

**SPECIAL ED**

**FOR HIGH SCHOOL**

**ENVIRONMENTAL  
SCIENCE BUNDLE**



Special Needs for Special Kids

**ALSO INCLUDES GOOGLE SLIDES**



*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!!*

**This bundle contains 9 complete units.**

- 1. Effects of Human Population**
- 2. World Water Supply**
- 3. Climate Change**
- 4. Sustainability**
- 5. Endangered Species**
- 6. Air Pollution**
- 7. Deforestation**
- 8. Food Production and Food Supply Chain**
- 9. Waste Management**



**22 WEEKS**

**5 1/2 MONTHS**

**PRINT & DIGITAL**

## Table of Contents

Pages	Activity
4-38	Solid Waste Management book
39-60	Hazardous Waste book
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64-72	Vocabulary cards
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161-168	Cloze worksheets
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In separate files, you will find:

- Lesson plans
- Voice-recorded PowerPoint
- Directions and links to digital activities

*Each unit has a table of contents to help you navigate the 150-200 pages of material.*

# 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/>

There is a detailed lesson plan that contains:

Overall tips for teaching students with significant needs.

## Quick Look

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

*The lesson plans contain:*

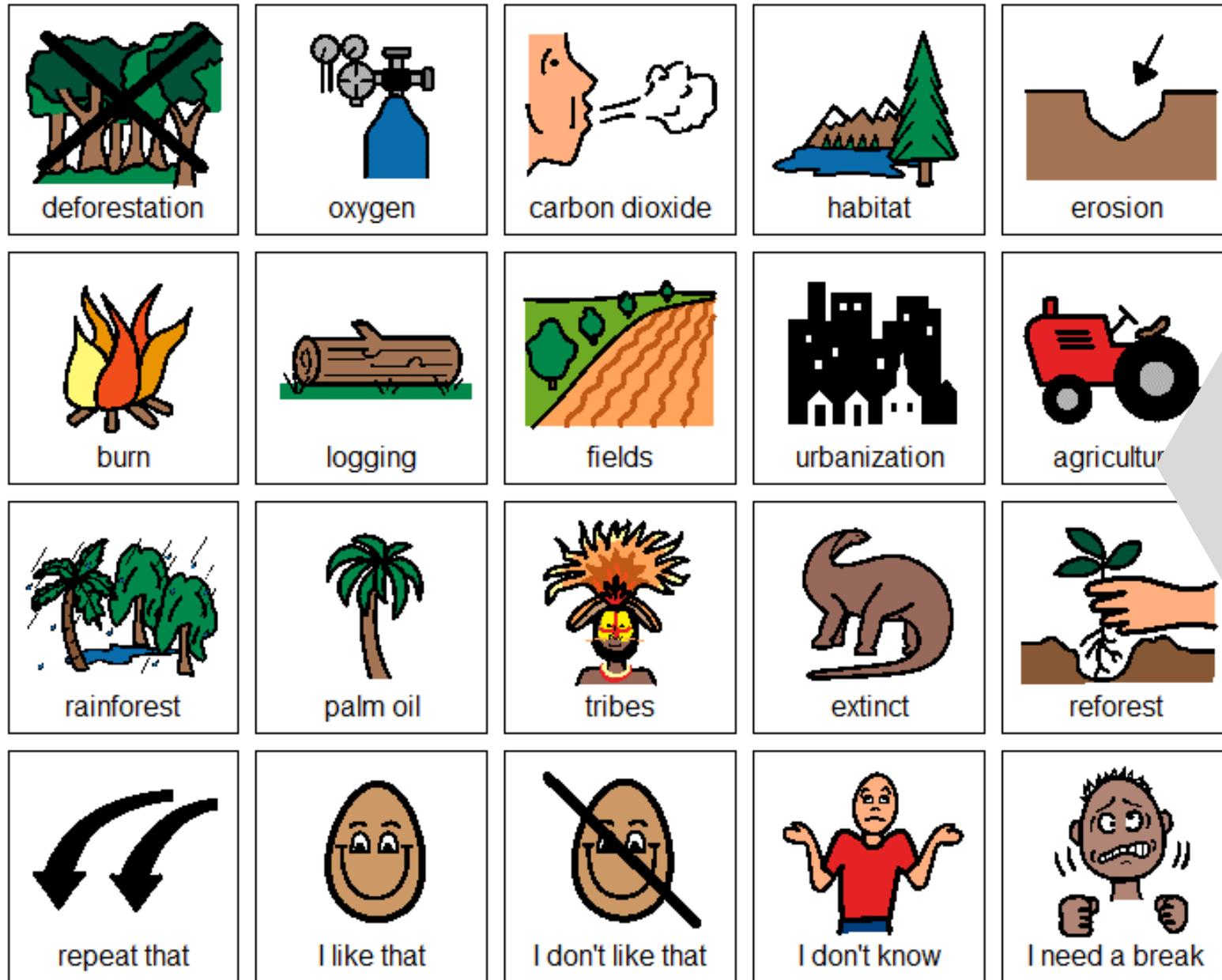
*A quick look at what you will do each day*

