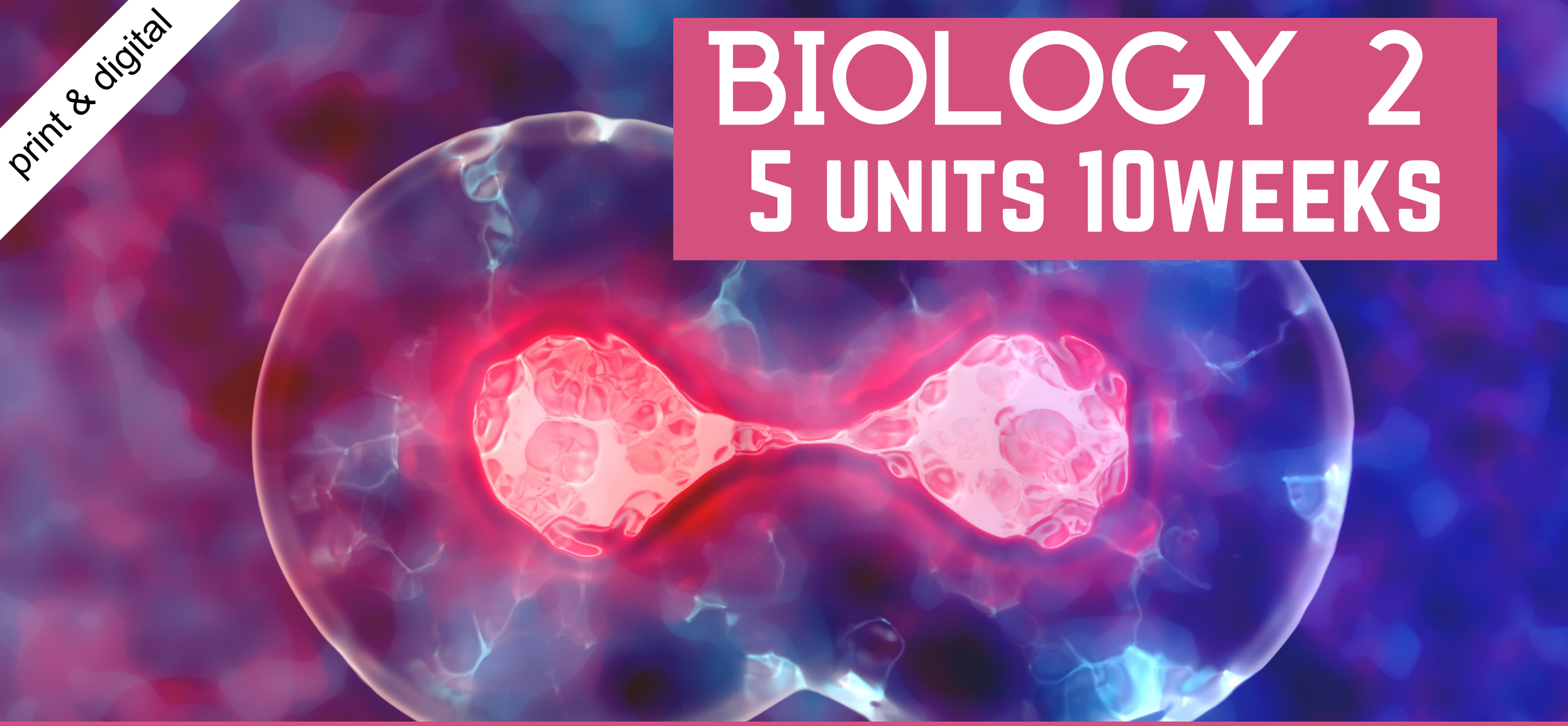
print & digital
BIOLOGY 2
5 UNITS 10WEEKS
JOY 2 TEACH
INCLUDES GOOGLE SLIDES

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 curriculum:

- 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 5 units that cover more advanced Biology concepts.

- The Nucleus (2 weeks)
- Mitochondria (2 weeks)
- Ribosomes (2 weeks)
- Chloroplasts (2 weeks)
- Punnett Squares (2 weeks)

All units have printable AND digital versions

All units built using the extended learning standards .

All the units contain various activities. Most units include:

- Detailed lesson plans
- A book
- 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

Table of Contents

Pages	Activity
4-5	Vocabulary board
6-9	Vocabulary cards
10-19	Vocabulary cut and paste
20-23	Circle maps
24-29	Match functions to parts of nucleus
30-32	Labeling parts of nucleus
33-37	Cloze worksheets
38-48	Assessment
49-50	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

Table of Contents

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4-5	Vocabulary board
6-9	Vocabulary cards
10-19	Vocabulary cut and paste
20-26	Circle maps
27-32	Match functions to parts of chloroplast
33-35	Labeling parts of chloroplast
36-39	Ins and outs of photosynthesis (easy)
40-43	Labels steps of photosynthesis in chloroplast
44-48	Cloze worksheets
49-59	Assessment
60-61	Terms of Use

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- Voice recorded PowerPoint
- Activities in black and white

Every unit has lots of different activities and ways for students to practice that skill.

