

Cell Parts: The Conclusion

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A Technology Integrated Lesson

Do-Now



Do-Now: Answer the question in a complete sentence.

Explain the importance of an organelle's function to the success of a cell in their interactive notebooks. For example, the cell wall is important because it keeps things out.

Example: The cell wall is important to the cell because it keeps things out.

3:00

Today's Objective

SWBAT apply knowledge of organelle functions by creating a comic strip in their notebooks including at least 3 organelles with 100% accuracy.

1:00
Stop

Essential Question?

How do organelles help the cell function?

Based on the unit, what have you learned about roles members play in their group, organization, cell, etc? How can you apply that knowledge in a comic strip to help you remember organelle functions? Think of the roles different members of the Avengers or Justice League play.

Lights, Camera, Recap:

The Rules

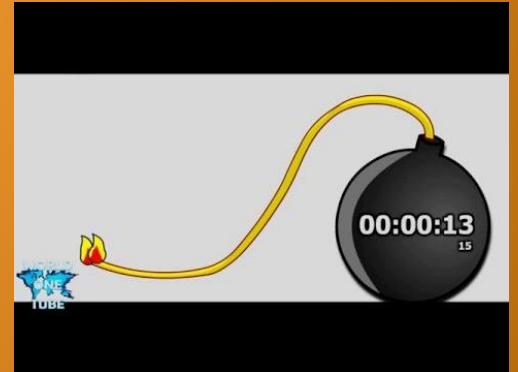
This is a recap game to see how much you remember about cell organelles and their roles

1. After I read each question, the first group to raise their hand gets to answer first.
2. Answer the questions in a complete sentence.
3. You have 15 seconds to answer the question. If you are wrong, another team can answer.
4. Respect your peers and their responses (no negative comments).

Now, shall we begin?

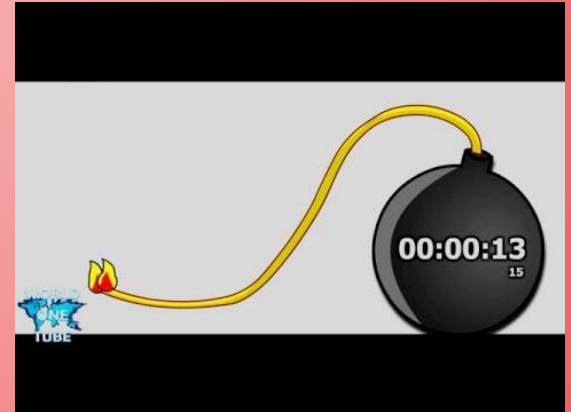
What would happen if the Golgi bodies in the cell were destroyed?

- A. The cell would spontaneously combust.
- B. The cell would no longer be able to make cell energy.
- C. The cell would have difficulty processing and transporting proteins.
- D. The cell would not be able to store DNA effectively



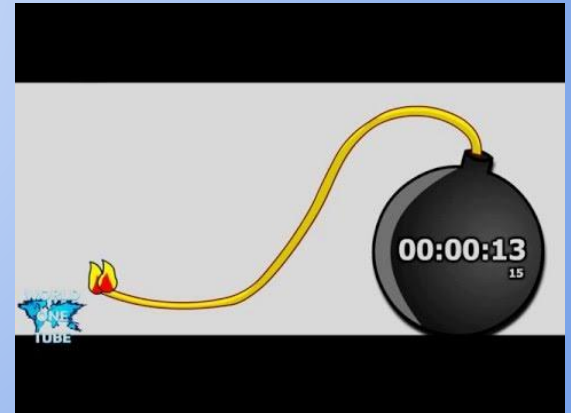
The cytoskeleton is **Not** involved in...

- A. Making energy.
- B. Cell movement.
- C. Maintaining cell shape.
- D. Maintaining cell structure.



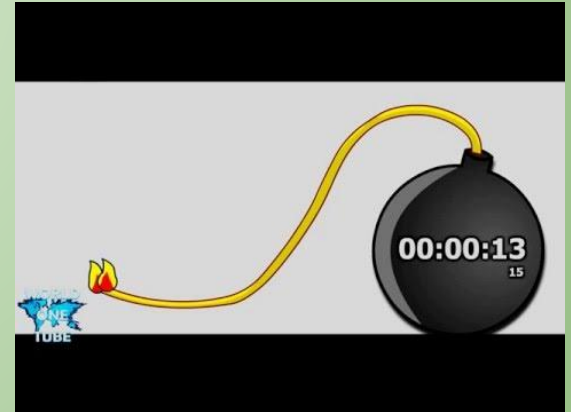
The mitochondria makes ATP. What is ATP?

- A. Energy that cells can use.
- B. A type of sugar.
- C. A protein that is important for cells.
- D. A nucleic acid.