## 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"> <li>• Read through the story, asking lots of questions</li> <li>• Continue to make connections between book and vocabulary board</li> </ul>	<ul style="list-style-type: none"> <li>• Book</li> <li>• Vocabulary board</li> </ul>
Vocabulary cards Scavenger Hunt (10 minutes)	<ul style="list-style-type: none"> <li>• Place one set of the vocabulary cards around the room before lesson               <ul style="list-style-type: none"> <li>◦ Students walk around and find them, bring them back and matching them to their own set of cards</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Vocabulary cards (extra sets)</li> </ul>
Sequencing review (5 minutes)	<ul style="list-style-type: none"> <li>• Review the sequencing activity completed yesterday</li> </ul>	<ul style="list-style-type: none"> <li>• Circle n complete yesterday</li> </ul>
Venn Diagram activity (10 minutes)	<ul style="list-style-type: none"> <li>• Students will complete the Venn Diagram comparing a landfill to an incineration plant</li> <li>• A color-coded version is provided.</li> <li>• Make connections to the book as necessary</li> </ul>	<ul style="list-style-type: none"> <li>• Worksheet</li> <li>• Scissors</li> <li>• Glue</li> </ul>
Sharing (10 minutes)	<ul style="list-style-type: none"> <li>• Each student shares their Venn Diagrams with the group using the communication method of their choice</li> </ul>	<ul style="list-style-type: none"> <li>• Completed worksheets</li> <li>• Communication devices</li> </ul>

The lesson plans contain:

Detailed instructions on how that day's lesson should run including group and individual activities.



Each 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!!

In 1973, the United States congress passed the **Endangered Species Act**. This law identifies, protects, and helps recover animals that are in danger of extinction.



Christa Joy, Special Needs for Special Kids

Throughout history, people have been known to overhunt and overfish in certain areas. This has led to an unnatural decrease in certain animal species.



Christa Joy, Special Needs for Special Kids

Each unit comes with 1 or more books to teach the material. Thye comes in a pdf, a recorded PowerPoint show, and an mp4 movie file format. Lots of options so you can print it out and bind it or show it on a device with no printing required.

### sustainability

Meeting the needs of the present while still being able to meet the needs in the future.



### renewable

Sources of energy that can never run out like solar and wind.



### nonrenewable

Sources of energy that can run out like coal, oil, and natural gas.



### solar energy

Energy produced from the light and heat of the sun. The most abundant renewable resource.



### wind energy

Energy produced using the movement of the wind to turn a turbine and create electricity.



### deforestation

Removal of forests; cutting down large amounts.



### Greenhouse effect

The gases in the earth's atmosphere that trap heat from the sun.



### composting

Natural process of breaking down plant material into nutrient rich soil.

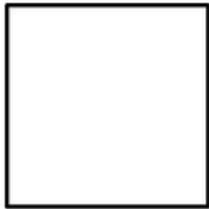


Each unit comes with 12-16 vocabulary cards..

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

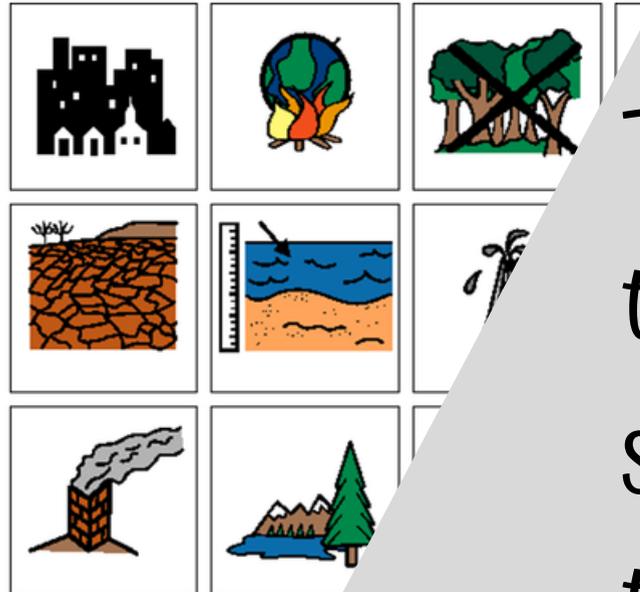
### climate change

The change in weather patterns in a region over a long period of time.



### global warming

An increase in the average temperature of the earth over time.



### satellite

Vehicle that orbits the earth collecting and sending information about changes on the earth's surface.



