

Recycling Detectives

Grade Level: 1

Subject Area: Science and English

Short Description: In this lesson, students will first hear a short book to get them excited about becoming detectives and will then learn about recycling. They will search the classroom for different recyclables and after being detectives in search of recyclables, students will make and present posters with sentences that describe the items they found throughout the classroom. In addition to writing sentences about the items they found, students will also draw pictures of the recyclables. The posters will be hung throughout the school to promote recycling for Earth Day.

Standards

Science

VA-SOL.SC.1.8	STANDARD: The student will investigate and understand that natural resources are limited. Key concepts include
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VA-SOL.SC.1.8.C	> recycling, reusing, and reducing consumption of natural resources.
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English

VA-SOL.ENG.1.12	STANDARD: The student will write to communicate ideas.
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VA-SOL.ENG.1.12.D	> Use complete sentences in final copies.
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VA-SOL.ENG.1.12.E	> Begin each sentence with a capital letter and use ending punctuation in final copies.
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Instructional Outcomes

Students will:

Identify recyclable items.

Use capital letters at the beginning of sentences as well as correct punctuation.

Use complete sentences.

Understand that natural resources are limited.

Understand ways to conserve resources. This includes learning about recycling, reusing, and reducing consumption of natural resources.

Predict what would happen if natural resources were no longer available and explain ways to prevent this from happening.

Enduring Understandings/Essential Knowledge

- Students will understand the importance of recycling and which items are recyclable.

- Students will identify natural resources and recognize that many of them are limited.
- Students will predict what would happen if natural resources were used up and explain ways to prevent this from happening.
- Students will write simple, complete sentences that focus on one topic.
- Students will use correct punctuation when writing sentences.

Essential Questions

Have you ever conducted an investigation?

What does a detective do?

How do we recycle?

Why do we recycle?

What could happen if we don't recycle?

Procedures

Lesson Set/Hook Activity

Gather students on the carpet.

Say this:

“Today we’re going to be recycling detectives! We will learn the importance of preserving natural resources and understand which items are recyclable while we search the classroom as detectives. How many of you know what a detective is? A detective investigates and solves problems and that’s exactly what we will do today. We will learn what can be recycled and then find some recyclables in our classroom.”

Read the book [Dora’s Detective Adventure](#) to get students excited about becoming a detective.

Discuss what it means to be a detective in the classroom by telling students that they will search the classroom for recyclables.

Show a few examples of recyclables found within the classroom. Examples: water bottle, paper, cardboard box.

Rationale

Dora the explorer is a fun character that the children know about and understand.

Students will learn the importance of recycling, know what items are recyclable, and understand that natural resources are limited. Learning about recycling will help students make better decisions about recycling in the future.

Techniques and Activities

1. Keep students on the carpet after reading Dora's Detective Adventure.
2. Group students in pairs.
3. Give one student in each group a small rock.
4. Explain to students that the person with the rock will go first.
5. Tell students to discuss what items they think are recyclable with their partner.
6. Allow a couple of minutes for discussion.
7. Explain the importance and benefits of recycling.
8. Tell students to discuss what might happen if we choose not to recycle with their partner.
9. Allow a couple of minutes for discussion.
10. Describe what could happen if we choose not to recycle.
11. List, verbally, some recyclable items.
12. Ask students to raise their hands if they recycle at home.
13. Acknowledge the students who recycle at home and offer praise.
14. Ask students to raise their hands if they can list one recyclable item found at home.
15. Pick three of four students to give one example of a recyclable found at home.
16. Ask students to raise their hands if they can list one recyclable item found at school.
17. Pick three or four students to give an example of a recyclable found at school.
18. List, verbally, a couple more recyclable items found at school.
19. Tell students they will be little detectives looking for recyclables around the classroom.
20. Explain that students will be placed in groups of two or three when they search for recyclables around the classroom.
21. Explain to students that they will draw pictures of the recyclable items found around the classroom after they conduct their investigation.
22. Group students in two's or three's.
23. Remind students of basic classroom rules.
24. Tell groups to begin searching the classroom for recyclables.
25. Allow 10-15 minutes for students to search the room.
26. Stop students and have them go to their desks when time is up or if they appear to be finished before time is up, stop them sooner.
27. Explain that each student will make a poster with pictures and one or two sentences about the recyclable items they found in the classroom.
28. Tell students to use the crayons and pencils at their desks to complete their posters.
29. Allow 15 minutes or so for students to complete their posters.
30. Gather students at the carpet when they finish their posters.
31. Explain that students will present their posters one by one to the class and will explain their drawings and read their sentence(s).
32. Pick students one by one to present their posters.
33. Explain the importance of recycling again when students have completed their presentations.
34. List some of the recyclables the students found around the classroom that were correct.

35. Have students return to their desks.

Lesson Closure

Students will present their posters by listing the recyclable items they found around the classroom and reading the sentence(s) they wrote about recyclables.

Assessment/Evaluation

Students will be assessed on accuracy of recyclable items found as well as for capital letters at the beginning of sentences, correct punctuation, and complete sentences.

Students Products

Students will produce posters with drawings and sentences of recyclables.

Students will complete an investigation of recyclables found in the classroom.

Supplemental Activities

Extensions: Students looking for a deeper challenge will think of recyclables found in the cafeteria and list them on the back of their poster.

Remediation: Students experiencing difficulty grasping what items are recyclable will have a book called Recycle: A Handbook for Kids read to them and will discuss it with the teacher or an assistant. To help students having difficulty, the teacher should present more recyclables for the students to see and touch.

Adaptations for Special Learners

Disabilities: Provide more visual aids of recyclables to help with understanding. Allow more time to complete posters. Teacher or assistant can write sentences as child verbalizes their thoughts if necessary. Provide more assistance if needed.

ESL: Provide more visual aids of recyclables to help with understanding. Allow more time to complete posters. Teacher or assistant can write sentences as child verbalizes their thoughts if necessary. Provide more assistance if needed.

Gifted: Have children write additional sentences to describe their poster. Encourage students to think of recyclables in the classroom that cannot be seen and draw pictures of them on their poster.

Differentiated Instruction

More Advanced: Students will complete their investigation and draw pictures of recyclables they cannot see as well as the recyclables found in the classroom. Students will also write one to

two sentences to explain what they discovered. Game for early finishers:
<http://www.epa.gov/osw/education/kids/games/bingame2/index.html>

At grade level: Students will complete their investigation, draw pictures of recyclables, and write one to two sentences about what they discovered.

Less Advanced: Students will complete the investigation, draw pictures of recyclables, and verbalize what they discovered.

Resources

Materials:

1. Paper
2. Crayons
3. Pencils
4. Recyclables within the classroom
5. Books- Dora's Detective Adventure; Recycle: A Handbook for kids