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Day 5

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 Bean Bag Toss (10 minutes)	• Glue the cut apart symbols to the paper plates (one on each plate) • Arrange them around the room • Students toss the bean bag trying to get it to land on a paper plate ○ Students retrieve the paper plate and share the vocabulary card they retrieved	• Vocabulary cards • Vocabulary cards cut apart • Small paper plates (you can also use pieces of construction paper) • Bean bags
Sequencing activity review (5 minutes)	• Review the sequencing worksheet completed yesterday	• Completed worksheet

Sequencing activity (10 minutes)	• Do the sequencing activity on cellular respiration in plant cells
	• There are 2 versions (use the version you don't use for review if needed prior to assessment)
	  ○ Version 1 has more picture symbols to support students
	  ○ Version 2 has students complete the cycle with much less support
	• Make connections to the book as necessary
		• Sequencing worksheets
		• 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

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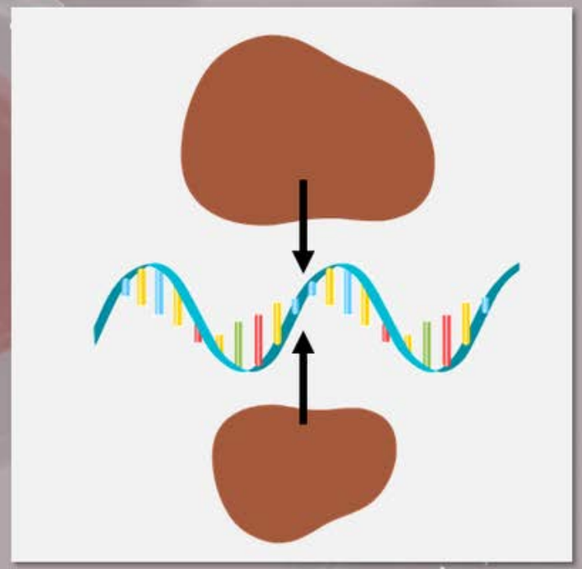
Book

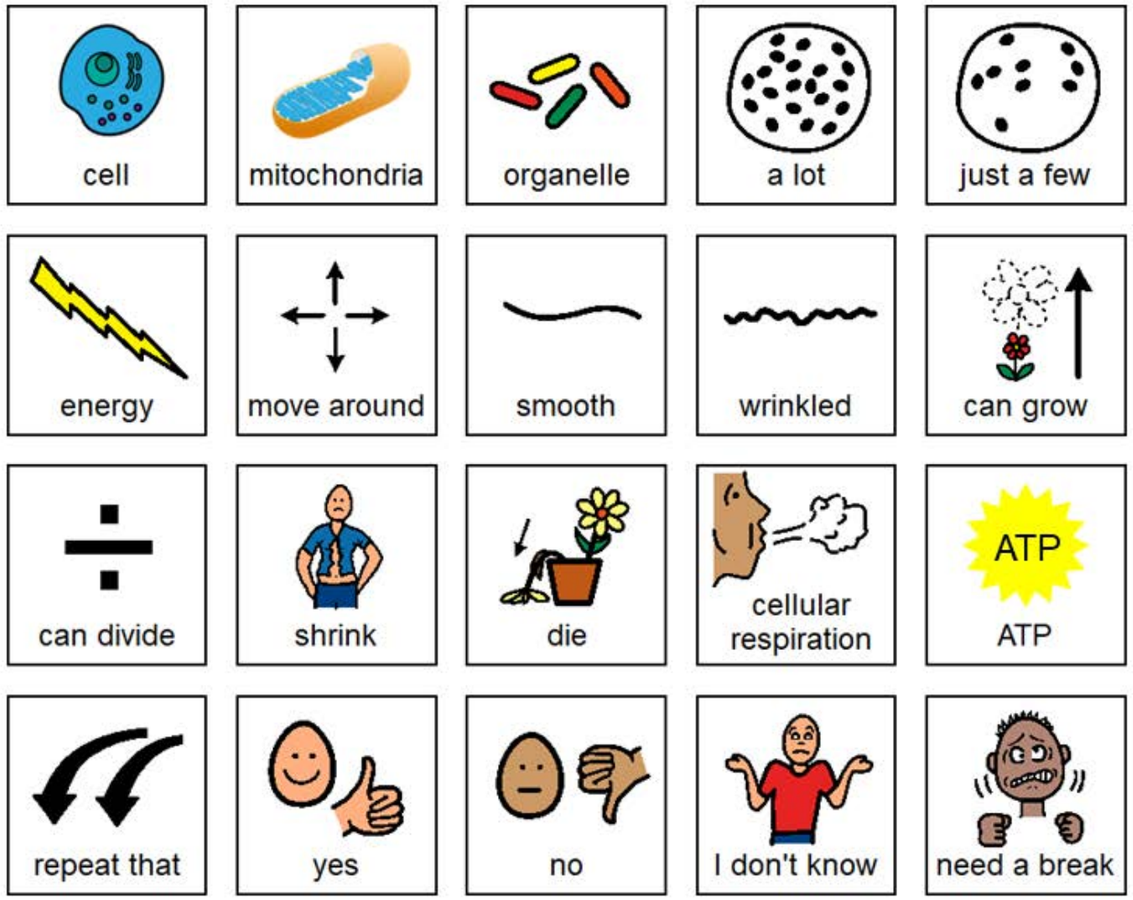
Initiation is the first step and it starts when the 2 subunits of the ribosome join together with the mRNA from the nucleus. They form a sandwich with the mRNA in the middle.