### habitat

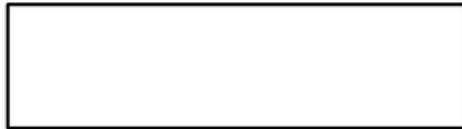


### sea level

How much water is in the ocean, measured by height of the water.



### deforestation



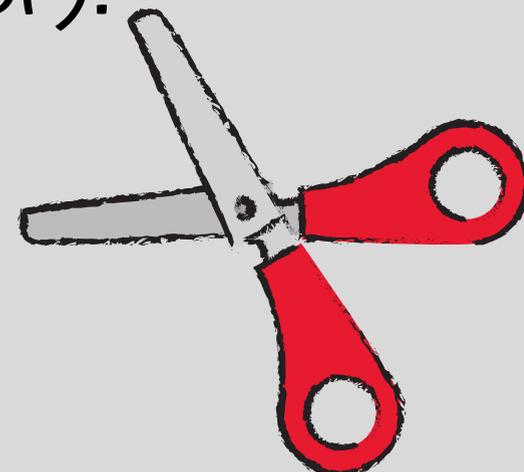
### ice cap



### carbon footprint



To review the vocabulary towards the end of the unit, students will match either the picture to the definition or the definition to the picture (harder).



l resource on earth like natural oil that is limited in supply and carbon dioxide when burned.

of forests; cutting down trees in large amounts.

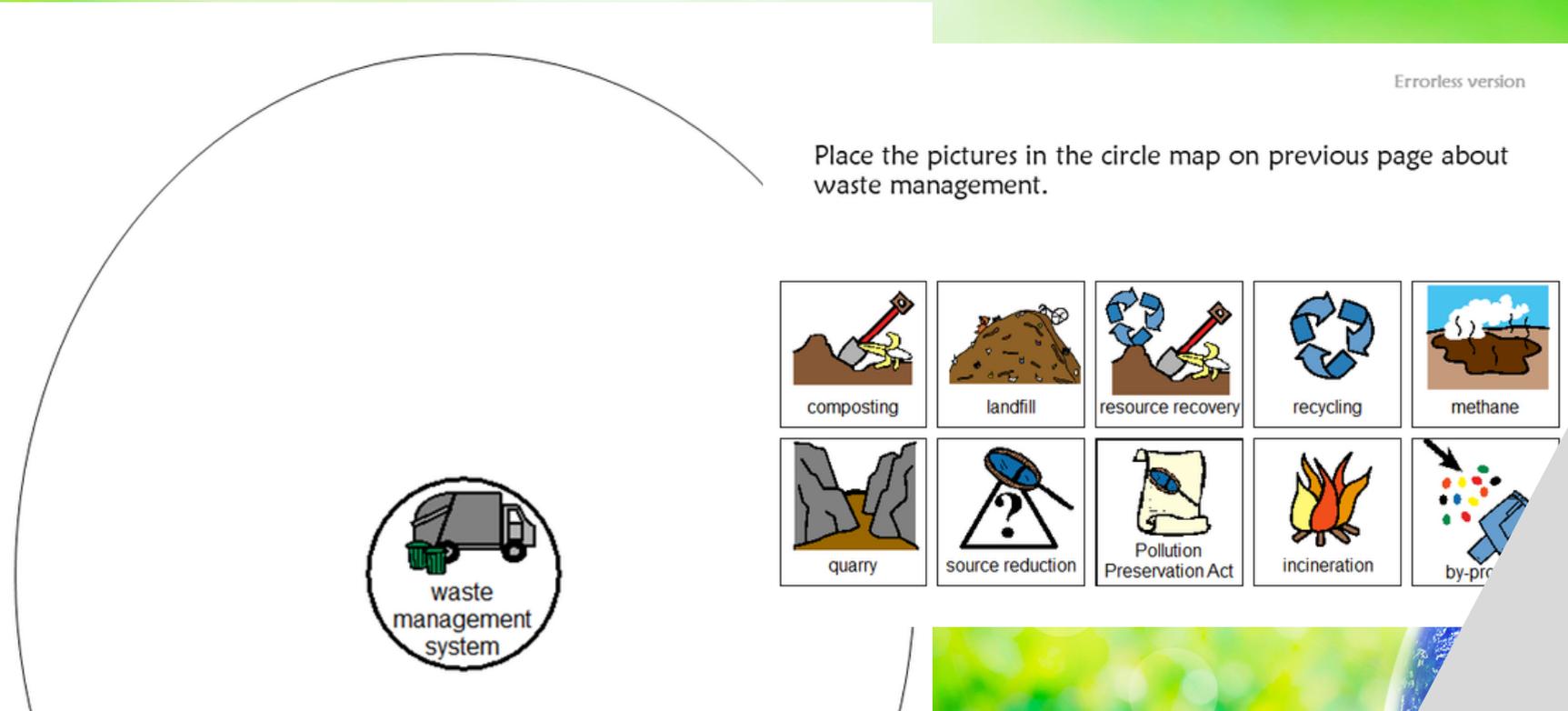
The region

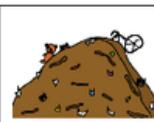
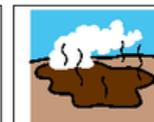
es in the earth's atmosphere trap heat from the sun.

