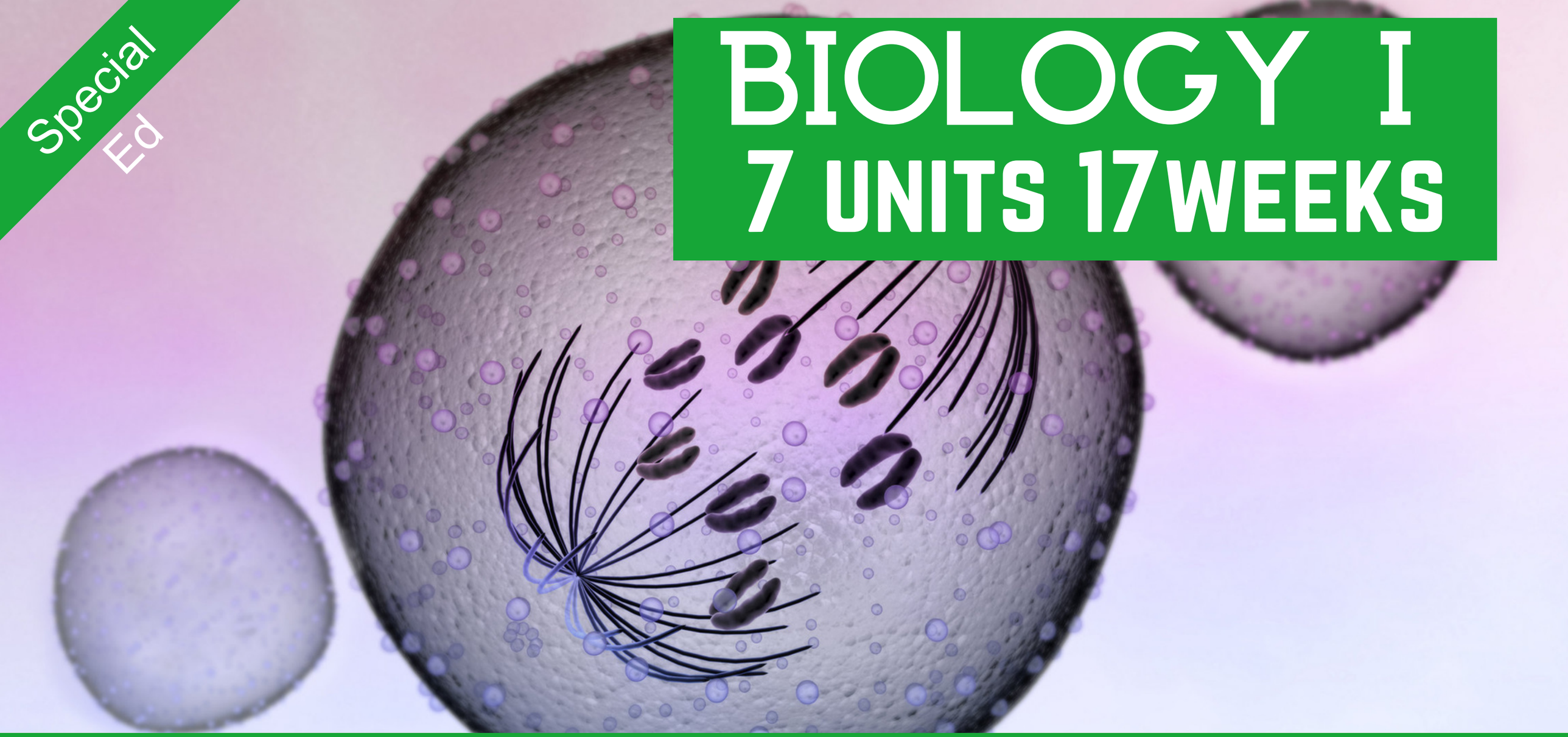

Special Ed
BIOLOGY I
7 UNITS 17 WEEKS
JOY 2 TEACH
INCLUDES GOOGLE SLIDES

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 7 different units:

1. Levels of Organization (3 weeks)
2. Cells and Cell Processes (3 weeks)
3. Cell Transport (2 weeks)
4. Mitosis and Meiosis (3 weeks)
5. Genes and Heredity (2 week)
6. Evolution (3 weeks)
7. Photosynthesis (1 week)

All units have printable AND digital versions

All units built using the extended learning standards

J2T

All the units contain similar activities so students become familiar with the format and can concentrate more on the content. Although there is some variation, each unit has:

- Detailed lesson plans
- A book/PowerPoint movie version
- Vocabulary cards
- Circle maps
- Sorting activities
- Labeling and sequencing activities
- Hands-on activities
- Vocabulary puzzles
- Close worksheets (fill in the blank)
- 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

J2T

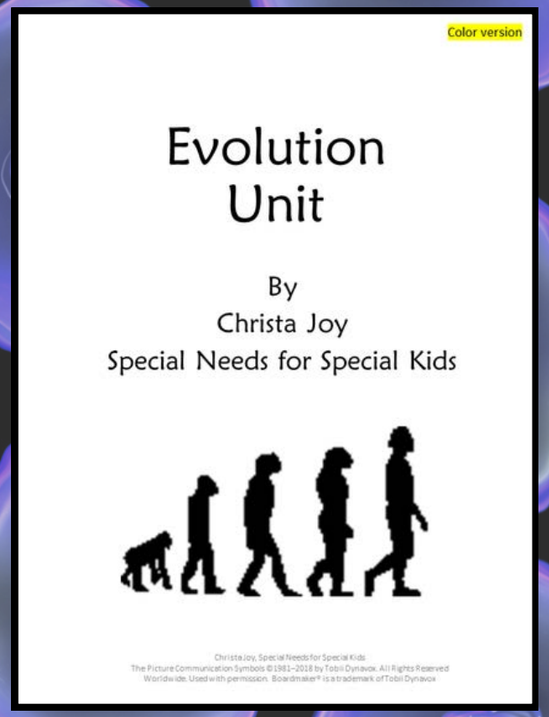


Table of Contents

Pages	Activity
4-5	Vocabulary board
6-11	Vocabulary cards
12-25	Vocabulary cut and paste
26-32	Circle maps
33-43	Sorting activities
44-47	Id adaptation
48-52	Sequencing activity
53-59	Writing Prompts
60-66	Vocabulary Sudoku
67-68	Vocabulary Word search
69-74	Cloze worksheets
75-85	Assessment
86-87	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 plans)**
- 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.

