LEARNING IN PLACE

LESSON PLAN

Subject: Grade 7 Science **Lesson:** Send for the Doctor!

Standard Addressed: Compare the structures and functions of plant and animal cells, including major organelles. (NC.7.L.1.2)

Objectives:

- Students will be able to compare bacteria, plant, and animal cells.
- Students will be able to analyze how organelles within all three cell types are the same and different.

Materials Needed:

- Device for showing *Send for the Doctor!* video
- "Send for the Doctor!" activity sheet

Outline:

- Prior to this lesson, students should know that all living things are composed of cells and that there are different organelles in a cell.
- Show the 12 ½ minute video, *Send for the Doctor!* (https://youtu.be/tda1nT4yEAY) .
- Discuss the activity prompt and review the diagrams of the three different types of cells.
- Students finish the activity independently or with a partner. (Please note that there are two versions of the activity; one provides more guidance by using sentence starters and the correct number of blanks for student answers.)

Take It Further: Students research the history of the microscope and make a timeline showing the invention and improvement of microscopes through the years.

Cross-Curriculum Connection: Students design a 3D representation of one of the cell types using only materials that would have been thrown away or recycled.

LEARNING IN PLACE

SEND FOR THE DOCTOR

Grade 7 Science

Student Name: _____Date: _____

We learned from our 1802 visit to Salem that epidemics and pandemics were occurring then as they do now. Some of these diseases were caused by viruses, while others were caused by bacteria.

Bacteria are organisms made up of only one cell. Let's compare bacteria with a plant and an animal cell.

Use the diagrams below to help you complete the graphic organizer on the next page.

Diagram of a Bacterial Cell

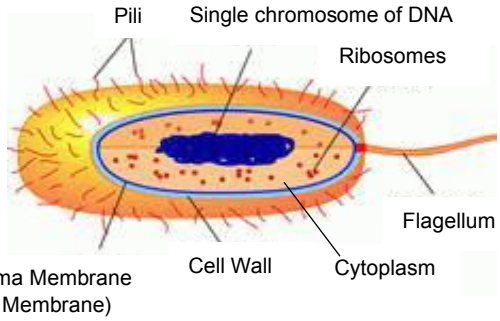


Diagram of an Animal Cell

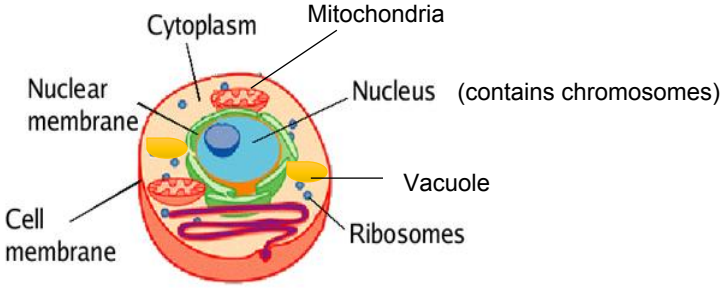
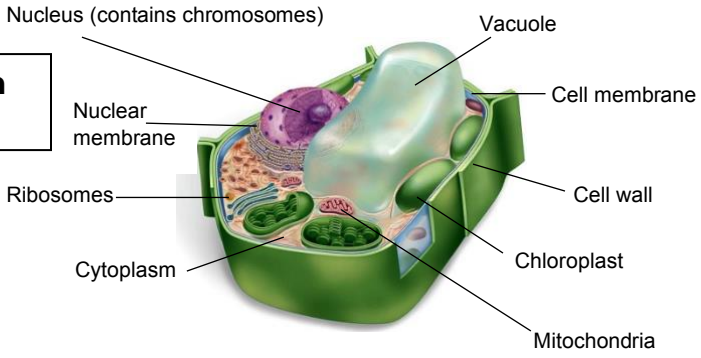


