

Feed the Bin Unit Overview

Grades K-8

Grade Level:

K-8

Concepts Taught:

Recycling, sorting and grouping of objects, putting things in sequence, life cycles, creative writing

Activity Time(s):

Lesson 1: Trash Sort (k-2):

20-30 minutes

Lesson 2: Sequencing Recycling at Our School (3-5):

20 minutes

Lesson 3: Make-A-MRF (4-8):

20-30 minutes

Lesson 4: Life Cycles of Aluminum and Paper (6-8):

30 minutes, multiple class periods

Essential Questions:

- What does the 3-arrow recycling symbol represent?
- What types of materials can be recycled in our classroom bins?
- Where does the paper go after it's collected from school?
- How can I create a sequence?
- What is a life cycle?
- What is the cycle of paper, plastic, and aluminum?
- What is a MRF and what does it do?
- How does a soda can get made into a new one?
- How do I write a creative writing story?

N.C. CORE/Essential Standards:

Kindergarten: ELA Standard for Speaking & Listening #6, Math Objective K.MD.3; Social Studies Objectives K.C&G.1.1; K.G.2; Science Objective K.P.2.1

Grade 1: ELA Standard for Speaking & Listening #1; Math Objective 1.G.1; Social Studies Objectives 1.G.2.1, 1.G.2.2, 1.C&G.1.3

Grade 2: ELA Standard for Speaking & Listening #1, 3, 4,6; Social Studies Objectives 2.G.2.2, 2.C&G2.1

Grade 3: ELA Standards for Informational Text 1, 2, 3, 5; Writing Standard 2, 7, 8; Speaking & Listening 4; Visual Art 3V.2.1, 3V.2.2, 3V.2.3; Soc Studies Objectives 3.G.1.3

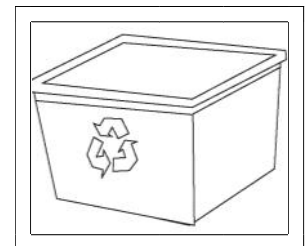
Grade 4: ELA Standard for Informational Text #3,7,9,10; Writing Standard 1,2,7,8; ; Speaking & Listening 1,2,4; Soc Studies Objective 4.G.1, 4.G.1.2, Science 4.P.1.1, 4.L.1.3; Visual arts 4.V.2., 4.V.3, 4.CX.2.2

Grade 5: ELA Standard for Informational Text #1,3,4,7,9,10; Writing Standards #1,2,7,8,9; Speaking & Listening # 1,3,4,5; Technology 5.SI.1, 5.IN.1, 5.TT.1; Soc Studies 5.G.1.2; Visual Arts 5.V.2, 5.V.3;

Grade 6: ELA Standard for Informational Text #1,3,4,7,9,10; Writing Standards #1,2,7,8,9; Speaking & Listening 1,3,4; Technology Standards 6.TT.1, 6.RP.1, 6.SE.1; Soc Studies 6.G.1.2, 6.E.1, 6.E.1.2

Grade 7: ELA Standard for Informational Text #1,4,7,9; Writing Standards #2,3,4,6,7,8,9; Speaking & Listening 1,3,4; Soc Studies 7.G.1

Grade 8: ELA Standard for Informational Text #1,3,4,9; Writing Standards #2,3,4,6,7,8,9; Speaking/Listening 1,2,4; Soc Studies 8.G.1.1



Feed the Bin Unit Overview continued...

Grades K-8

Objectives:

- Students will identify items that can be recycled from those that cannot.
- Students will sort and match items based on whether they are recyclable
- Students will determine the correct sequence of events for paper recycling.
- Students will work independently or collaboratively to create an interpretation of the sequence for paper, plastic, or aluminum recycling using writing and illustration skills.
- Students will simulate a recycling factory by devising and demonstrating methods to sort recyclable materials.
- Students will compare the simulation to how a real MRF operates.
- Students will learn the processes involved in production and recycling of aluminum cans.
- Using an example story as a model, students will write a creative story describing the life cycle of a piece of paper

Materials:

Lesson 1: *Trash Sort*: “Clean items to be sorted, Recycling bin, Trash can, matching worksheet

Lesson 2: *Sequencing Recycling at our School*: Scrambled recycling pictures (master included), Recycling sequence pictures (master included), Scissors, glue, Research material about the life cycle of paper, plastic, & aluminum (included), grading rubric (included); NEED Book pages from website (see individual lesson plan for link)

Lesson 3: *Make-a-MRF*: Clean trash” items including mixed paper, steel cans, aluminum cans, plastic bottles of different colors, 1– recycling bin, “Tools” for sorting (Ex: small fan, plastic garden tools, sticky paper lint rollers, magnets, flashlight, snorkel, shallow pan of water, clothespins, etc).