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

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

Vocabulary



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

Vocabulary

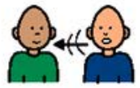
Every unit has vocabulary cards. There are suggestions for daily group activities to review these.

transcription

The messages the RNA is given in the nucleus and will carry to the ribosomes.

translation

Transferring the message from the RNA to the ribosomes so proteins can be made.

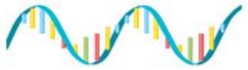


DNA

The genetic code that tells the cell what type of cell it should be.

RNA

Copy of the code from the DNA that it takes to the ribosomes as a building block to make proteins.



stroma

thylakoids

chlorophyll

grana

chloroplasts

Organelle that turns food into energy the cell can use. Powerhouse of the cell.

organelle

Things inside the cell that have their own membrane and special job to do.

outer membrane

Smooth outer surface of chloroplast that protects it.

inner membrane

Membrane inside the chloroplast that has holes and allows things in and out of the chloroplast.

chloroplasts

Organelle that turns food into energy the cell can use. Powerhouse of the cell.

organelle

Things inside the cell that have their own membrane and special job to do.

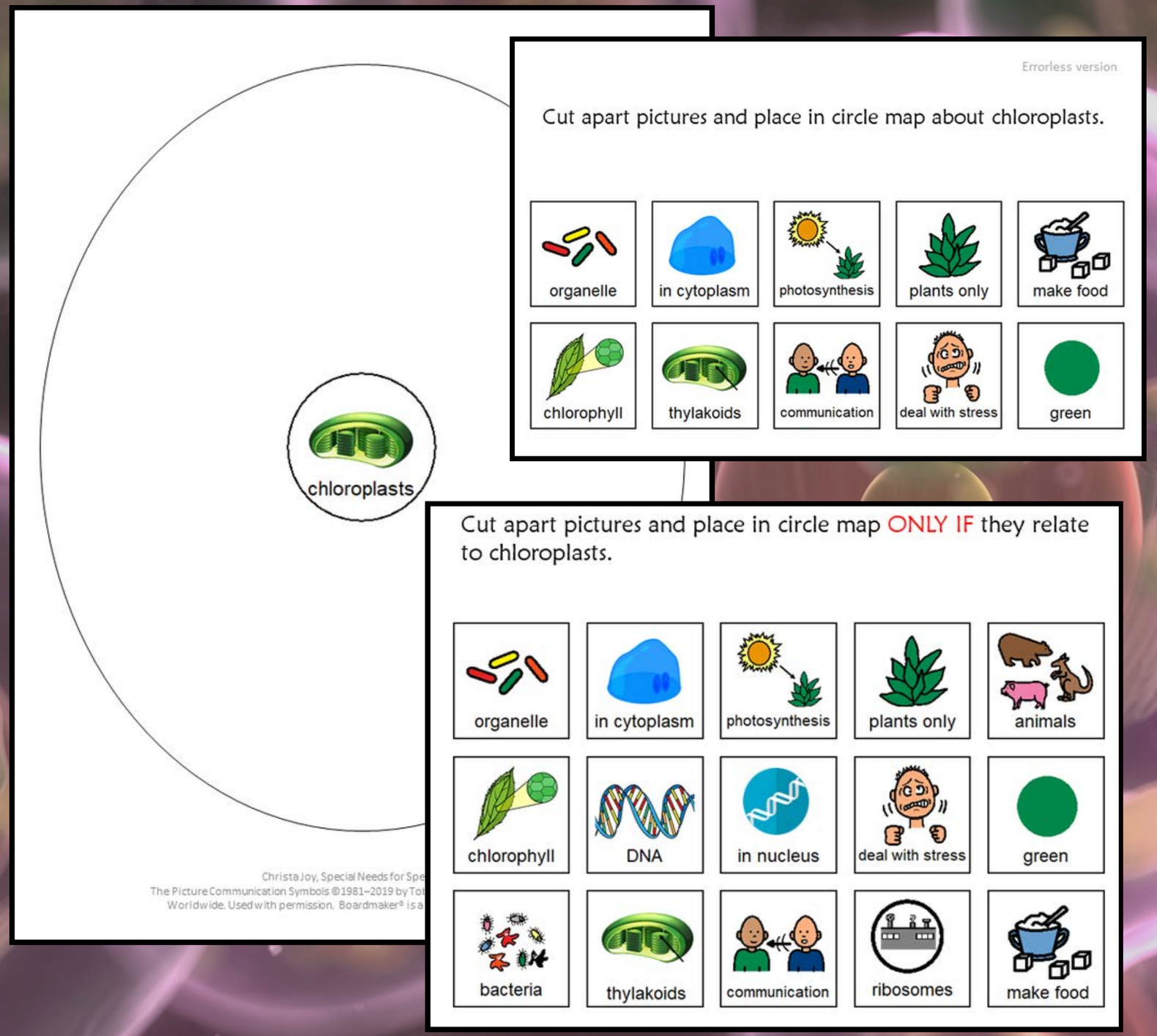
outer membrane

Smooth outer surface of chloroplast that protects it.

inner membrane

Membrane inside the chloroplast that has holes and allows things in and out of the chloroplast.

