

Lesson Plan Template

Lesson Segment Focus: Phases of Mitosis

Lesson _____ of _____

Course & topic addressed Science—Phases of Mitosis

Date: 10/21/2018 Grade 3rd

Student Outcomes

Specific learning objectives for this lesson.	Students will learn the five phases of mitosis.
Describe the connection to previous lessons. (Prior knowledge of students this builds upon)	Students should understand what a cell is and its functions as well as what a chromosome is.
Knowledge of students background (personal, cultural, or community assets)	There is no prior knowledge of student background needed when performing this lesson.

State Academic Content Standards

List the state academic content standards with which this lesson is aligned. Include state abbreviation and number & text of the standard.	<p>LS3.A: Inheritance of Traits</p> <ul style="list-style-type: none"> ▪ Many characteristics of organisms are inherited from their parents. (3-LS3-1) ▪ Other characteristics result from individuals' interactions with the environment, which can range from diet to learning. Many characteristics involve both inheritance and environment. (3-LS3-2)
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Academic Language Support

<p>What planned instructional supports might you use to assist students to understand key academic language to express and develop their content learning?</p> <p>What will you do to provide varying supports for students at different levels of academic language development?</p>	<p>I would try to make sure I used rich language found in their text to support the topic at hand. As a class we will read the chapter and discuss the main vocabulary words and main ideas. I will make sure the class understands the vocabulary and content by allowing them time to show understanding through group work and projects.</p>
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Key Vocabulary

What vocabulary terms/content specific terminology must be addressed for students to master the lesson?	Interphase, Metaphase, Prophase, Anaphase, Telophase, Mitosis, and cells.
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Materials

Materials needed by teacher for this lesson.	<ul style="list-style-type: none"> • YouTube video of mitosis.... https://www.youtube.com/embed/RNwJbMovnVQ • Slides on google that allows students to fill in information on mitosis • Handout of Phases for the students to place into correct order
Materials needed by students for this lesson.	<ul style="list-style-type: none"> • Scissors • Glue • Colored pencils/markers

Lesson Timeline with Instructional Strategies & Learning Tasks (**This should be VERY DETAILED**)

Amount of Time	Teaching & Learning Activities	Describe what YOU (teacher) will be doing and/or what STUDENTS will be doing during this part of the lesson.
5 mins	<u>Introduction:</u>	<ul style="list-style-type: none"> • Get the children excited about science and start the lesson by showing the video from YouTube about the phases of mitosis.
35 mins	<u>Instruction:</u>	<ul style="list-style-type: none"> • After they have watched the video, ask the students about what vocabulary words stood out to them the most. Which ones seemed content specific and what they think they mean. • After your class discussion is over let the students read the chapter from their books out loud to go over the phases of mitosis. • Once the reading is done let the students get into groups and complete the stages of mitosis handout. Tell them to cut them out and match the pictures to their discriptions.

Amount of Time	Teaching & Learning Activities	Describe what YOU (teacher) will be doing and/or what STUDENTS will be doing during this part of the lesson.
20 mins	Closure:	<ul style="list-style-type: none"> For the assessment allow the students to complete the google slides as a test. This wil show you what they know and how well they understand the information on mitosis. Be sure to explain the importance of copy rights and plagiarism when looking on the internet and taking information from sites. The students can conduct this in small groups of two or three or on their own. If you are wanting them to show their slides to the class I would recommend doing this in groups.

Accommodations/Modifications

How might I modify instruction for: Remediation? Intervention? IEP/504? LEP/ESL?	Remediation-group the student up with a student that could help explain it one on one. Intervention- I'm confused on this meaning? IEP/504- as the teacher you should make the printed instructions bolder and bigger. LEP/ESL-I am confused as to what this is??
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Differentiation:

How might you provide a variety of instructional methods/tasks/instructional strategies to ensure all student needs are met?	<ul style="list-style-type: none"> Write the instructions on the board in bold letters Say the instructions out loud so the students can hear it and ask questions afterwards as a group. Put the instructions on assignments in large print and simple task instructons.
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Assessments: Formative and/or Summative

Describe the tools/procedures that will be used in this lesson to monitor students' learning of the lesson objective/s (include type of assessment & what is assessed).	<input type="checkbox"/> Formative / <input type="checkbox"/> Summative	
	<input type="checkbox"/> Formative / <input type="checkbox"/> Summative	
	<input type="checkbox"/> Formative / <input type="checkbox"/> Summative	

Research/Theory

Identify theories or research that supports the approach you used.	
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Lesson Reflection/Evaluation

What went well?	<i>TO BE FILLED IN AFTER TEACHING</i>
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What changes should be made? How will I use assessment data for next steps?	
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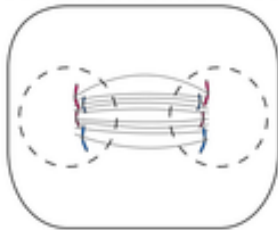
Include supporting material such as slides, pictures, copy of textbook, and handouts for any activities students will be using as part of your lesson.

*adapted from: <http://webcache.googleusercontent.com/search?q=cache:EsQcNWuG1ZoJ:web.mnstate.edu/harms/StudentTeachers/edTPA-LessonPlan.doc+&cd=2&hl=en&ct=clnk&gl=us>; <http://www.moreheadstate.edu/getmedia/cd3fd026-939f-4a47-a938-29c06d74ca01/Lesson-Plan-and-Reflections.aspx>; <http://www.mcneese.edu/f/c/9cb690d2/Lesson%20Plan%20Rubric%20Aligned%20with%20InTASC.docx>; <https://www.uwsp.edu/education/Documents/edTPA/Resource12.pdf>; <https://www.uwsp.edu/education/Documents/edTPA/Resource11.pdf>; <https://www.uwsp.edu/education/Documents/edTPA/Resource11a.pdf>; <https://www.uwsp.edu/education/Documents/edTPA/LessonPlanTemplateSOE.docx>; <https://www.uwsp.edu/education/Documents/edTPA/SpecEdLessonPlanGuide.docx>; <https://www.uwsp.edu/education/Documents/edTPA/SpecEdLessonPlanTemplate.docx>

STAGES OF MITOSIS

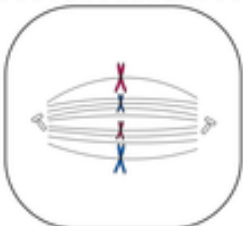
1a

Cut out the four diagrams and descriptions of the stages of mitosis below and stick them down in the correct order in the table on sheet 1b.



Stage: _____

The chromosomes line up on the e_____ of the cell. They attach to the f_____ by their c_____.



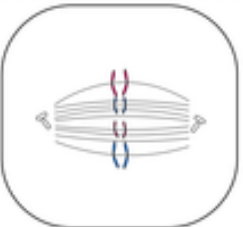
Stage: _____

The c_____ joining the two sister chromatids splits as proteins called m_____ proteins walk along the spindle fibres in opposite directions. This causes the chromatids, now called s_____, to be pulled a_____ to opposite poles of the cell.



Stage: _____

The separated chromosomes reach the opposite p_____ of the cell. A n_____ envelope forms round the two sets of duplicated chromosomes. The two n_____ that form are i_____ to one another. After mitosis, c_____ occurs, where the cell splits into two separate cells.



Stage: _____

The chromosomes in their r_____ form, consist of two sister c_____. In this stage the chromosomes c_____, giving a shorter and thicker appearance. The nuclear e_____ also breaks down. The centriole divides and the two centrioles move to opposite p_____ of the cell. A s_____ starts to form between the two centrioles. The spindle fibres are made from a protein called t_____.