Diagram of a Plant Cell

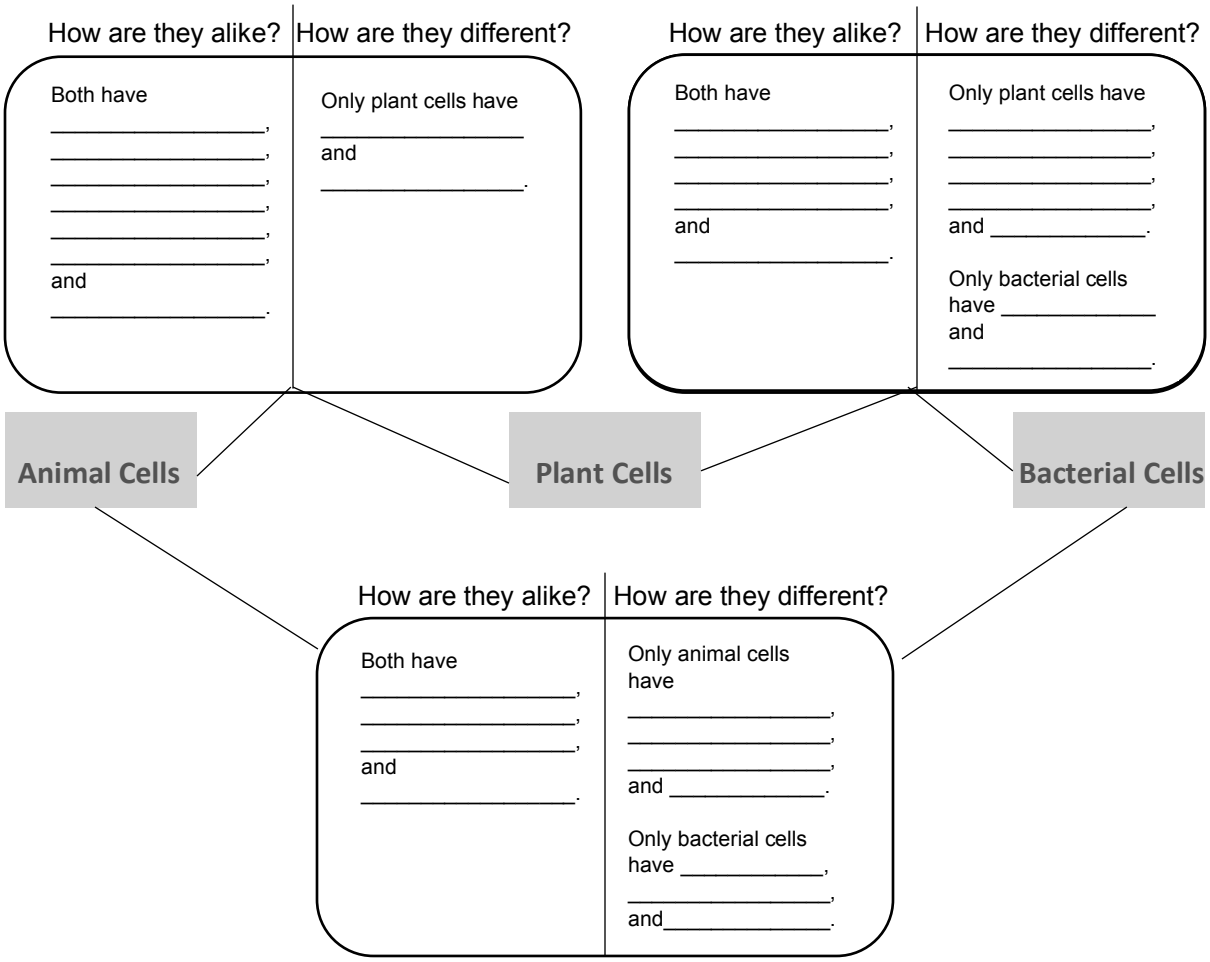


LEARNING IN PLACE

SEND FOR THE DOCTOR

Grade 7 Science, Graphic Organizer A

Student Name: _____Date: _____



What organelles are found in animal, plant, and bacterial cells?

