

**SPECIAL ED**

# EFFECTS OF HUMAN POPULATION



**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!!*



# Effects of the Human Population Unit

By  
Christa Joy  
Special Needs for Special Kids



Christa Joy, Special Needs for Special Kids  
The Picture Communication Symbols ©1981–2018 by Tobii Dynavox. All Rights Reserved  
Worldwide. Used with permission. Boardmaker® is a trademark of Tobii Dynavox

## Table of Contents

Pages	Activity
4-5	Vocabulary board
6-9	Vocabulary cards
10-19	Vocabulary cut and paste
20-23	Circle map
24	Urbanization group activity
25-31	Cause and effect activity
32-35	Matching solutions to problems
36-38	Writing prompt
39-41	Reducing my ecological footprint activity
42-48	Sudoku puzzle
49-50	Word search
51-55	Cloze worksheets
56-66	Assessment
67-68	Terms of Use

Also included in this resource as separate files:

- Lesson plans
- Links and directions to digital activities
- PowerPoints **(these are the books in the lesson plans)**
- Voice recorded PowerPoint
- Activities in black and white

Christa Joy, Special Needs for Special Kids  
The Picture Communication Symbols ©1981–2018 by Tobii Dynavox. All Rights Reserved  
Worldwide. Used with permission. Boardmaker® is a trademark of Tobii Dynavox

*This unit contains over 150 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.*

# Effects of human population

## 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

### 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/>
2. *Make your own copies of the activities:* Every day I review the activity we did yesterday. For that reason:
  - a. I often complete the activity myself and often laminated it for easy review that I could use year after year.
  - b. My copies were also helpful as either a model for students who needed more support or as a way for more advanced students to self-check their

The lesson plans contain:  
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>• Urbanization experiment</li></ul>	8	<ul style="list-style-type: none"><li>• Book</li><li>• Vocabulary cut and paste</li><li>• Sudoku puzzle</li></ul>
3	<ul style="list-style-type: none"><li>• Book</li><li>• Vocab cards activity</li><li>• Cause and effect activity</li></ul>	9	<ul style="list-style-type: none"><li>• Book</li><li>• Vocabulary cut and paste</li><li>• Word search</li></ul>
4	<ul style="list-style-type: none"><li>• Book</li><li>• Vocab cards activity</li><li>• Cause and effect activity</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>• Match solution to problems</li></ul>	11	<ul style="list-style-type: none"><li>• Assessment</li></ul>
6	<ul style="list-style-type: none"><li>• Book</li><li>• Vocab cards activity</li><li>• Reducing my ecological footprint</li></ul>		

*The lesson plans contain:*

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



## Day 2

Activity	Notes	Materials
Read or listen to a recording of the book (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 I Spy Game (10 minutes)	<ul style="list-style-type: none"><li>• I play this game, or variations of it the first few days<ul style="list-style-type: none"><li>◦ Determine how many cards your students can handle in front of them. This can vary, some students may be able to have all the cards, so may only be able to handle a field of 3-5</li></ul></li><li>• Since this is the first time playing this game, I make it easy. Hold up a card, and have students find the matching one and hold it up</li><li>• Discuss relevant points on the card<ul style="list-style-type: none"><li>◦ You can also play this game in this manner having them find the symbol on their vocabulary board</li></ul></li></ul>	<ul style="list-style-type: none"><li>• Vocabulary cards (student set and teacher set)</li><li>• Vocabulary board</li></ul>
Circle map review (5 minutes)	<ul style="list-style-type: none"><li>• Review the circle map completed yesterday</li></ul>	<ul style="list-style-type: none"><li>• Circle map completed yesterday</li></ul>
Urbanization experiment (10 minutes)	<ul style="list-style-type: none"><li>• Students will complete the experiment (see directions included in unit)</li><li>• Make connections to the book as necessary</li></ul>	<ul style="list-style-type: none"><li>• Construction paper</li><li>• Grids</li><li>• Colored tiles</li></ul>
Sharing (10 minutes)	<ul style="list-style-type: none"><li>• Each student shares their impressions from the experiment with the group using the communication method of their choice</li></ul>	<ul style="list-style-type: none"><li>• Completed grids</li><li>• Communication devices</li></ul>

The lesson plans contain:

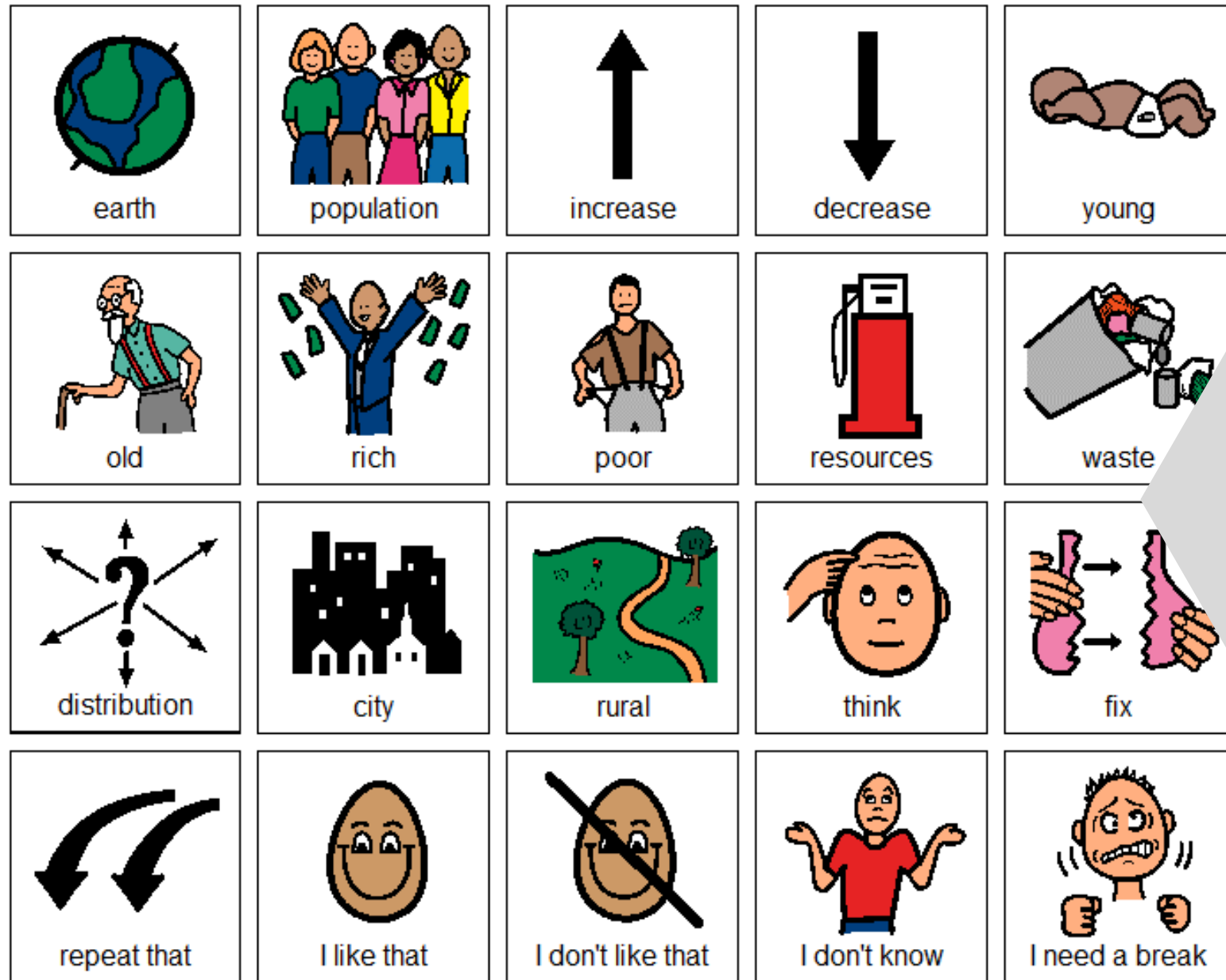
Detailed instructions on how that day's lesson should run



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!!





In general, the number of people, or the **population** impacts the earth in two ways. First, the population affects how many resources are **consumed** or used.



There is a book with this unit using simple text and photos. It is 41 pages and is an overview of the effects of the human population on the earth.

Next, we will consider the population **composition**. This is the overall age of the population. How many old and young people are present.

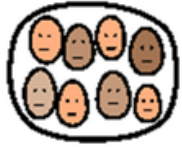


Both come in pdf versions as well as a voice-recorded powerpoints (so you don't have to print it out.)