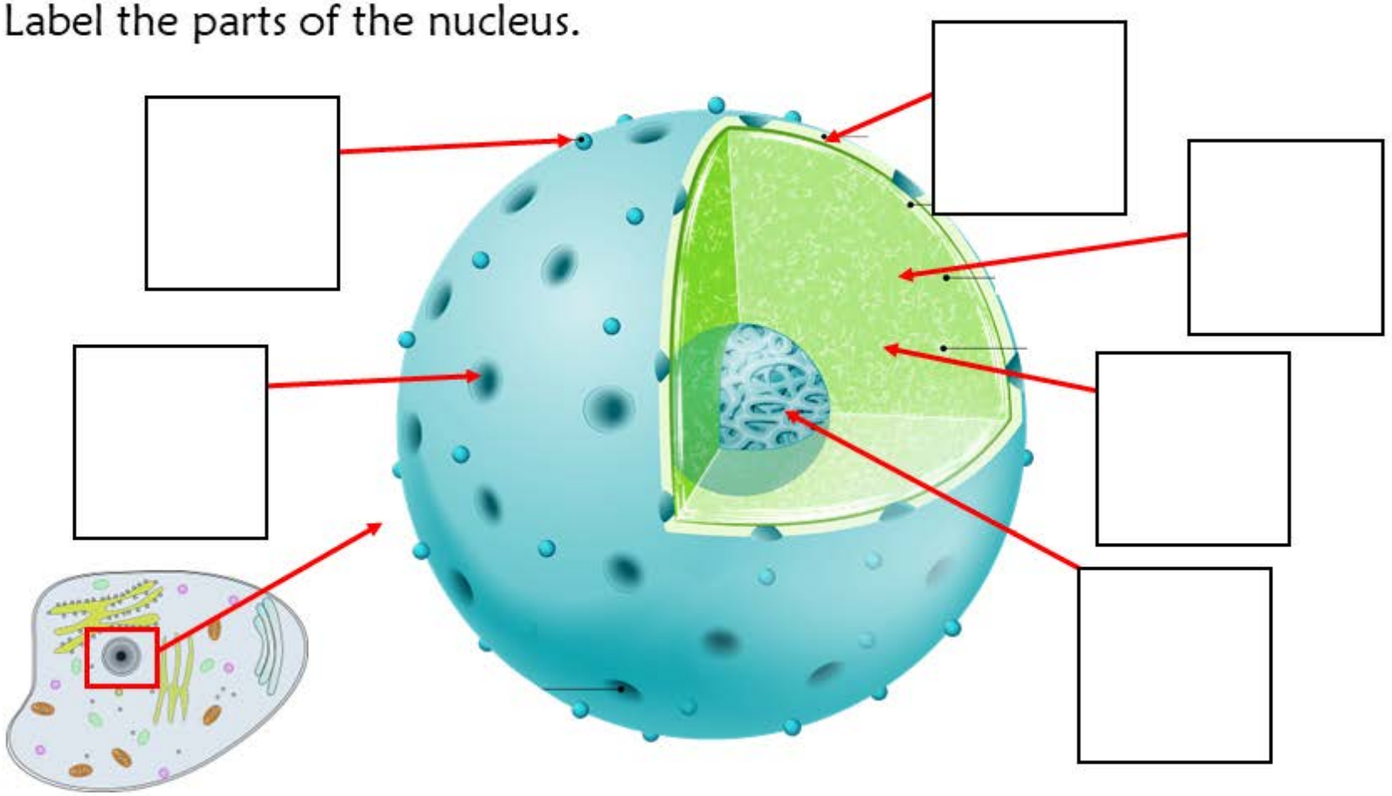
circle maps



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.

Labeling Activities

Label the parts of the nucleus.



nucleolus

chromatin

nuclear envelope

ribosomes

pores

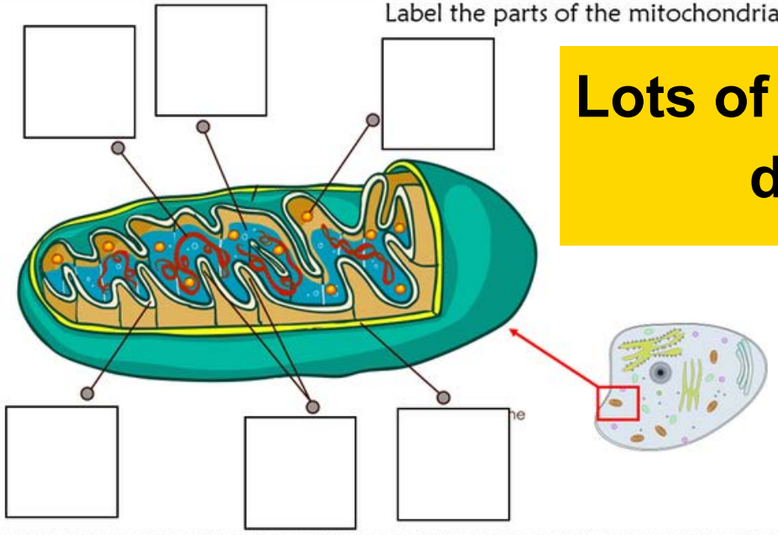
nucleoplasm

Decode the message. Look at the long list of amino acids and using the key to read each codon, decode the secret message. (This is just for practice, and does use real amino acids but does not match what the actual codons mean to the ribosome.)

