

Lesson Plan Title

Recycling Our Resources

Grade Level

Kindergarten

Subject Area

Science

MSCCRS

E.K.10 Students will demonstrate an understanding of how humans use Earth's resources.

E.K.10.1 Participate in a teacher-led activity to gather, organize and record recyclable materials data on a chart or table using technology. Communicate results.

E.K.10.2 With teacher guidance, develop questions to conduct a structured investigation to determine ways to conserve Earth's resources (i.e., reduce, reuse, and recycle) and communicate results.

Art Form

Visual Art

MSCCR Creative Arts Standards

VA: Cr1.2.K Generate and conceptualize artistic ideas and work. INVESTIGATE / PLAN / MAKE Engage collaboratively in creative art-making in response to an artistic problem.

VA: Cr2.3.K Organize and develop artistic ideas and work. INVESTIGATE Create art that represents natural and constructed environments.

Duration

1.5 hours (30 minutes each for 3 days)

Materials

Various items made from: paper, metal, glass (or use pictures) and plastic. *See lesson description for suggestions.

A bin to represent items to be recycled (or use a real one!)

Plastic water bottles

Aluminum foil

Newspaper

Plastic utensils

Large paper clips

Tagboard

Scissors
Glue and or tape

Objectives

Students will sort things that can be recycled.

Students will understand that everyday things we use can be recycled.

Students will understand that a sculpture is a three-dimensional form.

Students will understand that they need to design and plan their sculpture before constructing the pieces.

Vocabulary

Natural Resources

Recycle

Ingredient

Landfill

Design

Form

Two-dimensional

Three-dimensional

Sculpture

Lesson Description

Day 1

Ask the students: "What is trash" *Allow for discussion.*

"What do you do with trash?" *Allow for discussion.*

Sometimes we throw things away in the trash can that can be used again. They can be recycled. Recycling means taking something you were going to throw in the trash, such as a piece of paper, and turning it into something new and useful like a new book. You find a new way to use that item.

We are going to look at four things we can recycle: paper, glass, metal and plastic.

***Paper:**

1. Show students various kinds of paper items: writing paper, paper towels, newspaper, tissue, toilet paper, paperboard, paper plate, cardboard, etc.:
 - a. Paper items that can be recycled: Newspaper, paperboard, cardboard, magazines, office paper and envelopes, catalogs and telephone books.
 - b. Paper items that cannot be recycled: tissue, toilet paper, and paper towels.
2. All of the paper items we just looked at are made from trees!

***Glass:**

1. Show students various kinds of glass items: jar, window, drinking glass, plate, ornament, eyeglasses, light bulb, candle holder, etc.
 - a. Glass items that can be recycled: clear, brown, green or blue glass used for beverage bottles and food jars.
 - b. Glass items that cannot be recycled: all other glass items.
 - c. Some glass items can be reused. (drinking glasses)
2. The key ingredient in making glass is sand.

***Metal:**

1. Show students various kinds of metal items: aluminum can, steel (food) can, aluminum foil, pie pan, toys, pots and pans, baking sheets, etc.
 - a. Metal items that can be recycled: aluminum cans, and steel (food) cans.
 - b. Metal items that cannot be recycled: all other metal
 - c. Some metal items can be reused. (steel beams, scrap metal)
2. Metal is made from the ingredients found in certain types of rocks.

***Plastic:**

1. Show students various kinds of plastic items: bottle, milk jug, toys, cup, plate, food container, etc.
 - a. Plastic items that can be recycled: Look for the recycle symbol (show [picture of recycle symbol \[JPG\]](#)).
 - b. Plastics that do not have the recycle symbol printed on them are not recyclable.
2. A majority of plastic comes from oil.

[environmental education](#)

Day 2

Let's review what we talked about yesterday. We learned that:

1. Paper comes from trees.
2. Metal comes from rock
3. Glass comes from sand.
4. Plastic comes from oil.
5. Trees, rocks, sand and oil are some of earth's natural resources.
6. Some trash can be recycled.

Place items (except glass items if you are using pictures) from yesterday on the floor in the middle of your students.

Tell the students that the pile on the floor represents a landfill. (Show [picture of a landfill \[JPG\]](#)). All of our trash ends up in a landfill. The landfill is full of items that can be recycled or reused, and some of the items in the landfill are trash and belong there.

Why do you think I did not put any glass or soup cans in this pile? *Allow for discussion.*

Let each student pick one item from the landfill.

Have that student (or other students) tell the group if that item belongs in the landfill or if it can be recycled or reused.

1. If it is recyclable, they can place the item in the [blue] recycle bin.
2. If it is reusable, have the student share with the group how the item they picked could be reused.
3. If it belongs in the trash, have them return it to the landfill.
4. You may need to re-explain to the student that not all items are recyclable and why.

Why do we recycle? *Allow for discussion.*

We recycle because it helps our earth in two ways:

1. Our landfills don't fill up too quickly, so it saves landfill space.
2. Recycling helps save natural resources, like trees. Remember, recycling is when we take something no longer being used and turn it into something new and useful. Some items can be recycled again and again. Two examples are glass and aluminum.

Day 3

Show the following:

https://docs.google.com/presentation/d/1OU7m2M-Fs7H3_TvxS4Jba8brcRUfOP3jP53ku0TINxY/edit?usp=sharing

Slide 1: "How are these two pictures alike?" *Allow for discussion.*

"How are these two pictures different?" *Allow for discussion.*

Slide 2 and slide 3: read and discuss.

Say: "The last two days we have been talking about items that can be recycled. I have some recycled materials that you will use to create a 3-Dimensional sculpture.

Before you begin, gather the material you will use and lay out how you would like your sculpture to look. You have to design or plan (draw) what you will do, when you create art.

When you view a sculpture, think about how it will look from all sides. (sculpture in the round)"

Allow the students to create a sculpture using the materials.

Allow students to share their sculpture.

Review what they have learned about recycling earth's natural resources.

Recommended Resources

Extended Learning Activities

Allow the students to write an narrative piece about one of the natural resources: trees, rocks, sand, oil using the following prompt:

I can help save earth's natural resources by _____.

Sources

<https://www.in.gov/idem/iee/2368.htm>

Tips

Materials will need to be gathered ahead of time!

Author

[Indiana Department of Environmental Management](#) adapted by Nancy Gibson