Lesson 4: *Life Cycle of Aluminum and Paper*: Information about life cycles of aluminum (included), Creative aluminum story (included), Grading rubric (included)

Lesson 1: Trash Sort

Grade Level:

K-2

Concepts Taught:

Recycling, sorting/grouping objects

Activity Time(s):

20 minutes (lesson)

10 minutes (follow-up)

Essential Questions:

- What does the 3-arrow recycling symbol mean?
- What kinds of things can we recycle in our bin?
- What kinds of things should NOT go into the bin?

N.C. CORE/Essential Standards:

Kindergarten: ELA Standard for Speaking & Listening #6, Math Objective K.MD.3; Social Studies Objectives K.C&G.1.1; K.G.2; Science Objective K.P.2.1

Grade 1: ELA Standard for Speaking & Listening #1; Math Objective 1.G.1; Social Studies Objectives 1.G.2.1, 1.G.2.2, 1.C&G.1.3

Grade 2: ELA Standard for Speaking & Listening #1, 3, 4,6; Social Studies Objectives 2.G.2.2, 2.C&G2.1

Materials:

"Clean items to be sorted

Recycling bin

Trash can

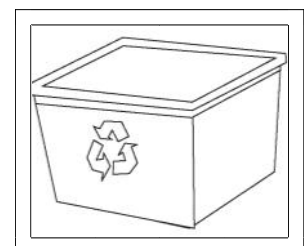
Laminated copies of "what can you feed the bin" matching worksheet

Objectives:

- Students will identify items that can be recycled from those that cannot.
- Students will sort and match items based on whether they are recyclable

Procedure:

1. Review the three-arrow symbol and its three steps with students (*see background section*). We are able to recycle certain materials at the school. When we recycle materials, they are used again and made into new products. The bin likes to be fed certain objects.
2. Ask the students ***which objects can we feed the classroom bin?*** Answers may include notebook paper, white and colored computer paper, copy paper, envelopes, junk mail, letterhead, newspapers, file folders, sticky notes, posters, pamphlets and brochures, and magazines and catalogs. (Remind students that staples, paper clips, and small amounts of crayon are okay to be included).
3. Explain that students should feed the bin as much as they can each day but, that we should not feed the bin anything it doesn't like. Place the trash can and the classroom bin where students can easily reach them.
4. Give each student a piece of the clean trash. Explain that they must put the clean trash in the correct location: either the trash can or the paper recycling bin. Ask students to take their object to the correct container.
5. After students have placed their objects, go through each bin in front of the class. Ask them to make certain that each bin has the correct objects in it. As you are examining the contents of the trash can, have students suggest a way the item could be reused in the classroom instead of throwing it in the trash.
6. Use the matching worksheet for students to independently circle items that belong in the classroom bin and "X" items that go in the trashcan. The laminated sheets may be marked on with crayon and wiped clean with tissues or other soft paper such as scraps of construction paper and reused. Students may exchange cards and check each other's answers.



Feed the Bin

Extensions/Modifications:

1. Students may enjoy sorting the “clean trash” in small groups. Give each group 10 objects to sort so that they can discuss its location together before placing it in the bin. Groups can be timed with how long it takes them to sort their objects. Each group can try to beat their own group time or compete with other groups to see who can sort the “trash” the fastest.
2. Students may also enjoy a recycling relay. Have two or three teams each form a line, with a recycling bin and trash can at the end of each line. When you say start, they pass objects down the line and say either “trash” or “recycle”. Each person must pass the item some way other than how they got it (over head/under legs/around back). Once it gets to the end of the line, they must put it in the correct container. The team that gets the most correct in a certain amount of time wins.

Trash Sort Lesson

If your school is not a Wake County Feed the Bin school, check with your local recycling coordinator to find out what materials are recyclable in your area.

Recyclable

- Brochures/Pamphlets
- Colored Paper
- Envelopes
- File Folders
- Handwriting Paper
- Junk Mail (not included in packet)
- Letterhead
- Magazines/Catalogs
- Newspaper
- Notebook Paper
- Posters
- Sticky Notes
- White Paper

Not Recyclable

- Construction Paper
- Copy Paper Ream Wrappers
- Facial Tissues
- Food Wrappers
- Napkins (not included in packet)
- Paper Towels
- Plastic Report Covers (not included in packet)
- Photographs (not included in packet)
- Textbooks (not included in packet)
- Tissue Paper

Feed the Bin

What Can You Feed the Bin?

Make a circle around the things that go in the classroom bin. Make an X on the things that go in the trashcan.



