

M07 Lab

Sunday, July 12, 2009
8:07 PM

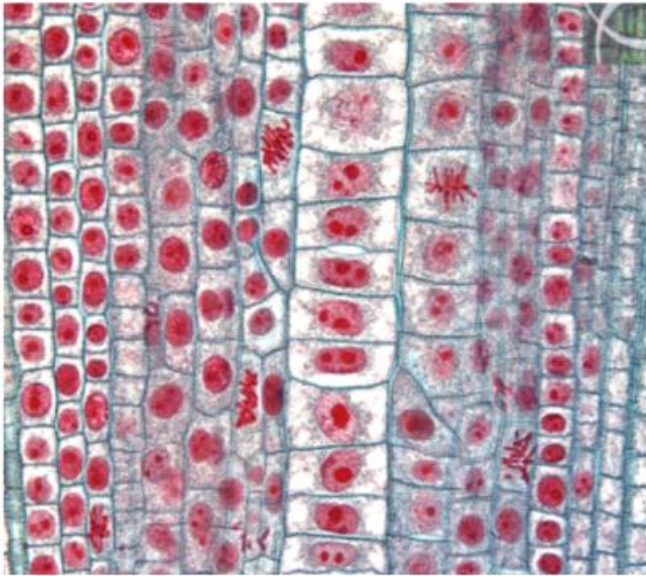
VoiceThread	http://voicethread.com/share/558829/
You Tube Link	http://www.youtube.com/watch?v=qeTwFyv-jtw

Slides	Notes
<div data-bbox="263 491 485 758"></div> <div data-bbox="516 520 769 674"><h2>Module 07: Cellular Reproduction</h2></div> <div data-bbox="217 789 628 852"><p>Lecture 1: Genes, Chromosomes, and DNA Mitosis: Asexual Reproduction</p></div> <div data-bbox="217 867 612 932"><p>Lecture 2: Meiosis: Sexual Reproduction Viruses</p></div> <div data-bbox="168 951 311 982"><p> Lab Day</p></div> <div data-bbox="224 997 409 1024"><p>Interactive Practice</p></div>	
<div data-bbox="380 1056 618 1087"><h3>DNA Extraction:</h3></div> <div data-bbox="198 1125 829 1220"><p>Book --- blender Video --- heat to 60 degrees Celcius (about hot chocolate temp) 5 minutes. Then an ice wtaer bath to cool it off. Then filter it.</p></div> <div data-bbox="138 1199 469 1558"></div> <div data-bbox="500 1236 816 1558"></div> <div data-bbox="548 1570 792 1598"><p>Pour the alcohol in gently.</p></div>	<p>http://www.youtube.com/watch?v=qeTwFyv-jtw</p> <p>The YouTube video has a better procedure in my opinion.</p>



Give the DNA a few minutes and you will find that it floats up in to the alcohol level. It is that cloudy stuff you see. It is composed of long thin strands. Try taking a toothpick to examine the length of the strands.

Liver does well too.



Prophase, Metaphase, Anaphase, Telophase

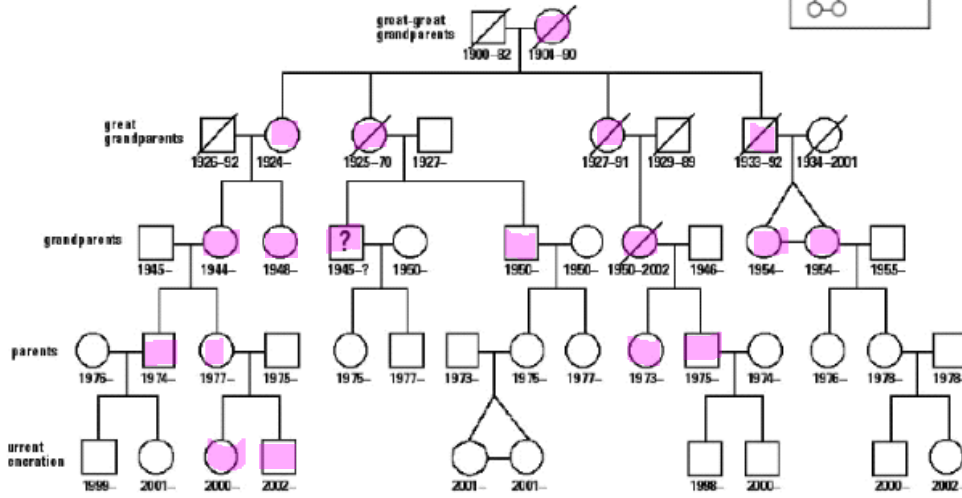
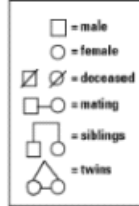
If you don't have a microscope to do the phases, just use the picture to do the lab.

Can you identify what cells are in ...

Prophase,
Metaphase,
Anaphase,
And telophase?

Who's Related by mtDNA?

Key



Mitochondrial DNA - only mother's pass on the mtDNA. There are thousands of copies in a cell as opposed to just up to two copies per cell, so when remains are badly damaged, forensic scientists can use mt DNA to get some indication of a person's identity. All mt DNA goes back to only 3 ladies. How does that fit in to the Bible (flood - Noah's son's had three wives).

CSI Mystery: <http://forensics.rice.edu/index.html>

Meiosis stage
activity would
be a good idea
to teach tough concepts