### carrying capacity

Maximum population the earth can sustain forever.



### population

All of the people that live in a certain area.



### consumed

Used up.



### resources

Physical material that humans need and value such as land, air, and water.



### distribution

Where people are located.



### developing country

Poor country that is seeking to become more advanced economically and socially. 80% of the world.



### composition

The number of people in different age groups within the population.



### urbanized

Made more like a city.



There are 12 vocabulary cards that come in color and black and white.

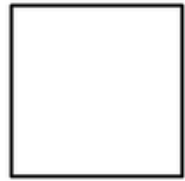
Included are suggestions for group activities to do with these each day.





### carrying capacity

Maximum population the earth can sustain forever.



### population

All of the people that live in a certain area.



### consumed

Used up.

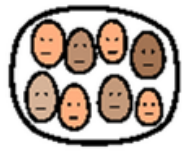
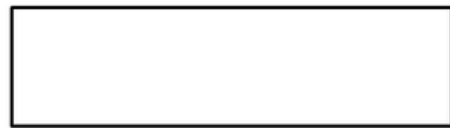


### resources

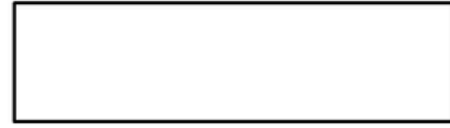
Physical material that humans need and value such as land, air, and water.



### carrying capacity



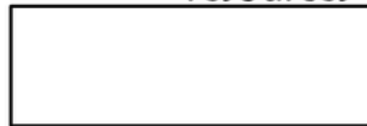
### population



### consumed



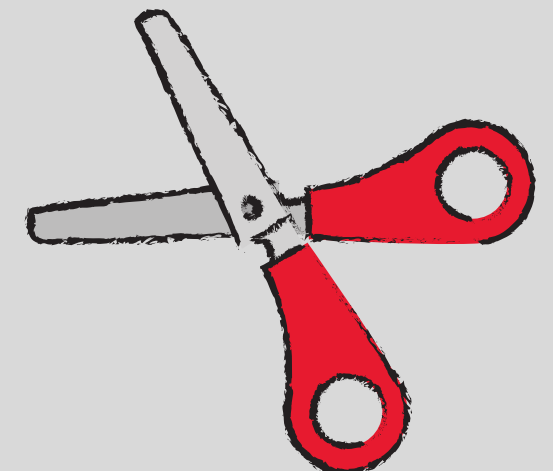
### resources



Cut apart and match definition with pictures.

Physical material that humans need and value.	The amount of land and resources required to support a population.
The number of people in different age groups within the population.	Maximum population the earth can sustain forever.
All the people that live in a certain area.	Uses less energy and makes less waste.

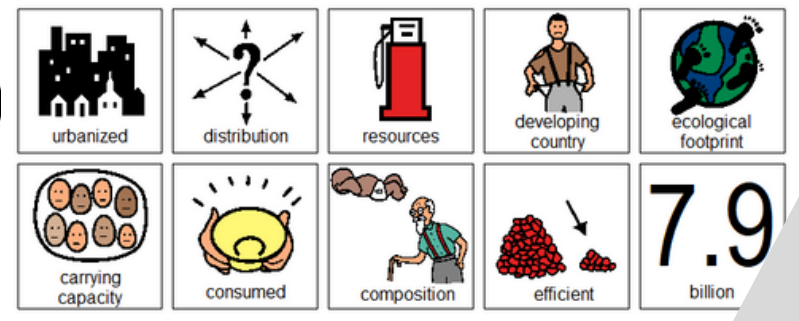
On days 8&9 there is an activity where students will match either the picture to the definition or the definition to the picture (harder).



