

Special Ed

85

UNITS

HIGH SCHOOL SCIENCE CURRICULUM

JOY
2
TEACH

INCLUDES GOOGLE SLIDES



For students who:

- are emerging or non-readers
- take alternate assessments
- are in special education
- short-attention span
- lack pre-requisite skills
- benefit from the use of pictures for support
- middle/high school

Why you need this bundle:

- If you teach multiple grade levels, you have all you need in one place.
- Having the same layout for each unit reduces students' anxiety and allows them to focus on the content.
- Aligned with extended learning standards.
- Saves you money
- Saves you time.

This bundle includes 84 different units that are often taught in middle and high school.

Biology 1

1. Cell Transport includes Diffusion
Osmosis Active Transport
2. Cells and Cell Processes
3. Evolution Unit and Cladograms
4. Genetics and Heredity
5. Levels of Organization of Cells
6. Mitosis and Meiosis Cell Division
7. Photosynthesis

Biology 2

1. Chloroplasts and Photosynthesis
2. Mitochondria of the Cell Organelle
3. Nucleus of the Cell Organelle
4. Punnett Squares
5. Ribosomes and Translation Cell
Organelle

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Chemistry

1. 12 Science Experiments
2. Scientific Method
3. Famous Scientists
4. Atoms Chemistry
5. Periodic Table
6. Mixtures and Solutions
7. Physical and Chemical Changes

Physics

1. Electricity and Circuits
2. Light Energy
3. Electromagnetic Spectrum
4. Motion Graphs
5. Potential and Kinetic Energy
6. Simple Machines
7. Sound Energy
8. Thermal Energy
9. Types of Forces: Magnetic Forces, Gravity, Push & Pull

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Anatomy 1

- 1.5 Senses
2. Cardiovascular System
3. Digestive System
4. Muscular System
5. Nervous System
6. Respiratory System
7. Skeletal System

Anatomy 2

1. Circulatory System
2. Endocrine System and Diabetes
3. Immune System
4. Integumentary System
5. Urinary and Reproductive Systems

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Health

1. Healthy Choices
2. Introduction to Health
3. Physical Health and First Aid
4. Social Health and Social Media Safety
5. Emotional Health and Self-Esteem

Biomes

1. Aquatic Ecosystems
2. Ecology and Food Chains
3. Terrestrial Biomes
4. Desert Biome
5. Forest Biome
6. Grasslands Biome
7. Tundra Biome

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Earth Science

1. Earth, Sun, Moon: Tides and Eclipses
2. Hurricanes
3. Severe Weather
4. Layers of the Atmosphere
5. Layers of the Earth
6. Seasons of the Year
7. Types of Clouds
8. Water Cycle

Environmental

1. Air Pollution Unit
2. Climate Change and Global Warming
3. Deforestation
4. Effects of Increasing Human Population
5. Endangered Species
6. Food Supply Chain
7. Pollution and Conservation
8. Renewable Energy
9. Sustainability
10. Waste Management
11. World Water Supply

This bundle includes 84 different units that are often taught in middle and high school.

Animal Science

1. Sharks
2. Animal Adaptations: Gorillas and Tigers
3. Camels
4. Kangaroo
5. Meerkat
6. Moose
7. Polar Bears
8. Prairie Dogs
9. Red Fox
10. Penguin
11. Sloths
12. Turkey Science
13. Wildebeest
14. Reindeer

All the units are structured similarly so students become familiar with the type of activities and can concentrate more on the content. Most units include:

- Detailed lesson plans
- Book
- Vocabulary
- Circle maps
- Sorting activities
- Sequencing/organizational charts
- Close worksheets
- Assessments (3 versions)

The activities are differentiated to allow more students to participate in the same activity.

- Saves you time
- Fosters inclusion



KEEP SCROLLING FOR ALL THE DETAILS



Table of Contents

Pages	Activity
4-5	Vocabulary board
6-10	Vocabulary cards
11-22	Vocabulary cut and paste
23-37	Bingo cards
38-41	Circle map
42-48	Collages
49-54	Sorting activities
55-57	Writing prompt
58-64	Sudoku puzzle
65-66	Word search
67-71	Cloze worksheets
72-82	Assessment
83-84	Terms of Use

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

Every unit has a table of contents. There is a separate file with directions and links to the digital activities.