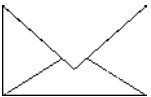
Apple Core



Magazine



Gum Wrappers



Envelope



File Folder



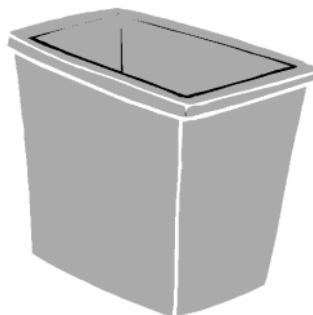
Newspaper



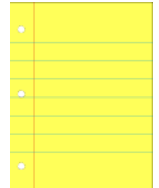
Tissues



Classroom Bin



Trash Can



Notebook Paper



Pencil



Copy Paper



Paper Bag



Shoes



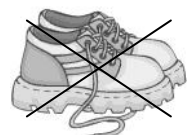
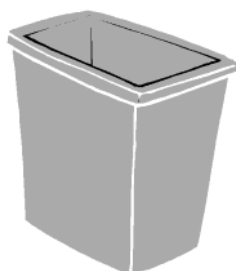
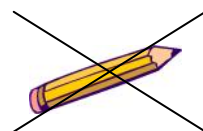
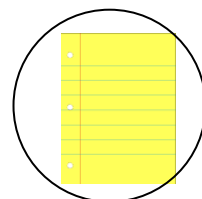
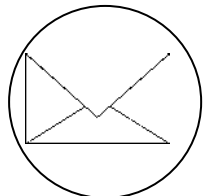
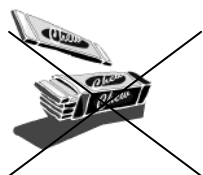
Toilet Paper

Feed the Bin

Name _____ **ANSWER KEY** _____

What Can You Feed the Bin?

Make a circle around the things that go in the classroom bin. Make an X over the things that go in the trashcan.



Lesson 2: Sequencing Recycling at our School

Grade Level:

3-5

Concepts Taught:

Sequencing, recycling, life cycles

Activity Time(s):

20 minutes (lesson)

50 minutes (follow-up)

Essential Questions:

- What happens to the paper once it leaves our school?
- What is a life cycle?
- What is the cycle of paper from start to finish?
- What is the cycle of plastic or aluminum?

N.C. CORE/Essential Standards:

Grade 3: ELA Standards for Informational Text 1, 2, 3, 5; Writing Standard 2, 7, 8; Speaking & Listening 4; Visual Art 3V.2.1, 3V.2.2, 3V.2.3; Soc Studies 3.G.1.3

Grade 4: ELA Standard for Informational Text 3,7,9,10; Writing Standard 1,2,7,8; Speaking & Listening 1,2,4; Soc Studies 4.G.1, 4.G.1.2, Science 4.P.1.1, 4.L.1.3;

Grade 5: ELA Standard for Informational Text #1,3,4,7,9,10; Writing Standards 1,2,7,8,9; Speaking & Listening 1,3,4,5; Technology 5.SI.1, 5.IN.1, 5.TT.1; Soc Studies 5.G.1.2; Visual Arts 5.V.2, 5.V.3;

Materials:

Scrambled recycling pictures (master included)

Recycling sequence pictures (master included)

Scissors, glue

Research material about the life cycle

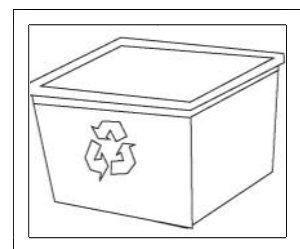
of paper, plastic, & aluminum
grading rubric (included)

Objectives:

- Students will determine the correct sequence of events for paper recycling.
- Students will work independently or collaboratively to create an interpretation of the sequence for paper, plastic, or aluminum recycling using writing and illustration skills.

Procedure:

1. Review the three-arrow symbol and the three-step process with students (*see background section*). Remind them that they will follow a certain procedure to recycle paper at their school. Explain that *sequencing* is putting something in order. Students may be familiar with sequencing events from the stories they read in class.
2. Ask students to cut the pictures out of how paper is recycled. These pictures are a general summary of how paper recycling may happen and can vary according to your school.
3. Students should then glue the pictures in order on the sequencing worksheet. Students who finish early may color their sequence or write their own sentences of the life cycle.
4. Go over the answers to the sequence. Ask students to read aloud their captions.
5. Students should create their own sequencing worksheet for the life cycle of paper, plastic, or aluminum. The worksheets can be created by groups or individually. [Background information for this lesson plan was taken from the National Energy Education Development Project (NEED) book entitled Talking Trash.



