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| M. Angileri | **6th grade science** | | **Lesson Plans 10-7-19 Cell Theory #2** | | | | |
| NGSS Standards | **MS- LS 1-2**  S & E practices  CCC | | Develop and use a model to describe the function of a cell as a whole and ways parts of a cell contribute to the function.  **Developing and Using Models:** Phenomena: Develop and/or use a model to predict and/or describe phenomena.  MS-LS 1-2  **Structure and Function:** Analysis of Structures: Complex and microscopic structures and systems can be visualized, modeled, and used to describe how their function depends on the shapes, composition, and relationships among its parts; therefore, complex natural and designed structures/systems can be analyzed to determine how they function. | | | | |
| Vocabulary: | | **Multicellular:** An organism made up of more than one, often different cells.  **Cell:** Basic structural and functional unit in living organisms.  **Cell Theory:** Theory that states the cell is the basic unit of all living things.  **Unicellular:** An organism made up of one cell.  **Organelle:** Membrane-bound structure inside a cell that has a particular function,  **Prokaryote:** Organism whose cells lack a nucleus and membrane-bound organelles.  **Eukaryote:** Organism whose cells have a true nucleus and membrane-bound organelles. | | | | | |
| Clarification Statement: | | Emphasis is on the cell functioning as a whole system and the primary role of identified parts of the cell, specifically the nucleus, chloroplasts, mitochondria, cell membrane, and cell wall. | | | | | |
| Essential Question | | **What is the smallest thing that can be considered living?** | | | | | |
|  | | **Monday** | | **TUESDAY** | **WEDNESDAY** | **THURSDAY** | **FRIDAY** |
| Content Objective: | | SW demonstrate application of contributions of Cell Theory scientists by completing information to create power point slides with 70 % accuracy. | | SW demonstrate analysis of contributions of Cell Theory scientists by finding connections in information from student power point slides with 70 % accuracy. | SW demonstrate knowledge of a cell as a whole by identifying and stating characteristics that make something living or nonliving with 70% accuracy. | SW demonstrate application of how complex and microscopic structures and systems can be visualized by carrying out the investigation and discussion with 70% accuracy. | SW demonstrate comprehension of how complex and microscopic structures and systems can be visualized by summarizing information from the scopepedia article with 70% accuracy. |
| Language objective | | SW summarize Cell Theory by completing google slides using accurate vocabulary and meeting all 6 components with 70 % accuracy. | | SW give feedback about the contributions of scientists who lead to the development of cell theory using Google slide presentations with 70% accuracy. | SW give feedback about knowledge of a cell as a whole using sentence starters with 70% accuracy. | SW justify how complex and microscopic structures and systems can be visualized using sentence frames with 70% accuracy. | SW summarize how complex and microscopic structures and systems can be visualized using sentence frames with 70% accuracy. |
| In class today | | Cell Theory Project  Research and edit | | Google Slides Present project  Investigating Phenomena and Graphic Organizer | APK: Assessing Prior Knowledge  Hook: Living Verses Nonliving sort | Explore 1: Single or Multi  Picture Vocabulary | Linking Literacy  Scopepedia |

1. Assessment Boundary: Assessment of organelle structure/function relationships is limited to the cell wall and cell membrane. 2. Assessment of the function of the other organelles is limited to their relationship to the whole cell.

3. Assessment does not include the biochemical function of cells or cell parts.

**Guiding Questions:**

What are living things made of?

What does a Cell need to live?

How do body systems work together?

How do organisms respond to stimuli?

**Scientists that contributed to Cell Theory:**

Robert Hooke

Anton van Leeuwenhoek

Matthias Schleiden

Theodor Schwann

Rudolf Virchow