

SPECIAL ED

WASTE MANAGEMENT

FOR HIGH SCHOOL



Special Needs for Special Kids



ALSO INCLUDES GOOGLE SLIDES

Special Needs for Special Kids



This unit was created with this guy in mind. He has autism and an intellectual disability. He is a non-reader, and loves the sound of piano keys. With some support he is able to do this unit, and enjoys the challenge. He is my tester!!

Waste Management System Unit

By
Christa Joy
Special Needs for Special Kids



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Also included in this resource as separate files:

- Lesson plans
- Links and directions to digital activities
- PowerPoint **(this is the book in the lesson plan)**
- Voice recorded PowerPoint
- Activities in black and white

This unit contains over 200 pages of material. I have included a detailed lesson plan to help you make the most of everything in this unit including how to add some group activities.

It comes in 2 separate files. One in color and one in black and white.

Waste Management Lesson Plan

Preparation

- Print out a vocabulary board for each student to use throughout unit
 - Laminate or place in page protector
- Book
 - Print out, laminate, and bind
 - OR your students can listen to the pre-recorded version
- Vocabulary cards
 - Print out a set of cards onto cardstock and laminate
 - Make one set for each student and one for the teacher to use in I Spy games
- Bingo cards
 - This unit comes with a set of Bingo cards.
 - They are in color and BW
 - Print on cardstock and laminate.
 - Suggestions for use included in unit.

Preassessment (do day 1 before starting lesson)

- Choose the form of the assessment that best fits the learning level of your students
- Give the assessment to assess what your students may already know
- I cannot emphasize enough how important this step is. If you want to see growth, this preassessment is so important!!

Teaching Tips

1. *Color Coding:* this is a really easy way to add more structure to a matching activity. Outline or color in an empty box or sorting label. Outline or color in the corresponding picture symbols the same colors. Becomes a color matching task.
 - a. For more info, read more here:
<https://specialneedsforspecialkids.org/2015/09/05/using-color-coding-for-differentiation/>
 - b. I also have a blog post on differentiating one activity 3 ways:
<https://specialneedsforspecialkids.org/2018/10/22/differentiating-1-activity-3-ways-easily-and-effectively/>

The lesson plans contain:
Overall tips for teaching
students with significant
needs

Quick Look

Day	Activity	Day	
1	<ul style="list-style-type: none">• Book• Vocab cards activity• Circle map	7	<ul style="list-style-type: none">• Book• Vocab cards activity• Writing prompt
2	<ul style="list-style-type: none">• Book• Vocab cards activity• Sorting activity	8	<ul style="list-style-type: none">• Book• Vocabulary cut and past• Sudoku puzzle
3	<ul style="list-style-type: none">• Book• Vocab cards activity• Sequencing activity	9	<ul style="list-style-type: none">• Book• Vocabulary cut and• Word search
4	<ul style="list-style-type: none">• Book• Vocab cards activity• Venn diagram	10	<ul style="list-style-type: none">• Book• Vocab cards activity• Close worksheet
5	<ul style="list-style-type: none">• Book• Vocab cards activity• Circle map	11	<ul style="list-style-type: none">• Book• Vocab cards activity• Close worksheet
6	<ul style="list-style-type: none">• Book• Vocab cards activity• Sorting activity	12	<ul style="list-style-type: none">• Assessment

The lesson plans contain:

A quick look at what you will do each day

Day 4

Activity	Notes	Materials
Read or listen to a recording of the book: <i>Solid Waste Management</i> (15 minutes)	<ul style="list-style-type: none">• Read through the story, asking lots of questions• Continue to make connections between book and vocabulary board	<ul style="list-style-type: none">• Book• Vocabulary board
Vocabulary cards Scavenger Hunt (10 minutes)	<ul style="list-style-type: none">• Place one set of the vocabulary cards around the room before lesson<ul style="list-style-type: none">◦ Students walk around and find them, bring them back and matching them to their own set of cards	<ul style="list-style-type: none">• Vocabulary cards (extra sets)•
Sequencing review (5 minutes)	<ul style="list-style-type: none">• Review the sequencing activity completed yesterday	<ul style="list-style-type: none">• Circle not complete yesterday
Venn Diagram activity (10 minutes)	<ul style="list-style-type: none">• Students will complete the Venn Diagram comparing a landfill to an incineration plant• A color-coded version is provided.• Make connections to the book as necessary	<ul style="list-style-type: none">• Worksheet• Scissors• Glue
Sharing (10 minutes)	<ul style="list-style-type: none">• Each student shares their Venn Diagrams with the group using the communication method of their choice	<ul style="list-style-type: none">• Completed worksheets• Communication devices