- Make sure to look for AUG (start codon) in each line. Start here and ignore all codons before it.
- Make sure to look for UGA (stop codon) in each line. This is where the message for that line stops.

1.	AUG	CUG	UUC	CUA	CGA	CAA	CUU	ACU	UCA	UGA
2.	AUG	GCG	AGA	AAG	GAG	CCG	UUA	CUU	GGG	UGA
3.	AGA	AUG	GGU	AGA	ACA	GUU	AGC	UUC	AGG	UGA

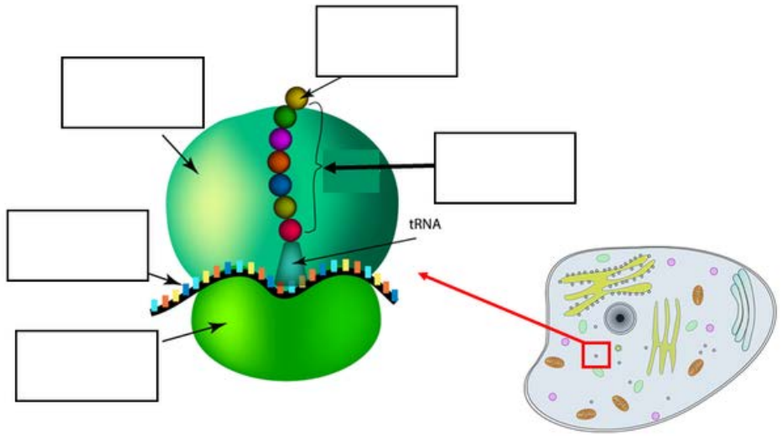
Label the parts of the mitochondria.



inner membrane | DNA | matrix | cristae | outer membrane | ribosomes

Lots of practice activities; differentiated

Label the parts of the ribosome.



Large subunit	mRNA	Amino acids	Growing protein	Small subunit

Decoder Key: AUG is where the message starts in each line. It does not correspond to a word. Students will ignore any codons that come after it.

CODON	WORD
AUG	Start message
UUU	birthday
CUG	watch
AUC	you
UCA	object
CAU	day
GAG	teachers
ACA	danger
AAA	this
UGU	will
GCG	one

CODON	WORD
UGG	scientist
CGA	tonight
CUU	an
CAA	for
AGA	of
UUC	the
AGG	cafeteria
AAG	your
GUA	wish
GGG	imposter
GUG	come

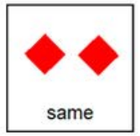
CODON	WORD
ACU	unusual
GAA	amazing
GGU	beware
CUA	sky
AGC	in
CCG	could
CGC	year
UUA	be
UCC	true
GUU	lurking
UGA	Stop message

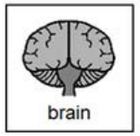
J2T

Review sheets

Nucleus

1. The nucleus is located in the ____ of the cell.
2. There is normally only ____ nucleus per cell.
3. The nucleus acts like the ____ of the cell.
4. The nucleus is the ____ in plant and animals cells.
5. The ____ surrounds and protects the nucleus.


same


brain


nuclear envelope

middle

one

Ribosomes

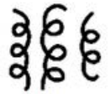
1. Ribosomes are located in the ____ of the cell.
2. Ribosomes are made in the ____ of the cell.
3. Most cells have ____ of ribosomes.
4. The ribosomes make ____ for the cell.
5. Ribosomes are made up of ____ subunits.


nucleus


a lot

2


cytoplasm


proteins

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

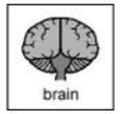
J2T

Assessment

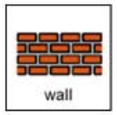
Version 1

1. All eukaryotic cells have one:

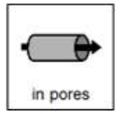
2. The nucleus is the _____ of the cell.



3. What surround the nucleus to keep things out?



4. Where are RNA and ribosomes made?



5. What is the resting form of DNA called that is stored in the nucleus?

Version 3

1. All eukaryotic cells have one:
   A. Ribosome
   B. Organelle
   C. Nucleus
2. The nucleus is the _____ of the cell.
   A. Muscle
   B. Brain
   C. Heart
3. What surround the nucleus to keep things out?
   A. Wall
   B. Nuclear envelope
   C. Fence
4. Where are RNA and ribosomes made?
   A. Chromatin
   B. In pores
   C. Nucleolus
5. What is the resting form of DNA called that is stored in the nucleus?
   A. Ribosomes
   B. Nucleoplasm
   C. chromatin
6. What allows the ribosomes to travel out of the nucleus?
   A. Pores
   B. Chromatin
   C. RNA

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.

