

1b Case Study Mitosis

Adapted from: [National Science Teachers Association](#)

[Your Body is Younger than You Think by Nicholas Wade New York Times, August 2, 2005](#)

1c Case Study Meiosis

6 Onion Root Tip Mitosis

Adapted from:

Babich, H., Segall, M.A. and Fox, K.D. (1997). The Allium Test—A Simple, Eukaryote Geneotoxicity Assay. The American Biology Teacher. 59, 580-583.

Stain preparation: 5 g of orcein is added 150 ml of hot acetic acid. Keep the stain solution in a dark bottle for 2-3 days, shaking several times to saturate the solution. After that treatment, add 150 ml of distilled water, filter and store in a dark bottle. (Babich, Segall and Fox, 1997)

7 Edible Chromosomes Mitosis

Adapted from Vanderbilt University

[Edible Chromosomes Lab Link](#)

8 Edible Chromosomes Meiosis

Adapted from Genetics Society of America

Durham, Mary F. (2015). Demonstrating Meiosis Using Manipulatable Chromosomes and Cells. Genetics Society of America Peer-Reviewed Education Portal (GSA PREP): 2015.002;

[Edible Chromosomes Meiosis](#)

Other Cell Division Lab Resources:

[Who Killed Yew? Murder and Mitosis -](#)

[Why Meiosis Matters: The case of the fatherless snake](#)