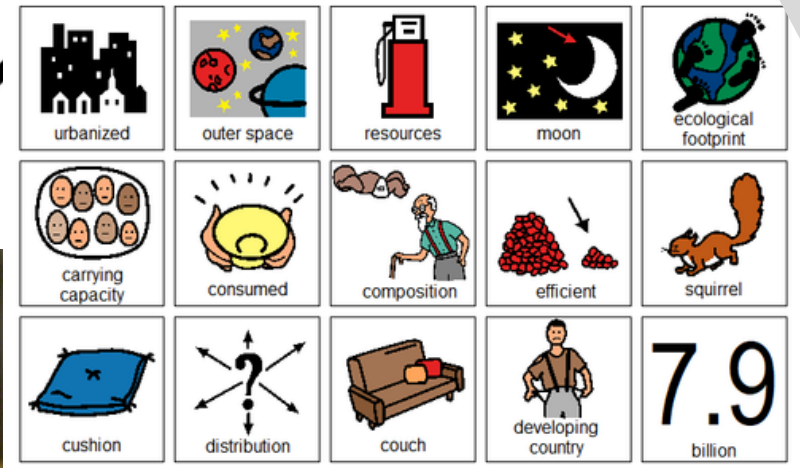


Errorless version

Place the pictures in the circle map on previous page about the effect of the human population on the planet.



Place the pictures in the circle map on previous page **ONLY IF** you think it relates to the effect of the human population on the planet.



There is a circle map on the effects of the human population.

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



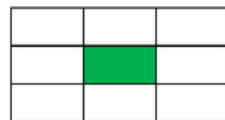
## ***Urbanization Experiment***

### **Materials:**

- 3 large pieces of construction paper with a 1 inch grid drawn on it
- 1 inch colored tiles separated into 3 baggies labeled city, suburb, rural or country
  - City: 5 green tiles (plants), 150 other colored tiles (people)
  - Suburb: 10 green tiles, 100 colored tiles
  - Rural: 20 green tiles, 30 colored tiles

### **Rules:**

- Students will attempt to place all tiles on gridded paper
- For each green tile, there must be an empty space all around it, reflecting the amount of room plants need to grow.



- They should place all the colored tiles, but may not be able to fit all the green tiles.

### **Observations:**

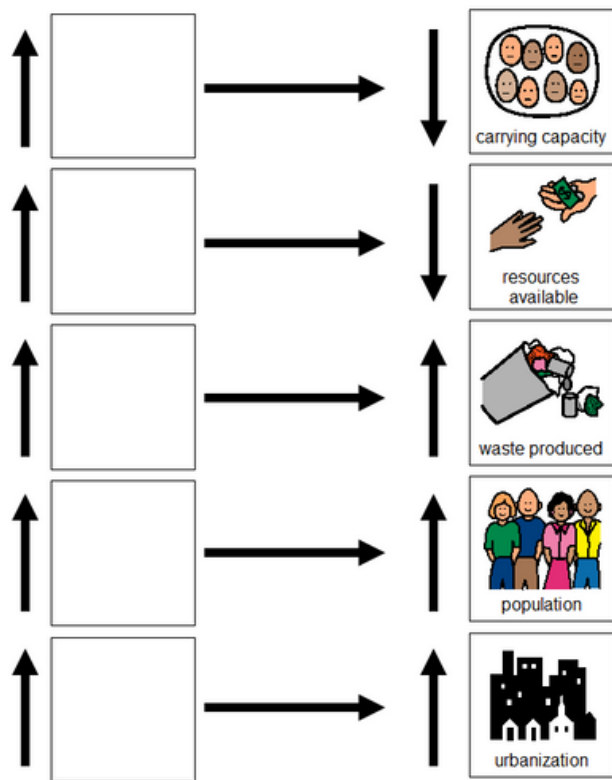
- Once all three papers are filled, put side by side to talk about what they notice about the number of plants versus number of people.

*There is a group activity where students will manipulate materials to better understand the effects of urbanization.*



3

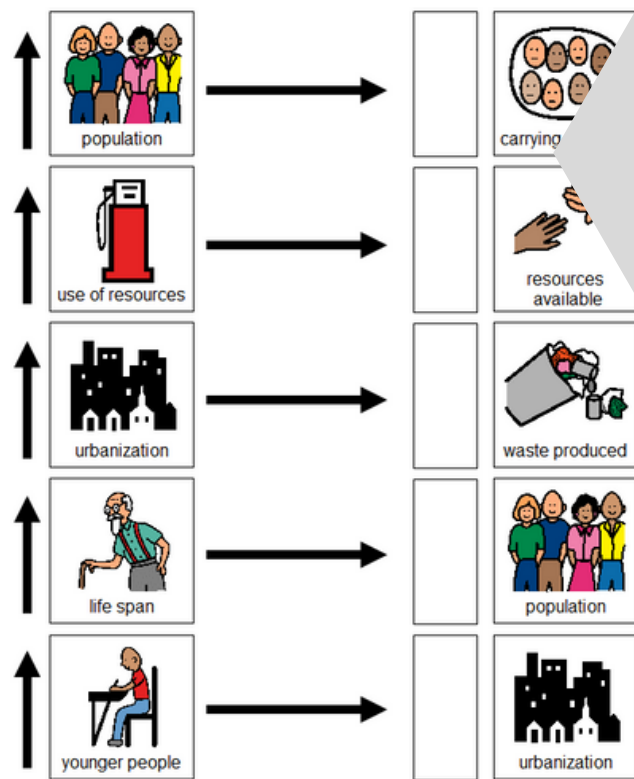
What are the causes of the following effects on the earth and environment.



