**Lesson Title: Mitosis Lab**

**Unit: Growth and Development (5)**

TEKS: (11)(b) The student will describe and explain cell differentiation in the development of organisms.

OBJECTIVES

The student shall be able to:

1. Identify phases of mitosis.
2. Analyze functions of phases of mitosis.
3. Apply mitosis to cell differentiation.

TEACHING MATERIALS, TOOLS, AND EQUIPMENT

LM: Construction/cardstock paper, yarn (6 different colors), forks, bottle caps, coke can tabs, glue, scissors, tape, markers.

TEACHING PROCEDURE

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| Interest Approach/Anticipatory Set | Teacher Notes |
| Play the mitosis rap: <http://www.nclark.net/MitosisMeiosis> (click on the link that says “Mitosis Rap”. Get students to memorize the phases of mitosis: interphase, prophase, metaphase, anaphase, telephase, cytokinesis (IPMATC-“I Pray More At The Church”) by repetition as a class.  TRANSITION: Introduce lab activity and pass out materials. Put students in 6 groups and assign each group a phase of mitosis to construct using materials given. Have them construct the phase of mitosis they are assigned using their own creativity. Provide pictures with a description of each phase to each group for reference. Walk around to help students/groups. | Play mitosis rap  Memorization technique  Pass out materials, introduce activity  Help students |

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| Teaching Plan and Strategy / Presentation of New Material | Teacher Notes |
| **When students have completed this lab activity, allow them to work on SAE record books for the last 15 minutes of class. Have them update their weekly activities.** | SAE’s |

ENGAGEMENT

Students are engaged throughout this lesson when they are put into groups to construct a phase of mitosis. They are able to collaborate with each other to get the task done. They are also engaged by repeating the phases before the lab begins with the teacher to ensure memorization.

EVALUATION

The teacher will check over work done when the groups have completed their assigned phase. If there is something wrong, have students correct it and then check again. This will allow the teacher to know what the students have achieved.

ADDITIONAL MATERIALS

Song: Mitosis rap (<http://www.nclark.net/MitosisMeiosis>)

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