Feed the Bin

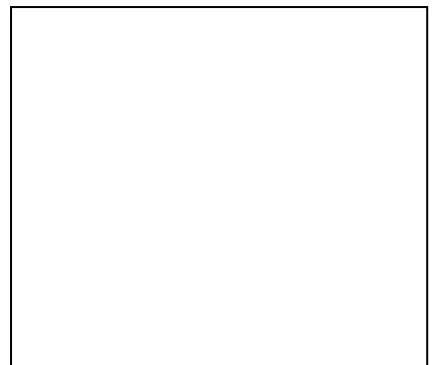
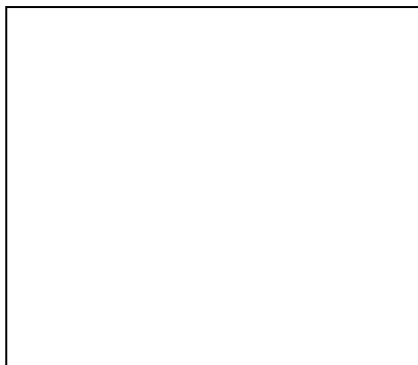
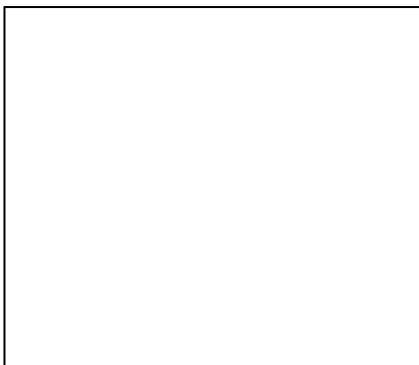
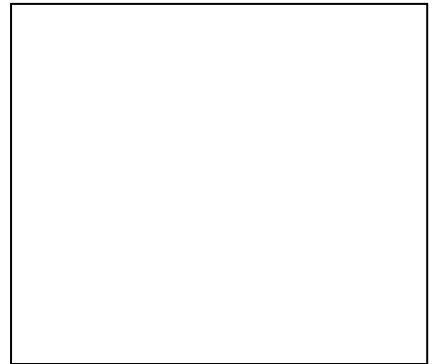
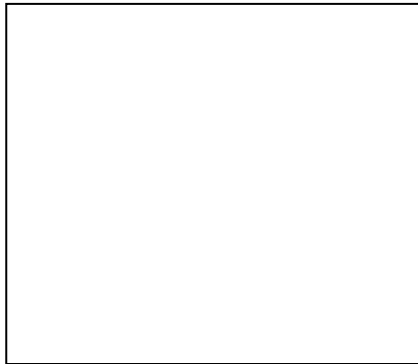
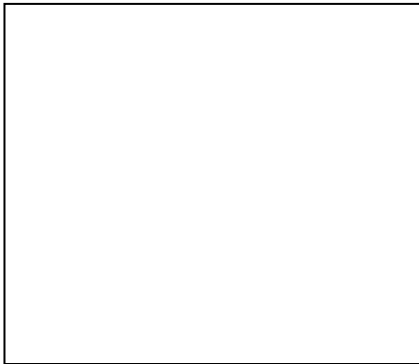
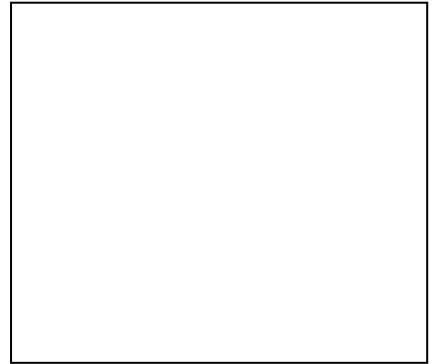
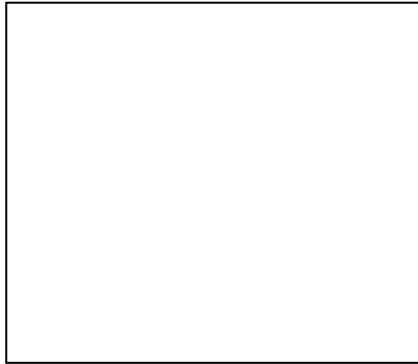
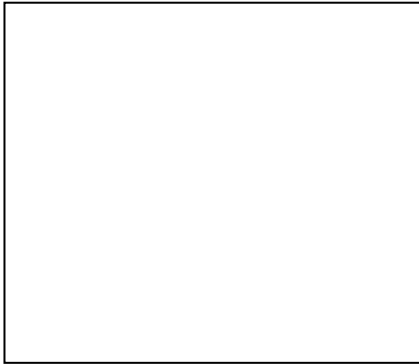
6. Students should do research on one of the life cycles using the research materials provided. They can also use the Internet if it is available.
7. After researching the life cycle of paper, plastic, or aluminum, students should draw pictures for each stage. Remind students that their life cycle should include detail (you may want to give a minimum number of 8 steps to include for each life cycle). Underneath each picture the students should write a description of what is happening in the step (1 sentence to 1 paragraph). Life cycles can be graded using the attached rubric.
8. Students should present their life cycles to the class and display them around the room.

