Author
Grade Level
Duration

David Sweeney 3 3-4 class periods

National Standards

GEOGRAPHY Element 5: Environment and Society

14. How human actions modify the physical environment.

16. The changes that occur in the meaning, use, distribution, and importance of resources.

Element 6: The Uses of Geography

18. How to apply geography to interpret the present and plan for the future

AZ Standards

ELA Reading Informational Text

3.RI.3 Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.

Writing

3.W.8 Recall information from experiences or gather information from print and difital sources; take brief notes on sources and sort evidence into provided catagories.

Speaking and Listening Comprehension and collaboration

3.SL.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clarity. 3.SL.4 Report on a topic or text, tell a story, or recount and experience and appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace.

MATHEMATICS Measurement and Data

3.MD.B3 Create a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step "how many more" and "how many less" problems using information presented in scaled bar graphs.

Arizona Social Science Standards

GEOGRAPHY
The use of
geographic
representations and
tools helps
individuals
understand their
world.

3.G1.1 Use and construct maps and graphs to represent changes in Arizona over time.

Human-environment interactions are essential aspects of human life in all societies.

3.G2.1 Explain how people modify and adapt to the Arizona environment.

SIOP Elements

Preparation

Adapting content Linking to background **Linking to past learning** Strategies used

Scaffolding

Modeling
Guided practice
Independent practice
Comprehensible input

Grouping Option

Whole class Small groups Partners Independent



Integrating Processes

Reading Writing **Speaking Listening**

Application

Hands on Meaningful Linked to objectives Promotes engagement

Assessment

Individual Group Written Oral

Arizona English Language Proficiency Standards

Stage III

Basic

Reading

Standard 4: The student will analyze text for expression, enjoyment, and response to other related content areas. The student will demonstrate knowledge of reading comprehension by:

B-13: drawing conclusions from information implied or inferred in a literary selection.

B-20: identifying content vocabulary within math, science, and social studies texts.

B-23: interpreting signs, labels and symbols in the environment.

Overview

Students view their trash as just garbage to be thrown away. However, adults understand that we need to protect our resources and our environment. This lesson's activities will help drive change and create habits for a lifetime while instilling responsibility for the environment.

Purpose

In this lesson students will work together through conversations, observations, and hands on activities to learn why they need to help take care of the environment. This lesson contains strategies for diverse learners.

Key Vocabulary

disposable: made to be used once and thrown

away

environment: the world around us

landfill: an area where waste is buried under the

ground

pollution: substances that make land, water, and

air, dirty and not safe to use

recycle: to make something new from something

that has been used before **reuse:** to use something again

Materials

- · National Geographic articles
 - A Whopping 91% of Plastic Isn't Recycled
 - Eight Million tons of plastic dumped in Ocean every year.

- Plastic Bottle catamaran Completes Epic Pacific Crossing
- · Lego person cutouts
- Popcycle sticks
- · Crayons/colored pencils
- Hot glue and gun
- Trashbags
- Rubber gloves
- Local community plan for what can be recycled (optional)
- · Boxes or bags
- Vocabulary Cards
- Vocabulary Word Wall Cards and Flash Cards
- Vocabulary Test and Answer Key
- Exit Slip Session One
- Exit Slip Session Two

Objectives

The student will be able to:

- 1. Find main ideas and key details from text.
- 2. Describe the effects of littering.
- 3. Participate in discussions.
- 4. Create a graph.
- 5. Gain support for trash pickups around campus and in the community.

Procedures

SESSION ONE

Engage:

a. Begin the lesson by asking students, "Where does trash go?" Solicit ideas from the class and then explain that they will be learning about kinds of trash and what happens to it.



- b. Explain that they are going around campus and picking up items that do not belong (trash). Divide the students into small groups and give each group a (pre-numbered or named) trash bag. Have students put on rubber gloves and exit the classroom and pick up items. (Application: Hands on)
- c. Upon returning to the classroom, put the collected trash in a corner of the room to be used for Session Two. Have students throw away the rubber gloves.
- d. Then discuss this question: "Should you have to pick up other people's trash?" Do a Think- Pair-Share and if possible seek out volunteers with for and against views. Allow time for your students to debate their views in a neutral setting. (Grouping options: Partners, Whole class)
- e. Distribute and discuss the vocabulary cards for reuse, disposable, and environment. Add the words to the word wall. Then use the flash cards with the definitions for these words and quiz the class.

