

A-Z Recycling Alphabet

GRADES 3- 8

OVERVIEW:

Student will learn that there are many sources for recycling and that they can find these places on the internet, on brochures or by calling or writing their county solid waste department or waste carrier. Students will select a specific item to learn about and create a poster to summarize and present their finding.

DURATION:

2 class periods: 30-45 Minutes for research and planning, and 30-45 minutes for design and final project completion. May time may be allowed for project completion.

VOCABULARY:

Index
Reuse
Recycle
Resources
Responsibility
Waste reduction

MATERIALS:

Internet Access
Clark County A-Z Index: <http://www.co.clark.wa.us/recycle/recyclingA-Z.html>
Save Organic Scraps website: <http://recyclextreme.com/>

11" X 14" white paper or poster board
Pencils, rulers, erasers
Crayons, markers, or paints

WORKSHEETS & HANDOUTS:

Poster Planning Page worksheet
Poster Criteria handout
Poster Grading Rubric



PROCEDURE:

Place students in groups of 2-3 or as available computer terminals allow. Make sure that all terminals are pre loaded to the Clark Count A-Z Index: <http://www.co.clark.wa.us/recycle/recyclingA-Z.html>

Prior to beginning individual or group work, you may wish to search several examples together using a classroom overhead projection of the website.

Each student will then chose items from the A-Z Index with the same first letter as their name. (ie: Alisha/ acetone, Beatrice/ batteries). Each student should search 3-5 items that start with the first letter of their name and read the information about each item.

Using the Poster planning page, students will record their findings for 3 different items. The student will research the ways in which the item can be reused, recycled or safely disposed of. The student will use the student data collection worksheet to record their findings. On a draft sheet of paper each student will sketch the design for a poster to communicate their findings.

Item #7 on the Poster Planning Page may be challenging for students and require additional research.

Each poster will include the following criteria:

- A title stating a clear message about REUSE, RECYCLE or SAFE DISPOSAL
- A picture showing how the item is reused, recycled or safely disposed of.
- A list of 1-3 of the facilities that the student found during research that accept the item for reuse, recycling, or disposal, and a way to contact each facility (ie: address and phone number).
- The poster should be attention getting and informative.
- All areas of the page should be filled.
- The text and images should create overall balance.
- Use best quality workmanship and make sure the poster is complete.

The student will complete a final copy of a poster to educate their classmates, other students, teachers and visitors to their school about how to reuse or recycle the item they chose to research. Each student will briefly present their poster to the class.

ASSESSMENT:

Use the **Poster Grading Rubric** to assess the final project. Students may use the rubric for self-assessment.

Optional: Contact Clark County Solid Waste at 360-397-6118 X 4830 to arrange for student work to be featured on the Recycle Extreme (www.recyclextreme.com) website.



EXTENSIONS:

1. Create Show n' Tell Showcase in the classroom. Ask students to bring items from home and showcase their findings about the object. Record findings on a classroom board or in a display. Connect to lesson: Waste in Specific Environments – choice board
2. Students can research the process of recycling a specific item, such as plastics or metals and present the findings to the class.
3. Map the Clark County facilities most cited in student research and create a poster size map to display with the student posters.
4. Write a letter to a Clark County facility or arrange to visit the West Van Recovery Center (see fieldtrip info under teacher resources).



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Poster Planning Page

Student Name: _____

1. Name of Item	Name of Item	Name of Item
2. Reuse?	Recycle?	Safe Disposal?
3. Name of facility	Name of facility	Name of facility
4. Address & Phone #	Address & Phone #	Address & Phone #
5. What does this facility accept?	What does this facility accept?	What does this facility accept?
6. Are there any special instructions? Or requirements?	Are there any special instructions? Or requirements?	Are there any special instructions? Or requirements?
7. What does this facility do with the item?	What does this facility do with the item?	What does this facility do with the item?