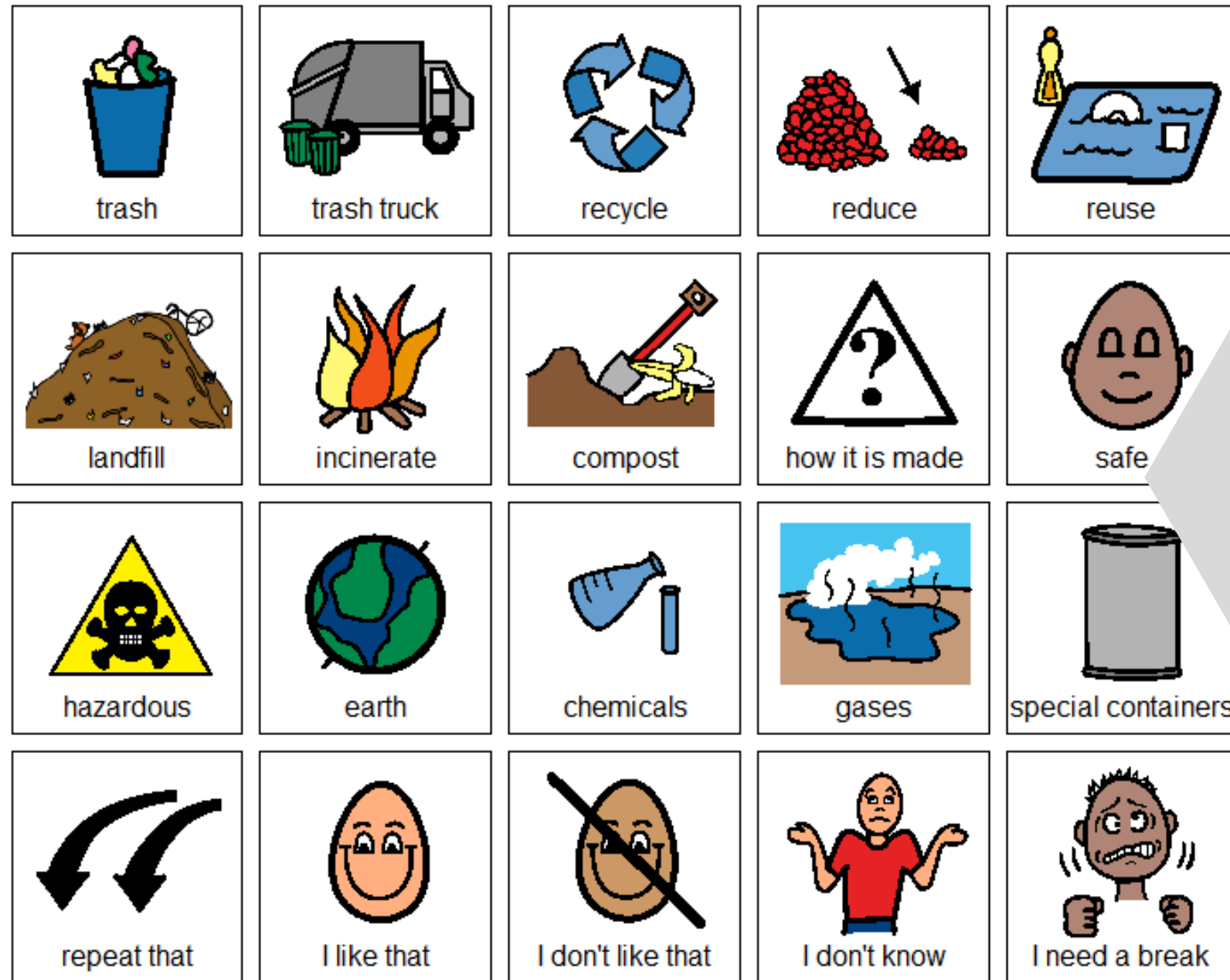
The lesson plans contain:

Detailed instructions on how that day's lesson should run

This unit comes with a vocabulary board.

Vocabulary boards are great for ALL students to assist with participation and engagement in group discussions.

Tips on how to use in the unit!!



The overall goal of the waste management system is to handle and dispose of the trash so that it will have as small an impact on the environment as possible.



There are two books with this unit using simple text and photos. This one is an overview of solid waste management.

Another way solid waste is handled is through **incineration**. This is when the trash is destroyed by burning it.



Both come in pdf versions as well as a voice-recorded powerpoints (so you don't have to print it out.)





As a general rule, not only is hazardous waste dangerous, it also takes a long time to get out of the environment. It can damage an area for hundreds of years.



Finally, what about in your very own home? Things like computers and televisions, batteries, paint, fluids from cars, and different types of oil can be very hazardous to the environment.



This one addresses hazardous waste.

Both come in pdf versions as well as a voice-recorded powerpoints (so you don't have to print it out.)

waste management system

Collection, transportation, processing and disposal of material.



source reduction

Effort to decrease the amount of waste created by changing how something is made.



Pollution Prevention Act

Passed in 1990, it focused on making changes to how something was made to reduce waste rather than recycling.



landfill

A place to dispose of waste material by burying it and covering it over with dirt.



quarry

A large, deep pit, from which stone or other materials are or have been removed.



methane

Dangerous gas produced when waste breaks down in a landfill.



incineration

Getting rid of waste material by burning it.



composting

Getting rid of trash that is food or paper by letting it break down and then used for fertilizer.



There are 15 vocabulary cards that come in color and black and white.

Included are suggestions for group activities to do with these each day.

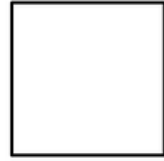
waste management system

Collection, transportation, processing and disposal of material.



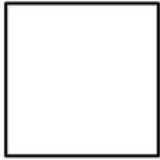
source reduction

Effort to decrease the amount of waste created by changing how something is made.



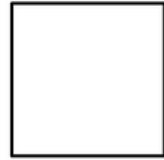
Pollution Prevention Act

Passed in 1990, it focused on making changes to how something was made to reduce waste rather than recycling.



landfill

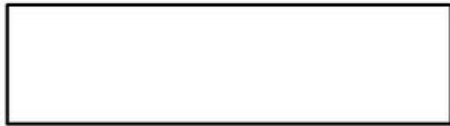
A place to dispose of waste material by burying it and covering it over with dirt.



at apart and match pictures with definition.



resource recovery techniques



recycling



Cut apart and match definition with picture

Waste materials that can hurt the environment and stay around for a very long time.	A...
Collection, transportation, processing and disposal of material.	The prac...
Something that is formed while the main product is created.	Getting rid of paper by letting it then use...
Ways to use waste materials as a resource as in composting and recycling.	Effort to decrease the amount of waste created by changing how something is made.

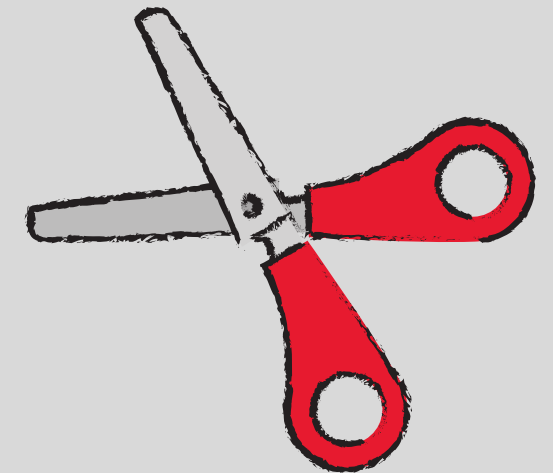
organic waste



hazardous waste



On days 8&9 there is an activity where students will match either the picture to the definition or the definition to the picture (harder).























