

Doing Things Better

SUBJECT AREA: SCIENCE

GRADE: 4



GENERAL LEARNER OUTCOMES

Topic A: Waste & Our World

Students will:

Recognize that human activity can lead to the production of waste and identify alternatives for the responsible use and disposal of materials.



SPECIFIC LEARNER OUTCOMES

Students will:

- Identify and classify wastes that result from human activity.
- Describe alternative methods of disposal, and identify possible advantages and disadvantages of each.
- Identify methods of waste disposal currently used within the local community.
- Identify actions that individuals and groups can take to minimize the production of wastes, to recycle or reuse wastes and to ensure the safe handling and disposal of wastes.
- Develop and implement a plan to reduce waste, and monitor what happens over a period of time.





ASSESSMENT

Students will provide evidence of learning by:

- Creating and using a plan to improve the use and/or disposal of agricultural food products in a way to help alleviate food waste in their home or school
- Presenting and explaining their findings to their peers



MATERIALS

[Saving Food Education on Food Waste](#) (3:29 min)

[Actsmart Schools, Waste and Recycling at Your School](#) (3:11 min)



LEARNING RESOURCES

- Alberta Education Programs of Study



TEACHER INSTRUCTIONS

Doing Things Better



In this assignment, students will recognize that there are many opportunities to help overcome food waste problems. In small groups, they will get involved by devising and implementing a way to “do something better”. This project’s challenge will be to create and use a plan to improve the use and/or disposal of agricultural food products to help alleviate food waste in their home or school. Students will make observations around their homes and the school to identify methods of food waste disposal currently being used. Brainstorming potential ideas they could use to improve current methods, or determining a new plan is the next step. Choosing one idea from their list to implement and track is the last step in planning. A trial period will be determined as a class to execute the various plans. Once the trial period has ended, student groups will present the findings to their peers on Google Slides.

View and Discuss:

- Prior to viewing the videos and making observations, discuss what students see as current food waste problems in their school and homes.

[Saving Food Education on Food Waste](#) (3:29 min)

[Actsmart Schools, Waste and Recycling at Your School](#) (3:11 min)

Determine student groups and follow criteria to complete the assignment:

- **Plan for Change**

In their working groups, students will discuss ideas and generate strategies to help alleviate agricultural food waste. What do they observe around home and/or the school that causes food waste. Do they notice actions being taken to minimize waste? Groups will then create a plan that supports the strategy their group chose to “do something better”. Group plans must be presented to their teacher before beginning.

- **Make the Change**

Student groups implement their plan, and track their entire experience for presentation. A time frame for the duration of the student projects is a class/teacher decision and must be set before beginning the tracking.

- **Assess the Change**

Student groups assess the effectiveness of the change they made. Were they successful in improving the use and/or disposal of agricultural food products to help alleviate food waste in their home or school?

- **Celebrate the Change**

Students celebrate their accomplishments by sharing their experiences and plans with their peers.

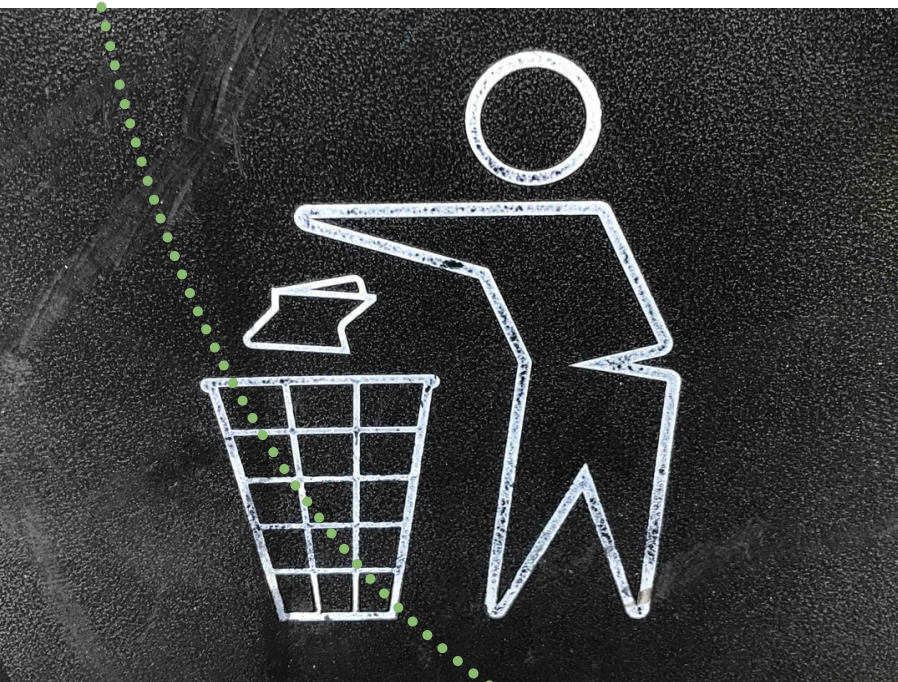
STUDENT ASSIGNMENT

Doing Things Better

Can you help “do something better”, as you create and use a plan to improve the use and/or disposal of agricultural food products in your home or school?