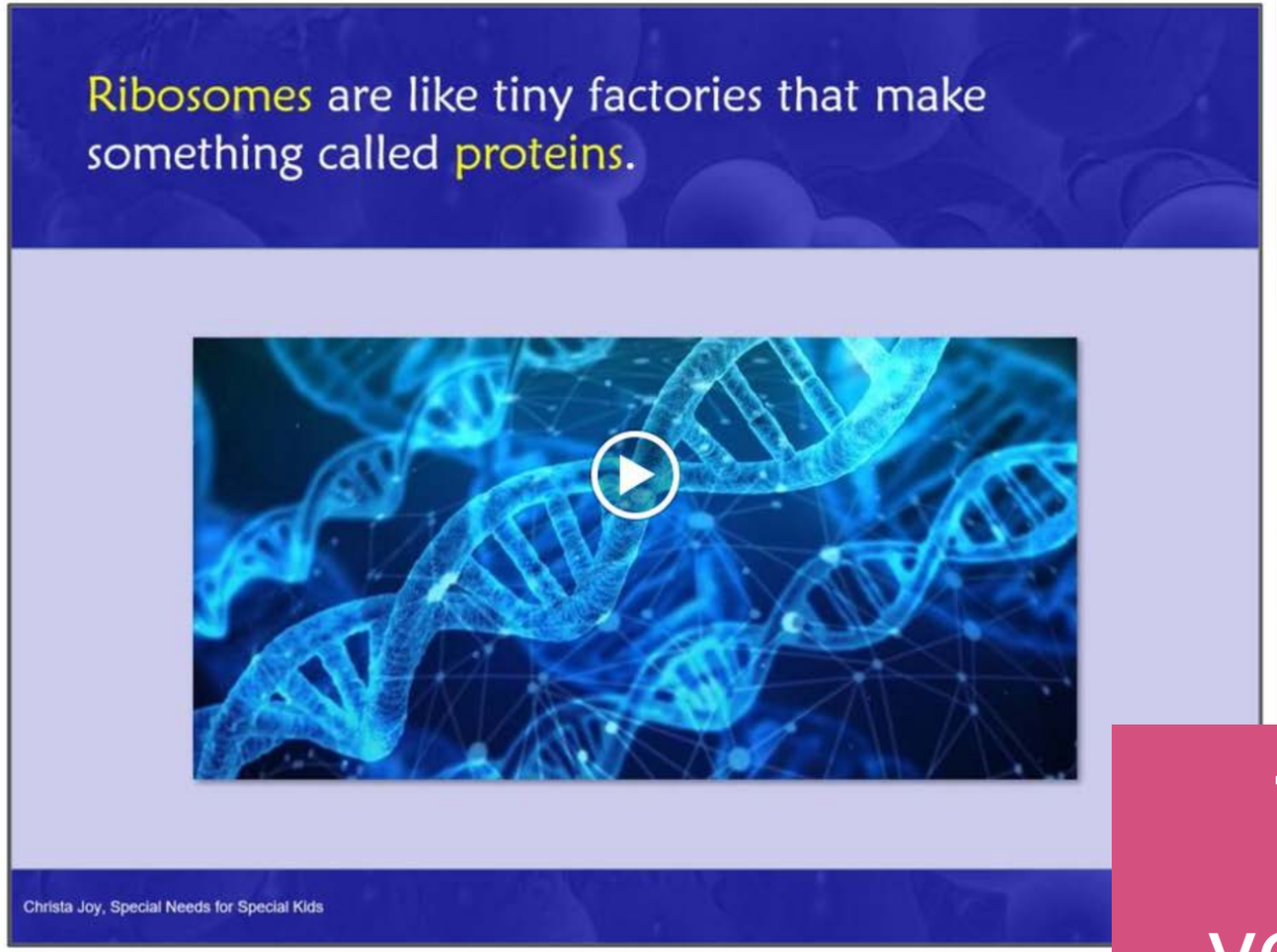
J2T

- 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 are 2 complete sets of slides. One set is differentiated using color.

