

Bio 120 Hybrid Spring 2015 -- Mitosis Cell Lab (Lab #6)

Directions for doing the lab at home

Before you start your lab, make sure you have spent time in the chapter. Normally I would have given you a pre-lab lecture on the topic so I am recommending that you watch one or both of the following and watch the BioFlix in Mastering Biology (chapter 6).

1. Crash Course Biology (Khan Academy) Mitosis:
<https://www.khanacademy.org/partner-content/crash-course1/crash-course-biology/v/crash-course-biology-112a>
2. Bozeman Biology – Mitosis—lecture on YouTube by a science teacher named Mr. Anderson: <https://www.youtube.com/watch?v=1cVZBV9tD-A>
- 3.

This lab is from your lab book – pages 6-1 through 6-4.

1. Fill in the terms on pages 6-1 and 6-2. You may skip G₀ and #10 – Recombination.
2. Go to
<http://www.instruction.greenriver.edu/kmarr/biology%20211/Labs%20and%20ALEs/B211%20Labs/B211%20Labs/Onion%20and%20Whitefish%20Mitosis/Onion%20Root%20Tip%20Mitosis/Onion%20Root%20tip%20Mitosis.html>
3. Using the images of an onion root tip in various stages of mitosis from the website, draw a representative cell for each phase on the chart on pages 6-3 and 6-4. Label cell wall, nucleus (where appropriate), chromosomes (where appropriate), and spindle fiber (where appropriate).
4. Record the main events of each phase in the same chart.
5. Practice identifying different stages of mitosis on the web page (nothing to turn in – I am just recommending the practice).
6. Whitefish Embryo Mitosis: Click on the following link to get to the whitefish embryo slides: http://www.biologycorner.com/projects/mitosis/whitefish_embryo.html
7. Look at the different stages of mitosis in the whitefish and compare it to what you saw in the onion root tip. Answer the two questions on p. 6-4 (#2 and #3).

That is it. You do not need to do the rest of the lab. This should only take you maybe 30-45 min. to complete. Hand in your lab book next week in class.