Extra Credit:

1. Add another interesting fact about the item or facility you chose for your final project/ poster.



Poster Grading Rubric

CATEGORY	4	3	2	1
Preproduction Plan	The poster planning page is complete.	The poster planning page is mainly complete.	The poster planning page is incomplete in 3 or more sections.	The poster planning page is incomplete and will not provide the information needed to complete an informed poster.
Required Elements	The poster includes all required elements as well as additional information. Information is accurate and comes mainly from the research planning page.	All required elements are included on the poster. Information is accurate and comes mainly from the research planning page.	All but 1 of the required elements are included on the poster. Information is accurate and comes mainly from the research planning page.	Several required elements were missing. Some information is inaccurate or comes from a source other than the research planning page.
Text Elements	All items of importance on the poster are clearly labeled and can be read from at least 3 ft. away. Text is appropriate in length for the target audience. Background and color enhance the readability of text.	Almost all items of importance on the poster are clearly labeled with labels that can be read from at least 3 ft. away. Text is appropriate in length for the target audience.	Many items of importance on the poster are clearly labeled with labels that can be read from at least 3 ft. away.	Labels are too small to view OR no important items were labeled.
Graphics - Relevance	All graphics are related to the topic and make it easier to understand.	All graphics are related to the topic and most make it easier to understand.	All graphics relate to the topic	Graphics do not relate to the topic.
Technical & Composition	The poster is attractive in terms of design, layout and neatness. The background is considered as well as objects drawn. The objects are complete and color has been added.	The poster is attractive in terms of design, layout and neatness. The objects are complete and color has been added.	The poster is acceptably attractive though it may be a bit messy. The objects are complete but only partial color has been added.	The poster is distractingly messy or very poorly designed. The background and objects separate, shapes float and are unrelated. Color is not used.
Writing Mechanics	The text is written with no errors in grammar, capitalization, punctuation, and spelling.	The text is clearly written with little or no editing required for grammar, capitalization, punctuation, and spelling.	Spelling, capitalization, punctuation, and grammar errors distract or impair readability (3 or more errors).	Errors in spelling, capitalization, punctuation, usage and grammar distract or impair readability (more than 5 errors)



EALR CONNECTIONS

SCIENCE:

1. The student understands and uses scientific concepts and principles.
 - 1.1 use properties to identify, describe, and categorize substances, materials, and objects, and use characteristics to categorize living things
 - 1.2 recognize the components, structure, and organization of systems and the interconnections within and among them
3. The student understands the nature and contexts of science and technology.
 - 3.2 know that science and technology are human endeavors, interrelated to each other, to society, and to the workplace

SOCIAL STUDIES:

CIVICS

4. The student understands the rights and responsibilities of citizenship and the principles of democratic civic involvement.
 - 4.1 understand individual rights and their accompanying responsibilities

GEOGRAPHY (*extensions*)

1. The student uses maps, charts, and other geographic tools to understand the spatial arrangement of people, places, resources, and environments on Earth's surface.
 - 1.1 use and construct maps, charts, and other resources
3. The student observes and analyzes the interaction between people, the environment, and culture.
 - 3.1 identify and examine people's interaction with and impact on the environment
 - 3.2 analyze how the environment and environmental changes affect people

HISTORY (*extensions*)

3. The student understands the origin and impact of ideas and technological developments on history and social change.

ECONOMICS

1. The student understands basic economic concepts and analyzes the effect of economic systems on individuals, groups, and society.
 - 1.1 comprehend key economic concepts and economic systems
 - 1.4 examine how governmental policies influence the economy

READING:

2. The student understands the meaning of what is read.
 - 2.1 comprehend important ideas and details
 - 2.2 expand comprehension by analyzing, interpreting, and synthesizing information and ideas
3. The student reads different materials for a variety of purposes.
 - 3.1 read to learn new information
 - 3.2 Read to perform a task
 - 3.4 Read for literacy/ narrative experience in a variety of genres

WRITING:

- 1.5 Published text to share with audience
2. The student writes in a variety of forms for different audiences and purposes.