_____, _____,

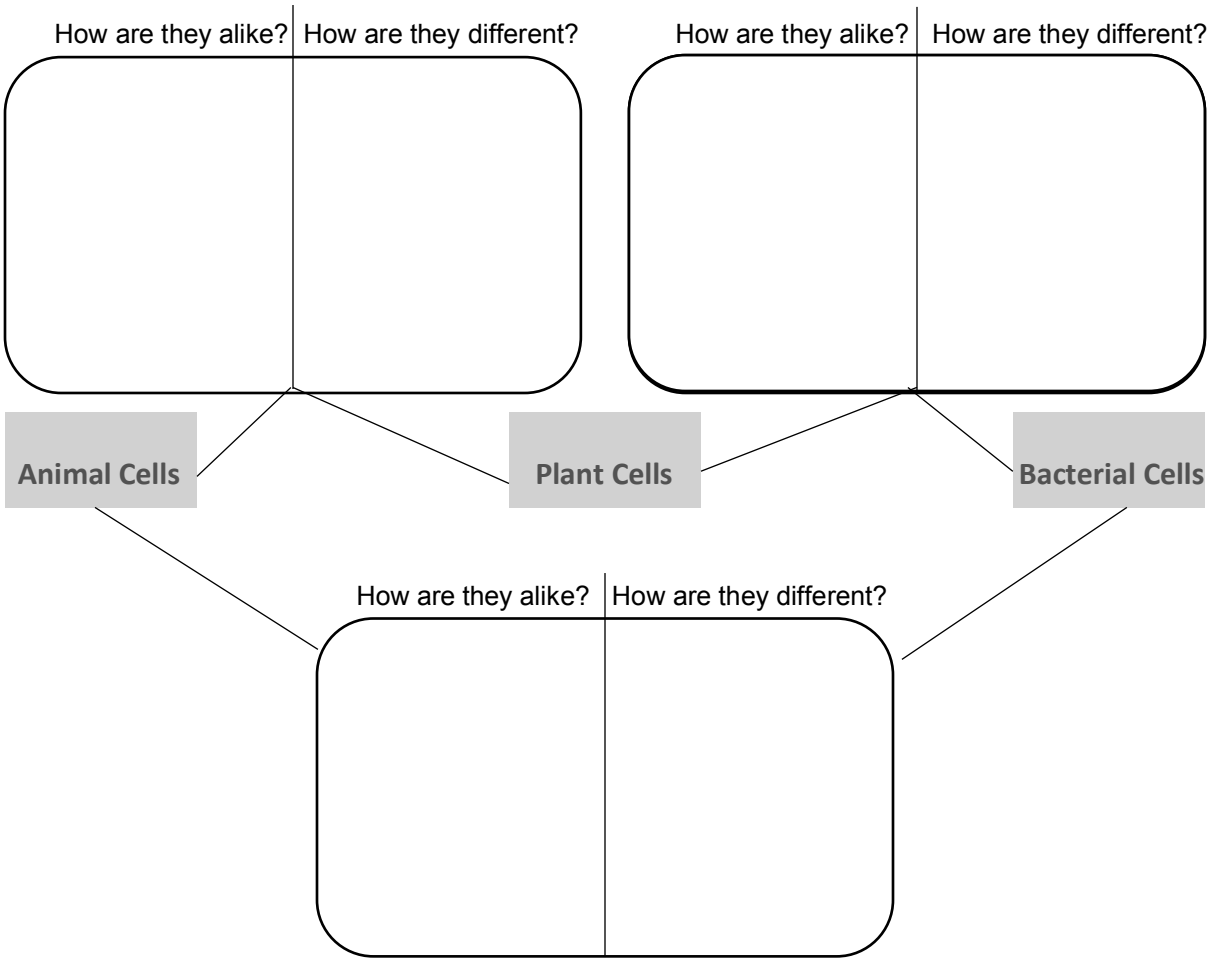
and _____.

LEARNING IN PLACE

SEND FOR THE DOCTOR

Grade 7 Science, Graphic Organizer B

Student Name: _____Date: _____



What organelles are found in animal, plant, and bacterial cells?