Natural hor

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-product

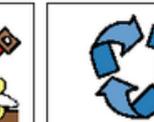
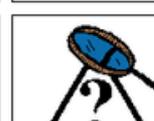
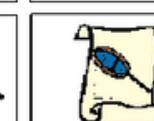
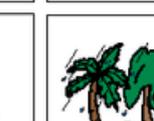
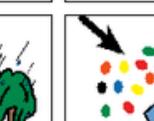
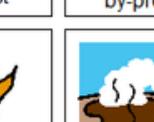
Each unit has 1 or more circle maps.

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

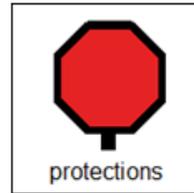
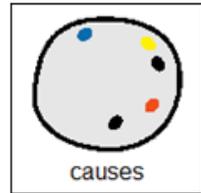
Place the pictures in the circle map on previous page **ONLY IF** you think it relates to waste management.



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

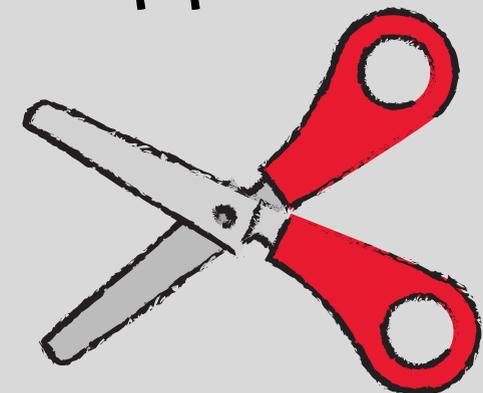
Christa Joy, Special Needs for Special Kids  
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Sort the pictures on the next pages into those that potentially cause extinction and those that protect against it.

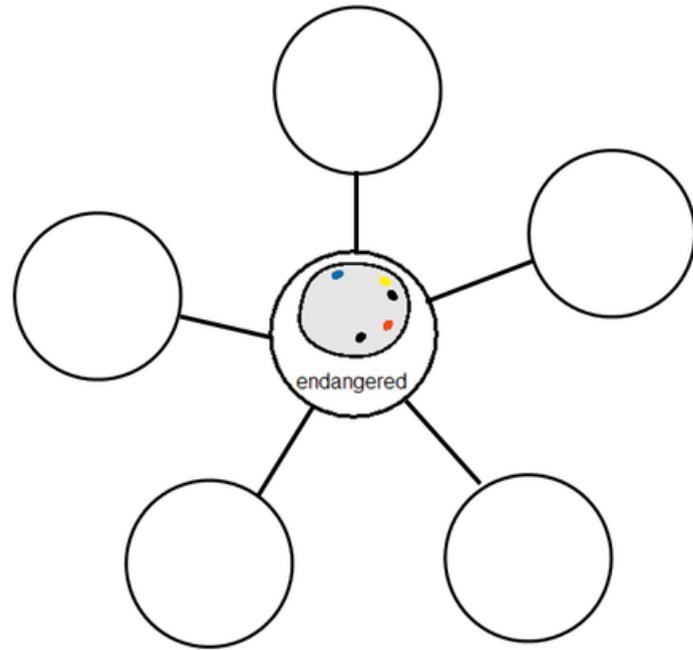


<p>deforestation</p>	<p>restore habitats</p>	<p>over-fishing</p>	<p>things people want to buy</p>
<p>fines</p>	<p>Endangered Species Act</p>	<p>capture and re-release</p>	<p>invasive species</p>
<p>pollution</p>	<p>plant new trees</p>	<p>urbanization</p>	<p>safer pesticides</p>
<p>increase awareness</p>	<p>pesticides</p>	<p>make a wildlife habitat</p>	<p>over-hunting</p>

Most of the units have sorting activities. There are directions on how to add color-coding for students who need more support.



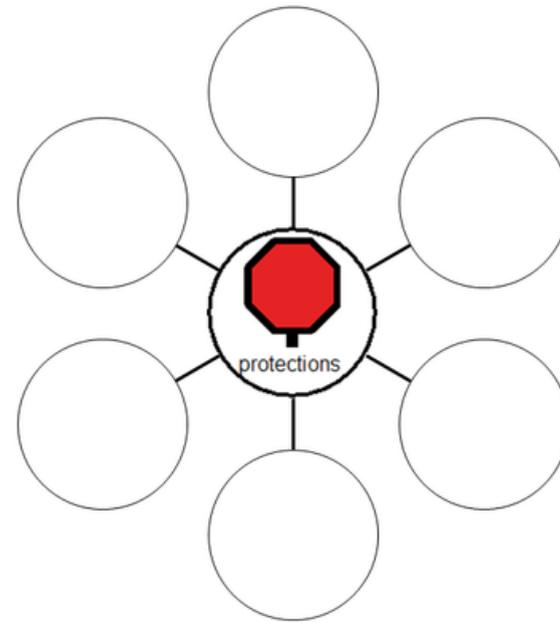
What causes a species to become endangered?