J2T

Day 2

Activity	Notes	Materials
Read or listen to a recording of the book (10 minutes)	• Read through the story, asking lots of questions • Continue to make connections between book and vocabulary board	• Book • Vocabulary board

Vocabulary cards I Spy Game (10 minutes)	• I play this game, or variations of it the first few days
	  ○ Determine how many cards your students can handle in front of them.
	• 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
	• Discuss relevant points on the card
	  ○ You can also play this game in this manner having them find the symbol on their vocabulary board
		• Vocabulary cards (student set and teacher set)
		• Vocabulary board

Circle map review (5 minutes)	• Review the circle map completed yesterday	• Circle map completed yesterday
Circle Map (10 minutes)	• Do the circle map about heredity • Choose the best version (errorless or not) depending on the learning level of your students • Students cut out symbols and place in circle map • Make connections to the book as necessary	• Circle map • Scissors • Glue
Sharing (10 minutes)	• Each student shares their finished worksheet with the group using the communication method of their choice	• Completed worksheet • Communication devices

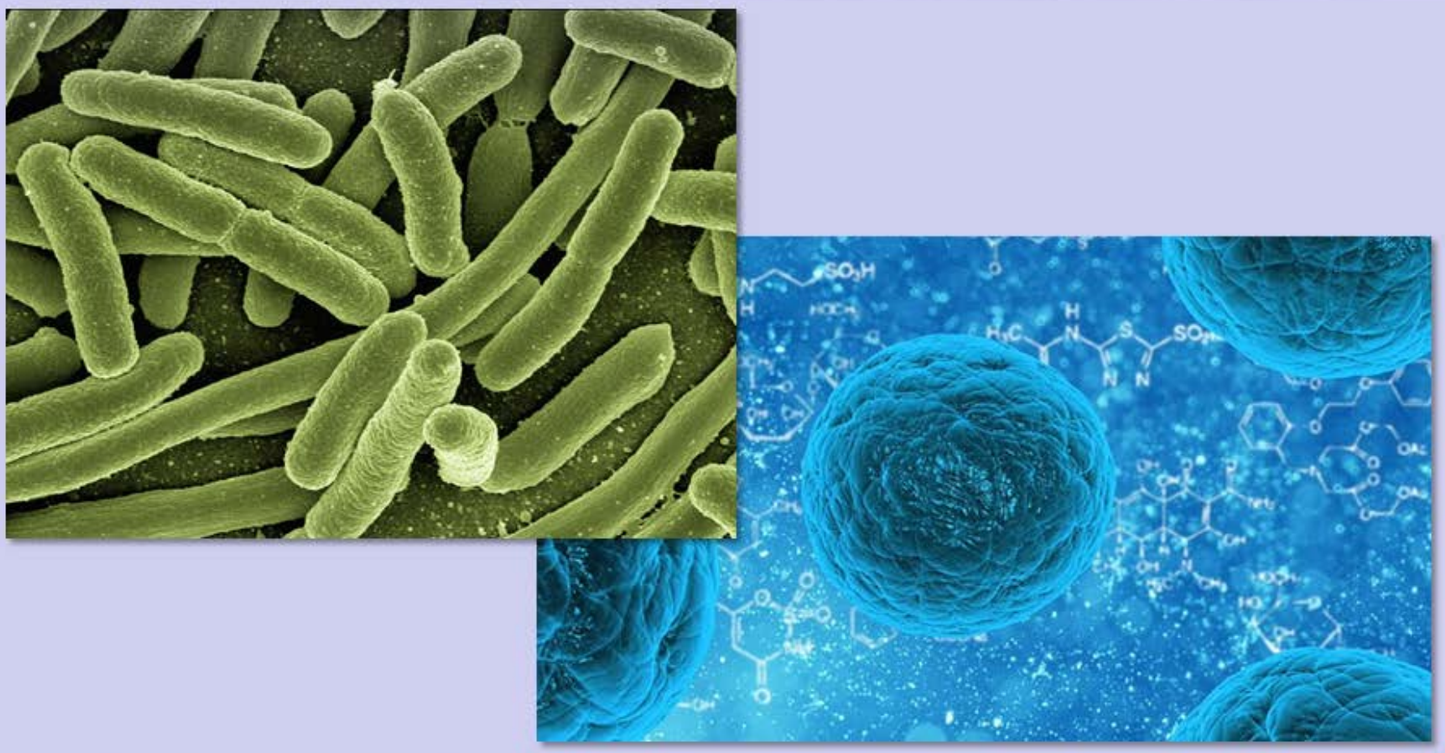
Lesson plan

Every unit has a detailed lesson plan with:

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

J2T

There are 2 main categories of cells: prokaryotic and eukaryotic.



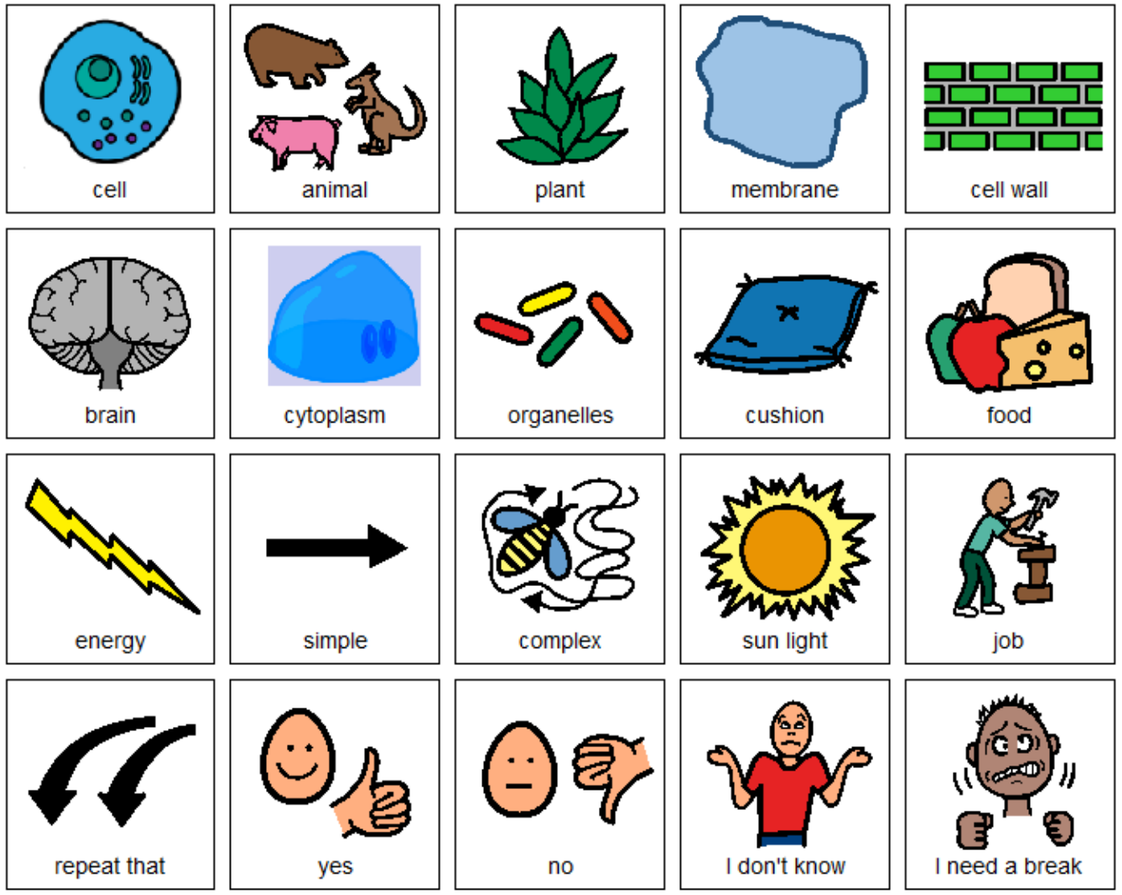
Christa Joy, Special Needs for Special Kids

Books

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

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

J2T



Every unit has a vocabulary board to use while working through the unit. Suggestions for use are included.

