**Lesson Title:** Eukaryotic vs. Prokaryotic Cells- Microscope Laboratory Activity

**Unit:** Growth and Development of Cells

TEKS: (11) (a)

OBJECTIVES

The student shall be able to:

1. Distinguish between eukaryotic and prokaryotic cells using a microscope.

TEACHING MATERIALS, TOOLS, AND EQUIPMENT

Microscopes

Slides containing plant, animal, and bacterial cells

Computer

PPT- *What’s the Difference? Plant, Animal, and Bacterial Cells*

Projector

TEACHING PROCEDURE

|  |  |
| --- | --- |
| Interest Approach/Anticipatory Set | Teacher Notes |
| 1. Link - I will link the material into real-life situations. For example, when the students are viewing the different plant, animal, and bacterial cells, they will know how we (as humans) differ from other organisms.  2. Motivation - I will motivate the students by demonstrating what they will be doing in class today by using the microscopes and various slides of cells.  TRANSITION – “Today, you will better understand the importance of knowing what type of cells go with each organism.” |  |

|  |  |
| --- | --- |
| Teaching Plan and Strategy / Presentation of New Material | Teacher Notes |
| 1st 15 minutes:  -Interest Approach   * Demonstrate what they will be doing in class today by using the microscopes and various slides of cells.   Then I would state, “Today, you will better understand the importance of knowing what type of cells go with each organism”.  -State Objectives   * Objective 1: Distinguish between eukaryotic and prokaryotic cells using a microscope.   -Review the previous day’s lesson to clear up any lingering questions.  2nd 15 minutes:  - Divide students into groups with numbers depending on number of available microscopes and slides.  - Pass out slides with so that:   * Each group has one set of the three different slides (plant, animal, and bacterial cells); *or* * Each group has 1 of the 3 slides (plant, animal, and bacterial cells)   -The students will determine which slide is a plant, animal, and bacterial cell.  -Additionally, they will have to individually, draw and label what they see under the microscope on a piece of paper.  3rd 15 minutes:  -One person from each group will come up to display on the Elmo, each of the three drawings from the microscope viewing.  -The class will participate in discussing what/if the groups left anything off of the drawings. | Techniques and media used to teach with:  Power point  Microscopes  Slides |

ENGAGEMENT

The students will have the opportunity to work as a group looking at various plant, animal, and bacterial cell slides. The students will then draw and label what they saw under the microscope, as well as display the findings on the Elmo to the class. The other students will have the opportunity to correct anything left off of the drawings.

EVALUATION

The teacher will have a re-cap of the objectives to make sure that everything is understood by everyone.

ADDITIONAL MATERIALS

None.

College & Career Readiness Standards: (11)(a)

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