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2

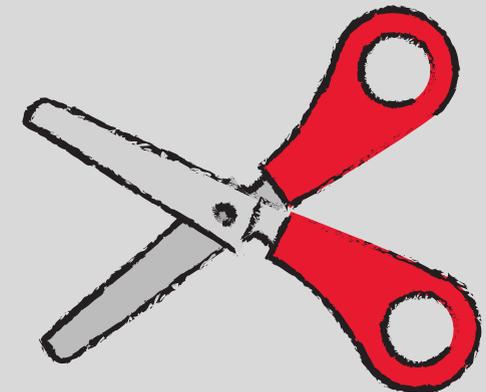
What protects a species from becoming endangered?



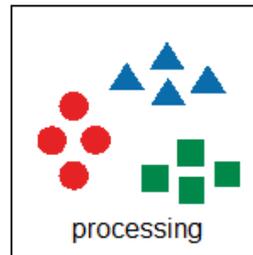
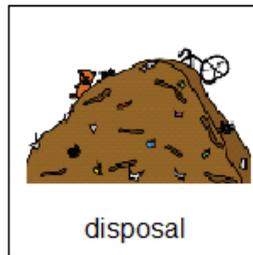
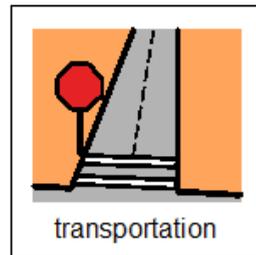
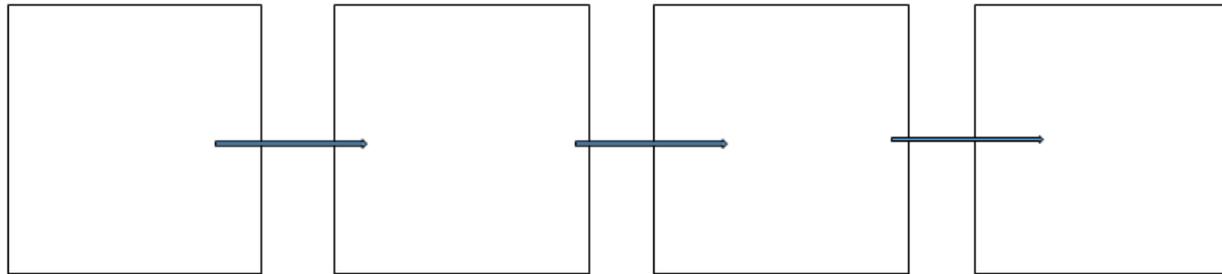
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4

Some units have thinking maps to visualize more complex concepts. These are errorless activities.

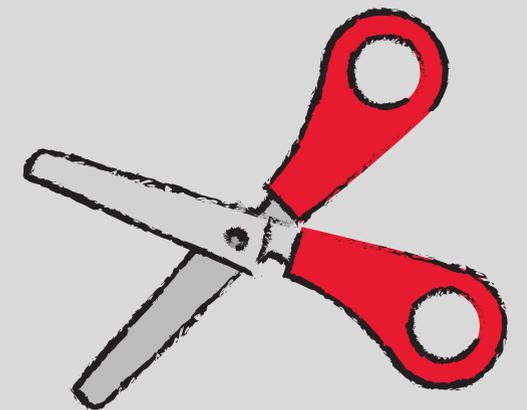


Sequence the steps of the waste management system



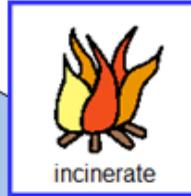
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*Some units have sequencing activities. Again, directions for adding color-coding are included.*