J2T

Vocabulary

Every unit has 15-20 vocabulary cards. There are suggestions for daily group activities to review these.

cell

Building block of all living things.

prokaryotic

Very simple cells with no nucleus. Bacteria is an example.

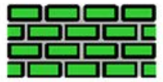
eukaryotic

More complex cells with a nucleus and organelles. Most plant and animal cells are examples.

cell membrane

Goes around the outside of all cells and regulates what comes in and goes out.

cel



plasm

organelle

nucleus

anaphase

Stage 3. Spindles from the centrioles pull the pairs of chromosomes apart to opposite sides of the cell.

telophase

Stage 4. A new nucleus forms around each set of chromosomes. Cell pinches in the middle.

chromatin

Genetic material in nucleus during interphase; loose coiled strands.

chromosome

Made up of DNA, they tell the cell what to do.

cell

Building block of all living things.

prokaryotic

Very simple cells with no nucleus. Bacteria is an example.

eukaryotic

More complex cells with a nucleus and organelles. Most plant and animal cells are examples.

cell membrane

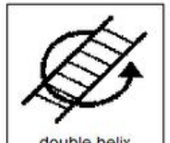
Goes around the outside of all cells and regulates what comes in and goes out.

J2T

circle maps

Errorless version

Cut apart pictures and place in circle map about genes.


double helix

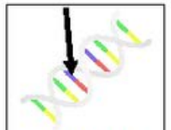

genome


DNA


Mendel


Watson & Crick


gene


nucleotides


chromosome


nucleus


alleles

Cut apart pictures and place in circle map ONLY IF they relate directly to genes.


