

## Chapter 15 The Chromosomal Basis of Inheritance Test

- 1.) People who have red hair usually have freckles. How can this be explained?  
\_\_\_\_\_
- 2.) New combinations of linked genes are due to \_\_\_\_\_
- 3.) A 50% frequency of recombination means that \_\_\_\_\_
- 4.) Why are linked genes inherited together? \_\_\_\_\_
- 5.) What two ways does genetic recombination occur? \_\_\_\_\_
- 6.) What is a linkage map? \_\_\_\_\_
- 7.) When does crossing over occur during meiosis? \_\_\_\_\_
- 8.) What are cytological maps used for? \_\_\_\_\_
- 9.) What is the chromosomal system for determining sex in mammals? \_\_\_\_\_
- 10.) What is the chromosomal system for sex determination in grasshoppers and certain other insects? \_\_\_\_\_
- 11.) What is the chromosomal system for sex determination in birds? \_\_\_\_\_
- 12.) In most species of ants and bees, the chromosomal system of sex determination is \_\_\_\_\_
- 13.) If a man who carries an X-linked allele, who will he pass it to, all of his sons, or all of his daughters? \_\_\_\_\_
- 14.) Which type of cell would you find a Barr body? \_\_\_\_\_
- 15.) Why does Duchenne muscular dystrophy only afflict males?  
\_\_\_\_\_
- 16.) Male calico cats are the result of \_\_\_\_\_
- 17.) Why are most calico cats female? \_\_\_\_\_
- 18.) TRUE/FALSE..... A cell that has  $2n+1$  chromosomes is trisomic and aneuploid.  
\_\_\_\_\_
- 19.) In chromosomes, what is a deletion? \_\_\_\_\_