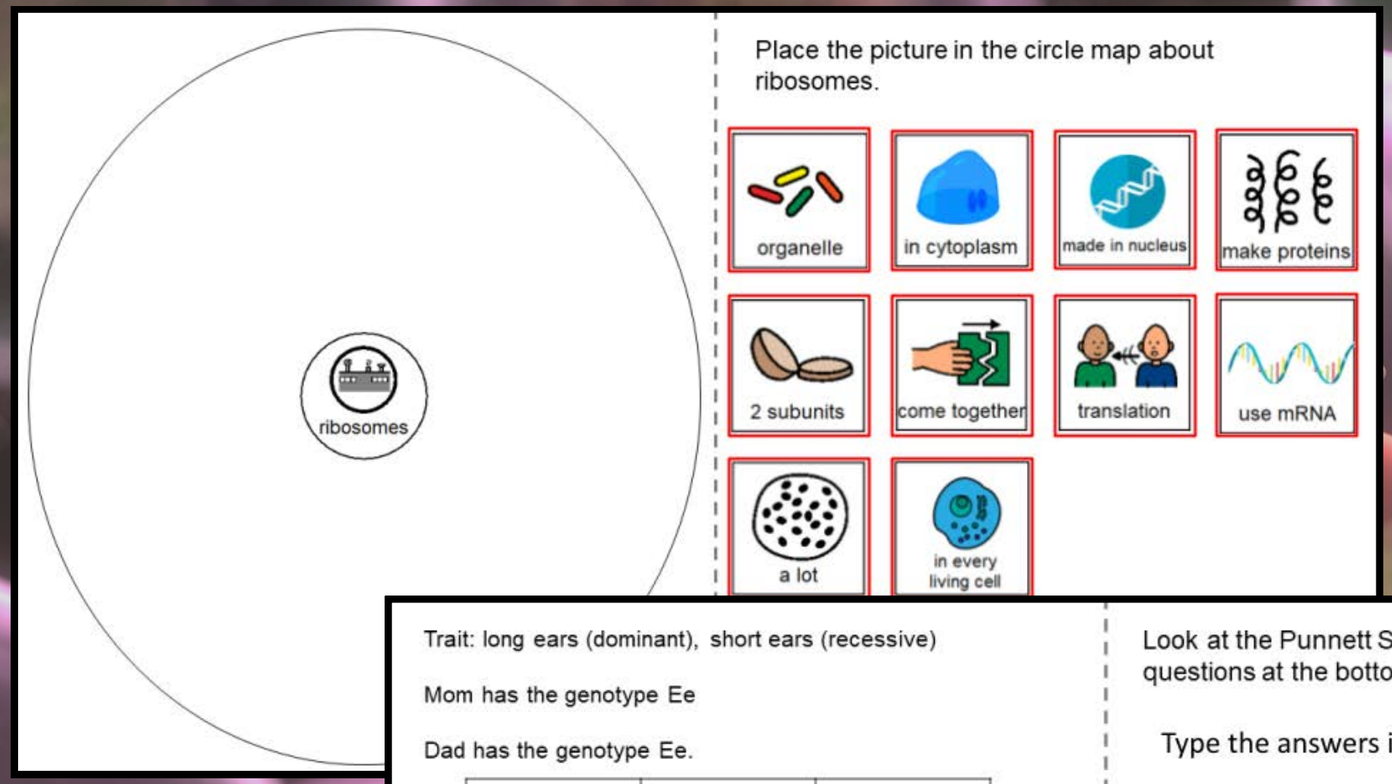
Make great independent learning centers.

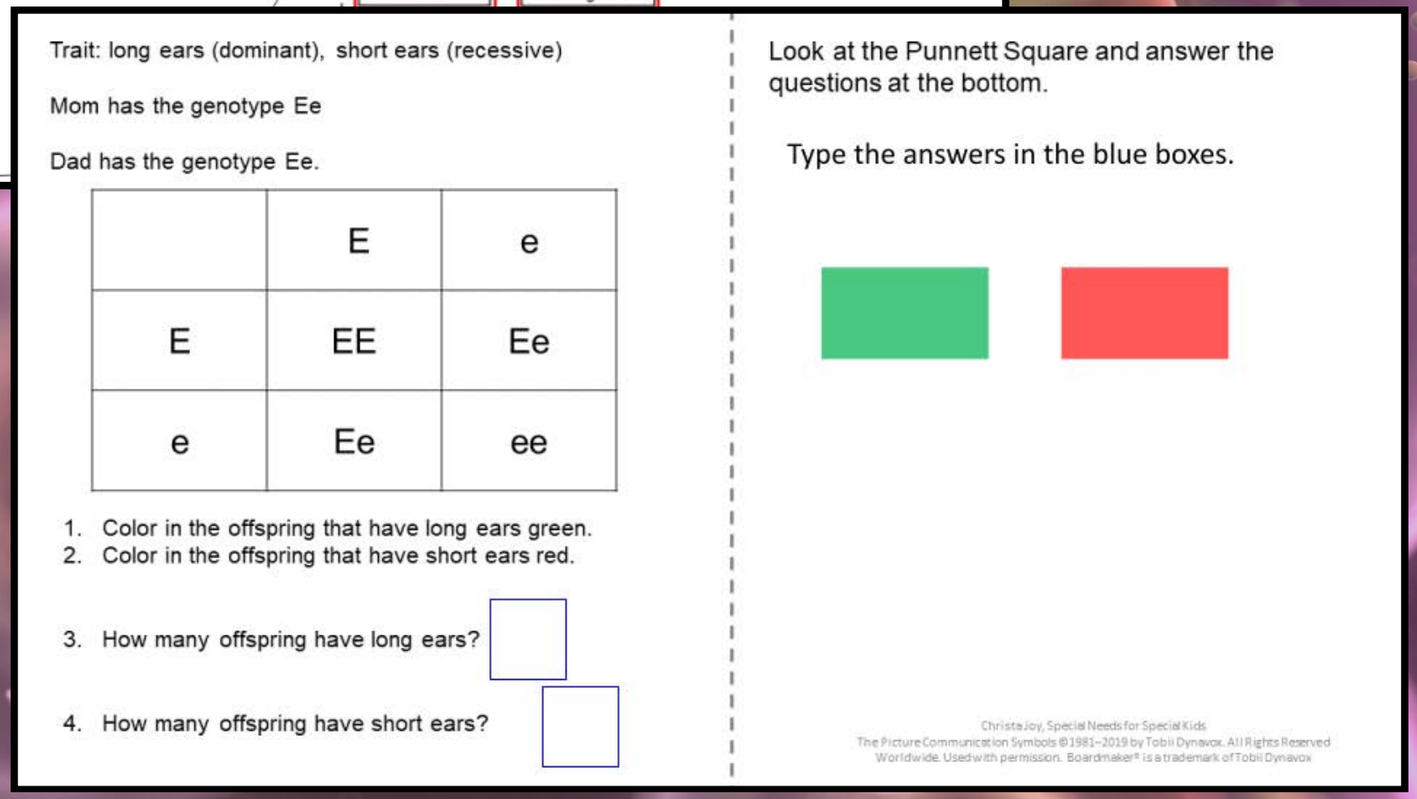
Watch the movie on Cells and Cell Processes