Christa Joy, Special Needs for Special Kids  
The Picture Communication Symbols ©1981-2019 by Tobii Dynavox. All Rights Reserved  
Worldwide. Used with permission. Boardmaker® is a trademark of Tobii Dynavox

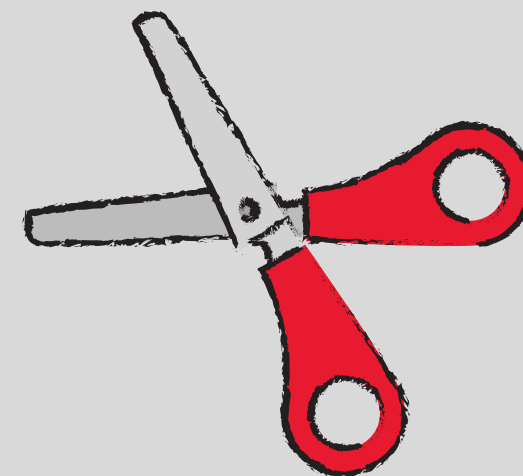
2

What are the effects on the earth and environment for the following. Fill in the correct arrows.











Christa Joy, Special Needs for Special Kids  
The Picture Communication Symbols ©1981-2019 by Tobii Dynavox. All Rights Reserved  
Worldwide. Used with permission. Boardmaker® is a trademark of Tobii Dynavox

There are several activities for students to understand the causes and effects of the increasing population.













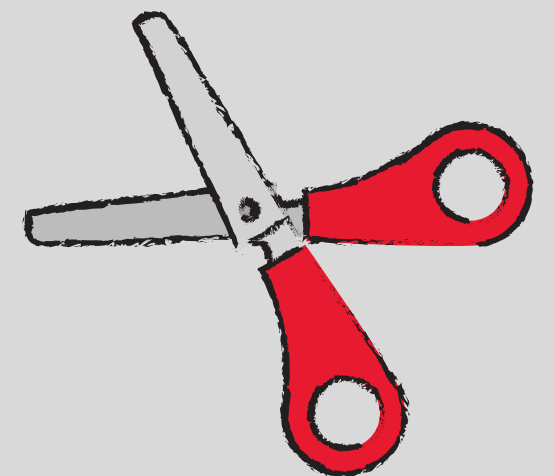
Find the best solution to each of the following problems caused by human population.

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

Match the following solutions to the problems on the previous page. There may be more than one correct answer.

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

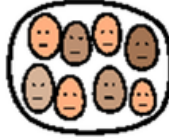
There is an activity where students match the best solution to the problems caused by the increasing population.





# What people need to know

We all need to do  to protect our earth.

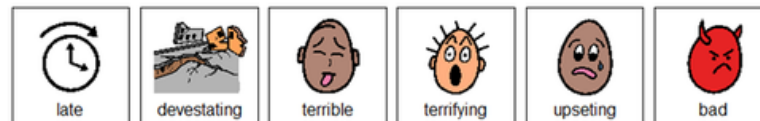
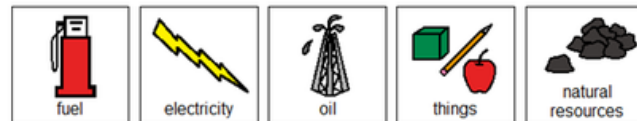
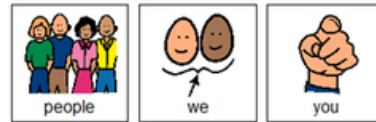
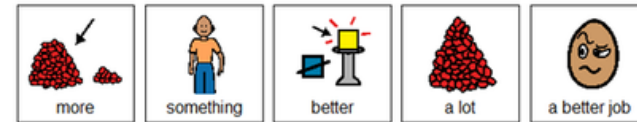
are a big part of the problem. 