Extension/Modification:

Students can complete a creative writing exercise in which they pretend they are a tree being cut down and processed into paper according to the life cycle given. Depending on the grade level, several sentences or a short paragraph can be written

Recycling Sequence

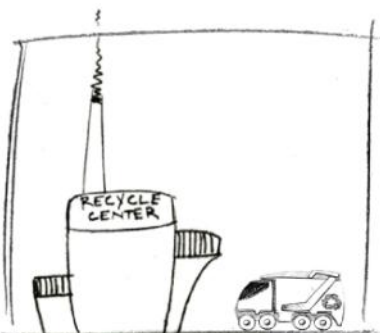
Place the pictures from the Scrambled Recycling in order of how paper is recycled at your school. Glue them in the correct order below.



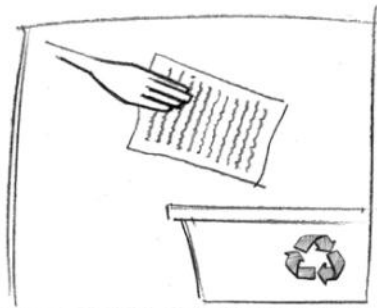
Feed the Bin

Scrambled Recycling Pictures

Cut out the pictures and sentences below. Place them in order of how paper is recycled at your school. Attach them to the Recycling Sequence worksheet.



The recycling truck takes the paper to the recycling center to be sorted.



The student places the used paper in the recycling bin.



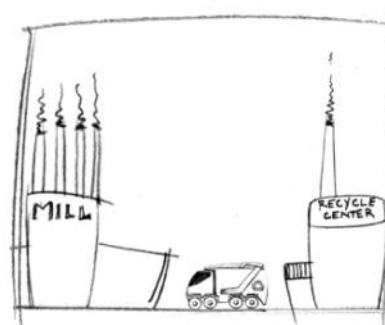
A student takes out a blank piece of notebook paper.



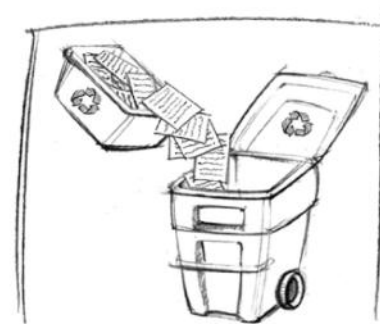
The student writes on the piece of notebook paper.



A recycled piece of notebook paper is created!



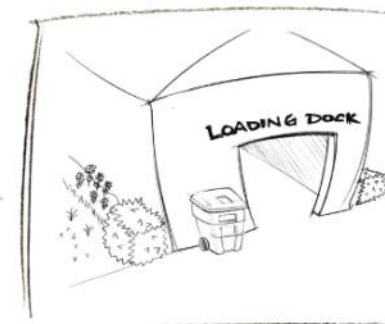
The sorted paper is taken to the paper mill where new paper is made.



The classroom bin is emptied into a roll cart.



A recycling truck comes to pick up the paper in the roll cart.

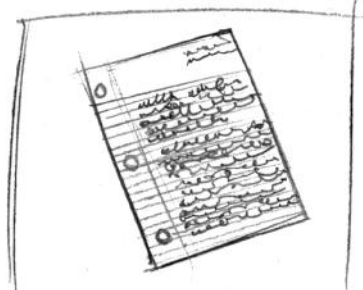


The roll cart is placed outside.

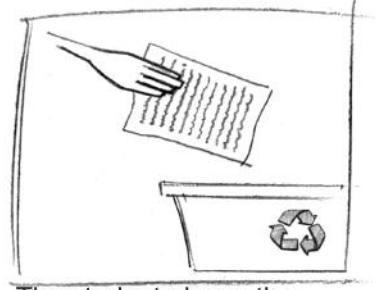
Scrambled Recycling Pictures-Answer Key



A student takes out a blank piece of notebook paper.



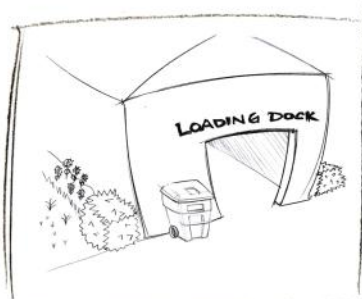
The student writes on the piece of notebook paper.



The student places the used paper in the recycling bin.



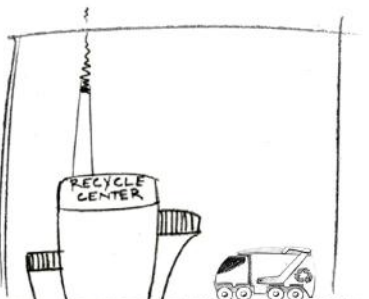
The classroom bin is emptied into a roll cart.



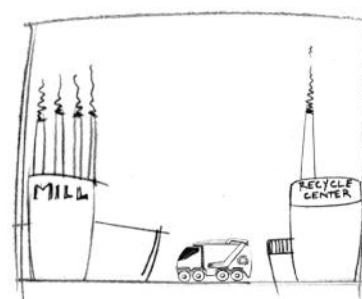
The roll cart is placed outside.



