

Genetics Slide Worksheet

Name _____ Pr. _____

While you watch the "Human Chromosomes" slide program, answer the following questions.

1. By viewing a karyotype, what are the two things you can tell about a person?

a.

b.

2. Observe Holly closely, list 6 characteristics of Holly's that are noticeably different. What system does each affect?

	<u>Characteristic</u>	<u>system</u>
1.		
2.		
3.		
4.		
5.		
6.		

3. About 1 out of every 800 people has an extra chromosome 21. How could this happen? Do a diagram of a cell in meiosis

4. Describe Mr. Carver's karyotype. Describe Mr. Carver's phenotype.

5. Describe his son's karyotype. Describe his son's phenotype.

6. Use a diagram to illustrate how the chromosome pairs could segregate during meiosis when someone is a translocation carrier. Sketch only chromosome pairs 14 and 21.

7. What is Kevin's karyotype? Phenotype?

8. Think of one explanation for the serious effects an extra chromosome has on a person's development.

9. What are some of the birth defects which can be detected through amniocentesis?

10. What do you think might be the result of having an extra chromosome 4?

11. Occasionally a child is born with an extra chromosome 13 but never with an extra 12. Why do you think this is so?