One thing we can do is use less .

We can live a more  life.

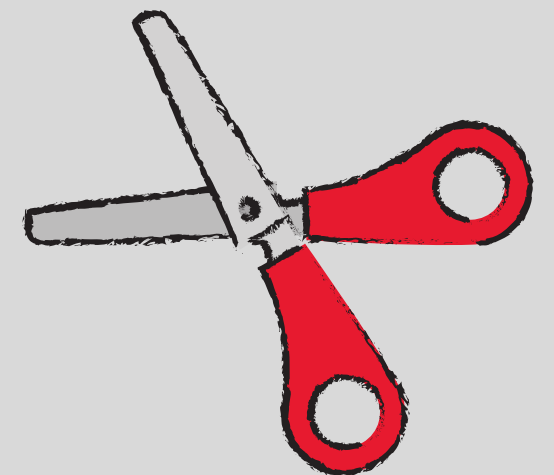
If we don't do something soon, it could be .

Christa Joy, Special Needs for Special Kids The Picture Communication Symbols ©1981-2019 by Tobii Dynavox. All Rights Reserved Worldwide. Used with permission. Boardmaker® is a trademark of Tobii Dynavox



Christa Joy, Special Needs for Special Kids The Picture Communication Symbols ©1981-2019 by Tobii Dynavox. All Rights Reserved Worldwide. Used with permission. Boardmaker® is a trademark of Tobii Dynavox

There is a writing prompt about what people need to know about the increasing human population.

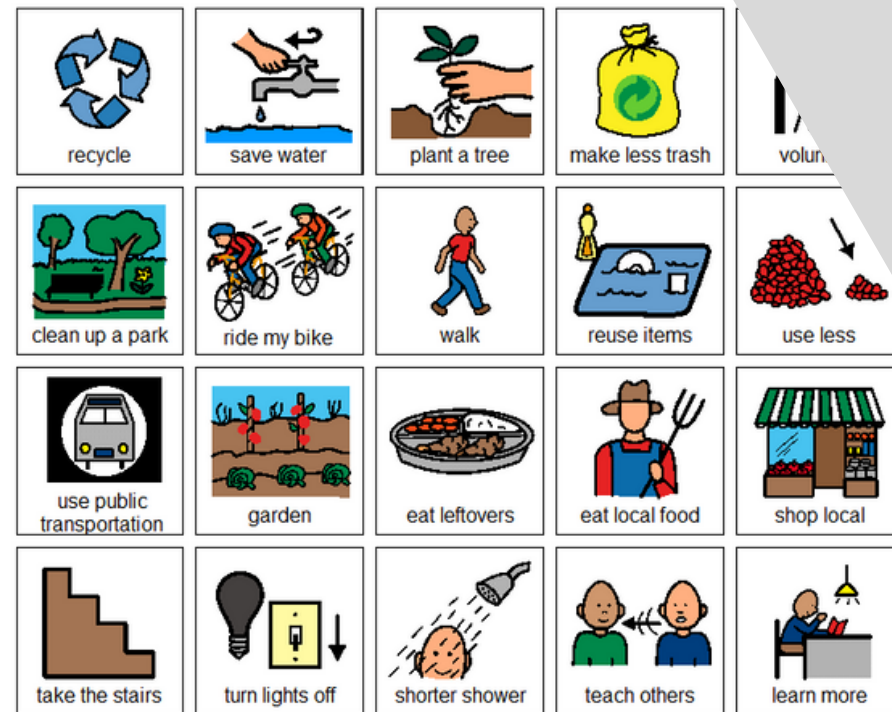




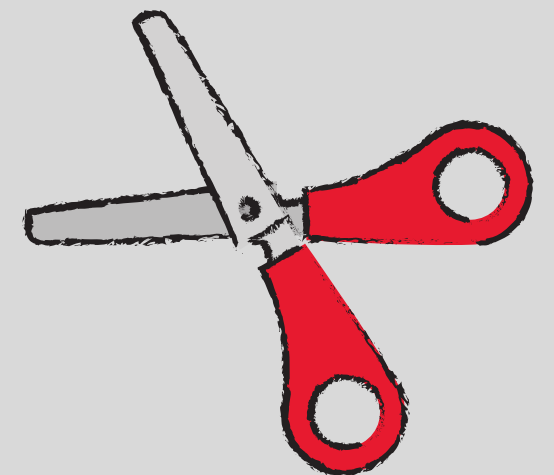
# How I can reduce my ecological footprint



You can choose from these pictures or draw your own to add to the previous page.



