best solution and determine necessary resources.
- *Build phase:* Sketch, model or build a prototype. (A sketch of the invention is sufficient.)
- *Review and redesign phase:* Review the design, assessing how well it met the design criteria and constraints. Identify its strengths and weaknesses. Redesign to improve weaknesses.



Plastic Pollution and You

MY COMMUNITY'S RECYCLING CHART

Name: _____

Class: _____

Date: ____/____/____

[illegible]

Plastic Pollution and You

RECYCLING IN MY COMMUNITY RESPONSE QUESTIONS

Name: _____

Class: _____

Date: ____/____/____

1. What plastics are recyclable in your area?

2. Was this information easy or hard to find?

3. Was there anything surprising about what you found? If so, what or if not why?

4. Go back to Recycle Right NY and choose another municipality to explore. Compare what you found to your community, are things very similar or very different? What might cause these differences? What effects could these differences have on the recycling system and on individuals?
