

Directions for making a karyotype:

1. WRITE THE LETTER OF THE KARYOTYPE YOU WERE GIVEN AT THE TOP OF YOUR ANSWER SHEET!
2. Cut out all chromosomes.
3. Match up pairs of chromosomes based on length, banding pattern, and centromere location.
4. Order pairs of chromosomes according to the following criteria:
 - a. Group A should include the longest chromosomes with centromeres in the middle.
 - b. Group B should include long chromosomes with centromeres away from the middle.
 - c. Group C should include medium length chromosomes with centromeres away from the middle.
 - d. Group D should include medium length chromosomes with centromeres at or very near the end.
 - e. Group E should include somewhat short chromosomes with centromeres away from the middle.
 - f. Group F should include short chromosomes with centromeres in the middle.
 - g. Group G should include very short chromosomes with centromeres at or near the end.
 - h. Sex chromosomes should include two identical chromosomes that fall between #s 6-8 in regards to length (XX) OR one longer chromosome and one shorter chromosome that are the only mismatched chromosomes in the set (XY).
5. Once you have decided where each pair of chromosomes go on the answer sheet, glue or tape them down in their spot.
6. Identify the gender of the patient and any abnormalities/disorder he/she would have based on their karyotype. Write a general description (physical/mental features of the disease, likelihood of death or effect on reproductive ability) of the disorder on the backside of this answer sheet.