

Presentation Date: March 3

Presenters: Joe Mahmuh, Stu Dent, Ima Jean Yiss

Presentation Plan

Title of Presentation: Cell Growth and Mitosis

Topics / Main Ideas:

- Cells come from pre-existing cells
- Cells must go through a particular sequence of steps in order to properly reproduce
- Eukaryotic cells undergo a special process known as mitosis

Objectives:

By the end of this presentation, students will understand that cells are constantly replacing each other and will be able to recognize and name the four stages of mitosis in chronological order.

Materials:

- Biology textbook
- PowerPoint on mitosis
- Sticky notes
- Video on mitosis / cytokinesis dance

Activities:

Opening activity or Hook – grabbing student attention and establish relevance)
Quick question/answer/discussion/: 5 minutes.

“Who can tell me some characteristics all living organisms share?”-(Presenter should expect students to use their prior knowledge to answer.)

Growth is one of the answers along with having cells, and after the characteristics have been given the presenter should ask how living things grow, and then have each student turn to a partner and quickly discuss a few possibilities. The presenter will then ask for responses, not necessarily expecting the answer they are looking for. Finally, the presenter will state that it partially occurs through cell division, otherwise known as mitosis. This will lead the class into the activities for the rest of the day, which is mainly dedicated to giving students a fundamental knowledge of mitosis.

Activities and Methods (identify what the students and presenter will do)

Notes/Lecture: 20minutes

The presenter will use the appropriate textbook section to create a powerpoint outline of the material. The end of each slide will contain a question related to the slide content. The students will copy the material from the slides into their notebooks (ILP students will get the slides printed for them with a few blanks of key terms to fill in). The presenter will give the students a few minutes to transfer the content into their notebook while slowly and quietly walking up and down the aisles to observe the students writing. After they are done writing the presenter will talk about the slide in detail and explain why the information is relevant. (Wait to lecture until students are done writing is beneficial because it is difficult for them to write and listen at the same time.) At the end of the slide the presenter will verbally ask the question that is written, hopefully fostering critical thinking or class discussion. This process will repeat for 4-5 slides. The very last slide will ask the students to draw each stage of mitosis.

Reading Guide/Coding the Text: 20 minutes

The students will silently read the appropriate section of their textbook. While they do this they will also do an activity called coding the text. They will write in the text through the usage of sticky notes. While they are reading they will need to mark important things such as key words, connections they find to previous content, inferences, questions they may have, and general ideas written in their own words. They will write on sticky notes and stick those notes to the pages of the textbook. This is designed to help the students understand the material and give them something to study from.

Closing activity or Wrap-up (explain how the lesson objectives will be reinforced and brought to closure for the day)

Informal Assessment: 5 minutes

At the end of the class the presenter will have each student take out a piece of scratch paper and write their name at the top. The presenter will then use my computer and projector to pull up a word document with the following questions: "What are some ways living things grow?" and "In order, what are the four stages of Mitosis?" The students will be informed that this assessment is not graded and is simply a way to gauge how the

students are doing and potentially enlighten the presenter on what material needs to be covered again.

Assessment:

Mitosis “Quick Quiz”

Homework:

NONE