The movie version of the book from the unit.

Use for more review.

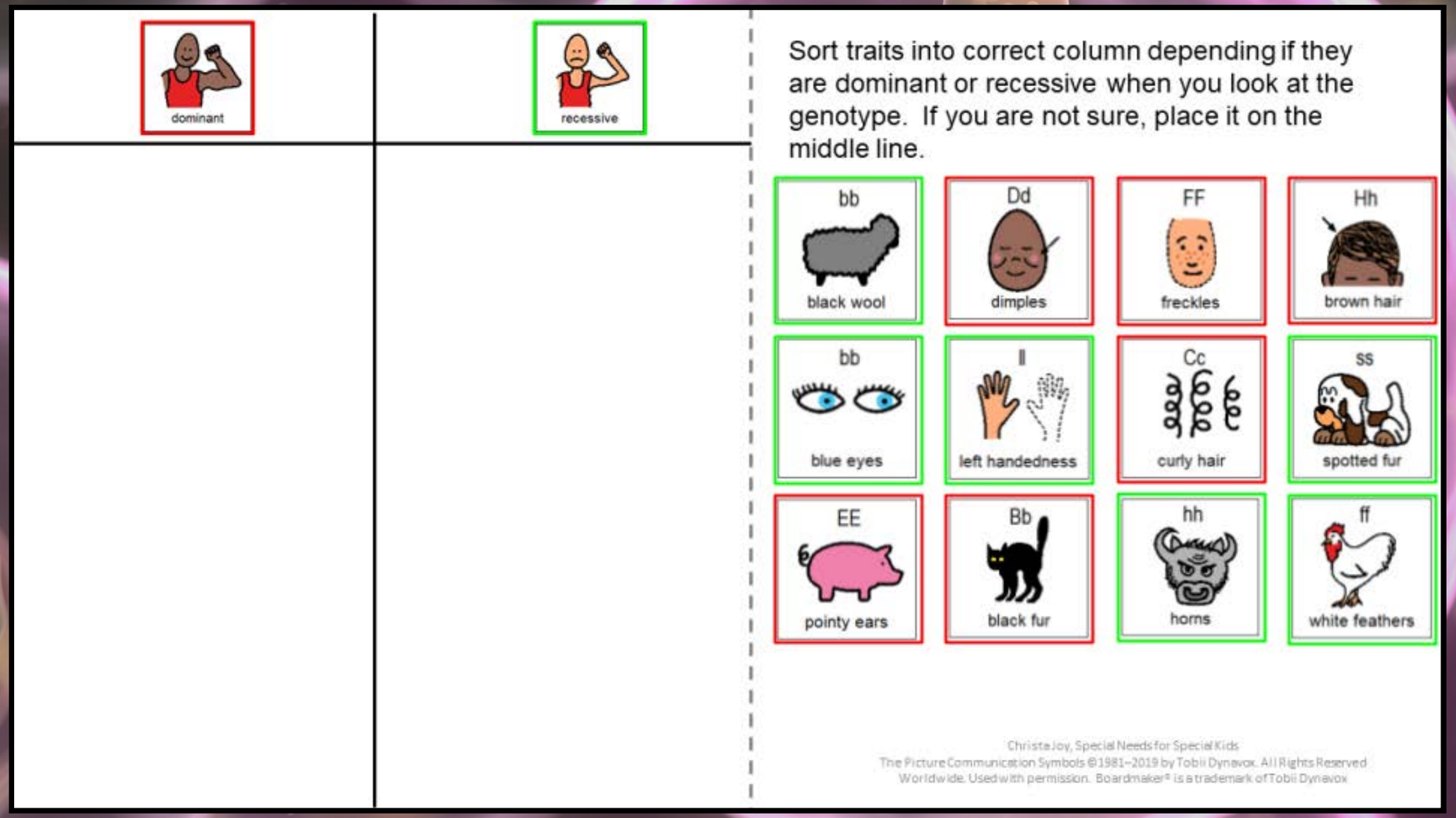




The digital activities are click and drag.

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.