Students will create a collage about how they can reduce their own ecological footprint.





# Effect of human population

carrying capacity	urbanized	population			composition
composition				population	
ecological footprint	population	carrying capacity		urbanized	
	composition	urbanized	ecological footprint	carrying capacity	population
		distribution	population		
	carrying capacity	composition	urbanized		

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

carrying capacity	population	distribution	distribution	distribution
distribution	distribution	composition	urbanized	urbanized
ecological footprint	ecological footprint	ecological footprint		

# Effect of human population

	ecological footprint		
composition	distribution	carrying capacity	ecological footprint
distribution			composition
		distribution	

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.





## Effect of the human population

FKUZIEMXBGHMKVZIQYCT  
QFRKPFBCIBWJWJJVUH7P  
XNBPOWUBAWYVBUPBKMZL  
LAEUPSQQALTERNATIVEC  
LAFOUDATRQTSVTPISLVR  
LZFHILTCAFGQQNIMBGJCO  
ESIWARQPLGTJUOEKPD MH  
JRCATNEYHSQINUVRQAFI  
YTIGIEEENQXFOOTPRINT  
PXEWORESSOURCESSIUKMA  
LUNRNJKNCOMPOSITIONE  
DRTEVNSCFXPVMGBFPVZU  
FBDNIGQGKSVRFNLF SVA  
EALLEGRIICLDIQCONSUMEU  
LNRWKLOPXDFDSLX EJOT  
XIUANJUWCPOVVNJFOFKC  
KZRBHCTZZOBKZETHRKB P  
PEALKSXFYONIGBFDAFDR  
IDLECARRYINGCAPACITY  
QHNUDISTRIBUTIONKJFZ

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

## Effect of the human population

FKUZIEMXBGHMKVZIQYCT  
QFRKPFBCIBWJWJJVUH7P  
XNBPOWUBAWYVBUPBKMZL  
LAEUPSQQALTERNATIVEC  
LAFOUDATRQTSVTPISLVR  
LZFHILTCAFGQQNIMBGJCO  
ESIWARQPLGTJUOEKPD MH  
JRCATNEYHSQINUVRQAFI  
YTIGIEEENQXFOOTPRINT  
PXEWORESSOURCESSIUKMA  
LUNRNJKNCOMPOSITIONE  
DRTEVNSCFXPVMGBFPVZU  
FBDNIGQGKSVRFNLF SVA  
EALLEGRIICLDIQCONSUMEU  
LNRWKLOPXDFDSLX EJOT  
XIUANJUWCPOVVNJFOFKC  
KZRBHCTZZOBKZETHRKB P  
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 circle words on the answer key.



## Human population

1. The number of people is constantly .
2. The carrying capacity is how many  the earth can keep alive.
3. People  way too many resources.
4. People produce way too much .
5. We need to look at  people live.



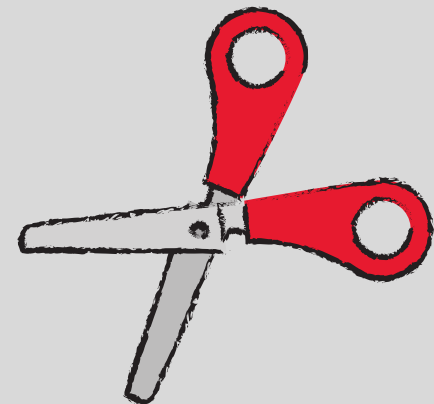
## Human Population

6. Developing countries have the  birth rate of anywhere.
7. People are living about 20 years .
8. Younger people tend to live in more .
9. Scientists are looking at how to use more  energy, save our natural resources.
10. It would help if people lived a more  life.