Bingo cards



- Included are 10 Bingo cards in color and 10 Bingo cards in BW.
- Place the cards in page protectors or laminate for long term use.
- This is a great way to practice the new vocabulary included in this unit.
- Cut apart a set of the vocabulary cards to use as the calling cards.
- Options:
 - Show students the picture for them to match
 - Read the definition and see if students can find the matching picture
 - Work as teams
 - Vary the "winning" patterns.
 - Cover all
 - Cover corners
 - Row across or down
 - Cover the edges
 - Vary the ways to mark the card
 - Place in page protector or laminate and use dry erase markers
 - Stickers
 - Post-it notes
 - Dot markers

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 methane	 recycling	 incinerate	 quarry	
				 recycling
 hazardous	 methane	 incinerate		
 landfill		 quarry	 hazardous	 incinerate
	 incinerate		 recycling	 methane
 recycling	 hazardous	 methane	 quarry	 incinerate

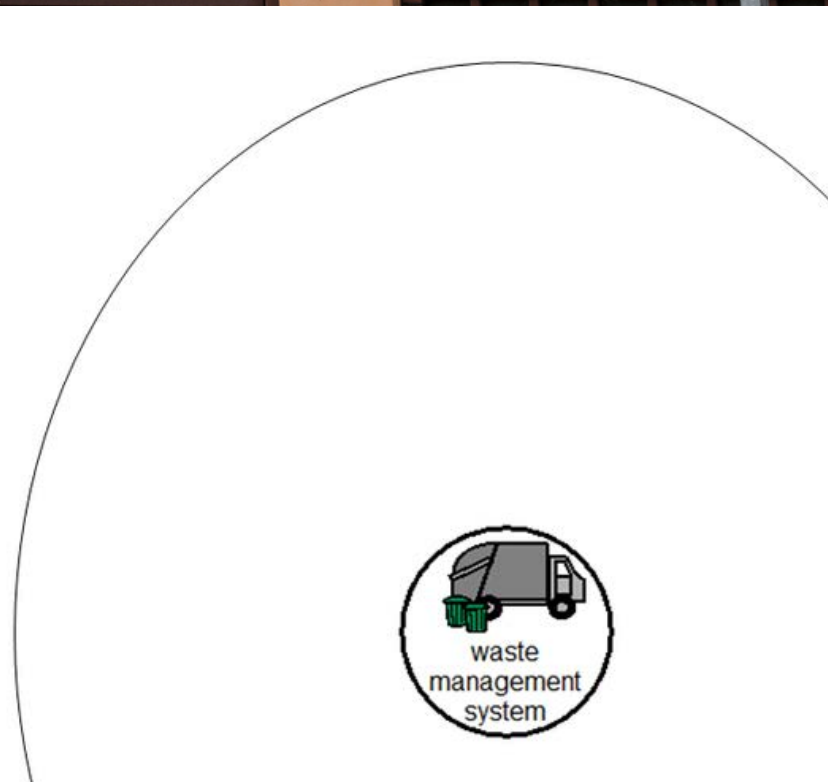
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Also included in this unit are 10 BINGO cards (in color and BW) to practice the vocabulary. There are suggestions for various ways to use them.




Errorless version


Place the pictures in the circle map on previous page about waste management.



 composting	 landfill	 resource recovery	 recycling	 methane
 quarry	 source reduction	 Pollution Preservation Act	 incineration	 by-pr



Place the pictures in the circle map on previous page **ONLY IF** you think it relates to waste management.

 composting	 fish	 resource recovery	 recycling	 auto racing
 quarry	 source reduction	 Pollution Preservation Act	 rainforest	 by-product
 ocean	 landfill	 pond	 incineration	 methane

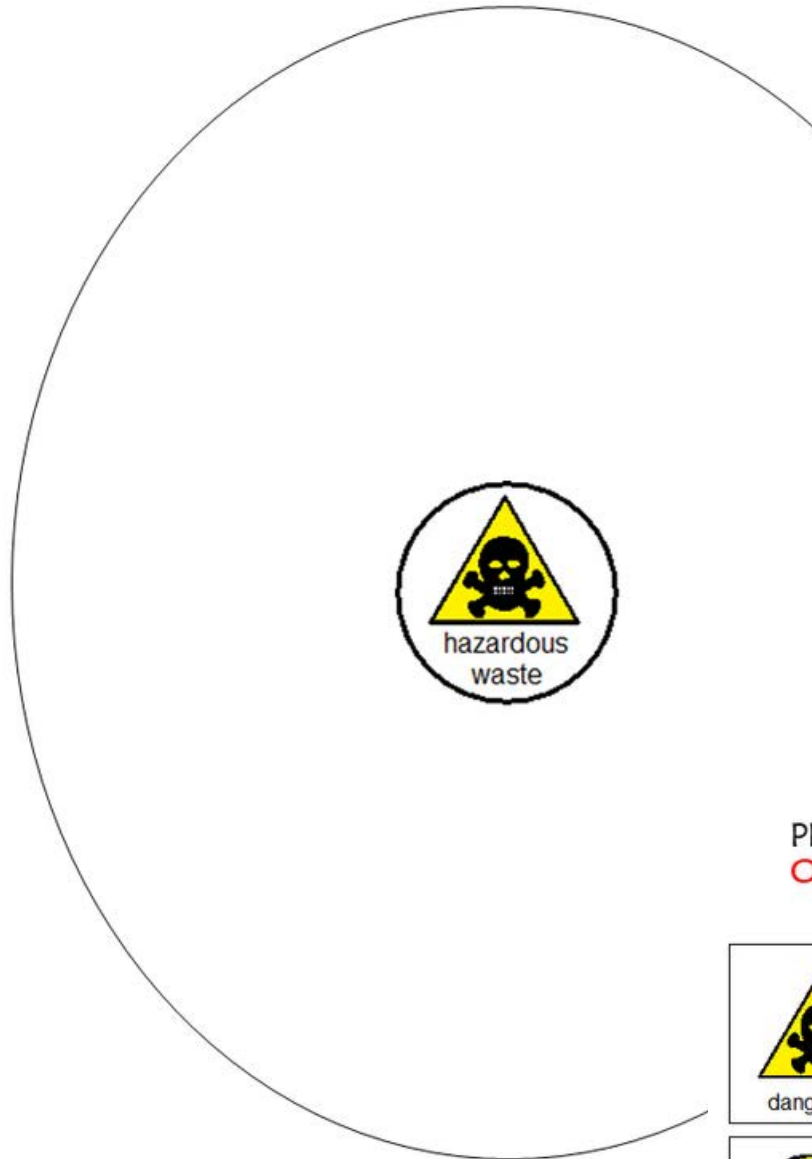
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There is are 2 circle maps in this unit. This one is on waste management.