double helix

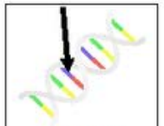

genome


DNA


rocket


Watson & Crick


bacon


nucleotides


paper


nucleus


alleles


gene


needle


chromosome

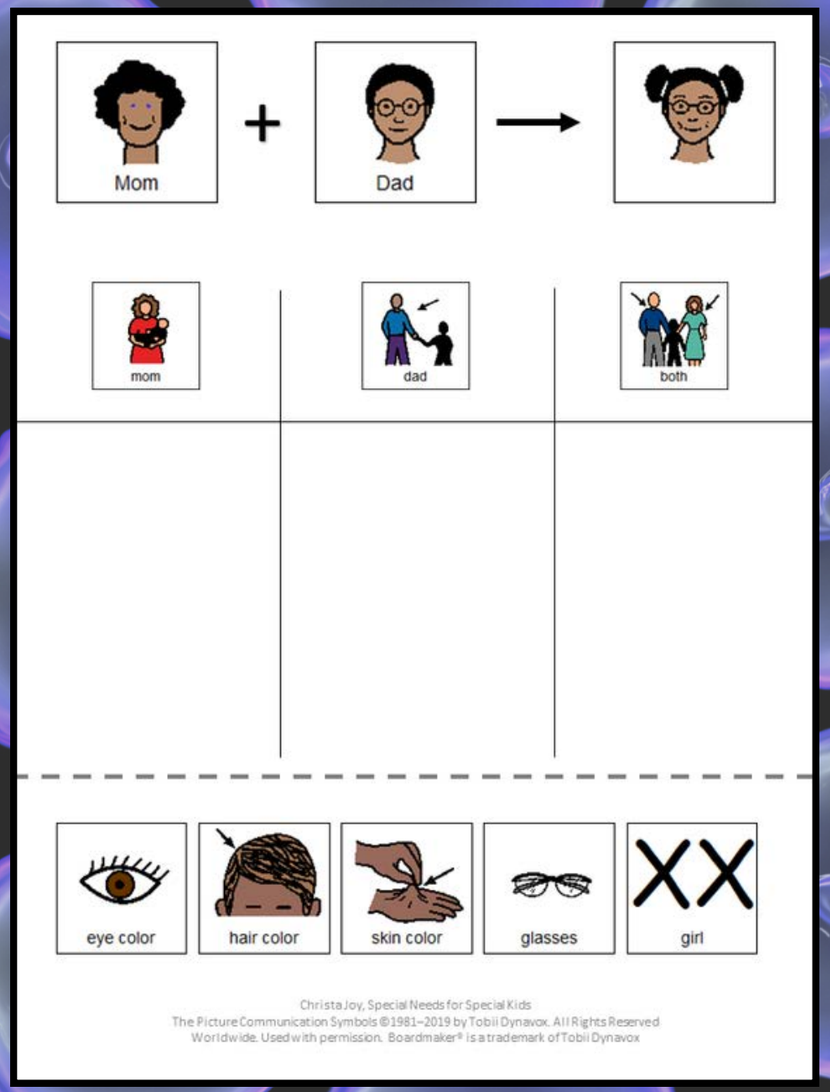

Mendel

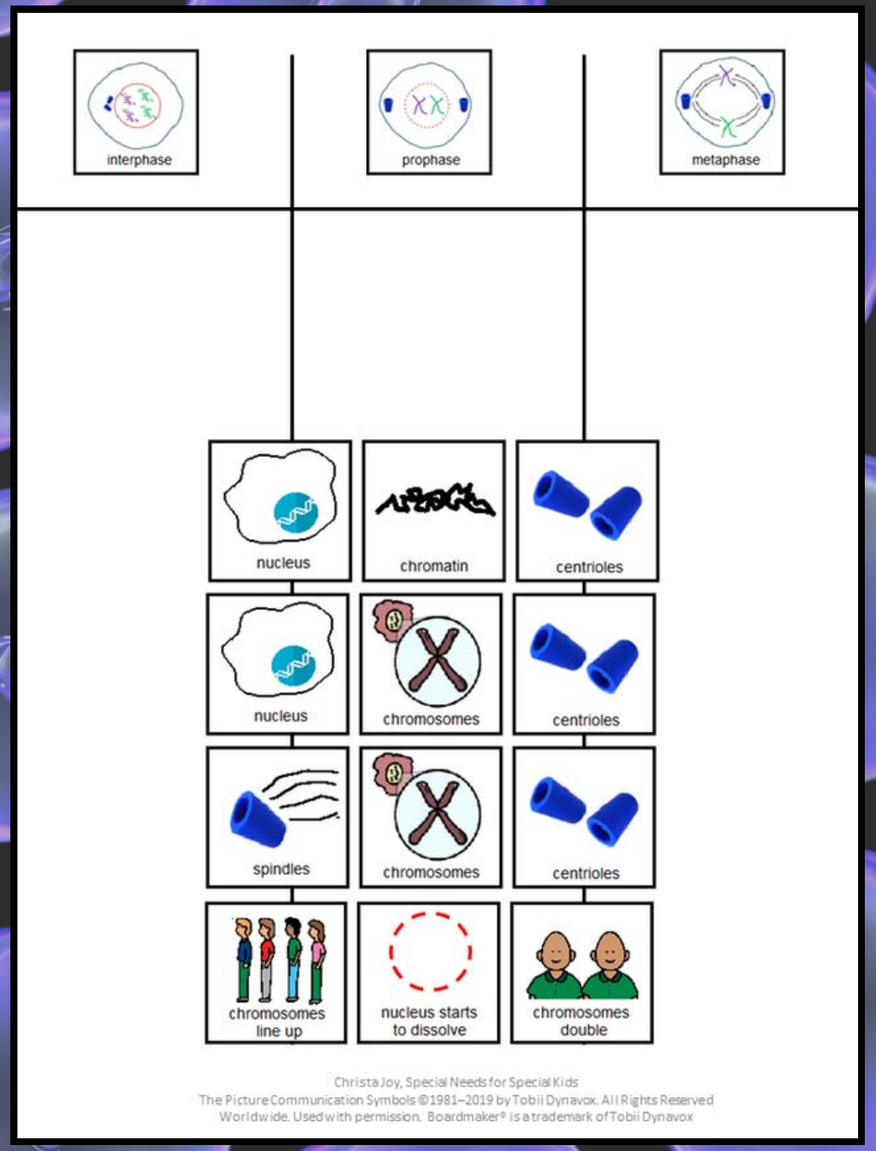

roll dice

Each unit comes with 1-2 circle maps to visually review the main facts from the book. These come with an errorless option and an option with wrong answers mixed in.

