

Chapter 1 Review Guide

1. How did Mendel prevent his pea plants from self-pollinating?
2. What are genes?
3. Define: traits, heredity, purebred, hybrid, alleles, mutation, genotype, phenotype, homozygous, heterozygous, and codominance.
4. What do TT , Tt and tt mean to geneticists?
5. What is probability?
6. What does a Punnett square show? (Be able to draw and use one.)
7. What is the chromosome theory of inheritance?

8. What is meiosis?

9. Describe the steps of meiosis?

10. How many chromosomes do sex cells have compare to normal body cells?
11. What is the genetic code?
12. What is DNA?
13. What are the four bases in DNA?
14. How many bases code for specific amino acid?
15. What do the amino acids form?
16. What is RNA?
17. What are the four bases in RNA?

18. In what order do the DNA bases pair up?

19. In what order do the RNA bases pair up with the DNA bases?

20. What is the job messenger RNA and transfer RNA?

21. When is a mutation harmful?

22. When can a mutation be passed on to offspring?