Lesson plan

Day 6

Activity	Notes	Materials
Read or listen to a recording of the book (10 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 speed game (15 minutes) OR BINGO	<ul style="list-style-type: none">• Place the finished vocabulary cards in the middle of the table• Either hold up or describe a card and the student who can find it first wins and keeps the card<ul style="list-style-type: none">◦ The student with the most cards at the end is the winner	<ul style="list-style-type: none">• Vocabulary cards• Vocabulary board
Writing prompt (10 minutes)	<ul style="list-style-type: none">• Complete the writing prompt about taking a walk in the forest• Students can do more than one if desired• These are errorless• Can make more than one story	<ul style="list-style-type: none">• Writing prompt• Scissors• Glue
Sharing (10 minutes)	<ul style="list-style-type: none">• Each student shares their story with the group using the communication method of their choice	<ul style="list-style-type: none">• Completed story• Communication devices

Every unit has a detailed lesson plan with:

- suggestions
- overview
- daily step-by-step guide

Book

Forests are the primary source of the oxygen we breathe. While making that oxygen, forests also recycle much of the excess carbon dioxide that has built up on our planet.



The other deforestation technique is called **logging**. This is when the trees are cut down by the thousands and hauled away to use for lumber. It also destroys the habitat for the plants and animals that live there.



Every unit has a book with simple text and engaging photos. It comes in:

- PowerPoint
- recorded PPT show
- mp4 (movie) file

Vocabulary



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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.

fossil fuels

A natural resource on earth like natural gas, coal, oil that is limited in supply and releases carbon dioxide when burned.

carbon dioxide

Released when fossil fuels are burned and trap more heat on earth.

Greenhouse effect

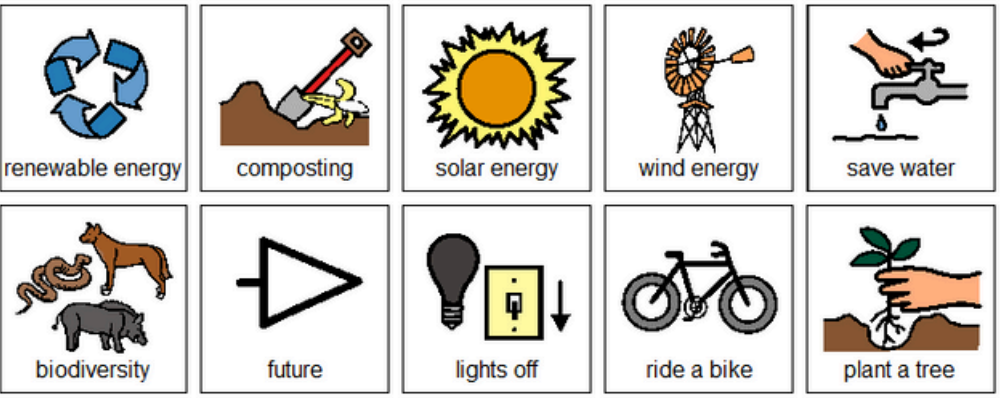
gases in the earth's atmosphere that trap heat from the sun.

urbanization

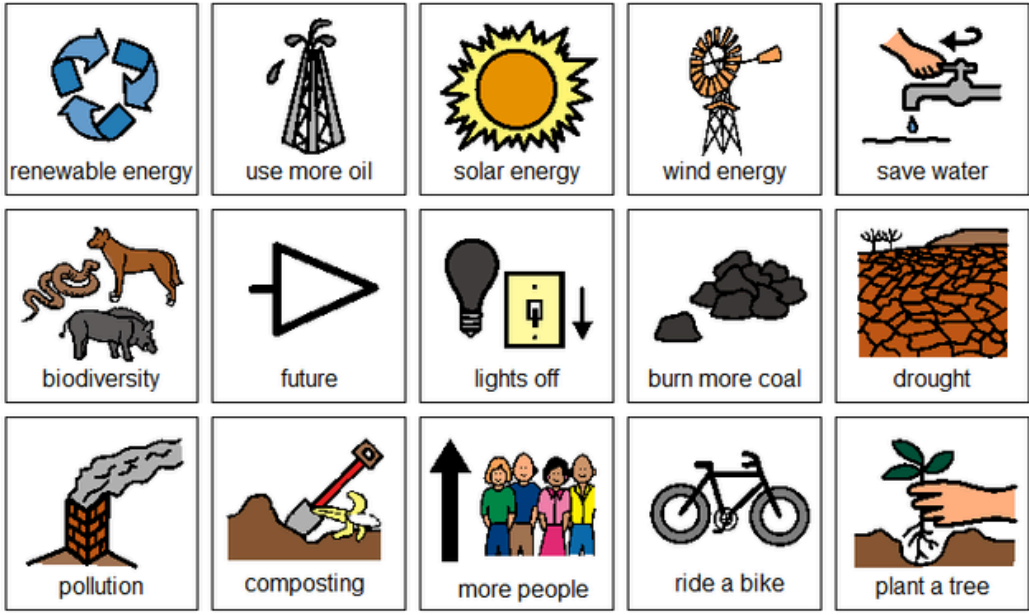
Changing more of the country into a city where fewer plants can grow.