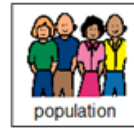
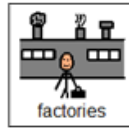
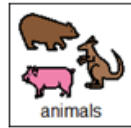
Close worksheets are a great informal assessment. There are two worksheets that cover the main points from the book.

Answer key included.

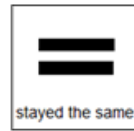




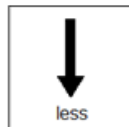
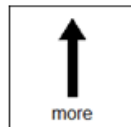
1. The ecological footprint is the amount of land need to support the:



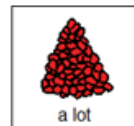
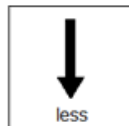
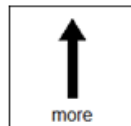
2. Over time, the population of the word has:



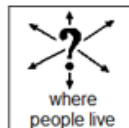
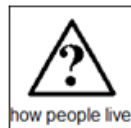
3. We need to consume \_\_\_\_\_ resources.



4. We need to create \_\_\_\_\_ waste.



5. The population distribution relates to:




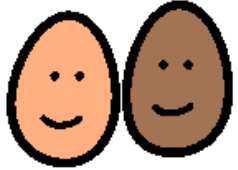

FINALLY the assessment!! There are 3 versions. This version has 10 questions with 3 picture choices for each question.

Answer key included.






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

Q 6

 <p>age of people</p>	 <p>color of people</p>	 <p>government</p>
--	--	---

Q 7

 <p>rich</p>	 <p>poor</p>	 <p>freezing</p>
---	---	---

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. The ecological footprint is the amount of land need to support the:
  - A. Animals
  - B. Factories
  - C. population
2. Over time, the population of the word has:
  - A. Increased
  - B. Decreased
  - C. Stayed the same
3. We need to consume \_\_\_\_\_ resources.
  - A. More
  - B. Less
  - C. A lot
4. We need to create \_\_\_\_\_ waste.
  - A. More
  - B. Less
  - C. A lot
5. The population distribution relates to:
  - A. How people live
  - B. Where people live
  - C. House they live in
6. The population composition refers to:
  - A. Age of people
  - B. Color of people
  - C. government

*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.*



Watch the movie on the effect of the human population on the Earth.

Currently, the earth supports a high percentage of younger (under 24 years old) and elderly (over 65 years old) than ever before.



*This unit also includes digital versions of the activities.*

*Students can watch a movie book version of the book rather than printing it out.*





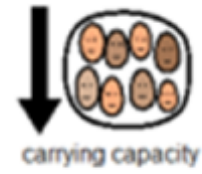
Place the picture in the circle map **ONLY IF** they relate to the effect of human population on the earth.

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

Picture Communication Symbols. All Rights Reserved Worldwide. Used with permission. Boardmaker® is a trademark of Tobii Dynavox

Each activity is set up so students can click and drag answers. No typing is required.

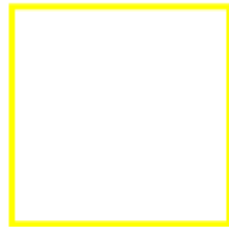




carrying capacity



natural resources



waste & pollution



birth rate



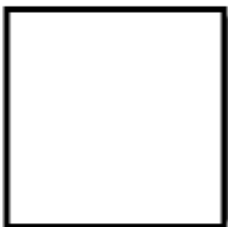
urbanization



not enough food



want more things



unaware of problem



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



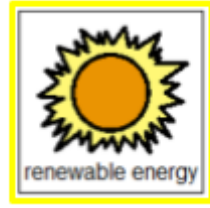
simple life



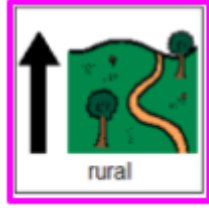
grow own food



less people



renewable energy



rural



better health care



cleaner energy



education

Christa Joy, Special Needs for Special Kids  
The Picture Communication Symbols ©1981-2019 by Tobii Dynavox. All Rights Reserved  
Worldwide. Used with permission. Boardmaker® is a trademark of Tobii Dynavox

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:***

- ***11 days of lesson plans***
- ***Effects of Human Population activities in color***
- ***Effects of Human Population activities in black and white***
- ***Voice-recorded PowerPoint show***
- ***Effects of Human Population book (PowerPoint) to use with activities***
- ***Links and directions to digital activities***