A recycling truck comes to pick up the paper in the roll cart.



The recycling truck takes the paper to the recycling center to be sorted.



The sorted paper is taken to the paper mill where new paper is made.



A recycled piece of notebook paper is created!

Rubric: Life Cycle of Paper, Plastic, or Aluminum				
CATEGORY	4	3	2	1
Clarity and Neatness	Life Cycle is easy to read and all elements are so clearly written, labeled, and drawn that another student could understand the life cycle.	Life Cycle is easy to read and most elements are clearly written, labeled, and drawn. Another person might be able to understand the life cycle after asking one or two questions.	Life Cycle is hard to read with rough drawings and labels. It would be hard for another person to understand this life cycle without asking lots of questions.	Life Cycle is hard to read and one cannot tell what goes where. It would be impossible for another person to understand this life cycle without asking lots of questions.
Use of Time	Used time well during each class period (as shown by observation by teacher) with no adult reminders.	Used time well during most class periods (as shown by observation by teacher) with no adult reminders.	Used time well (as shown by observation by teacher), but required adult reminders on one or more occasions to do so.	Used time poorly (as shown by observation by teacher) in spite of several adult reminders to do so.
Spelling & Grammar	No spelling or grammatical mistakes on a life cycle with lots of text.	No spelling or grammatical mistakes on a life cycle with little text.	One spelling or grammatical error on the life cycle.	Several spelling and/or grammatical errors on the life cycle.
Content	All content is in the students' own words and is accurate.	Almost all content is in the students' own words and is accurate.	At least half of the content is in the students' own words and is accurate.	Less than half of the content is in the students' own words and/or is accurate.
Required Elements	Life Cycle included all 8 stages as well as a few additional stages.	Life Cycle included all 8 stages and one additional stage.	Life Cycle included all 8 stages.	One or more stage was missing from the life cycle.
Cooperation	Worked cooperatively with partner all the time with no need for adult intervention.	Worked cooperatively with partner most of time but had a few problems that the team resolved themselves.	Worked cooperatively with partner most of the time, but had one problem that required adult intervention.	Worked cooperatively with partners some of the time, but had several problems that required adult intervention.

Lesson 3: Make a MRF: Build Your Own Recycling Factory

Grade Level:

Grades 4-8

Concepts Taught:

Recycling, Sorting/Grouping Objects

Activity Time(s):

20 minutes (lesson)

10 minutes (follow-up)

Essential Questions:

- Where does our recycling go once it leaves our house or school?
- What is a MRF and how does it work?

N.C. CORE/Essential Standards:

Grade 4: ELA Objectives Speaking & Listening 1,2,4; Science 4.P.1.1, 4.L.1.3;

Grade 5: ELA Objective Speaking & Listening 1,3,4,5

Grade 6: ELA Speaking & Listening 1,3,4; Soc Studies 6.G.1.2, 6.E.1, 6.E.1.2

Grade 7: Speaking & Listening 1,3,4; Soc Studies 7.G.1

Grade 8: Speaking/Listening 1,2,4; Soc Studies 8.G.1.1

Materials:

“Clean trash” items including mixed paper, steel cans, aluminum cans, plastic bottles of different colors

Recycling bin

“Tools” to sort recyclables (Ex: small fan, plastic garden tools, sticky paper lint rollers, magnets, flashlight, snorkel, shallow pan of water, clothespins, etc.

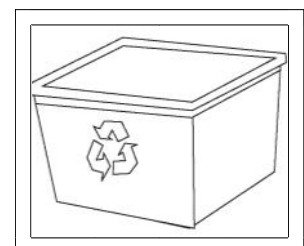
Objectives:

- Students will simulate a recycling factory by devising and demonstrating methods to sort recyclable materials.
- Students will compare the simulation to how a real MRF operates.

Procedure:

1. Divide students into groups, each with their own bin of mixed recyclables to sort. Each group of students will be their own “factory.”
 2. Each student should choose (or be assigned) one type of recyclable to sort. For example, student 1 will only pick out aluminum cans. Student 2 will only pick out paper.
 3. Students are not allowed to simply use their hands to remove items. They **MUST** use one of the “tools” provided, such as using the magnet to remove steel cans, the lint roller to pick up paper, and so on. They may not necessarily use all the tools provided.
 4. Allow students 10 minutes to make and test their factory plan.
 5. Have each group demonstrate their factory to the rest of the group.
 6. Show students how a real MRF might operate:
 - a. **A magnet picks out steel cans**
 - b. **A light shines through the plastic bottle, can detect their color, and signals a fan to blow the green plastics into one pile, clear plastics into another, etc.**
 - c. **A sticky conveyor belt (lint roller) removes the paper**
- Aluminum cans are left. (These are usually removed with an eddy current-a machine that produces a countercurrent of electricity to repel cans out.)**

Independent Follow Up: Have students create their own invention or factory that will make something useful. Students should draw pictures of their invention and label and describe what it does in a few sentences.