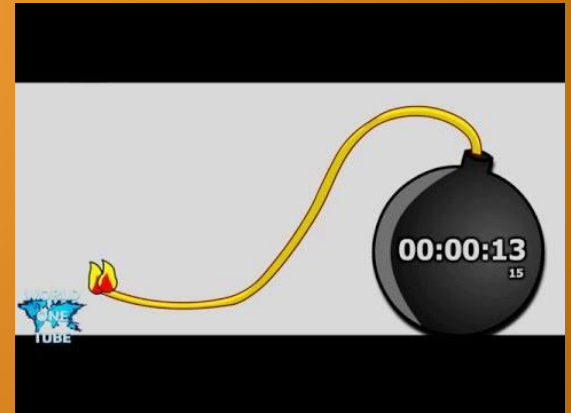
Fill in the blank.

The _____ is the organelle that transports materials around the cell to where they need to go.



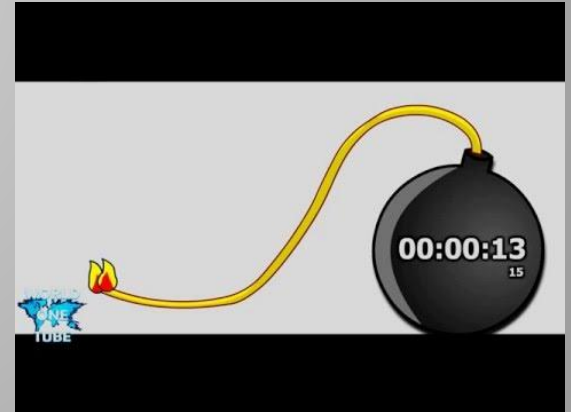
True or False.

The cytoskeleton is the structure that helps maintain the cell's internal structure and shape by supporting the cell.



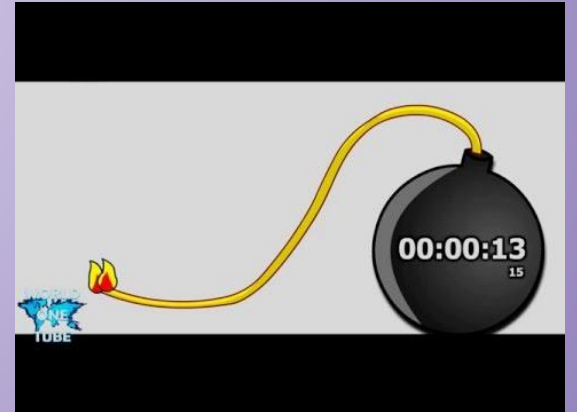
What is the name of the organelle that has the genetic material inside of it?

- A. The Nucleolus.
- B. The Nucleus
- C. Ribosomes



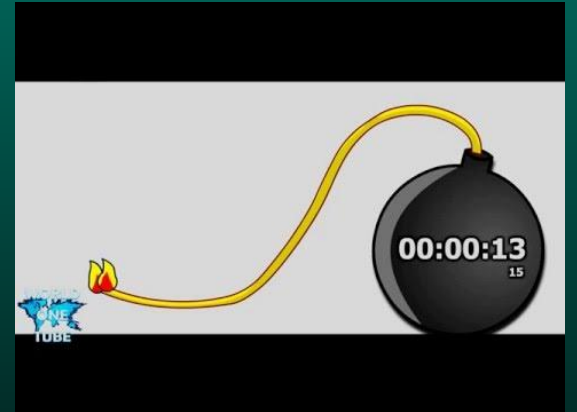
True or False.

Ribosomes create the proteins the cell needs.



Fill in the blank.

The _____ is the barrier that separates the cell from the external environment.



Cell Explorer: Mission 4



Your mission is to help scientists build a working cell by using your knowledge of cell structure and function.

Record your personal percentage in your notebook so that you can track your progress.

Once you are finished, modify your cell drawing you created. Use a different color to show the changes you've made.