- 2.1 write for different audiences
- 2.2 write for different purposes
- 2.3 write in a variety of forms
- 4. The student analyzes and evaluates the effectiveness of written work.
- 4.1 Analyzes and evaluates others' and own writing.

COMMUNICATION

- 1. The student uses listening and observation skills and strategies to gain understanding.
- 1.1 Uses listening and observation skills and strategies to focus attention and interpret information.
- 1.2 Understands, analyzes, synthesizes, or evaluates information from a variety of sources.
- 2. The student uses communication skills and strategies to interact/work effectively with others.
- 2.2. Uses interpersonal skills and strategies in a multicultural context to work collaboratively, solve problems, and perform tasks.
- 3. The student uses communication skills and strategies to present ideas and one's self in a variety of situations.
- 3.1. Uses knowledge of topic/theme, audience, and purpose to plan presentations.
- 3.2. Uses media and other resources to support presentations.
- 3.3. Uses effective delivery.
- 4. The student analyzes and evaluates the effectiveness of communication.
- 4.1. Assesses effectiveness of one's own and others' communication.
- 4.2. Sets goals for improvement.

MATH:

- 4. The student communicates knowledge and understanding in both everyday and mathematical language.
- 4.1 gather information
- 4.2 organize and interpret information
- 4.3 represent and share information

HEALTH & FITNESS:

- 3. The student analyzes and evaluates the impact of real-life influences on health.
- 3.1 understand how environmental factors affect one's health

ARTS:

- 2. The student applies the creative process with arts knowledge and skills to reason and solve problems.
- 2.1 use the senses to gather and process information
- 2.2 generate and analyze solutions to problems using creativity and imagination
- 3.1 use image, sound, action and movement through the arts to express individual ideas for a specific purpose
- 3.2 reflect and respond critically to the use of the arts in all forms of communication



OSPI ENVIRONMENTAL/ SUSTAINABILITY GUIDELINES:

These Environmental Education Guidelines for Washington Schools clarify the interdisciplinary nature of any study of the environment and show directly how it advances the fundamentals of student learning. Throughout the basic subject areas, there are innumerable opportunities to introduce students to matters and context related to the environment while at the same time meeting the essential academic learning requirements.¹

EE Goal I. The student will develop knowledge about the components of the environment and understand their interactions within natural systems.

Objective A: The student will analyze the interrelationships of living and nonliving components within ecosystems.

Objective B: The student will investigate how, over time, populations of organisms are influenced by limiting factors within ecosystems.

Objective C: The student will evaluate interactions occurring between humans and the environment.

Objective D: The student will examine the implications of resource conservation.

EE Goal II. The student will understand how social and natural systems are fundamental in supporting our lives, economy, and emotional well-being.

Objective A: The student will explain the relationship between health and the environment.

Objective B: The student will investigate the relationship between a viable economy and responsible use of natural resources.

Objective C: The student will explore the relationship between nature and creativity.

Objective D: The student will examine the role that cultural values plays in how people relate to the environment.

Objective B: The student will understand how ideas and technology can influence the natural and built environment.

EE Goal III. The student will recognize how individual decisions and actions impact the environment.

Objective A: The student will investigate how individuals can shape and influence cultural interactions with the environment.

Objective B: The student will analyze how personal decisions and actions alter the outcomes of environmental topics.

EE Goal IV. The student will develop and utilize the knowledge and skills necessary for cooperative action to maintain or enhance the environment.

Objective A: The student will evaluate the usefulness of effective communication and participation in resolution of environmental topics.

Objective B: The student will evaluate historical and contemporary interactions between governments (local, state, and national) and interest groups in environmental policymaking.

Objective C: The student will investigate how involvement in political and legal processes is paramount to resolving environmental topics.

Objective D: The student will actively participate in seeking sound scientific information and participate in developing and applying this information for solving environmental problems.

¹ *Environmental Education Guidelines for Washington Schools, July 2000, pg. i*