circle maps

Place the pictures in the circle map on previous page about sustainability.



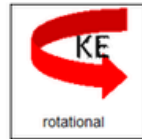
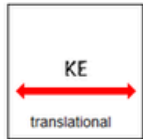
Place the pictures in the circle map on previous page **ONLY IF** you think it relates to sustainability.



Each unit comes with a circle map to visually review the main facts from the book. These come with an errorless option and an option with wrong answers mixed in.

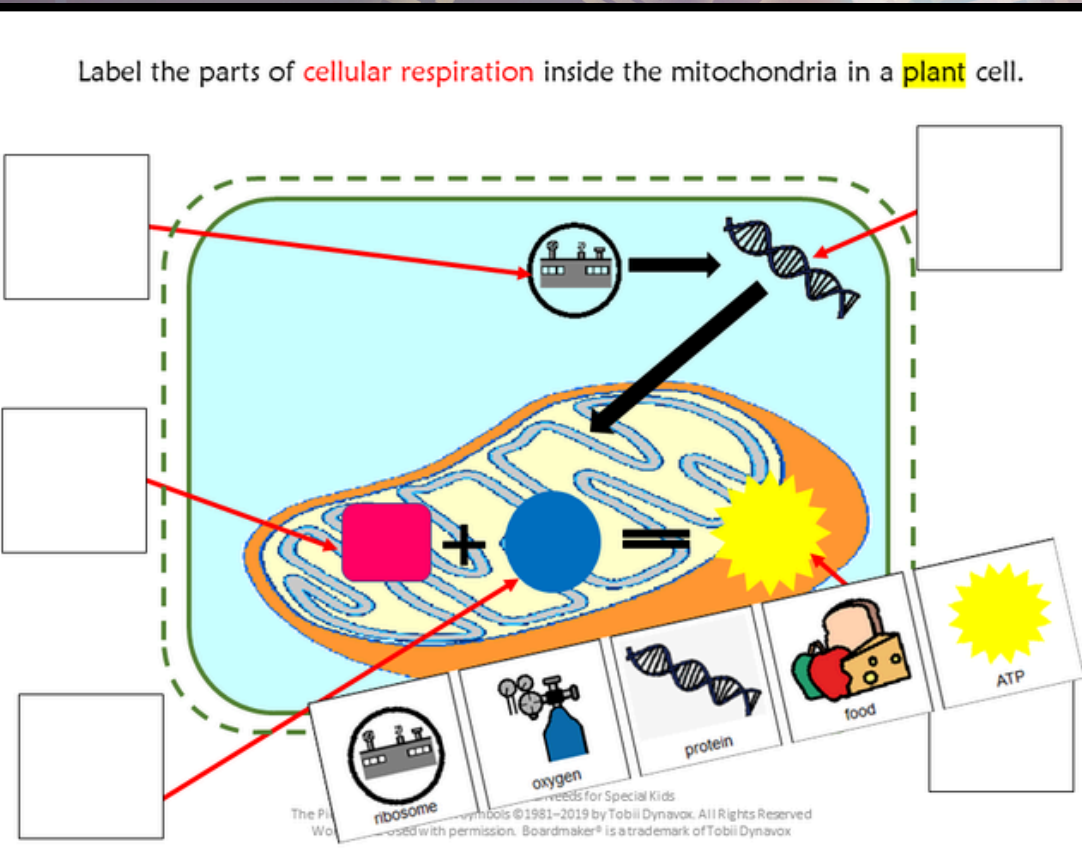


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 earth spins	 throw	 salad spinner	 rocket	 go around
 running	 hopping	 tetherball	 axis	 jump rope
 spin	 wiggle	 flying	 swimming	 turn

