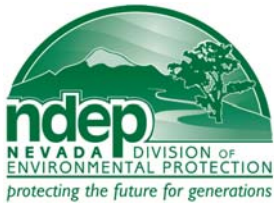


Lesson 16

Solid Steel

Aluminum and Steel Recycling

Support Document	Teaching Strategies	M3-21
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Teaching Strategies

Solid Steel

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Teaching Strategies

Group Discovery

The group work is effective for all levels of learners.

Group Makeup

Groups should be selected by the lead classroom teacher. The groups should be heterogeneous and learners of all levels should be included.

Group Presentations

The group presentation allows learners of all levels to practice public speaking. Each member of the group is required to participate in the presentation. The individuals with difficulty in public should be able to gain confidence with the support of other group members.

Small Group Discussion

The small group work is effective for all levels of learners. Discussion and collaboration will allow all students to participate. It will also allow individual students to hear another classmate's ideas in a relaxed setting (they will not be afraid of sharing information).

Lecture

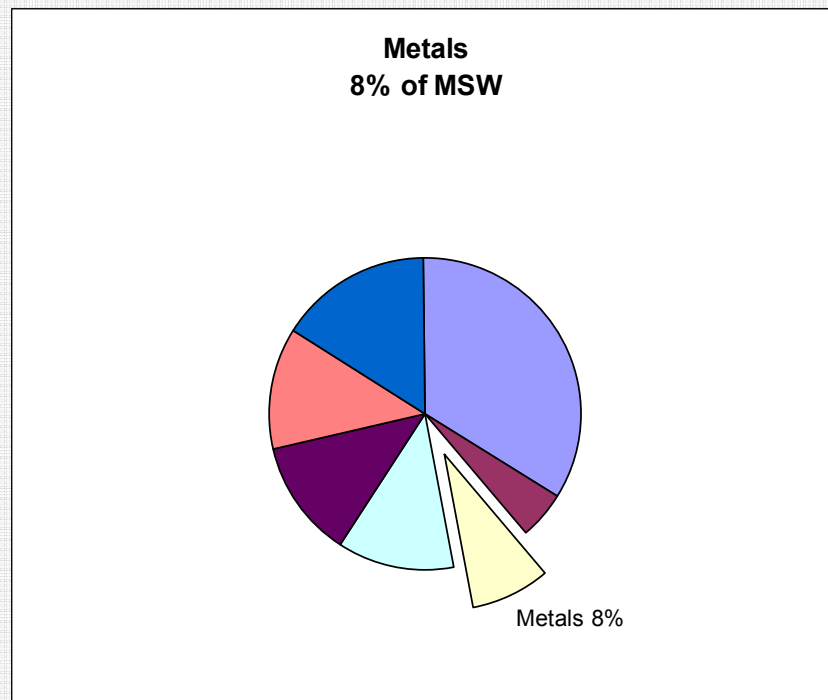
This strategy is effective for all levels of learners. During the lecture, an alternative may be to use the overhead (use student worksheet as a transparency).

Tip: The student worksheet can be made as a transparency for group discussion.

Lesson Time:
60 minutes

Solid Steel

Aluminum and Steel Recycling



Data from EPA document EPA530-R-06-011 October 2006

Objective

- Students will be able to identify aluminum and steel cans.
- Students will know how to recycle cans in Northern Nevada.
- Students will compose a poem, song, or other performance piece about metal cans.

Materials Needed

30	Single subject notebooks
6	Dry erase markers
1	White board
1	Aluminum can
1	Steel can

Anticipatory Set

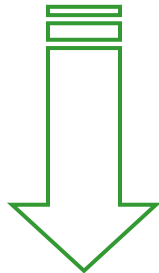
Write the lesson objectives on the white board.
Discuss with the students what the objectives of the lessons are.

Objective: You will be able to identify aluminum and steel cans.

Objective: You will know how to recycle cans in Northern Nevada.

Objective: You will compose a poem, song, or other performance piece about metal cans.

Distribute handouts (or workbooks).



Introduction:

“Today we are going to talk about aluminum and steel recycling. Let us look first at the characteristics of aluminum and steel. We will then talk about how you can properly recycle them. Finally, you are going to write and perform a poem, song, or other performance piece.”

Modeling / Guided Practice

1. At the board (or overhead), draw a T-chart.
2. Label one side Aluminum and the other Steel.
3. Ask the students to tell you some of the characteristics of aluminum cans.
4. If they have difficulty, direct the discussion.
(see support document)
5. Use an aluminum can as a guide
6. Write these characteristics in the T-chart.

Modeling / Guided Practice

7. Ask the students to tell you some of the characteristics of steel cans.
8. If they have difficulty, direct the discussion.
(see support document)
9. Use steel can as a guide.
10. Write these characteristics in the T-chart.

11. Ask the students to tell you how to recycle aluminum cans in Northern Nevada.
12. If they have difficulty, direct the discussion.
(see support document)
13. Write these characteristics in the T-chart.

14. Ask the students to tell you how to recycle steel cans in Northern Nevada.
15. If they have difficulty, direct the discussion.
(see support document)
16. Write these characteristics in the T-chart.

17. Explain to the students they are going to write poem, song, or other performance piece, using the information on the board.
18. Explain to the students the parameters to which they must adhere.
(see support document)

19. Divide the students into groups of five.
20. Give the students 20 minutes to write and practice their performance piece.

21. Call the students back to their desks.
22. Explain the behavior expected during the performances.

23. Call upon each group to perform.

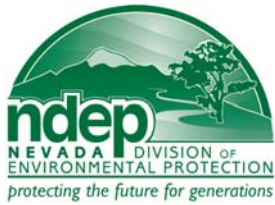


Closure:

1. Take a few minutes to do a quick review of Aluminum and steel recycling.
2. Check for understanding.

Independent Practice

1. Not applicable.
- 



Support Document

Solid Steel

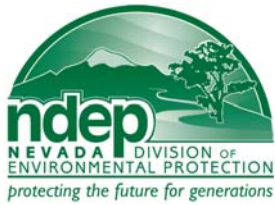
Aluminum and Steel Recycling

Fact Sheet

Identification and local recycling

<u>Aluminum</u>	<u>Tin(99% Steel)</u>
Not magnetic	Magnetic
Bottom does not have rim	Bottom has rim
Brushed, polished appearance	Shiny, silver appearance
Body is shiny, silver, and smooth	Body has rings or ribbing
No seams on body	Always has seam on body
Label usually sprayed on	Label is usually paper, glued on
Lighter in weight	Heavier in weight
Curbside pickup	Curbside pickup
Transfer station drop off	Transfer station drop off
Yellow bin	Yellow bin

You can include any other observations that the students suggest.



Support Document

Solid Steel

Aluminum and Steel Recycling

Performance piece parameters

The writing should be appropriate for school and should not contain foul language or sexual connotation.

The students should choose either aluminum or steel.
(They can do both if they so desire).

The piece should include at least 6 facts.

The piece should be performed by the group as a whole. If there is a student who does not want to speak during the performance, this is acceptable.

The students will have a maximum of 60 seconds to perform their creation.

Audience parameters

The students will be quiet and respectful.

There will be no laughing (unless intended) or teasing.

Students should treat others as they want to be treated.

Solid Waste and Recycling Curriculum
Lesson 16

Name: _____

Solid Steel

Date: _____

Performance Piece

Please write draft of your performance piece here.