J2T

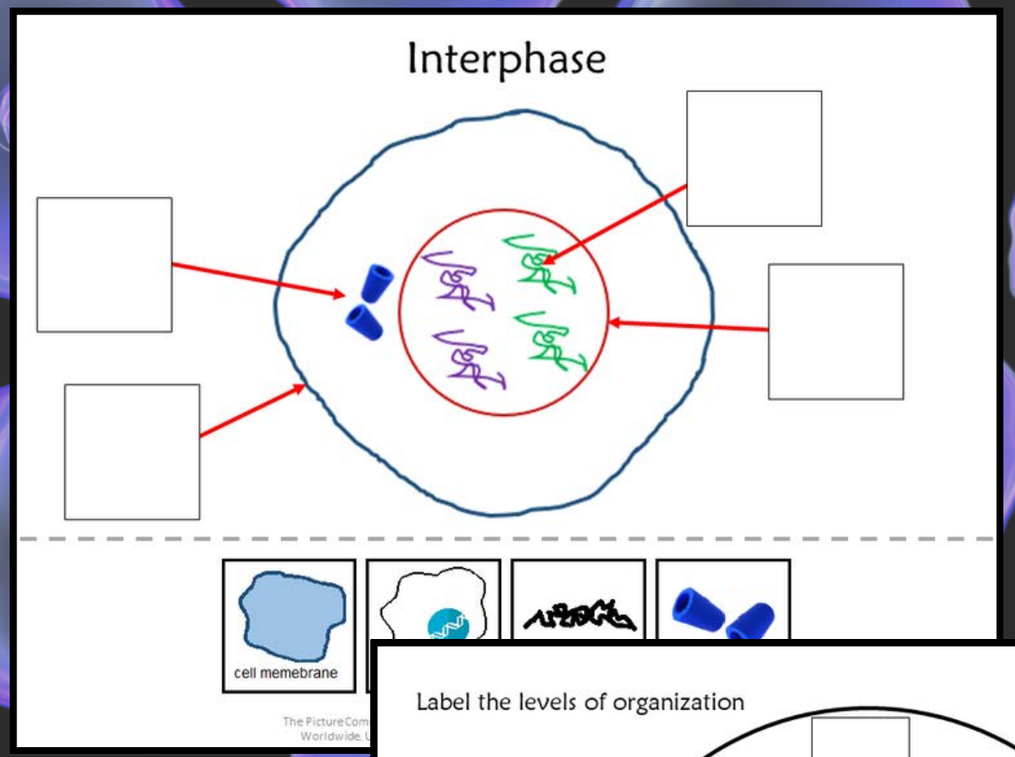
daily activities

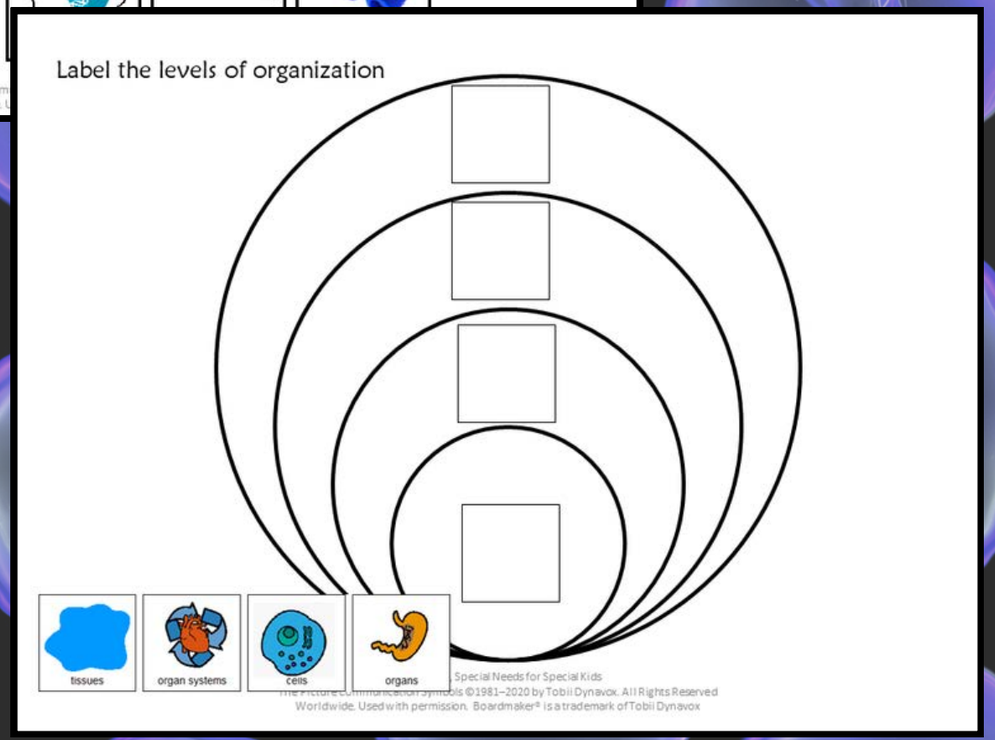


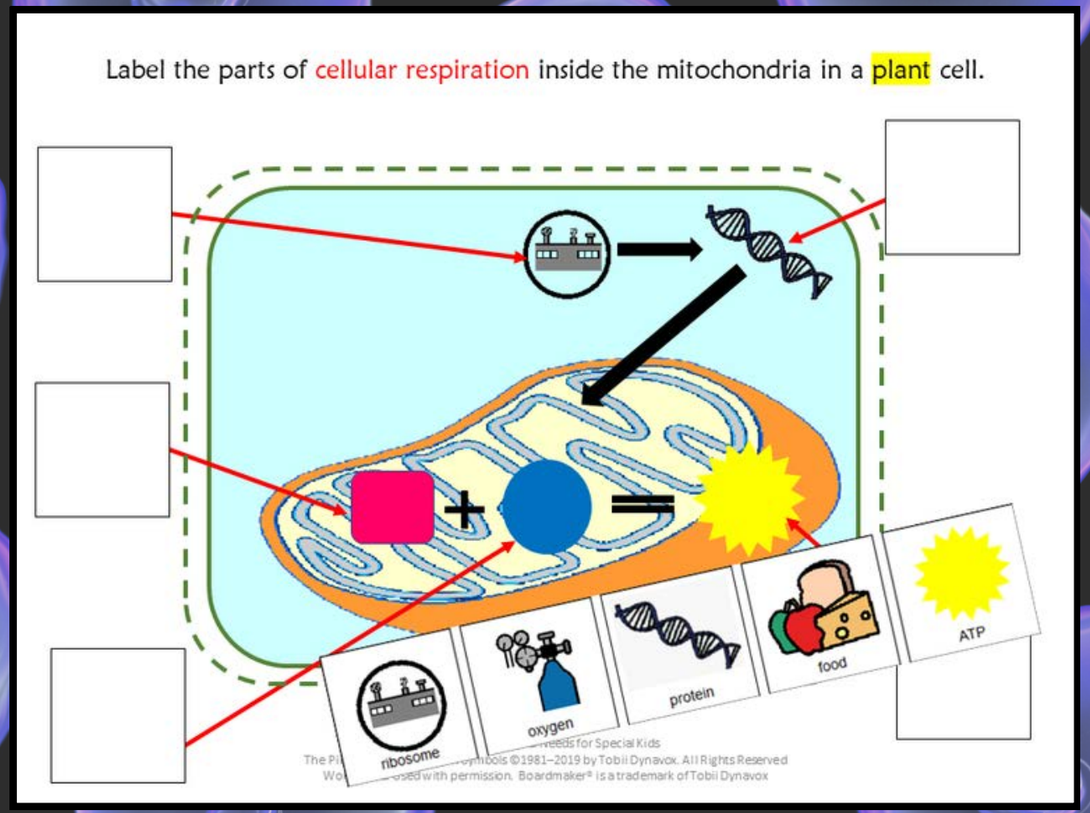


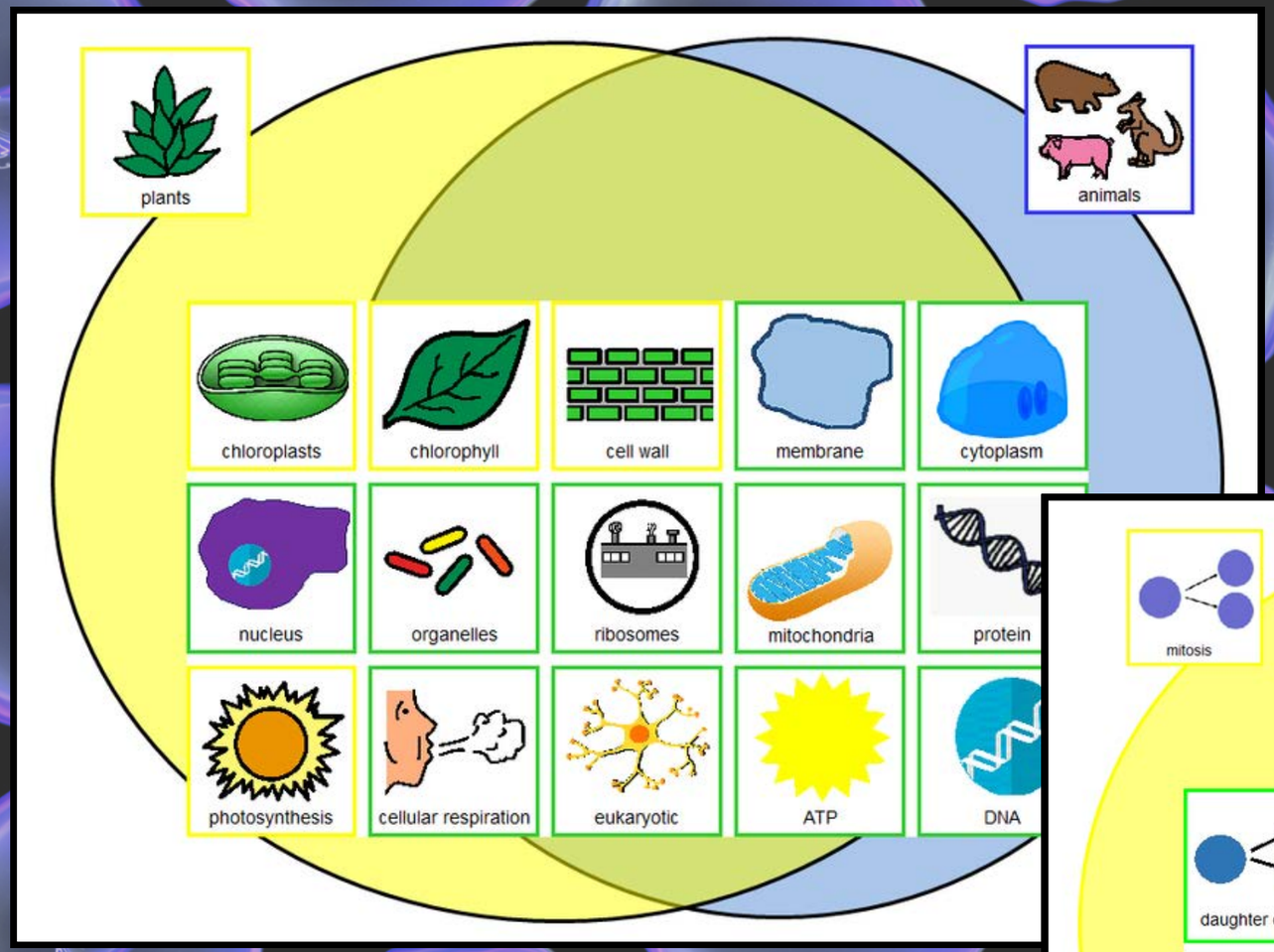
Most units have sorting activities. There are suggestions for how to differentiate these quickly included.