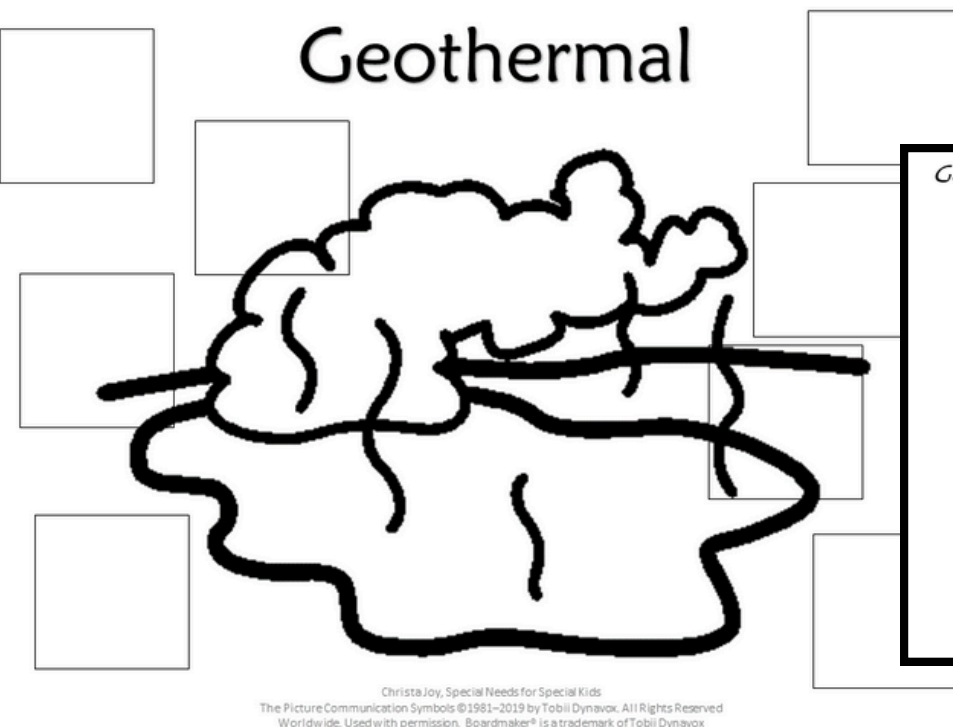
Label the parts of **cellular respiration** inside the mitochondria in a **plant** cell.



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There are matching, sorting, labeling, and sequencing activities. Suggestions for differentiation or a differentiated version is included.




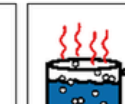




Geothermal



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Geothermal errorless version

Cut out symbols and place on the image depicting geothermal energy.

 earth's crust	 drill down	 heat	 steam
 renewable	 volcanic region	 reliable	 dangerous gases can be released

experiments





Many of the units have experiments. These are laid out in a very structured format to allow students to work with peers as independently as possible.

Physical or Chemical Change Experiment #2

Producing a Gas

People on my team: _____

Materials needed:

-  baking soda
-  vinegar
-  salt
-  milk

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Physical or Chemical Change Experiment #2

Producing a Gas

My hypothesis

I think the balloon on:

Bottle #1 will

Bottle # 2 will

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Physical or Chemical Change Experiment #2

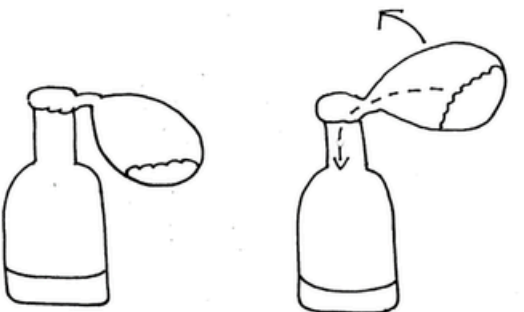
Producing a Gas

The Experiment:

Balloon #1

- Carefully place the balloon on the bottle without letting the contents spill in. (Teacher to do)
- Lift up the balloon and empty the contents into the bottle.
- Observe changes in the balloon.

Balloon #2 : Repeat same process



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Physical or Chemical Change Experiment #2

Producing a Gas

What I knew

When there is a chemical change gas released.

When there is a physical change then gas is released.

What I learned

Bottle #1 had a change.

Bottle #2 had a change.