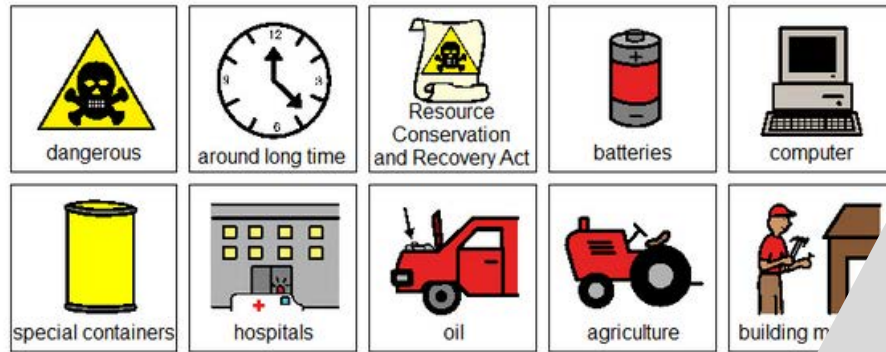
Circle maps are a great way for students to see the concept at a glance. There are 2 versions:

- One is errorless
- One has wrong answers mixed in students will have to set aside

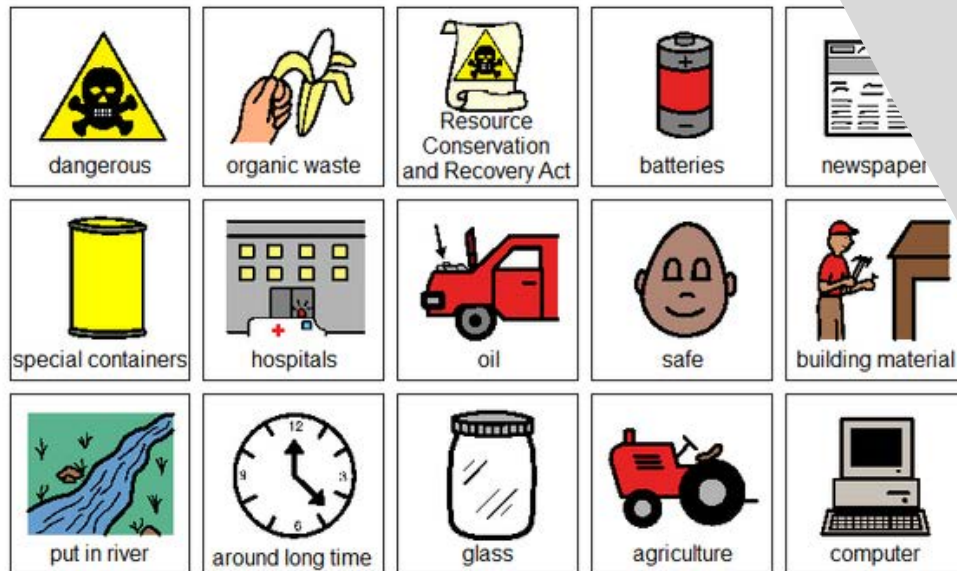


Errorless version

Place the pictures in the circle map on previous page about hazardous waste.

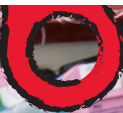


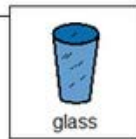
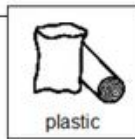
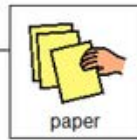
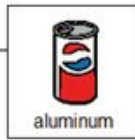
Place the pictures in the circle map on previous page **ONLY IF** you think it relates to hazardous waste.



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This circle map is specifically on hazardous waste.

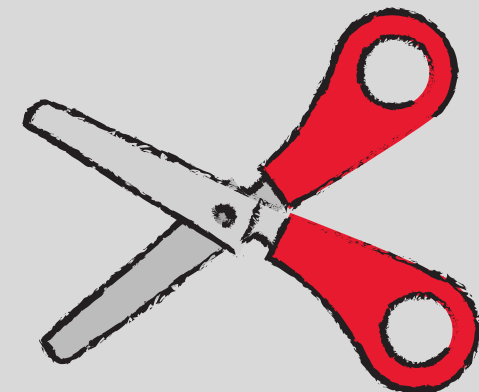




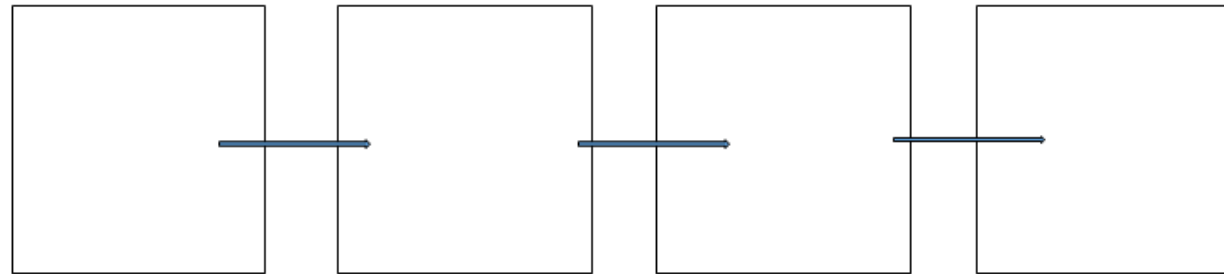
Students will sort items for recycling.

Cut pictures apart and sort into correct box.

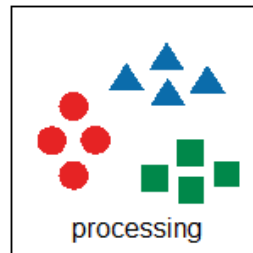
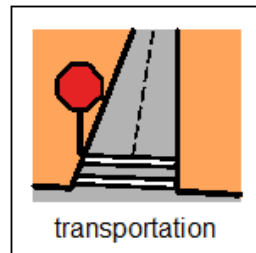
 soda can	 newspaper	 baggie	 notebook paper	 plastic wrap
 foil	 wrapping paper	 paper	 soda bottle	 glass
 mirror	 detergent container	 yogurt container	 broken glass	 light bulb
 index cards	 envelope	 magazine	 can	 cookie sheet



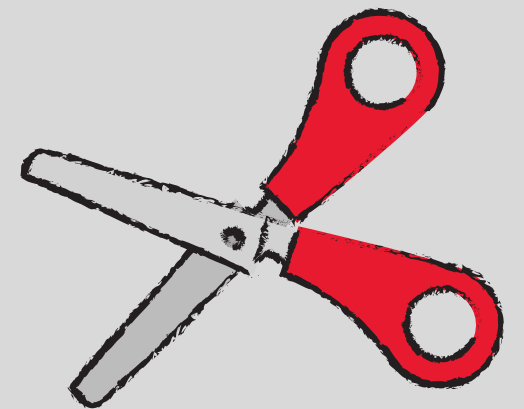
Sequence the steps of the waste management system



Students will sequence the steps of waste management.

