



### Cells Lesson 1: “The Solve”

#### Student Handout

#### I. Watch the Mosa Mack Mystery.

Either on your own, in a small group or as a class (your teacher will let you know), [watch](#) Mosa Mack’s episode on Cells. Then, fill out the questions below. Include a time code in your answer as evidence of where you found your answer.

**Name:** \_\_\_\_\_

**Date:** \_\_\_\_\_

#### Episode Questions

1. What is the job of the cell membrane?
2. Which part of the cell is in charge of the whole cell?
3. What does the mitochondria need in order to make energy?
4. What does Mosa and her team take a taxi to the small intestine?
5. Why do the small intestine cells look slightly different than the muscle cells?
6. What cells are responsible for telling Eric to eat more food?
7. Why do the brain cells look different than the other cells?



# MOSA MACK SCIENCE

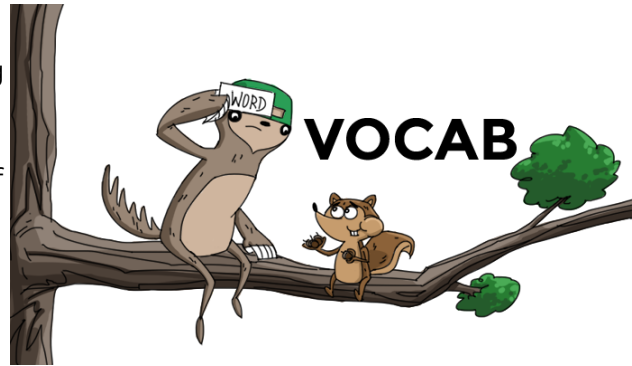
## STUDENT GUIDE

8. What did Mosa figure out? Why did Eric collapse?

### II. Vocabulary Activity

Note: Your teacher will tell you whether you will complete this activity [online here](#), or offline by following the instructions below.

1. Using the materials at your table, cut out your vocabulary cards along the **solid blank lines**.
2. Using the definitions on the back of the cards, match the vocabulary word with the correct picture on the “Cells Mind Map.” When you’re ready to glue, raise your hand so you can check your Mind Map with your teacher.
3. Fold along the dotted line on each vocabulary card to create a flap. Put glue **ONLY** on the hinge of your vocabulary cards ( the word should be on top). **You should be able to open the flap to see the definition and the picture underneath.**
4. Discuss with your group:
  - a. Why do you think “glucose” is important to cells?
  - b. What is the role of each cell part in making the whole cell function?
  - c. Predict: Why do all of the types of cells look different?