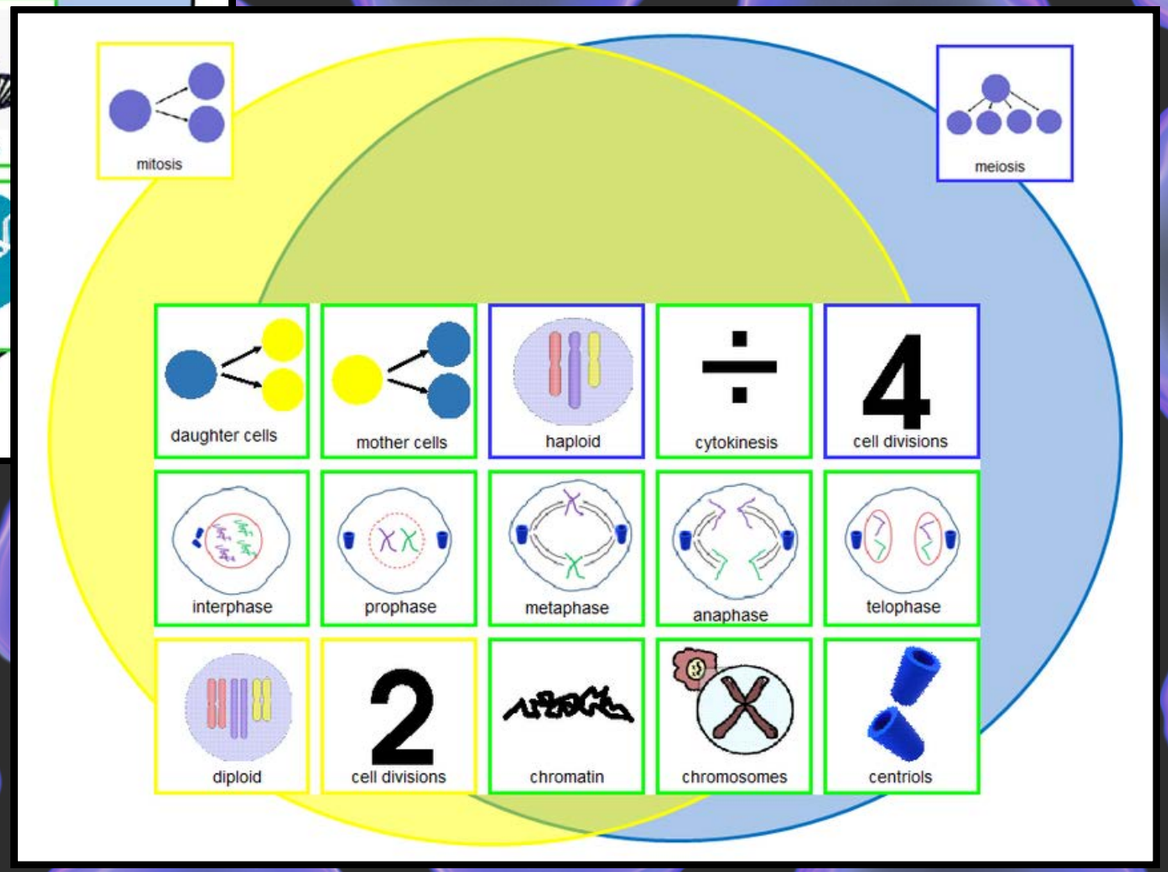
All of the units have labeling worksheets. Suggestions for differentiation are included.











2 of the units contain Venn Diagrams. Differentiated versions using color-coding are included.

J2T

Making a Cell Pizza (Sweet)

Materials

- Crescent dough or premade large cookie (cooked)
- Frosting
- Chocolate chips
- Jelly beans
- Green skittles or M&Ms
- 1 Oreo

Directions

- *Cell membrane/wall*
  - Have students spread crescent dough if using
  - Talk about how the crust is like the cell membrane/wall
    - Provides stiffness/structure
    - Holds all the inner parts of the cell
- *Cytoplasm*
  - Spread the frosting
  - Talk about how the frosting is similar to the cytoplasm
    - Provides cushion
    - Helps holds inner structures in place
- *Organelles*
  - Use chocolate chips for the ribosomes
  - Use jelly beans for the mitochondria
  - Use green skittles or M&Ms as chloroplasts
  - Talk about how they are like the organelles
    - Uniform in size and shape
    - Spread throughout the cytoplasm and cushioned
- *Nucleus*
  - Place whole Oreo in center of pizza as nucleus
  - Talk about how the Oreo is similar to the nucleus
    - Only one present in the cell
    - Round

3D Model of a Plant Cell: Directions

Materials:

- Cell membrane: long piece of yarn
- Cell wall (*if doing a plant cell*): Hula hoop
- Ribosomes: ping pong or other small ball
- Mitochondria: Legos
- Chloroplasts (*if doing a plant cell*): Green bean bags
- Nucleus: Pink ball
- Cytoplasm: Piece of yellow felt or fabric cut to fit the interior of the hula hoop
- Proteins: plastic links (Several connected together)

Directions:

- Give each student a piece of the cell; can/should have multiple chloroplasts, mitochondria, and ribosomes
- Have students form the piece of yarn into a circle as the cell membrane.
- *If doing a plant cell*: Have student place hula hoop on floor. Explain that this is the cell wall. Notice how strong, rigid, and hard it is. It helps keep the shape of the cell and keeps all the parts inside.
- Have student fit the yellow felt inside the hula hoop. Explain that this is the cytoplasm and makes a nice cushion for all the parts inside the cell. It is like a big pillow.
- Have student place pink ball in the center of felt. Explain that this is the nucleus of the cell. It is like the brain, and tells all the other parts in the cell what to do. Every cell has a nucleus.

There are hands-on activities.

J2T

Cells

		 cell	
	 nucleus		 ribosome
 nucleus			
	 cell		 mitochondria

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

 cell	 cell	 nucleus	 nucleus
 ribosome	 ribosome	 mitochondria	 mitochondria
 ribosome	 mitochondria		

There are vocabulary puzzles.

Levels of Organization

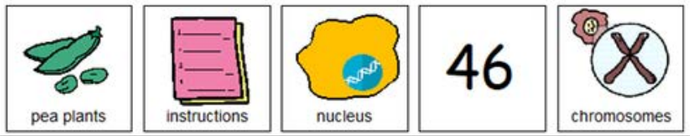
O V N E Z U P B N Q J G Z X A
R E E Z U W C Z X V G O I B A
G T P R F O R G A N I U O N Z
A P G I N V O L U N T A R Y C
N D Z H G L T K B S Q R H Q P
S I I I L L H B L N P B N Y H
Y C L V I F S A Q U R A U M S
S Z X R W Q B M N E T X X K S
T N V X B O T S U A W M C A V
E R M Y R D E F S A M F Z F N
M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

organ system
involuntary
homeostasis
organism
tissue
organ
cell

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

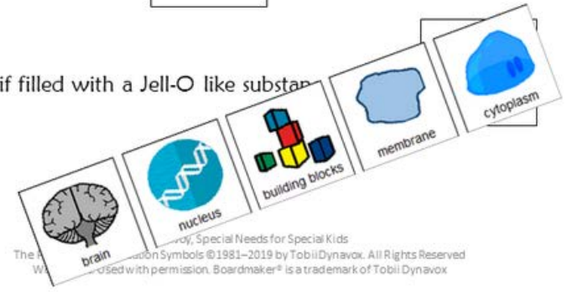
Genes

1. The instructions for the cell are found in the [ ] .
2. Genes carry the [ ] for the cell.
3. Genes are made of DNA which consist of [ ] .
4. Every person has [ ] chromosomes.
5. Gregor Mendel, the father of genetics, worked with [ ] .



