

Lesson 3: CELLebration! Create a Model

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Grade Level(s)

K-5

Lesson Overview

Students will create cellular representations their “community” using the data they’ve generated from their interviews as inspiration. They will create sketches with pencil and paper, and after receiving feedback from their teacher and peers, students can choose to redesign or move on to 3-dimensional craft materials, such as Crayola Model Magic, Play-Doh, modeling clay, and paper mache.

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

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

- Completed student interview sheets from lesson 2
- Gather materials for prototyping (see below)

Materials and Resources

Paper
Pencils
Modeling Clay
Glue
Crayons
Scissors

Activity 1: Cellular Representations of Classroom Community (15 Minutes)

- Instruct students will create cellular representations their “community” using the data they’ve generated from their interviews as inspiration. For this activity, they will create rough sketches using pencil and paper.

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Activity 2: Create a Cellular Model (45 Minutes)

- Divide class into small groups of 3-4 students.
- Taking turns, students present their sketches to the group, explaining how their sketch is a cellular analogy of the data received in the interview.
- After receiving feedback from their teacher and peers, students can choose to redesign or move on to 3-dimensional craft materials, such as Crayola Model Magic, Play-Doh, modeling clay, and paper mache.

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.