_____

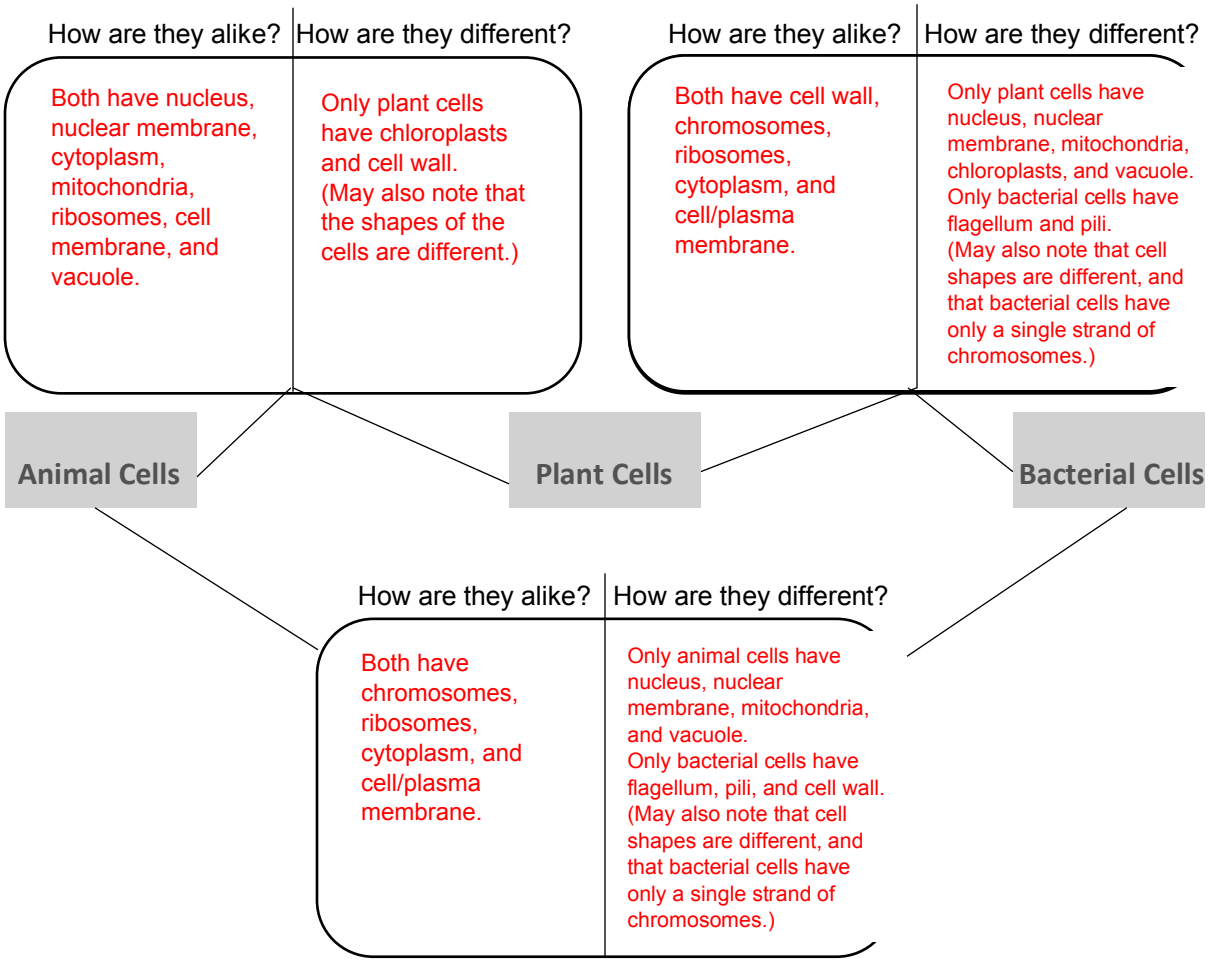
_____

_____

SEND FOR THE DOCTOR

Grade 7 Science

ANSWER KEY



What organelles are found in animal, plant, and bacterial cells?

Chromosomes, cytoplasm, and cell/plasma membrane