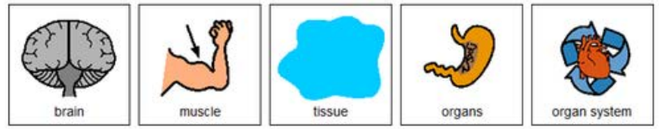
Cells

1. Cells are the [ ] of all living things.
2. All cells are surrounded by a [ ] that protects it.
3. Most cells are eukaryotic and have a [ ] .
4. The nucleus is like the [ ] of the cell.
5. The cell if filled with a Jell-O like substan



Levels of Organization

1. Cells that are similar, group together to form [ ] .
2. Muscle cells would group together to form [ ] tissue.
3. Tissues that are similar, group together to form [ ] .
4. Nervous tissues would group together to form the [ ] .
5. Organs that are similar, group together to form [ ] .



Version 1

1. All plant and animal cells are surrounded by a:

2. A cell wall is an extra outer layer found only in:

3. The brain of the cell is the:

4. Which cells do NOT have a nucleus?

5. What are cells filled with that protect what is insi

Version 3

1. All plant and animal cells are surrounded by a:
   A. yarn
   B. membrane
   C. fence
2. A cell wall is an extra outer layer found only in:
   A. animals
   B. plants
   C. octopus
3. The brain of the cell is the:

Version 2

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

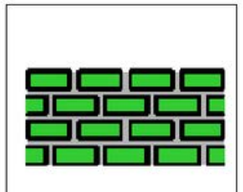
NOT have a nucleus?

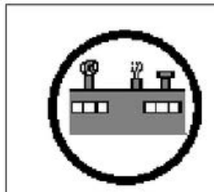
illed with that protect what is inside?
ws
ly

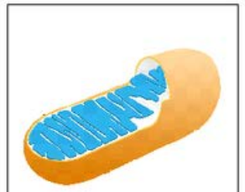
ings that are considered organelles.
D. ribosome
E. mitochondria
F. chloroplast

Q 5

Q 6







Finally, each unit has an assessment that is available in 3 versions. These are given 1:1 and read aloud to the student.

J2T

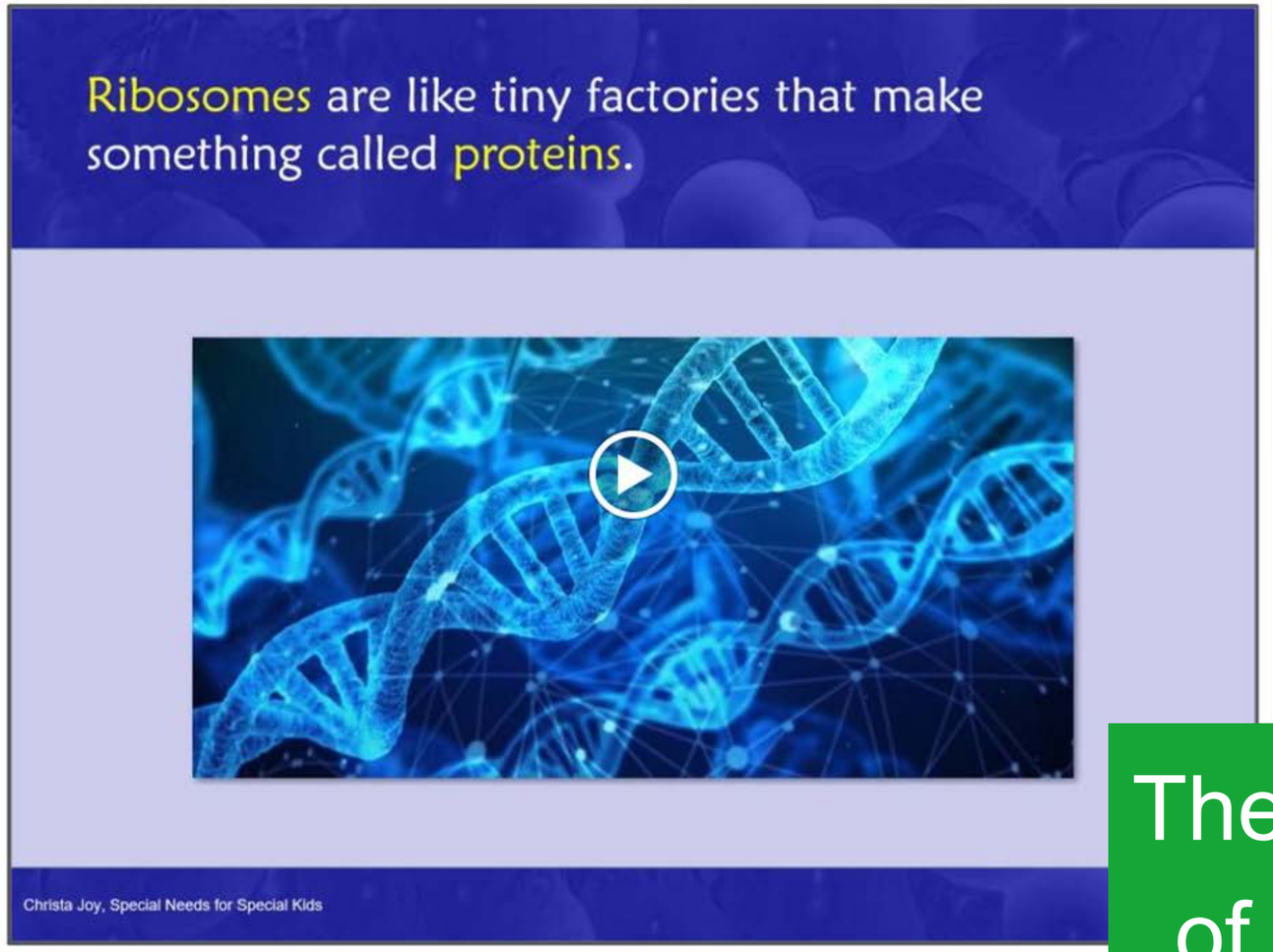
All of these units include digital versions of the activities. These simply require the student to click and drag the answers. There is no drawing or typing involved.

There is a movie version of the book.

There are 2 complete sets of slides. One set is differentiated with color.

Quickly combine slides from the 2 sets to create the perfect combination for each student.

