

Lesson 2: CELLebration! Cell Mapping

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Grade Level(s)

K-5

Lesson Overview

Students will begin to interpret all life and structures as organisms vs. organizations. They will interview each other, drawing analogies between the parts of their classroom, their homes and the functions of a healthy cell.

Learning Objectives

- To explore analogies through macro-observation of community structures
- To develop more empathy and care around creating analogies in cell structures
- To deepen understanding of the anatomy and function of the cell
- To define micro observation

Standards

Develop and use a model to describe the function of a cell as a whole as ways parts of cells contribute to the function (NGSS MS-LS1-2)

Preparation

- Make an aerial map of classroom labeling the structural components of the classroom with the parts of the cell
- Parts of the Cell Definitions with Analogies made by students should be available

Materials and Resources

Paper

Pencils

Cells Rap! (<https://www.youtube.com/watch?v=-zafJKbMPA8>)

Parts of the Cell "School" Analogy (<https://quizlet.com/18134639/part-of-a-cell-analogy-with-a-school-flash-cards/>)

Activity 1: Parts of the Cell Rap and Review (15 Minutes)

- Review the parts of the cell and their definitions (Pair-Share)

- Play the “Cell Rap” song and see if the students can catch on to some of the clever metaphors in the lyrics. Ask questions and discuss.
- Reveal the map of the classroom and ask students to share their cell analogies (i.e. I think our main rug is the nucleus because it brings order to our space and directs all of the cell activity. I think our snack table is like mitochondria because that’s where you all organize snack and make snack available for the whole group, helping us keep our energy up, etc.)

Activity 2: Interviews and Micro-Observation (45 Minutes)

- Tell the students that they will now conduct a “Micro-Observation,” learning how to analyze social settings on a small, local level.
- Have students pair up and decide whether they are going to Micro-Observed their homes or their classrooms. They can then begin to interview each other using the parts of the cell as a prompts: “I think my parents are the nucleus in our house because they direct all of the activity.”

Troubleshooting

Constantly move throughout the classroom to keep students on track, to answer questions, and to listen/correct for understanding or misunderstanding of the process.

Assessment

Reflections: Circle up and have the students share out their wins and their struggles. These reflections will help gauge how well the activity resonated and how their learning was reinforced.