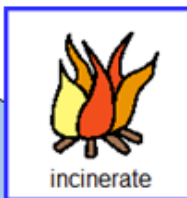


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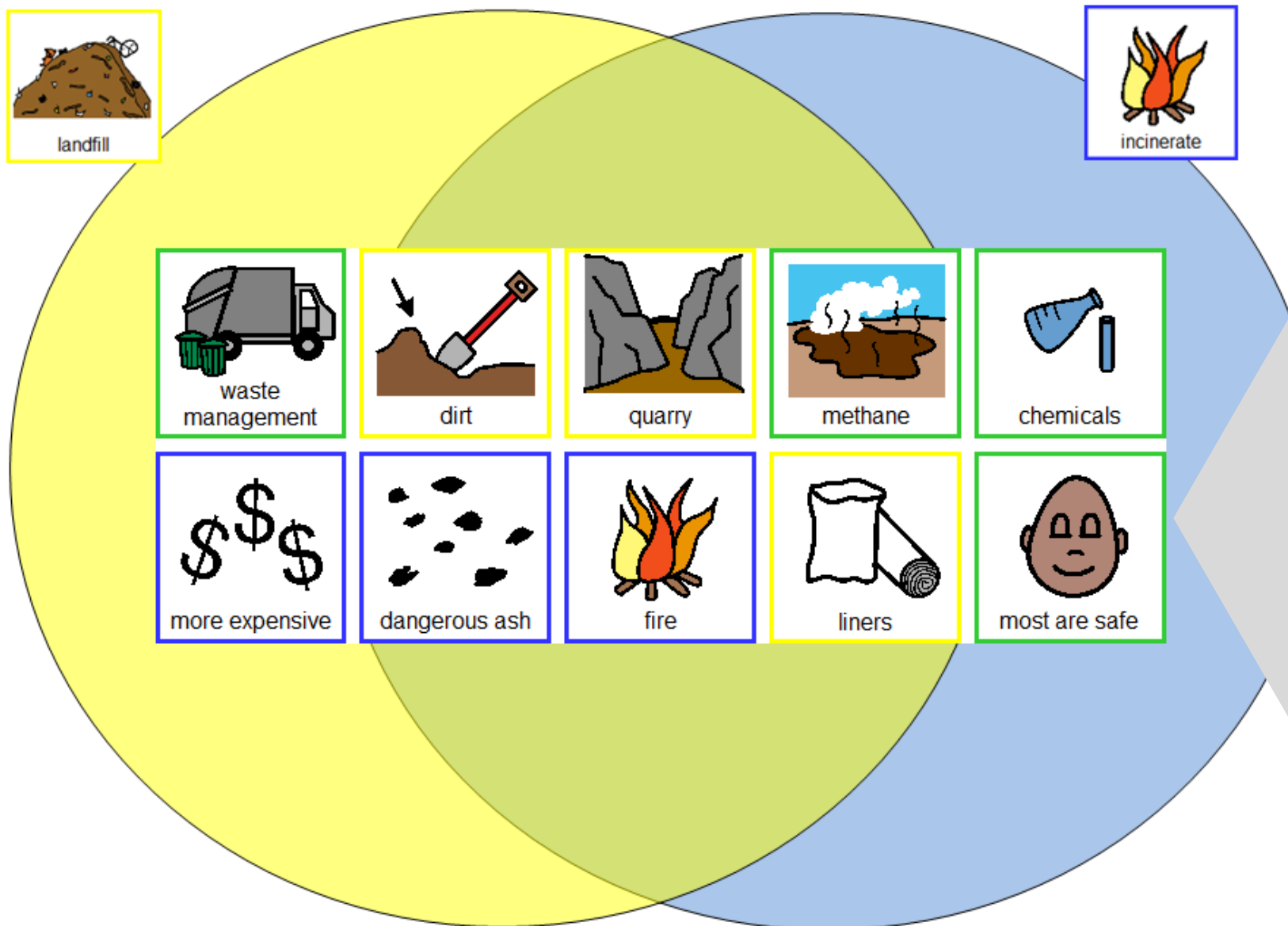




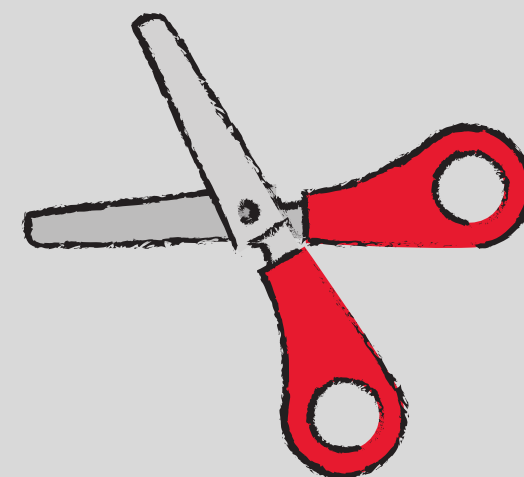
landfill



incinerate



There is a Venn Diagram comparing a landfill to an incinerator plant. A color-coded option is included.





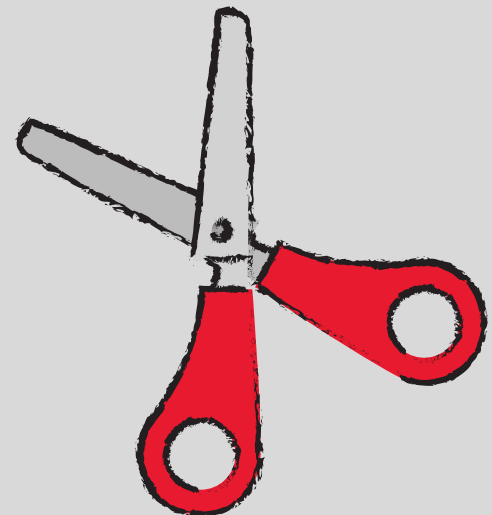
hazardous



landfill

 television	 pesticides	 newspaper	 batteries
 organic waste	 hospitals	 oil	 wrapping paper
 crayons	 computer	 pencil	 leaves
 fork	 building material	 magazine	 gum

Students will sort waste that is hazardous and waste that can go to the landfill.



