

RE 9.1 Question Set #3:

1. Which of the following contain DNA? Explain your answer.
 - a. Chromosome
 - b. Nucleus of a cell
 - c. Gene
2. What four chemicals make up the genetic code? Describe how these chemicals are arranged in a DNA molecule.
3. Define the following terms in your own words and explain their function:
 - a. DNA
 - b. Chromosome
 - c. Gene
 - d. Allele
4. Explain why chromosomes are considered to be the “source of diversity”.
5. Explain how DNA, chromosomes, genes, and alleles are related. What is their role in storing genetic information?
6. How do alleles fit into the analogy of chromosomes as encyclopedias?
7. Explain how dominant and recessive traits differ from each other.
8. How does a purebred individual differ from a hybrid individual?
9. How could two black cats produce an albino kitten? Use a diagram to explain.
10. If you wanted to be certain that a trait would appear in the offspring of the plants or animals that you were breeding, what would you have to find out about the parents?