**Backwards Design Project**

**Name of lesson/unit: Life Science-Cells**

**Grade Level: 6th grade/ 7th grade**

**Subject Area: Life Science**

**Stage 1:**

**Content standards:**

* **MS-LS1-2.**
* **RL.6.4**
* **RL.6.7**
* **RI.6.7**
* **SL.6.1**
* **SL.6.4**
* **SL.6.5**
* **SL.6.6**

**Understanding(s):**

Students will understand that…….

* The structures and functions of plants and animal cells.

**Essential Question:**

* What are the different organelles in plant and animal cells, and what are the functions?

**Stage 2: Acceptable Evidence**

**Performance Task(s)**

How do the students prove they understand the concept?

* Venn diagram on dry erase posters comparing and contrasting plant and animal cells
* Drawing and explanation of cell parts on the EDUCREATION app (interactive whiteboard)
* Vocabulary flipchart in their interactive notebook
* Vocabulary quiz to check for understanding of the function of the parts of a cell

Other Evidence and Formative Assessment works:

* 3D edible cell presentation. The students will bring in a variety of materials to create their edible cell. They will complete a brainstorming activity prior to this day to decide which items to use for this project. For example, frosting for the cytoplasm, sprinkles for the ribosomes, gummi worms for the mitrochondrion, and a fruit roll-up for the cell wall. After creating their edible cell, they will be required to present their cells. The teacher will record with a flipcam while they present. They will be required to explain the parts and their functions as they present.

**Rubric:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Parts:** | **Part include:** | **Part Description:** | **Appropriate Material:** |
| **Nucleus** | **\_\_\_\_\_\_/10** | **\_\_\_\_\_\_/10** | **\_\_\_\_\_\_/10** |
| **Cell Wall** | **\_\_\_\_\_\_/10** | **\_\_\_\_\_\_/10** | **\_\_\_\_\_\_/10** |
| **Chloroplast** | **\_\_\_\_\_\_/10** | **\_\_\_\_\_\_/10** | **\_\_\_\_\_\_/10** |
| **Mitochondria** | **\_\_\_\_\_\_/10** | **\_\_\_\_\_\_/10** | **\_\_\_\_\_\_/10** |
| **Cell Membrane** | **\_\_\_\_\_\_/10** | **\_\_\_\_\_\_/10** | **\_\_\_\_\_\_/10** |

**Stage 3: Learning Plan**

**Learning Activities:**

* **Big Tip: pre-reading strategy finding the key words and key ideas.**
* **Vocabulary flipchart**
* **Read the text about cells (paired reading, whole group reading, independent/class discussion)**
* **Practice labeling the correct cell parts (smartboard or magnetic model on the board)**
* **Describing the cell functions on Educreation**
* **Quiz over the cell parts and functions**
* **Final presentation will show the understanding of the parts and functions of a cell**

**Lesson Contributors: Names and schools**

**Jenna Keigley-Harding Grade School CU #2**

**Judith Cary –Parkside, Peru 124**

**Brian Pett – La Salle Lincoln Junior High**

**Kenna Branz- Northlawn Jr. High School #44**

**Kristine Ehrler – Northlawn Jr. High School #44**