Lesson 4: Life Cycles of Aluminum & Paper

Grade Level:

6-8

Concepts Taught:

Sequencing, recycling, life cycles, creative writing

Activity Time(s):

30 minutes (lesson), 2-4 class periods (follow-up)

Essential Questions:

- How is a soda can made into a new one?
- How long does it take for a can to reach the grocery store shelf?

N.C. CORE/Essential Standards:

Grade 6: ELA Standard for Informational Text 1,3,4,7,9,10; Writing Standards 1,2,7,8,9; Technology Standards 6.TT.1, 6.RP.1, 6.SE.1; Soc Studies 6.G.1.2, 6.E.1, 6.E.1.2

Grade 7: ELA Standard for Informational Text 1,4,7,9; Writing Standards 2,3,4,6,7,8,9; Soc Studies 7.G.1

Grade 8: ELA Standard for Informational Text 1,3,4,9; Writing Standards 2,3,4,6,7,8,9; Soc Studies 8.G.1.1

Materials:

Information about aluminum life cycles use NEED books from <http://www.NEED.org> - "Talking Trash" and "Museum of Solid Waste & Energy."
Creative aluminum story (included)
Grading rubric (included)

Objectives:

- Students will learn the processes involved in production and recycling of aluminum cans.
- Using an sample model story , students will write a creative story describing the life cycle of a piece of paper.

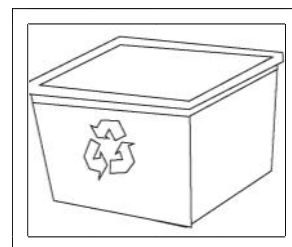
Procedure:

1. Review the three-arrow symbol and three-step process with students (*see background section*). Remind them that they will follow a certain procedure to recycle paper, plastic, and aluminum at their school.

Additional background material can be found from the National Energy Education Development (NEED) Project [The Museum of Solid Waste and Energy book](#).

2. **Ask students what life cycles they have studied in school** (butterfly, humans, etc.). **Ask what a cycle means** (that the process continues over and over). Explain that the objects that we will recycle at school each have their own life cycle. Using the information from the NEED Museum of Solid Waste & Energy book (pgs 27-28, 30 -31), go through the life cycle of an aluminum can:

- *We start at the ore where aluminum is mined. The aluminum is still mixed with other elements, so it is sent to a plant.*
- *At the plant, the aluminum is dissolved into a liquid salt.*
- *Then an electric current separates the aluminum from other elements. The aluminum sinks to the bottom. The electric current requires an enormous amount of energy*
- *Next the aluminum is likely to be sent to another factory where it is melted and formed into cans.*
- *The cans are sent to another factory where they are filled with liquid.*
- *The can is now shipped to a store to be sold. Once the can is sold, someone uses the liquid inside. (The amount of time from beginning to end-user is approximately 60 days).*
- *Assuming the consumer is a responsible recycler, the can is placed in a recycling bin. After the materials in the bin*



Feed the Bin

are collected, a truck picks up the material and takes it to a MRF (Materials Recovery Facility) to be sorted.

- *The cans are sorted and taken to a recycling plant. The aluminum is then shredded and melted and formed into a mold called an ingot.*

- *The aluminum is then perhaps re-formed into a can and the cycle begins again. Note that the cycle does not include mining the ore & separating the aluminum from other elements. This only has to be completed once.*

3. Explain to students that this life cycle can be used to write a creative story about a can. Read aloud the included aluminum story or another you have created. Ask students to pay attention to how each part of the life cycle is used in the story. This will serve as a model of the story they will write independently.

4. Students will use the information provided from the NEED books (suggest that students use other pages from the NEED book for background information) to write a creative life story of a piece of paper, starting from a tree.

5. Have students complete a draft for comments and then a final version. Their creative writing can be graded using the rubric. Use the aluminum can story as a model.

6. Students can create their own recycling character to go along with the life cycle story using recycled materials. "Paper Guys" can be displayed alongside the stories.

Extensions/Modifications:

Integrate technology use by having students create a recycling info fact card (similar to a baseball card) using this interactive website:

http://www.readwritethink.org/files/resources/interactives/trading_cards/

My Story: Alum, the Aluminum Can

Hi, my name is Alum. I am an aluminum can and have had a long and exciting life. It all started so long ago, I cannot even remember the exact date. I just remember being pressed tighter and tighter inside of this rock. I was happy to be there, it was safe & cozy and I had my whole family near by.

