

Online Karyotyping Activity - (Standard 6)

Objectives:

- To understand that homologous chromosomes are a matching pair – each coming from a different gamete;
- To know how a karyotype is made;
- To know what information we can get from a karyotype;
- To know how to interpret that information.

What to do:

PART 1

☺ Go to website:

http://www.biology.arizona.edu/human_bio/activities/karyotyping/karyotyping.html

☺ Read Introduction – Very Carefully!

☺ Go to Patient Histories – check those out;

☺ Complete Patient A Karyotype by matching homologous chromosomes (look carefully for patterns):

💰 Answer Questions A1 and A2 on a clean sheet of paper (that you plan on handing in to me).

☺ Continue the Activity with patient B and patient C:

💰 Answer B1 & B2 and C1 & C2 on the same page as Patient A answers.

PART 2

☺ Go to website:

<http://learn.genetics.utah.edu/content/begin/traits/predictdisorder/>

☺ Interact with the animations – arrange the chromosomes into a Karyotype; watch Nondisjunction occur in both egg and sperm cells; see the cause of several chromosomal disorders including all four that you are responsible for in UNIT 8 (and many that we will not be covering!);

☺ THERE ARE QUIZ QUESTIONS TO ANSWER!!! Do the Quiz” on the bottom of the initial page;

☺ Number your answers 1 – 8 (start with the X + X and ending with the X + no chromosome questions) and record them on the same paper used above.

☺ Put your **name and period on the paper and leave it on my desk**, you can study or continue to play around at the biology site if you finish early.