Title: Visual Depictions of Mitosis

Curriculum: Life Sciences

Grade-Level Span: 7-10

PURPOSE:
The student will demonstrate knowledge of the phases of mitosis after a verbal, still-visual and moving-visual study of the steps of mitosis.

DESCRIPTION:
The teacher will use a "Smart board" to enhance the classroom lecture on mitosis. During the lecture, the teacher will access the provided websites and project them onto the "Smart board" for students to view. Students will also be supplied with the website addresses to use in their review of the steps of mitosis on the "Smart board" with the class. A video quiz will also be used as reinforcement of the information prior to the test.

ACTIVITIES	CURRICULUM STANDARDS	NETS PERFORMANCE INDICATORS
1. Students will take notes on the mitosis lecture. (**Day 1**)	7 SCI A5 9-12 SCI A6	N/A
2. Students will draw steps of mitosis with website images as a guide. (**Day 1**)	7 SCI A5 9-12 SCI A6	3
3. Students will compare diagrammatic depictions of mitosis with actual photographs of the stages of mitosis. (**Day 1**)	7 SCI A5 9-12 SCI A6	3
4. Students will take turns using the "Smart board" to review stages of mitosis with the class. (**Day 1**)	7 SCI A5 9-12 SCI A6	1,2,3,4
5. Students will view the video and complete the accompanying quiz, "Mitosis Video Quiz" by the Teachers' Video Company for review. (**Day 2**)	7 SCI A5 9-12 SCI A6	3
6. Students will study 15 minutes. They will then complete a study guide to assess their knowledge level of mitosis. (**Day 3**)	7 SCI A5 9-12 SCI A6	N/A
7. After completing the study guide, students will use their notes to check their answers and complete any portion of the study guide they have left blank. (**Day 3**)	7 SCI A5 9-12 SCI A6	N/A
8. Students will complete the written test on mitosis. (**Day 4**)	7 SCI A5 9-12 SCI A6	N/A

TOOLS AND RESOURCES:

Hardware:

Computer with internet connection
Smart board and projector
TV/VCR
Paper
Writing utensils
"Mitosis Video Quiz" video (Teachers' Video Company)

Web sites:

www.bioweb.uncc.edu/biol1110/stages.htm
www.cellsalive.com/mitosis.htm
www.bioweb.uncc.edu/BIOL1110/d-stages.htm

ASSESSMENT:

Students will be assessed based on their answers on the written test regarding mitosis.

CREDITS (INCLUDING CONTACT INFORMATION):

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COMMENTS:

The students really seem to like the "goofy" people in the "Mitosis Video Quiz" video. The repetition of material over three days also seems to help them get a firm grasp of the concepts which helps with the ensuing study of meiosis.