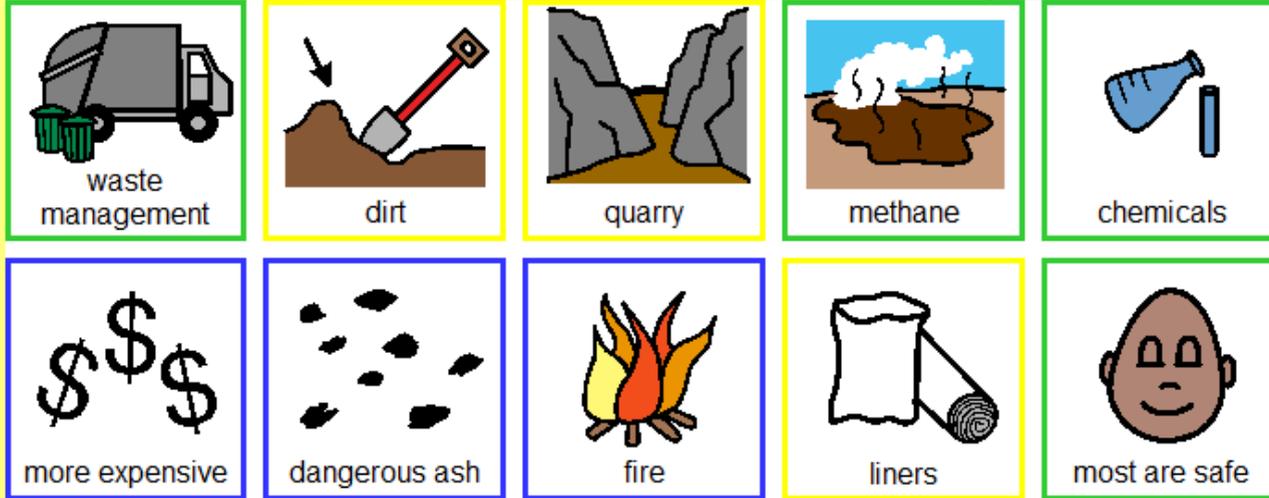




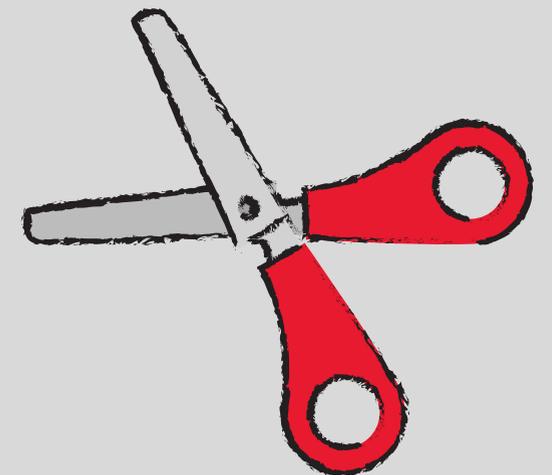
landfill



incinerate



Each unit has some activities that are unique and a perfect fit for that unit.



# Sustainability

We all need to do  to protect our earth.

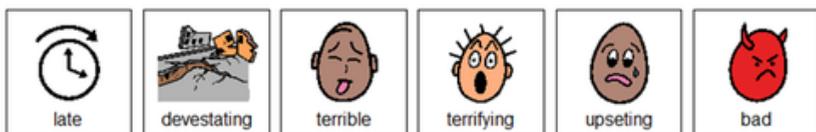
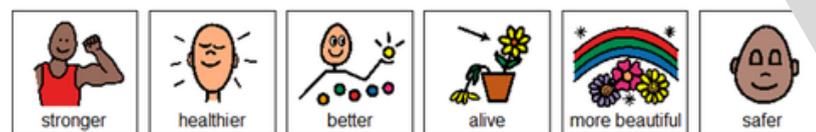
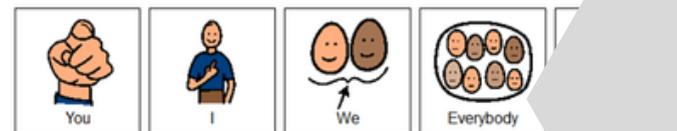
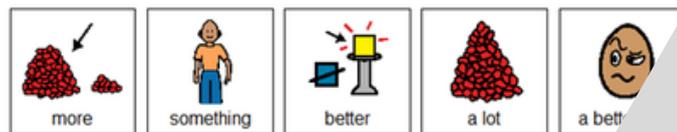
can make a difference.



One thing I can do is .

It will keep the earth  longer.

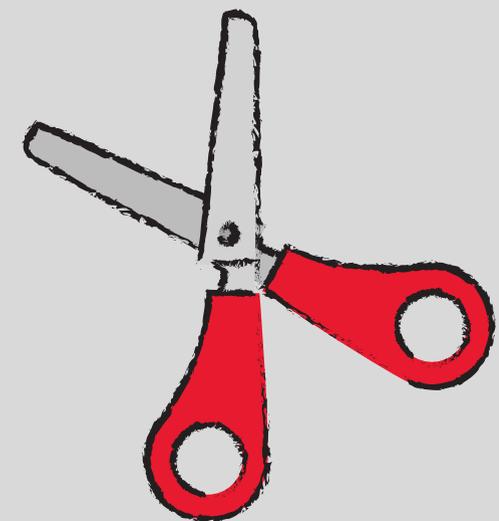
If we don't do something soon, it could be .



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Every unit has a writing prompt that makes the material in that unit more relatable. This is an errorless activity.