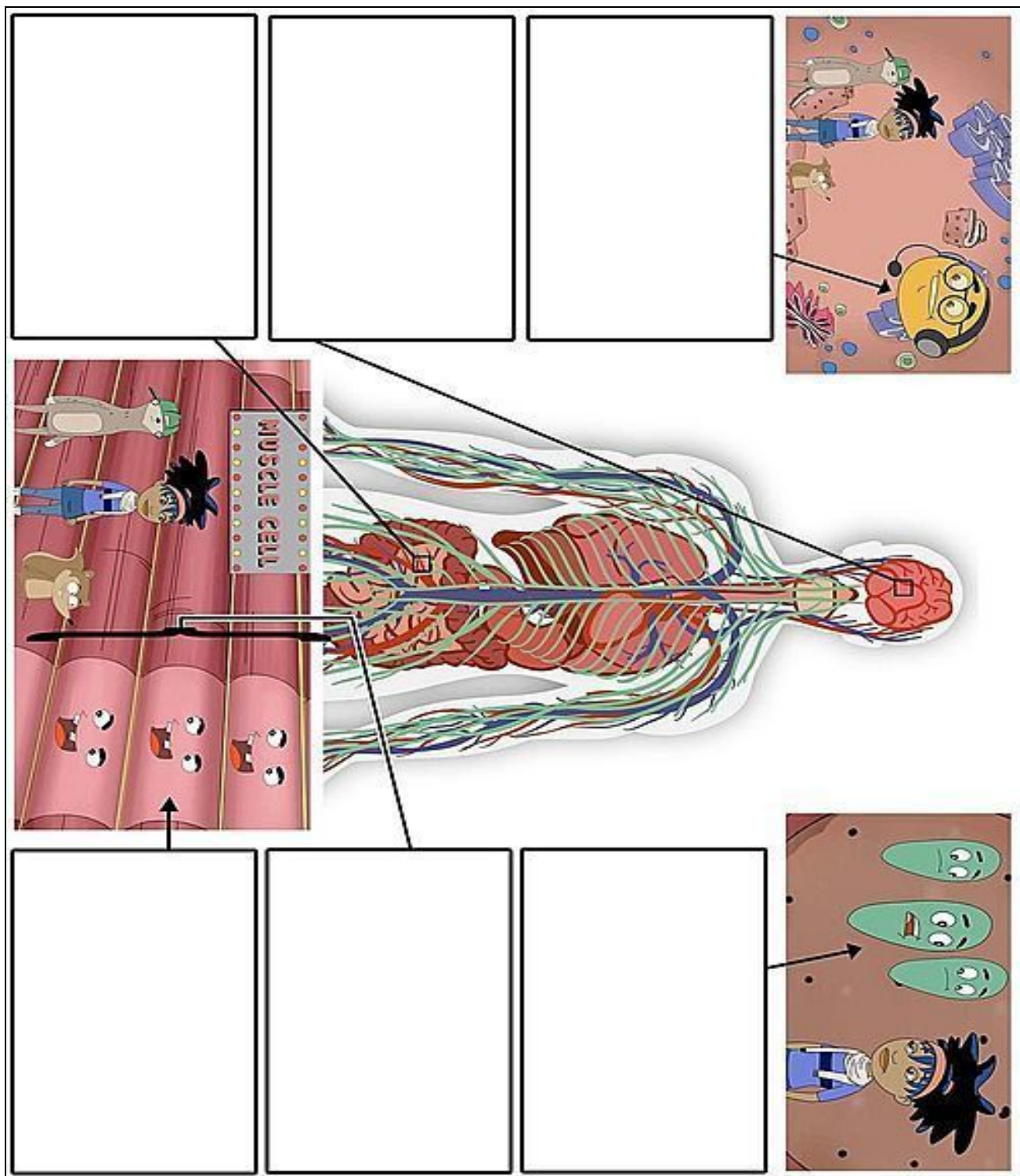




# MOSA MACK SCIENCE

## STUDENT GUIDE

### Cells Mind Map





# MOSA MACK SCIENCE

## STUDENT GUIDE

### Vocabulary Cards

<div></div> <div>Mitochondria</div>	<div></div> <div>Nucleus</div>	<div></div> <div>Cell Membrane</div>
<div></div> <div>Muscle Cell</div>	<div></div> <div>Brain Cell</div>	<div></div> <div>Small Intestine Cell</div>

Definitions:

**Muscle Cell:** Cells that make up the muscle

**Brain Cell:** Cells that make up the brain

**Small Intestine Cell:** Cells that make up the small intestine

**Nucleus:** The command center of the cell

**Mitochondria:** The part of the cell that creates energy

**Cell Membrane:** The outside barrier of the cell



# MOSA MACK SCIENCE

## STUDENT GUIDE

### III. Exit Ticket: Check for Understanding

Complete the exit ticket below or you can take the quiz online!

**Name:** \_\_\_\_\_

**Date:** \_\_\_\_\_

1. Which cell part is responsible for controlling what goes into and out of the cell?
  - a. Nucleus
  - b. Cell Membrane
  - c. Mitochondria
  - d. Ribosome
2. Which cell part is responsible for making energy for the cell?
  - a. Nucleus
  - b. Cell Membrane
  - c. Mitochondria
  - d. Ribosome
3. Which cell part would be called the “control center” of the cell?
  - a. Nucleus
  - b. Cell Membrane
  - c. Mitochondria
  - d. Ribosome
4. The small intestine has extensions of what cell part, which helps it absorb more nutrients?
  - a. Nucleus
  - b. Cell Membrane
  - c. Mitochondria
  - d. Ribosome
5. What type of cell has branch-like extensions, which allow it to send messages to other parts of the body?
  - a. Muscle Cell
  - b. Brain Cell
  - c. Small Intestine Cell
  - d. Skin Cell
6. Mosa and her team find out that Eric is low on energy. What does the mitochondria need in order to make energy?
  - a. Carbon Dioxide
  - b. Air
  - c. Glucose
  - d. ATP