(Scaffolding: Comprehensible input, Assessment: Group)

- f. Read the article about a plastic boat to the class. https://news.nationalgeographic.com/news/2010/07/100727-plastic-bottle-catamaran-completes-epic-pacific-crossing/ Read one more time, looking for purpose, main idea and key details. (Scaffolding: Comprehensible input)
- g. Use the Exit Slip to have students learn and apply the meaning of the vocabulary words for today. (Assessment:Individual)

SESSION TWO

Explore:

- a. Discuss and review how students felt about yesterday's article and activities.
- b. Introduce today's new vocabulary words, pollution and recycle, and place the new words on the word wall.
- **c.** Explain to students that they are now going to sort yesterday's trash after they put on rubber gloves. Then demonstrate the categories in which the trash will be sorted:
- ✓ recyclables: plastic, glass, metal, paper, and wood
- ✓ non-recyclables: dirty paper, certain kinds of packaging, plastic bags, etc.
- ✓ It would be helpful at this point to show them the community's plan for what can be recycled. (Scaffolding: Comprehensible input)
- d. Give each group from yesterday their sack of trash and have them begin to sort the trash into the types identified. (Grouping options: Small group, Application: Hands on,)
- e. Exit ticket ideas:

- 1. Ask the students these questions and have them write their answers on a slip of paper.
 - ✓ In your trash bag, which did you have more of recyclable or non-recyclable items?
 - ✓ What was the most common item that was thrown away?
 - Could this item be reused or made into something different?
- Use Exit Slip asking "Should we recycle?" (Assessment: Written)

SESSION THREE

Prior to this session, you need to create your own Lego person as an example and have at least one example of how you asked someone about recycling.

Explain:

- Discuss how students felt about yesterday's trash lesson. Ask if any of them went home and thought about what was being put in the trash can or in the recycling can? Have students share some reactions. (Preparation:linking to past learning, Application: meaningful)
- Introduce the new vocabulary word, landfill by explaining its meaning and adding it to the word wall.
- c. Read and discuss the articles on plastic in the ocean and how much plastic is not recycled. https://news.nationalgeographic.com/news/2015/02/150212-ocean-debris-plastic-garbage-patches-science/ and https://news.nationalgeographic.com/2017/07/plastic-produced-recycling-waste-ocean-trash-debris-environment/
- d. End the day, by having students create a Lego person (Avatar) to help them share on campus or at home what they are learning in class. (Application: meaningful)
- e. Distribute to each student a blank Lego person along with art supplies. Show them your Lego person. Tell them you named your Lego person _____.(Scaffolding: modeling) Allow time for students to create their Lego person.

SESSION FOUR

Elaborate:

- f. Have students share their Lego person with the class and tell the class what they have named their Lego person.
- g. Then write this sentence stem on the board: _____(Lego person name) thinks its important to recycle because ______. (Scaffolding: Modeling) Have students complete the sentence on a piece of paper and share their ideas with the class.



h. Explain that students will carry their Lego person around campus so teachers and students will ask who or what it is. Students will then have a chance to talk about recycling and campus cleanliness. (Integrating processes: Speaking and listening).

Evaluate:

- i. At the end of a week, have students complete one or more of the evaluation ideas.
 - Describe in writing how their Lego person activity went.
 - Create a graph depicting the different types of items that were picked up initially.
 - Continue to collect trash and graph a week's worth of trash.
 - Have small groups generate written plans for lessening the amount of trash on campus and devise a plan of action.

Assessment

ELA and Geography

Session One Exit Slip can be graded for correctness and completeness. Mastery will be considered a score of 100%.

Vocabulary Test can be given on vocabulary words. Mastery will be considered a score of 80% or higher on the test.

Session Two Exit Ticket can be graded for Ideas and Organization using the 6 Traits Writing Rubric. Mastery will be considered a score of 4 or higher. The description of how the Lego person activity went can be graded for Ideas and Organization using the 6 Traits Writing Rubric. Mastery will be considered a score of 4 or higher.

Small group plans for lessening the amount of trash on campus can be graded for Ideas and Organization using the 6 Traits Writing Rubric. Mastery will be considered a score of 4 or higher.

Small group plans of action can be graded for Voice using the 6 Traits Writing Rubric. Mastery will be considered a score of 4 or higher.

Mathematics:

Graph can be graded for correct information and labeling. Mastery will be considered a score of 80% or higher.

Extensions

Third graders can share with a Kindergarten class what they have learned and encourage them to recycle.

Sources

Whopping 91% of Trash isn't Recycled https://news.nationalgeographic.com/2017/07/plastic -produced-recycling-waste-ocean-trash-debrisenvironment/

Eight Million Tons of Plastic Dumped in Ocean Every Year

https://news.nationalgeographic.com/news/2015/02/150212-ocean-debris-plastic-garbage-patchesscience/

Plastic Bottle Catamaran Completes Epic Pacific Crossing

https://news.nationalgeographic.com/news/2010/07/100727-plastic-bottle-catamaran-completes-epic-pacific-crossing/

