



Rubbish Robots

Lesson Plan

Centered on the Three R's of Reduce, Reuse and Recycle

Grades: K–5. Please make changes to lessons and appendices as desired to fit the needs of your classroom.

Lesson Duration: 2-4 Days

Standards: See complete list at end of lesson.

Objectives:

- Students will understand the significance of reusing and recycling and its impact on our environment.
- Students will recognize the properties of items that make them reusable and recyclable
- Students will use critical thinking and problem solving to plan and create robots
- Students will investigate ways they might reuse and recycle at home or school

Materials:

- Parent letter Appendix A
- Digital Camera
- Elmer's Glue-All®
- Various items brought from home see below for samples
- Your own literature selection pertaining to reusing and recycling and/or robots
- Other literature suggestions

Directions:

Send or email parent letter (Appendix A) home asking students to bring in items that are found around the house such as foil pans, empty containers, toilet paper and paper towel holders, boxes, plastic or Styrofoam cups, lids, coffee cans, soup cans (with no sharp edges), etc.

To further enrich or extend lesson, gather needed literature on robots, recycling, rubbish and have students read these items before making a robot.

Lesson:

1. Play Share, One Get One

Have each child quickly write down any item(s) they can think of that could be reused or recycled, or both, before or instead of discarding them. Give students an allotted time. When time is up students play *Share One, Get One*. One student shares a word. Anyone who has this word on their list puts a check by it so it will not be repeated. Also, the person who had the word circles it if no one else had that same word. Students continue sharing their words until all their words on their list are mentioned and then they are "out". The student who "wins" is the student who still has words left to share after everyone else is out or who has the most circled words.



Lesson (continued):

2. Make Connections

Help students make connections to their own lives. Ask them to think about some of the items that were added to our list when we played Share One, Get One. Are there anymore words to add? Add any additional words.

3. Go on a Recycle Walk

Take your class on a walk around the classroom and school building. Ask students to draw or write down any items they see on their walk that could be reused and/or recycled.

4. Rubbish Review

Ask students to get out their pile of "rubbish" they brought in from home.

What does rubbish mean? A: something that is no longer useful.

Go through items asking students to share which items could be recycled and which were rubbish. Rubbish items can be used for other purposes before throwing them away. One way is to use items to create something new. Today, we're going to use this household rubbish you brought in to make rubbish robots!

5. Design Robot

Students design their robot on paper and then plan which recycled items to use. Students place any rubbish items they do not plan to use in a sharing pile so they can swap and share items they've brought to school.

6. Build Robot

Using their planning paper as a guide, students use materials to build and design a **Rubbish Robot**. Invite parents to volunteer their assistance the day the students assemble the robots. Don't forget to take pictures of students creating their projects as well as of their finished products!

7. Wrap It Up

Students give as presentation, sharing their robot and how it was made. Display robots for the whole school to see.

Let's have some more fun!

Reduce, Reuse, Recycle Collage

Use Elmer's glue and arts and crafts products to make a collage of real items found around their school or home. Items can be glued on the collage in three separate categories. Or students and browse through magazines and cut out items that can be reduced, reused or recycled; sort them and glue them to their collage.



Let's have some more fun! (continued)

Trash/Recycling Audit

At home, with the permission of their parents, students can complete a Trash/Recycling audit. Wearing rubber gloves, they can sort their trash. Finding out if their trash includes any items that could be reused, reduced or recycled. With their parents' help, students can come up with a recycling plan for their home.

This lesson adheres to the following National Education Standards:

Science

NS.K-4.1 Science as inquiry Abilities necessary to do scientific inquiry, Understanding about scientific inquiry

NS.K-4.2 Properties of objects and materials

NS.K-4.3 Life Sciences Characteristics of organisms, organisms and environments

NS.K-4.5 Science and Technology: Abilities to distinguish between natural objects and objects made by humans

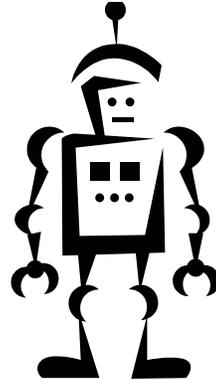
NS.K-4.6 Personal and Social Perspectives: Characteristics and changes in populations, types of resources, changes in environments

English

NL.Eng-K-12.4 Communication Skills Students adjust their use of spoken, written, and visual language (e.g., conventions, style, vocabulary) to communicate effectively to variety of audiences.



We're Making



Rubbish Robots!

Dear Parent,

We're making Rubbish Robots! Please help your child gather items around the house that could be used to make a robot. Items like: foil pans, empty containers, toilet paper and paper towel rolls, boxes, plastic or Styrofoam cups, lids, bottle caps, coffee cans, soup cans (no sharp edges, please!) etc...

Students will need their items at school by _____.

Thank you!

If you would like to volunteer to help the children assemble their robots we would appreciate your help.

Please return the form below.

I, _____ (name) will volunteer on

_____ (date) to help students make rubbish robots.

Appendix A