One day, there was a huge explosion. I was cracked apart. Then, these men came with hammers and ripped me out of my cozy home. They took me away to a plant. Once I was at the plant they put me into a big pot. They made it very hot and dissolved me into a liquid.

Next they ran a huge electric current through me. Wow – it used so much energy! I sunk to the bottom of the liquid, and the oxygen & other elements that had been with me went to the top.

They took me and sent me to another factory. I had to say goodbye to the other elements, because they did not come with me. They got me hot again, melted me, and made me into a flat sheet. Then they made me into something that is called a “can”. This is something that humans used to store liquid.

I then was sent to another factory – this one was called Pepsi. They painted me with neat colors and then filled me up with a sweet and fizzy liquid. Then someone put me in a truck where I rode for a while.

Remember how they made me so hot before? Well, now they made me very cold. I was put in a refrigerator in something called a vending machine. Next thing I knew, I was being bumped all around and came out of a slot. A kid’s hand reached out and grabbed me.

He opened me up, turned me upside down, and emptied me out inside of him! The kid seemed really happy to see me. But then I got scared. I thought, “What if this is the end? Maybe this will be all I ever do.”

Boy, was I wrong! This kid threw me in a special bin that only had other aluminum cans & plastic bottles in it. I even ran into my cousin, Inum, in there! He told me that everything would be okay. Next, someone lifted us out of the bin. I was glad that I could see out since the bag we were in was made of clear plastic. They took us outside.

That afternoon, a truck came. Someone emptied us into the back of the truck with a bunch of other aluminum cans and plastic bottles. The truck drove for about 30 minutes and then brought us to something they called a MRF. The plastic bottle next to me, Dottie Bottle, told me that MRF stood for “Materials Recovery Facility.” I didn’t get to see Dottie again because we were separated – all of the cans were put into one pile.

Then they took all of us aluminum cans to another factory. We were shredded up (Don’t worry, it didn’t hurt me. I don’t have any nerve endings.) and melted. They poured us into these molds, almost like you pour batter into a cake pan. We got hard. Then they melted us again and made us into aluminum sheets by flattening us.

Now here is the wildest part. Guess what they made me into next? Another can! This time I went to something called a grocery store. Someone drank the liquid inside of me, put me in a recycling bin, and then the whole process of being made into a can started over again.

I love being made into a can over and over again. I have gotten to see so many different parts of the world this way. Some cans tell me that I am lucky. There are ghost stories about cans who get put into something called the trash. They don’t get made into a can again. Instead they get buried in the ground with a bunch of other things. I just hope this never happens to me. I love being used over and over and meeting new people!

Well, that is my life story. You now know all about Alum, the aluminum can. Who knows, maybe I’ll meet you the next time you buy something in an aluminum can. Please, just make sure to remember to recycle me so I can keep going!

Creative Writing: Life Cycle of Paper

CATEGORY	4	3	2	1
Writing Process	Student devotes a lot of time and effort to the writing process (prewriting, drafting, reviewing, and editing).	Student devotes sufficient time and effort to the writing process (prewriting, drafting, reviewing, and editing)..	Student devotes some time and effort to the writing process but was not very thorough.	Student devotes little time and effort to the writing process.
Neatness	The final draft of the story is readable, clean, neat and attractive. It is free of erasures and crossed-out words.	The final draft of the story is readable, neat and attractive. It may have one or two erasures, but they are not distracting.	The final draft of the story is readable and some of the pages are attractive.	The final draft is not neat or attractive.
Organization	The story is very well organized. One idea or scene follows another in a logical sequence with clear transitions.	The story is pretty well organized. One idea or scene may seem out of place. Clear transitions are used.	The story is a little hard to follow. The transitions are sometimes not clear.	Ideas and scenes seem to be randomly arranged.
Spelling and Punctuation	There are no spelling or punctuation errors in the final draft. Character and place names that the author invented are spelled consistently throughout.	There is one spelling or punctuation error in the final draft.	There are 2-3 spelling and punctuation errors in the final draft.	The final draft has more than 3 spelling and punctuation errors.
Accuracy of Facts	All facts presented in the story are accurate.	Almost all facts presented in the story are accurate.	Most facts presented in the story are accurate (at least 70%).	There are several factual errors in the story.
Creativity	The story contains many creative details and/or descriptions that contribute to the reader's enjoyment. The author has really used his imagination.	The story contains a few creative details and/or descriptions that contribute to the reader's enjoyment. The author has used his imagination.	The story contains a few creative details and/or descriptions, but they distract from the story. The author has tried to use his imagination.	There is little evidence of creativity in the story. The author does not seem to have used much imagination.
Requirements	All of the written requirements (# of pages, # of graphics, type of graphics, etc.) were met.	Almost all (about 90%) of the written requirements were met.	Most (about 75%) of the written requirements were met, but several were not.	Many requirements were not met.