# 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.

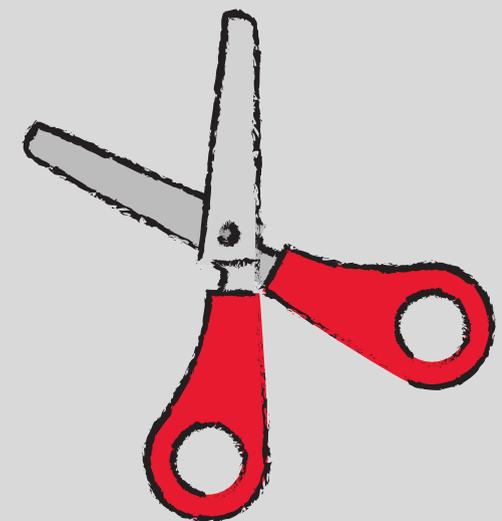
The Picture Company  
Worldwide!

 landfill	 landfill	 landfill	 incinerate
 incinerate	 quarry	 hazardous	 hazardous

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

There are 2 versions plus answer keys.



## Effect of the human population

FKUZIEMXBGHMKVZIQYCT  
 QFRKPFBCIBWJWJJVUHZP  
 XNBPOWUBAWYVBUPBKMZL  
 LAEUPSQQALTERNATIVEC  
 LAFOUDATRQTSVTPISLVR  
 LZFHILTCAFGQQNIMBGJCQ  
 ESIWARQPLGTJUOEKPD MH  
 JRCATNEYHSQINUVRQAFI  
 YTIGIEEENQXFOOTPRINT  
 PXEWORESSOURCESSIUKMA  
 LUNRNJKNCOMPOSITIONE  
 DRTEVNSCFXPVMGBFPVZU  
 FBDNIGQGKSVRFNLF SVA  
 EALEGRICLDIQCONSUMEU  
 LNRWKLOPXDFDSLLEJOT  
 XIUANJUWCPOVVNJFOFKC  
 KZRBHCTZZOBKZETHRKB  
 PEALKSXFYONIGBFDAFDR  
 IDLECARRYINGCAPACITY  
 QHNUDISTRIBUTIONKJFZ

carrying capacity	distribution	composition	populatic
alternative	resources	urbanized	renewabl
footprint	efficient	consume	rural

## Effect of the human population

FKUZIEMXBGHMKVZIQYCT  
 QFRKPFBCIBWJWJJVUHZP  
 XNBPOWUBAWYVBUPBKMZL  
 LAEUPSQQALTERNATIVEC  
 LAFOUDATRQTSVTPISLVR  
 LZFHILTCAFGQQNIMBGJCQ  
 ESIWARQPLGTJUOEKPD MH  
 JRCATNEYHSQINUVRQAFI  
 YTIGIEEENQXFOOTPRINT  
 PXEWORESSOURCESSIUKMA  
 LUNRNJKNCOMPOSITIONE  
 DRTEVNSCFXPVMGBFPVZU  
 FBDNIGQGKSVRFNLF SVA  
 EALEGRICLDIQCONSUMEU  
 LNRWKLOPXDFDSLLEJOT  
 XIUANJUWCPOVVNJFOFKC  
 KZRBHCTZZOBKZETHRKB  
 PEALKSXFYONIGBFDAFDR  
 IDLECARRYINGCAPACITY  
 QHNUDISTRIBUTIONKJFZ

carrying capacity	distribution	composition	population
alternative	resources	urbanized	renewable
footprint	efficient	consume	rural

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



# Climate Change

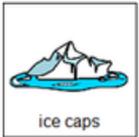
1. The average temperature here on Earth is  every year.

2.  is trapped in the atmosphere and keeps too much heat in.

3. As the temperatures rise, the  melt.

4. As the ice caps melt, the  rises.

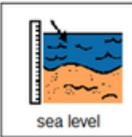
5. The  have less and less area to survive as the ice caps melt.



ice caps



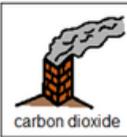
polar bears



sea level



increasing



carbon dioxide

# Climate Change

6. Scientists use  to collect data and learn more about climate change.

7. Global warming is caused by the .

8.  and  are 2 big reasons for climate change.

9. Plants help to use up the  in the air.

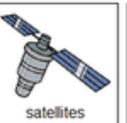
10. One of the best things you can do is to .



greenhouse effect



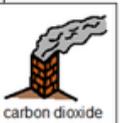
urbanization



satellites



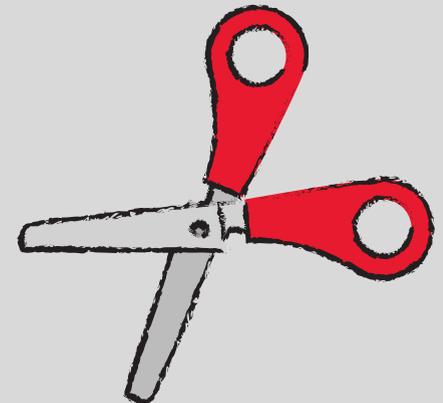
plant a tree



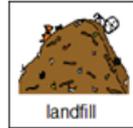
carbon dioxide

Close worksheets are a great informal assessment. There are two or more in each unit worksheets that cover information from the book(s).