Scenario:

Change can be hard. It can be challenging and at times difficult. In this challenge, you get to control the change. You decide what you want to change and how you want to change it. You create a plan to help overcome agricultural food waste problems, by coming up with a way to “do something better”. With your group of 3-4 students, find food waste problems at home and at school. Follow the Decision Making Model as you complete the assignment. This Model will feel very much like filling out a diary. Information you collect will help your group complete a Google Slide presentation to share with your peers. Enjoy celebrating what you accomplished as you share your story on how to “do something better” to help solve food waste problems.



STUDENT ASSIGNMENT

Doing Things Better

Decision Making Steps:	Record your discussions and progress:
Problems: Find and list 3-4 agricultural food waste problems in your home and/or school.	
Discuss your ideas: Research and list some ideas to choose from to help solve each problem of food waste you listed.	
Evaluate your ideas: Review your choices to “do something better”: <i>Can you accomplish the task?</i> <i>Will it help solve food waste problems?</i> <i>How will you decide if you're successful?</i>	
Make your group choice on the solution you will use and track, and get your teacher’s approval:	
Set up and track your plan:	
Was your plan to “make things better” successful?	



STUDENT ASSIGNMENT

Doing Things Better



SLIDE OUTLINE:

1. Title slide that fully captures the attention of your audience (include group names)
 2. Identify 3-4 agricultural food waste problems in your home and/or school.
 3. How have people tried to solve the problems you found? Were they successful?
 4. What food waste problem did you track?
 5. Discuss your plan to reduce the agricultural food waste for the problem you chose (recycle or reuse waste, safe disposal of waste?)
 6. Discuss what happened during the tracking period.
 7. Were you successful in reducing agricultural food waste?
 8. How can you get other people to “do something better” to minimize the production of agricultural food wastes?
 9. Bibliography
- Slide information must be in point form.
 - You may need more than one slide to complete the slide outline points (maximum number of slides is 10).
 - URLs must be collected for information and pictures. Use the Bibliography Slide to post URLs as your research progresses.
 - Insert audio you have recorded to further explain slide content if you do not present live (maximum time for presentation is 10 minutes).

In a 3-5 minute presentation, using your slides, you will explain your experience on how to “do something better” to improve the use and/or disposal of agricultural food products in your home or school? Be prepared to answer correctly any questions related to the facts presented on the slides. Each student in your group must have a speaking role. If you are unable to present live, insert audio your group members have recorded to further explain the slide content.



Objectives	Excellent	Proficient	Satisfactory	Limited
Introduction - Introduction slide includes your group names and an eye-catching image.	Fully captures the attention of the audience. Topic has a clear focus.	Captures the attention of the audience. Topic is focused.	Few audience members seem interested. Topic focus is vague.	Audience is not captured. No topic focus.
Organization - Introduction (title slide), body content and bibliography.	Presents findings in an organized manner and an interesting sequence that is easy to follow.	Presents findings with some degree of organization and logical sequence that the audience can follow.	Information and graphics are placed haphazardly and students jump around content.	Audience cannot understand the presentation because there is no sequence and information is disorganized.
Content - Accuracy Topic A: Waste & Our World Students will: Recognize that human activity can lead to the production of wastes, and identify alternatives for the responsible use and disposal of materials.	Covers topic completely and in depth. All content throughout the presentation is accurate. There are no factual errors. Students demonstrate full knowledge with detailed explanations.	Includes essential information. Most of the content is accurate, but there is one piece of inaccurate information. Students demonstrate knowledge of content, but fail to fully explain.	Includes some essential information. The content is generally accurate but more than one piece of information is clearly flawed or inaccurate.	Includes little essential information. Content is typically confusing or contains more than one factual error.
Presentation	Includes 10–12 slides. Information on slides is kept short and clear. Group members further explain ideas very clearly in person or by inserting recorded audio.	Includes 9 slides. Information on slides contains some sentences. Group members have some difficulty explaining ideas clearly either in person or through recorded audio.	Includes 8 slides. Information on slides contains many sentences. Group members have much difficulty explaining ideas clearly either in person or through recorded audio.	Includes less than 8 slides. Information on slides contains many sentences. Group members cannot further explain ideas either in person or through recorded audio.