Being a garbageman

Being a garbageman is a job.

People count on me to keep things .

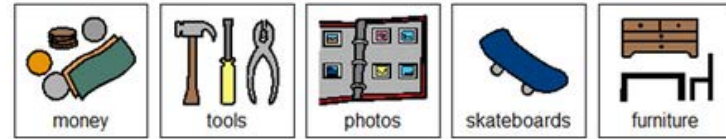
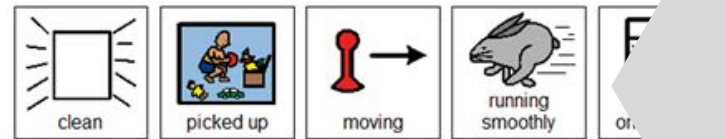
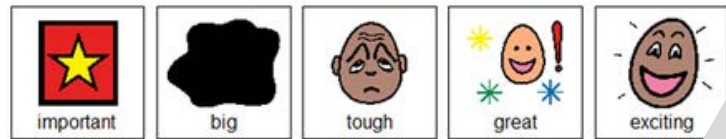
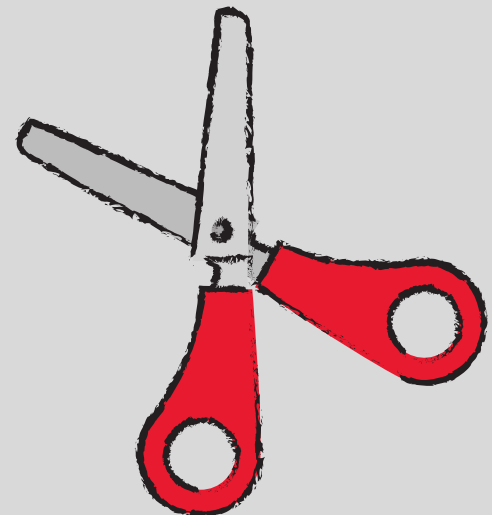
I pick up all the people leave outside.

Sometimes, we find interesting things, like a .









Being a garbageman is work, but I love it.











There is a writing prompt about the important jobs garbageman have.



Waste Management System









	 hazardous		
 quarry	 incinerate		 landfill
 incinerate		 quarry	
 hazardous	 quarry		

Waste Management System

	 hazardous		
 quarry	 incinerate		 landfill
 incinerate		 quarry	
 hazardous	 quarry		

Place the following images in the empty squares on the previous page, completing the sudoku puzzle.

The Picture Company
Worldwide!

 landfill	 landfill	 landfill	 incinerate
 incinerate	 quarry	 hazardous	 hazardous

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There is a Sudoku puzzle in this unit as well. This is a great way to work with the new vocabulary!!

There are 2 versions plus answer keys.



Waste Management System

B A G R I C U L T U R E B R B
I N C I N E R A T E Q N B F Y
S S Z F L E O R G A N I C K P
E R S M C O K Z I O R M A Z R
K W E U O R M E T H A N E E O
H Z A H C O M P O S T I N G D
S D G F R E C Y C L I N G F U
K Z Y F M F T E M F A M N N C
H A Z A R D O U S H C O P N T
S O U R C E R E D U C T I O N
V W O I H Z D T U L U Q N Q E
D A W F H M V L A N D F I L L
K Y U A G J J Z W H B T S V F
R H V S F G R Q L H T M C V I
O Z A I X L P U Q D W A D N M

source reduction	incinerate	composting	recycling
hazardous	landfill	methane	agriculture
by product	organic		



Waste Management System

B A G R I C U L T U R E B R B
I N C I N E R A T E Q N B F Y
S S Z F L E O R G A N I C K P
E R S M C O K Z I O R M A Z R
K W E U O R M E T H A N E E O
H Z A H C O M P O S T I N G D
S D G F R E C Y C L I N G F U
K Z Y F M F T E M F A M N N C
H A Z A R D O U S H C O P N T
S O U R C E R E D U C T I O N
V W O I H Z D T U L U Q N Q E
D A W F H M V L A N D F I L L
K Y U A G J J Z W H B T S V F
R H V S F G R Q L H T M C V I
O Z A I X L P U Q D W A D N M

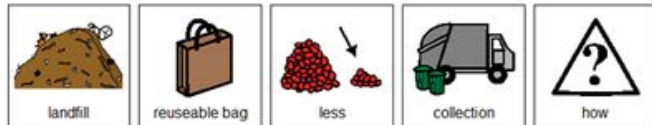
source reduction	incinerate	composting	recycling
hazardous	landfill	methane	agriculture
by product	organic		

There is also a word search to work with vocabulary. If your students cannot do a word search, have them highlight the circle words on the answer key.



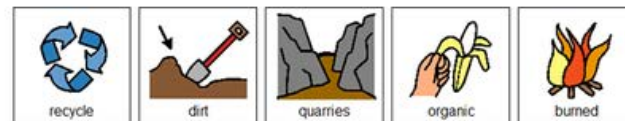
Solid waste management

1. is the first step in the waste management system.
2. Source reduction looks at a product is made.
3. Source reduction finds ways to make waste.
4. An example of source reduction is to use .
5. Most trash goes to the after being collected.



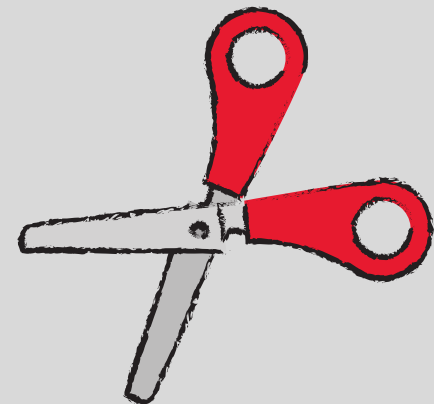
Solid waste management

5. Landfills use to keep it as clean and contained as possible.
7. Many landfills are formed in abandoned .
3. Some trash goes to the incineration plant where it is .
9. An example of a resource recovery technique is .
10. Composting can only use types of material like food and paper.



Close worksheets are a great informal assessment. There are two worksheets that cover general waste management.

Answer key included.