Comic Hour

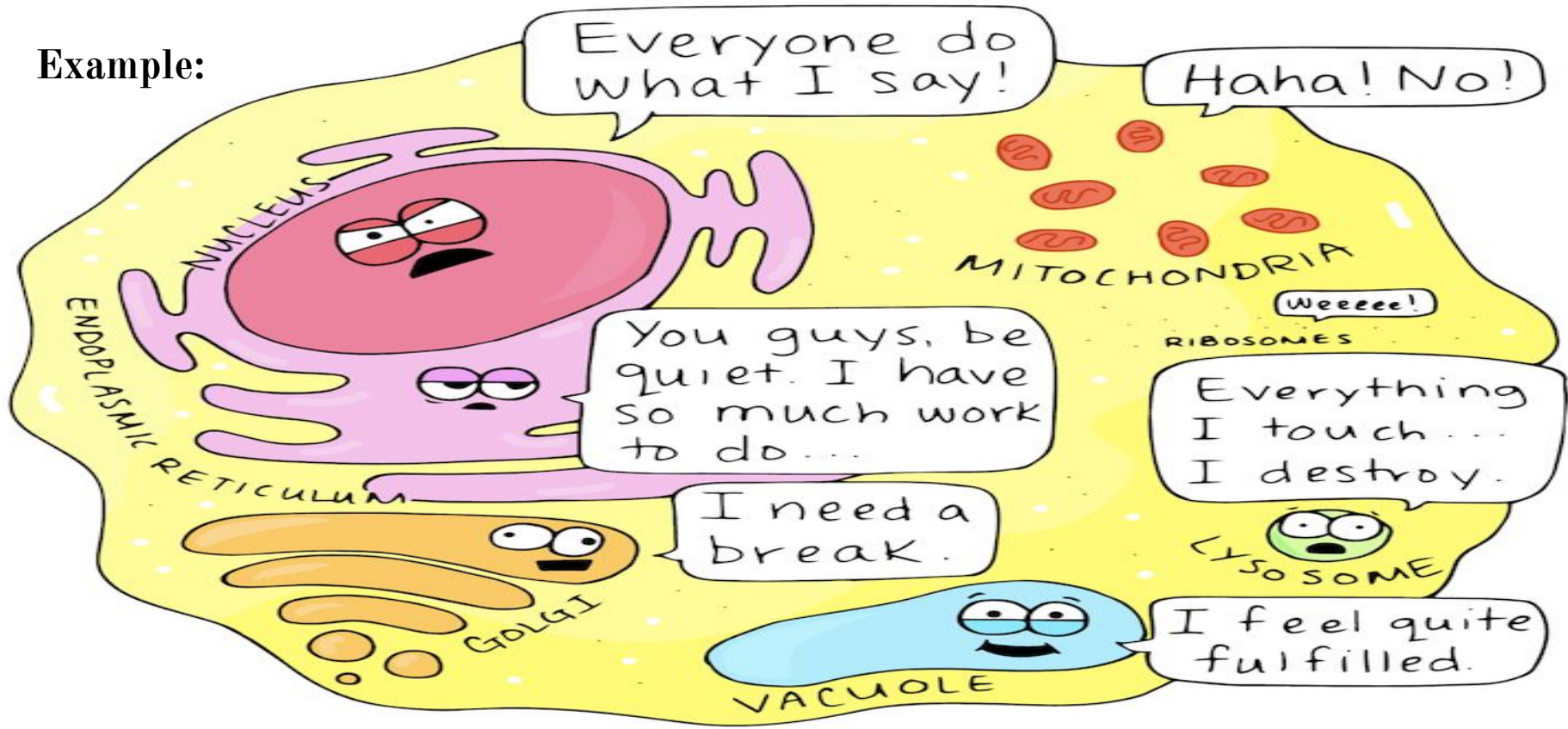
Starring: Cell Organelles

Directions:

Create a comic strip or drawing using at least 3 different organelles and explain their role in the cell.

You control the conversation. It can be funny or serious, whatever you want as long as it's appropriate.

Example:



If organelles could talk.

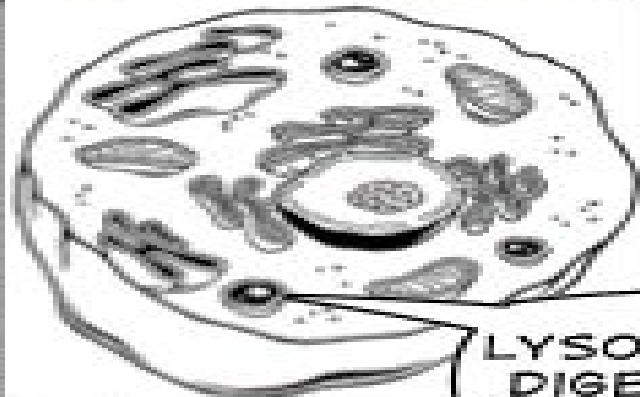
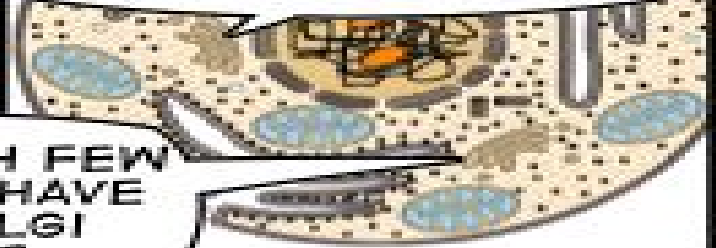
Beatrice the Biologist

Another Example:

THE **GOLGI APPARATUS** PREPARES SUBSTANCES FOR EXPORT FROM THE CELL

A STACK OF MEMBRANES USED TO WRAP SUBSTANCES FOR EXPORT THROUGH THE CELL MEMBRANE

CELLS WITH FEW EXPORTS HAVE FEW GOLGI BODIES



MOST CELLS HAVE **LYSOSOMES** TO PRODUCE ENZYMES FOR DIGESTION

LYSOSOMES ARE THE DIGESTIVE CENTERS OF A CELL

THANKS FOR LISTENING!



ANY QUESTIONS?