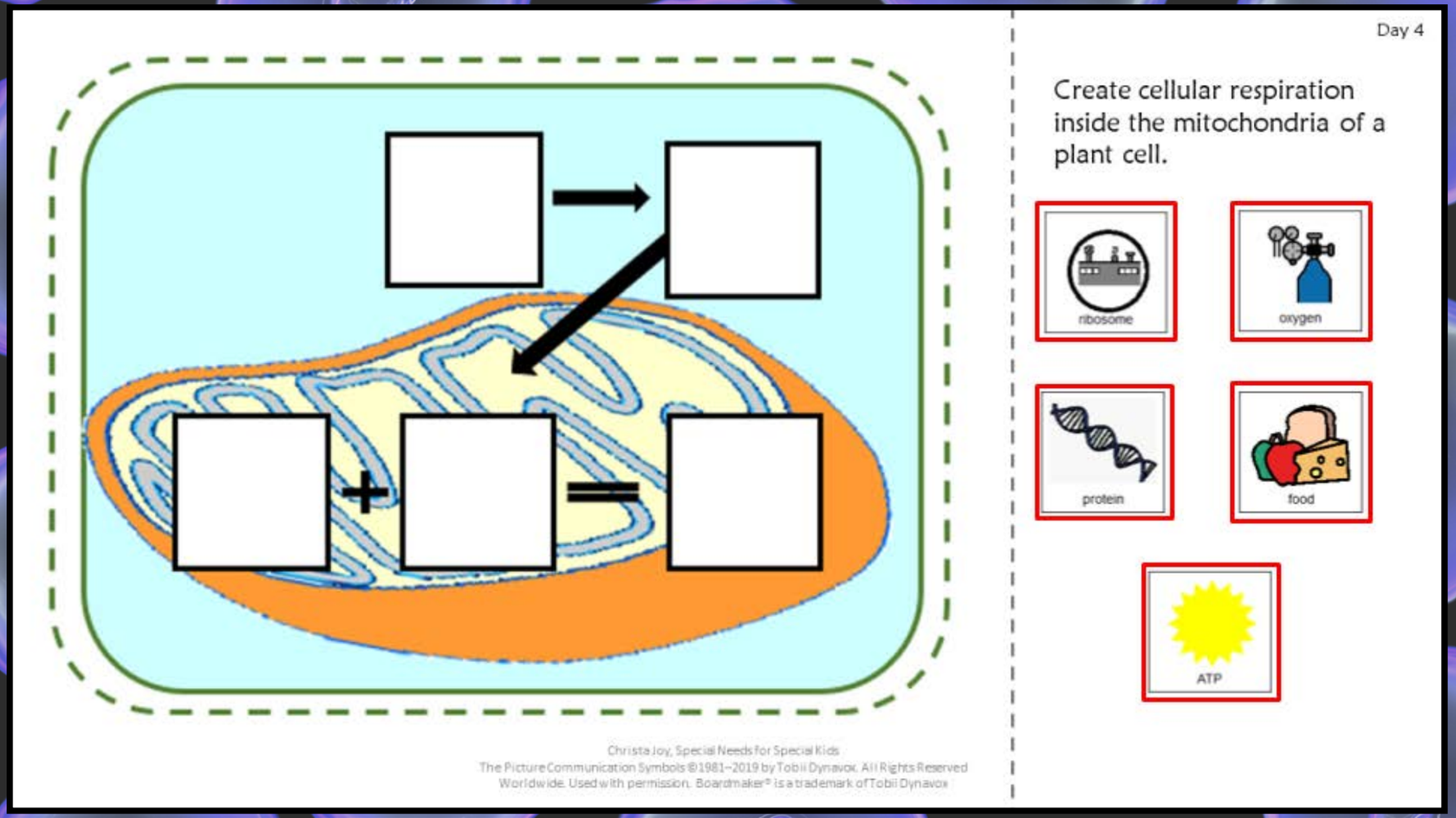
Watch the movie on Cells and Cell Processes



The movie version of the book from the unit.

Great for review

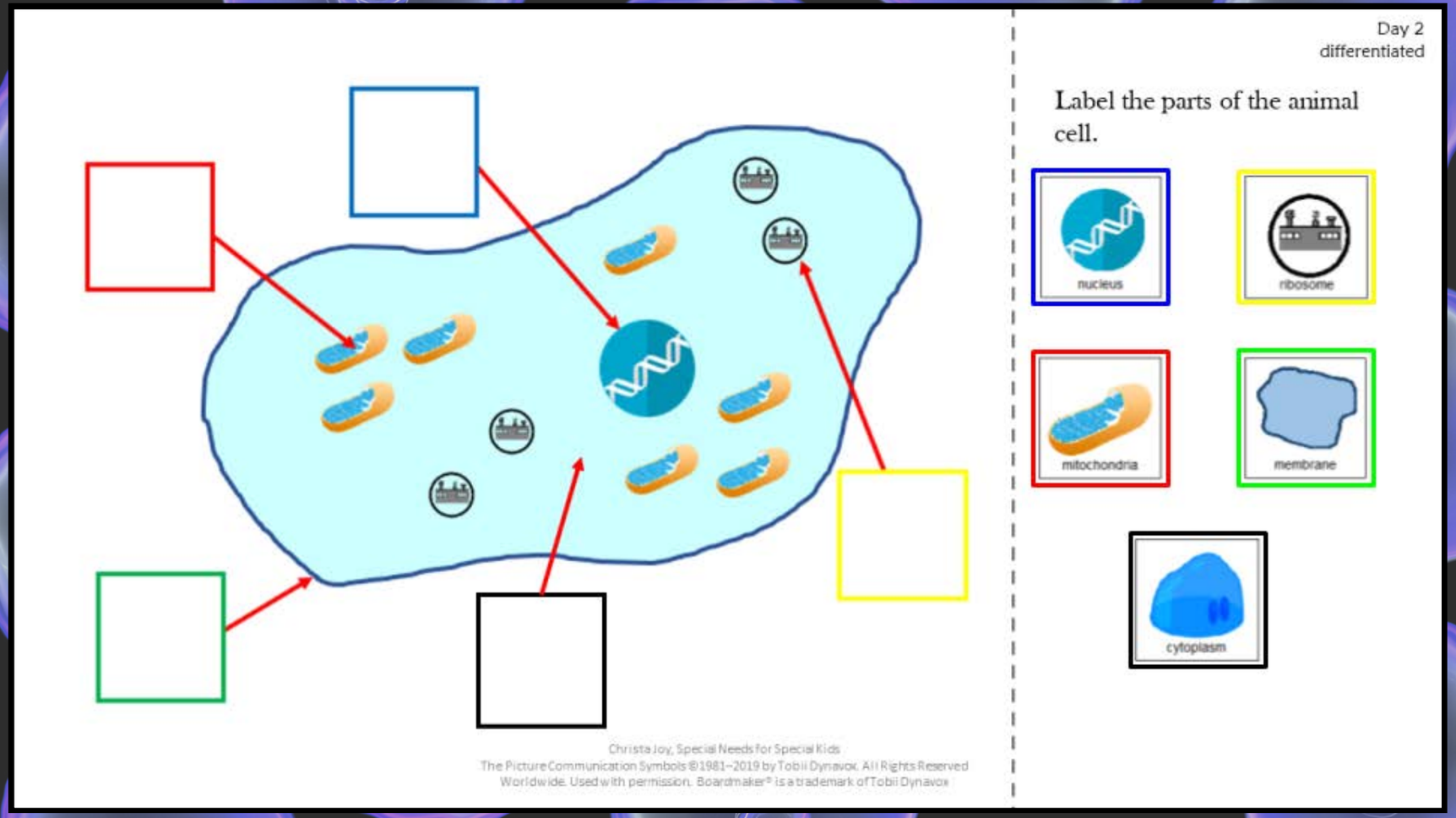
The digital activities are click and drag.



J2T

Perfect for any learning level

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



Still have questions?

Reach out at specialneedsforspecialkids@gmail.com

I will answer your question personally and promptly.