Hazardous waste

1. Hazardous waste stays in the environment a .

2. Hazardous waste is to animal and plants.

3. is one of the biggest producers of hazardous waste.

4. Factories create a lot of that can be hazardous.

5. Hazardous waste from hospitals can contain that could be harmful.



Hazardous waste

6. Things in your home could be hazardous waste like .

7. You need to take hazardous waste to a facility.

8. There are special that can store the hazardous waste.

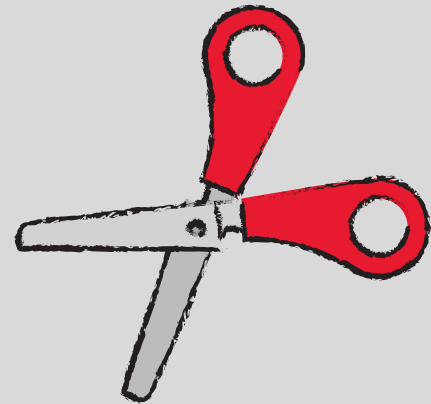
9. There are very special places to take waste from a .

10. Hazardous waste cannot go into the .

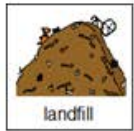


Close worksheets are a great informal assessment. There are two worksheets that cover hazardous waste.

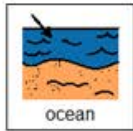
Answer key included.



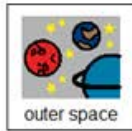
1. Where does most of the trash go in the waste management system?



landfill

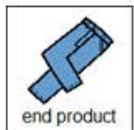


ocean



outer space

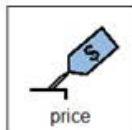
2. Source reduction looks at which step in the process?



end product



how it is made

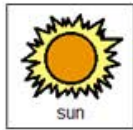


price

3. The goal of waste management is to impact what as little as possible?



trash truck

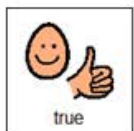


sun

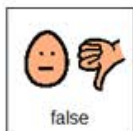


environment

4. True or False. All trash can go into the landfill.



true

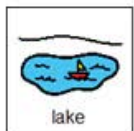


false

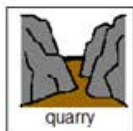


I don't know

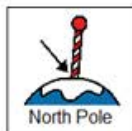
5. Where are landfills often placed?



lake



quarry



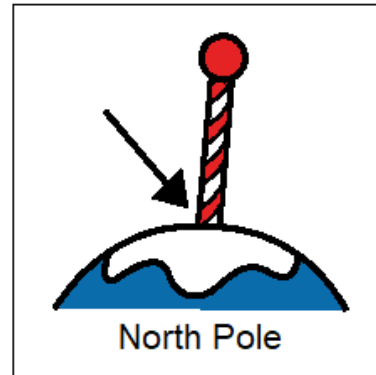
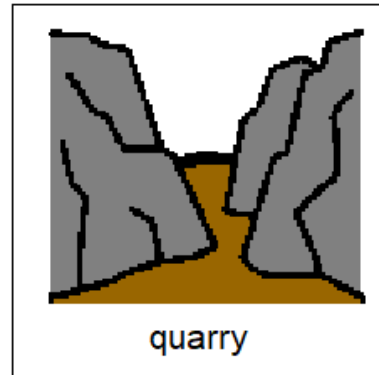
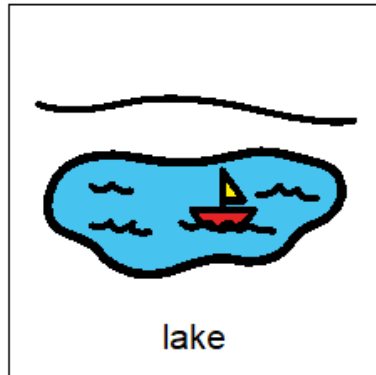
North Pole

FINALLY the assessment!! There are 3 versions. This version has 10 questions with 3 picture choices for each question.

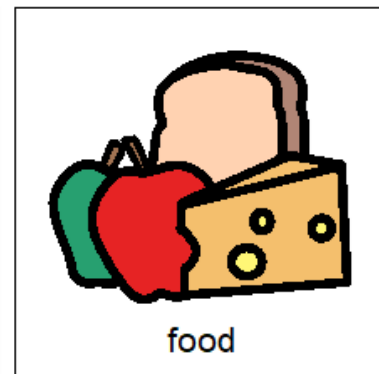
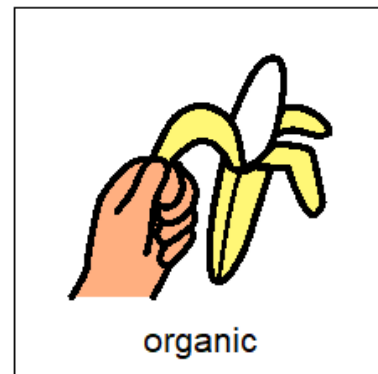
Answer key included.

Print onto cardstock or mount on index cards. Cut pictures apart and show student answer choices for each question.

Q 5



Q 6



With this version, you cut out the answer choices and glue them on index cards. Ask the student the question, and they point to the correct answer.

Version 3

1. Where does most of the trash go in the waste management system?
 - A. Landfill
 - B. Ocean
 - C. Outer space
2. Source reduction looks at which step in the process?
 - A. End product
 - B. How it is made
 - C. Price
3. The goal of waste management is to impact what as little as possible?
 - A. Trash truck
 - B. Sun
 - C. Environment
4. True or False. All trash can go into the landfill.
 - A. True
 - B. False
 - C. I don't know
5. Where are landfills often placed?
 - A. Lake
 - B. Quarry
 - C. North pole
6. What type of waste is taken to a special facility to be process and disposed of?
 - A. Hazardous
 - B. Organic
 - C. food

This is your traditional multiple choice version. It can also be used as a recording sheet if your students are using the version with index cards.

Source reduction looks at *how things are made* and tries to change that process in an effort to improve waste management by either making less waste in the process or waste that is more easily disposed of.



Christa Joy, Special Needs for Special Kids

Watch the movie on Solid Waste Management

This unit also includes digital versions of the activities.



As a general rule, not only is hazardous waste dangerous, it also takes a long time to get out of the environment. It can damage an area for hundreds of years.



Christa Joy, Special Needs for Special Kids

Watch the movie on Hazardous Waste

Students can watch a movie book version of the books rather than printing them out.



