Computer Modeling/Simulation:
Online Karyotyping Activity

Directions:
1. Go to HEREDITY & TRAITS: [http://learn.genetics.utah.edu/content/begin/traits/](http://learn.genetics.utah.edu/content/begin/traits/)
2. Click on “WHAT IS A CHROMOSOME?” Listen to/read the slides, then answer the question: What is a chromosome? _________________________________________________________________
3. Click on “HOW DO SCIENTISTS READ CHROMOSOMES?” Read this screen, carefully studying the illustrations. Summarize the answer to the question: How do scientists read chromosomes? _________________________________________________________________
4. Click on “TELOMERES.” Read this page, then summarize: What is a telomere? What is the connection between telomeres and cancer? Between telomeres and aging?
5. Click on “MAKE A KARYOTYPE.” Follow the instructions to do the online interactive version. Try to NOT use the “Hints!” Print the completed karyotype for your portfolio. Use a screen shot if for some reason the print command doesn’t work.

Note: If your computer does not allow for the interactive part, then go to the bottom of the screen and do the “Match Up Chromosome Pairs – PRINT VERSION.” Doing a karyotype this way takes scissors, tape/glue, and patience!