

# Karyotyping Activity

Name \_\_\_\_\_

You will use a computer model to look at chromosomes and prepare a karyotype. You will diagnose patients for abnormalities and learn the correct notation for characterizing karyotypes.

The Biology Project at [www.biology.arizona.edu](http://www.biology.arizona.edu) Click on the link that says "Karyotyping"  
Follow the instructions at the site. As you proceed through the lesson, answer the following questions.

## **Introduction:**

1. What causes a dark band on the chromosome?

2. What is a centromere?

## **Patient Histories:**

Complete the karyotype for the patients by matching the chromosome with its homologous pair.

Hint: Use the sizes and banding pattern of the chromosome to help you make the match. (Your choices are highlighted in blue)

You will not be able to proceed until you have correctly matched all the chromosomes.

Patient A

3. (A.1) What notation would you use to characterize Patient A's karyotype?

4. (A.2) What diagnosis would you give for Patient A

Patient B

5. (B.1) What notation would you use to characterize Patient B's karyotype?

6. (B.2) What diagnosis would you give for Patient B

Patient C

5. (C.1) What notation would you use to characterize Patient C's karyotype?

6. (C.2) What diagnosis would you give for Patient C