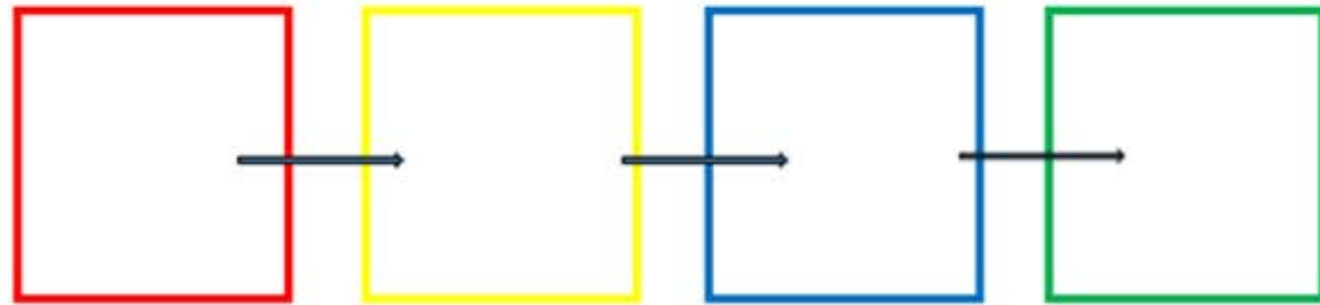
Place the picture in the circle map about types of the waste management system.

 composting	 landfill	 resource recovery	 recycling
 methane	 quarry	 source reduction	 Pollution Prevention Act
 incineration	 by-product		

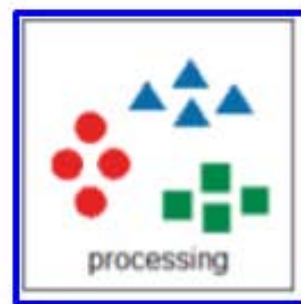
Christe Joy, Special Needs for Special Kids
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Each activity is set up so students can click and drag answers. No typing is required.

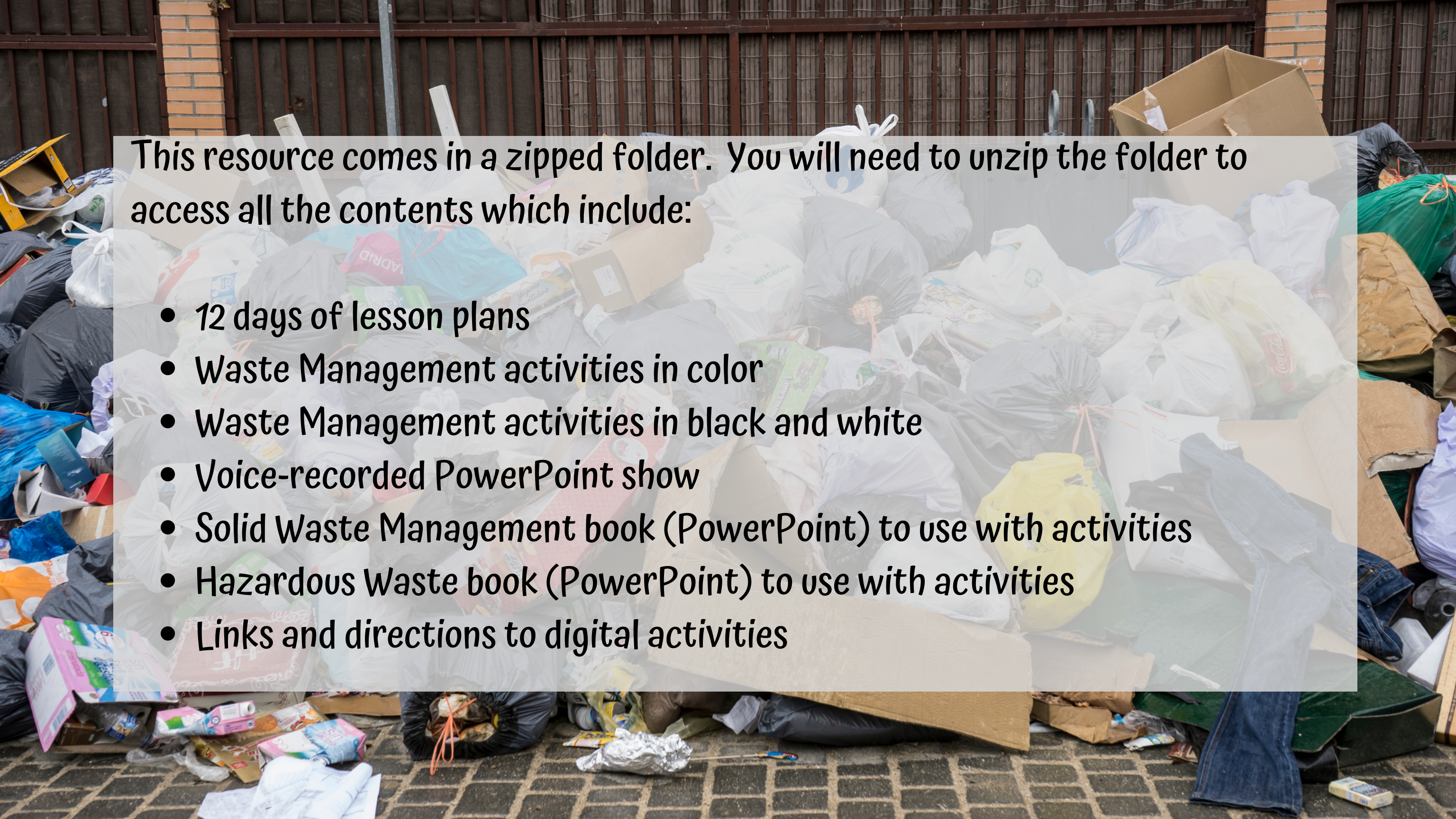
Sequence the steps of the waste management system



Sequence the steps of the waste management system.



The second set of slides uses color for differentiation and extra support for students who may need it. Mix and match slides from both sets to make the perfect set for each student.



This resource comes in a zipped folder. You will need to unzip the folder to access all the contents which include:

- **12 days of lesson plans**
- **Waste Management activities in color**
- **Waste Management activities in black and white**
- **Voice-recorded PowerPoint show**
- **Solid Waste Management book (PowerPoint) to use with activities**
- **Hazardous Waste book (PowerPoint) to use with activities**
- **Links and directions to digital activities**