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Wind

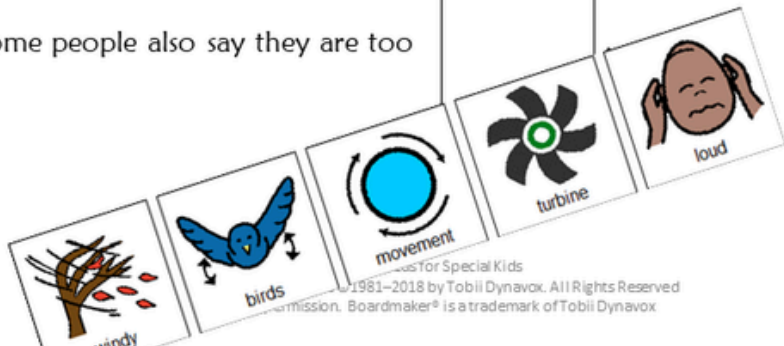
1. You can also make electricity by using the of the wind.

2. The wind spins a that creates electricity.

3. This type of energy works better in areas that are more .

4. The windmills can be dangerous for .

5. Some people also say they are too .



Review sheets

All units include fill-in-the-blank worksheets to review concepts covered in the book and unit.

Biomass

1. Feedstock is made up of and other waste material.

2. is used to change the waste into electricity.

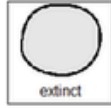
3. Biomass is a energy source.

4. Biomass our need for nonrenewable energy sources.

5. You need to make sure there is good when using bioenergy.



1. Animals that are endangered could become what?



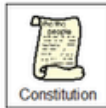
2. What is the cause of the extinction of most species today?



3. What are some of the causes of a species becoming endangered? (circle all)



4. What law did Congress pass to protect species from becoming extinct.



5. Are invasive species a good or bad thing?



Assessments

1. Animals that are endangered could become what?

- A. Food
- B. Extinct
- C. People

2. What is the cause of the extinction of most species today?

- A. People
- B. Weather
- C. Dogs

3. What are some of the causes of a species becoming endangered? (circle all)

- A. Deforestation
- B. Urbanization
- C. Invasive species
- D. Endangered Species Act
- E. pesticides
- F. over-hunting

4. What law did Congress pass to protect species from becoming extinct.

- A. Constitution
- B. Endangered Species Act
- C. Bill of Rights

5. Are invasive species a good or bad thing?

- A. Good
- B. Bad
- C. I don't know

6. What does global warming and deforestation hurt?

- A. City
- B. Habitats
- C. Mall

Finally, each unit has an assessment that is available in 3 versions. These are given 1:1 and read aloud to the student. It also includes a traditional multiple-choice version included.

- All of these units include digital versions of the activities. These simply require the student to click and drag the answers. There is no drawing or typing involved.
- There are 2 complete sets of slides. One set is differentiated using color.

Make great independent learning centers.

Cars and other forms of transportation are the largest producers of primary pollutants. Factories are not far behind.



Olivia App. Special Needs for Special RNH

Watch the movie on Air Pollution

The movie version of the book from the unit.

Use for more review.



Place the picture in the circle map **ONLY IF** they relate to air pollution.



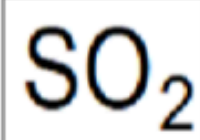
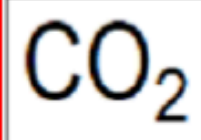





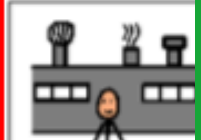




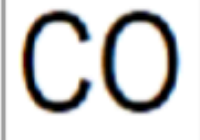


 Air quality index	 pollutants	 rain forest	 Secondary pollutants
 emissions	 ocean	 hard to breathe	 dangerous
 Clean Air Act	 smog	 Primary pollutants	 hummingbird
 coffee	 burning oil	 jail	

The digital activities are click and drag.

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Perfect for any learning level.

Each unit comes with a set of slides that are differentiated with color.

 primary pollutants	 secondary pollutants	Sort the following into those that are primary or secondary pollutants. If you are not sure, place it on the center line.			
		 sulfur dioxide	 carbon dioxide	 ozone	 volcanic ash
		 smog	 burning oil	 dust storm	 factories
		 burning coal	 energy	 acid rain	 acid sleet
		 carbon monoxide	 acid snow	 emissions	<small>Special Kids Tobii Dynavox. All Rights Reserved. a trademark of Tobii Dynavox</small>

Still have questions?

Reach out at specialneedsforspecialkids@gmail.com

I will answer your question personally and promptly.