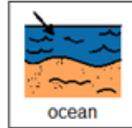
Answer key included.



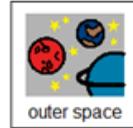
1. Where does most of the trash go in the waste management system?



landfill

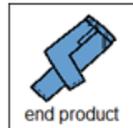


ocean



outer space

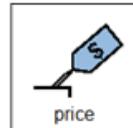
2. Source reduction looks at which step in the process?



end product



how it is made

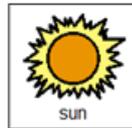


price

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



trash truck

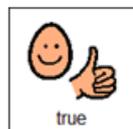


sun

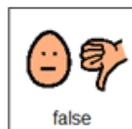


environment

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



true

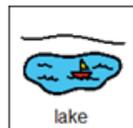


false

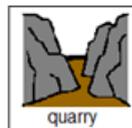


I don't know

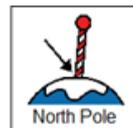
5. Where are landfills often placed?



lake



quarry



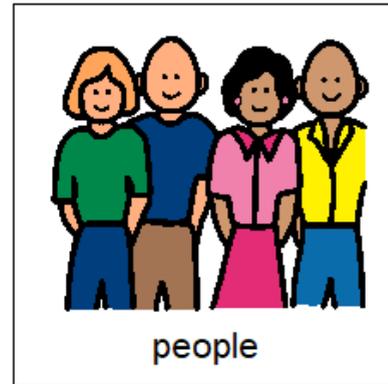
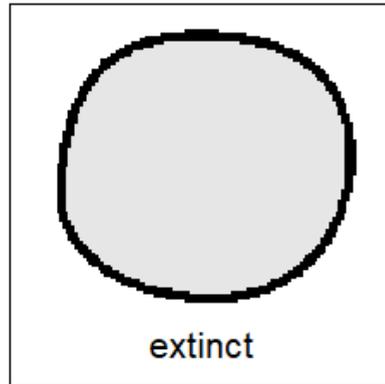
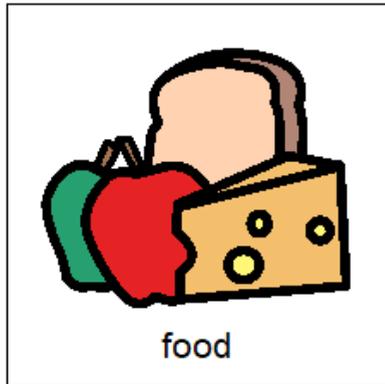
North Pole

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

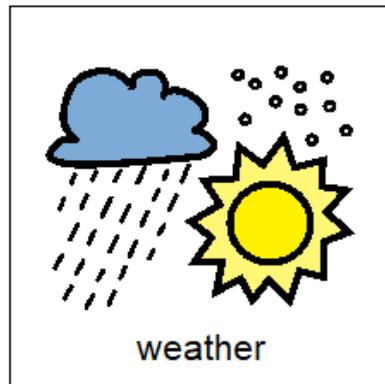
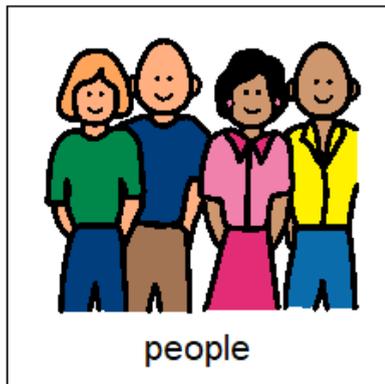
Answer key included.

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

Q 1



Q 2



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.

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.*



Place the picture in the circle map **ONLY IF** they relate to the effect of human population on the earth.

urbanized	distribution	resources	developing country
ecological footprint	outer space	couch	composition
efficient	7.9 billion	consumed	squirrel
cushion	carrying capacity	moon	



Every unit also has google slides. There are 2 sets of slides included. The second set is differentiated using color.

carrying capacity		natural resources	
waste & pollution		birth rate	
urbanization		not enough food	
want more things		unaware of problem	

Find the best solution to each of the following problems caused by human population.

simple life	grow own food	less people
renewable energy	rural	better health care
cleaner energy	education	



[Click Here to read more!!](#)

I realize there will be some students out there unable to do cutting activities. I have a blog post with ways to complete activities without a pair of scissors!!

All of the activities (except the book) come in color and black and white.