

PowerUp! Instructional Unit

Unit Plan Title: Mitosis/cell cycle		
Developed By: Cheryl Huddleston		
Academic Vocabulary: Mitosis, interphase, anaphase, telophase, metaphase, prophase, mitosis, cell cycle, cytokinesis	Grade Level: 10	Length of Unit: 2 days – one lesson in unit on cell biology
Science/Math Standard(s): <i>What standards will provide the focus for this unit?</i>		
1. L. 1.1. Students are able to relate cellular functions and processes to specialized structures within cells.		
Essential Questions: <i>What essential questions will focus this unit?</i>		
1. Why are cells microscopic?		
2. What controls cell growth and division?		
Content: <i>What topics do students need to know?</i>	Skills: <i>What should students be able to do?</i>	
Students will need to know: Steps of cell cycle, stages of mitosis Cell organelles and functions	Students will need to be able to: Operate a computer independently, read and follow instructions Fill in answers on worksheet using computer Access worksheet from a common file stored on the network	
Assessment(s): <i>What evidence will show that students understand?</i>		
Performance Tasks, Projects: complete web quest worksheet, identify stages of mitosis in classroom lab using prepared slide of onion root tip		
Quizzes, Tests, Academic Prompts: pre and post test Achievement series		
Informal observations/discussions/interviews: questions/answers that teacher generates as students are working through the assignment. I circulate around the room and provide feedback to students who are making mistakes in the choices offered.		
Student Self-Assessment: The cell cycle game provides immediate feedback when students make incorrect choices. They must make the correct choices to finish the game.		