



Department of Environmental Protection Solid Waste Recycling Curriculum

Umm excuse me, what's your recycling policy?

COURSE Biology 1	TIMEFRAME 2 Class Periods (90-100 minutes)
LESSON SUMMARY Students explore plans to improve environmental conditions through Zero Waste initiatives. They examine policies in Florida with regard to waste and suggest next steps to improving the lives of its current and future residents.	
NGSSS SCIENCE CONTENT BENCHMARK SC.912.L.17.13 Discuss the need for adequate monitoring of environmental parameters when making policy decisions (assessed as SC.912.L.17.20).	
NGSSS NATURE OF SCIENCE BENCHMARK SC.912.N.1.6 Describe how scientific inferences are drawn from scientific observations and provide examples from the content being studied.	
LESSON OBJECTIVES <ul style="list-style-type: none"> • Students will recognize that adequate monitoring of environmental parameters is critical to the enforcement of laws, environmental standards, accountability, and environmental protection. • Students will discuss how monitoring data is necessary for making informed management decisions. 	
SCIENCE VOCABULARY <ul style="list-style-type: none"> • compost • recycle • single-use plastic • sustainability • zero waste 	ACADEMIC VOCABULARY <ul style="list-style-type: none"> • initiative • monitor • parameter • policy • textiles
INQUIRY QUESTION(S) <ul style="list-style-type: none"> • How can educating the community encourage future environmental policies? 	STATEMENT OF STUDENT MASTERY I can recognize that educating the community on the need for adequate monitoring of environmental parameters is crucial to addressing environmental issues and influencing policy decisions.

CROSS-CURRICULAR CONNECTIONS

SOCIAL STUDIES

SS.912.C.2.3 Experience the responsibilities of citizens at the local, state, or federal levels.

ENGLISH LANGUAGE ARTS

ELA.K12.EE.1.1 Cite evidence to explain and justify reasoning.

ELA.K12.EE.4.1 Use appropriate collaborative techniques and active listening skills when engaging in discussions in a variety of situations.

See Teacher Slide Deck as a guide.

Lesson Overview

ENGAGE

5 minutes



Students critically think about what they know regarding waste policies and practices.

Teacher Moves

- Distribute the Anticipation Guide.
- Direct students to complete the “Before” section.

Alternate methods:

Vote With Your Feet, Polling Software

Student Moves

- Complete the “Before” section of the Anticipation Guide.

EXPLORE

30 minutes



Students explore a city’s initiatives to achieve Zero Waste by 2030.

Teacher Moves

- Introduce the concept of a Zero Waste goal along with the indicators and targets.
- Divide students into four groups based on initiatives.
 - (1) Initiative 1
 - (2) Initiatives 2, 3, 4
 - (3) Initiatives 5, 6, 7
 - (4) Initiative 8
- Review “Read and Say Something” protocol and graphic organizer.

Student Moves

- Read assigned text in groups using “Read and Say Something.”
- Students complete a graphic organizer.

EXPLAIN

20 minutes





Students discuss the impact of their initiatives on a Zero Waste Goal and consider the potential effectiveness in their community.

Teacher Moves

- Regroup students into new groups to ensure that at least one student from each of the four initial groups is present in the regrouping.

Student Moves

- Discuss with new groups all initiatives and their impacts on a Zero Waste Goal. Determine the potential effectiveness of the

<ul style="list-style-type: none"> ● Explain use of graphic organizer. ● Facilitate group discussion. 	<ul style="list-style-type: none"> ● initiatives in their community. ● Complete graphic organizer.
<p>ELABORATE 25 minutes  Students will examine local environmental plans regarding waste, compare the value and impact of implementation of the researched initiatives on their community, and identify potential changes, and/or applications. Students will engage local government officials to demonstrate the importance of policy on minimizing our environmental footprint.</p>	
<p>Teacher Moves</p> <ul style="list-style-type: none"> ● Provide students with the pages of the Final Appendix Strategic Plan related to their county. ● Explain Twitter Post document. 	<p>Student Moves</p> <ul style="list-style-type: none"> ● Review their county’s recycling plan found in the pages of the Final Appendix Strategic Plan. ● Identify necessary change or application. ● Create a Tweet to send to a local official regarding an adjustment to a current waste policy or the introduction of a new policy.
<p>EVALUATE 10 minutes  Students reflect on the lesson and correct any misconceptions previously held.</p>	
<p>Teacher Moves</p> <ul style="list-style-type: none"> ● Revisit Anticipation Guide. ● Direct students to complete the “After” section with evidence from the lesson. ● Review correct answers. <p>Alternative method: Questions can be displayed on the projector screen for review.</p>	<p>Student Moves</p> <ul style="list-style-type: none"> ● Complete the “After” section of the Anticipation Guide with supporting evidence.

<p>Source Data <i>These are the sources of data used to build this lesson/unit. You may or may not choose to share these with your students, but they are good reading for you as the instructor.</i></p>	
<p>Engage</p>	<p>One New York Final Appendix Strategic Plan</p>
<p>Explore</p>	<p>One New York</p>
<p>Explain</p>	<p>One New York</p>
<p>Elaborate</p>	<p>Final Appendix Strategic Plan</p>
<p>Evaluate</p>	<p>One New York Final Appendix Strategic Plan</p>