

Name _____

AP Biology

TEXT: *Biology, Campbell and Reece*

7th Edition

Chapter 14 – Mendel and the Gene Idea
Guided Reading

1. Who were the two strong influences on Mendel's education?

2. Define the following terms:
 - a. Character
 - b. Trait
 - c. True-breeding
 - d. Hybridization
 - e. P generation
 - f. F₁ generation
 - g. F₂ generation
 - h. Alleles
 - i. Punnett Square
 - j. Homozygous
 - k. Heterozygous
 - l. Phenotype
 - m. Genotype

10. Does having a dominant allele mean that it will be found in greater frequency in the population?

11. What are multiple alleles?

12. What does the term Pleiotropy mean?

13. In your own words, explain epistasis.

14. What would be your “clue” that a character would have polygenic inheritance pattern?

15. What is a pedigree and how does it help in our understanding of genetics?

16. Describe and discuss the genetics of the following inherited disorders:

- a. Cystic Fibrosis
- b. Sickle cell disease
- c. Achondroplasia
- d. Huntington's disease

17. Label the diagram below then compare and contrast amniocentesis and chorionic villus sampling in a description below the diagram.


