

NAME: \_\_\_\_\_ DATE: \_\_\_\_\_ HOUR: \_\_\_\_\_

**HA Inv. 2 i-Check Review**

1. What is DNA?

\_\_\_\_\_

2. What are Alleles? How many alleles are there for each trait?

\_\_\_\_\_

3. What is a Gene? What does it do?

\_\_\_\_\_

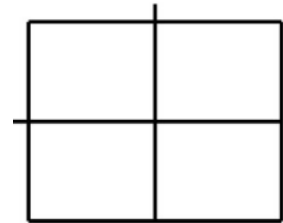
4. How does an organism inherit its traits?

\_\_\_\_\_

5. Mendel's pea plants were tall or short. Tall (T) is the dominant allele and short (t) is the recessive allele. What combinations would give us tall pea plants? \_\_\_\_\_ and \_\_\_\_\_

6. What combination would give us a short pea plant? \_\_\_\_\_

7. Do a Punnett square for two Heterozygous Pea plants (Tt) and their offspring.

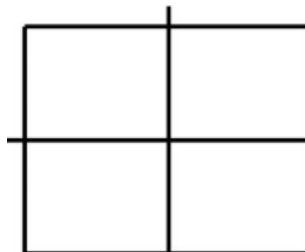


8. What percent (think probability) of the pea plants may be tall from this generation? \_\_\_\_\_

9. List the genotypes that are possible from this cross.

\_\_\_\_\_

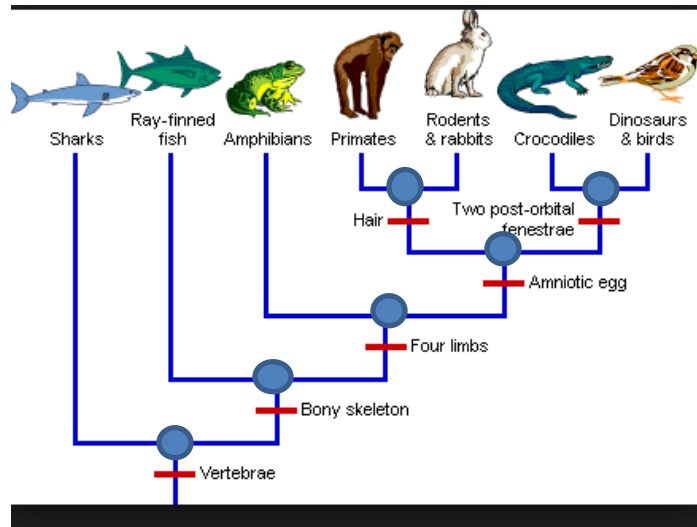
10. Cross a Homozygous tall plant with a homozygous short plant.



11. What are the possible genotypes for this cross? \_\_\_\_\_  
What are the phenotype percentages?

\_\_\_\_\_

Answer the following questions based on the cladogram.



12. What characteristic do all of these animals share?  
\_\_\_\_\_

13. What characteristics do sharks and fish share?  
\_\_\_\_\_

14. What characteristics Frogs and crocodiles share?  
\_\_\_\_\_

15. Place an X where mammals branched off from the other vertebrates.

16. The circles represent \_\_\_\_\_

17. Are Sharks direct descendants of birds? Explain  
\_\_\_\_\_  
\_\_\_\_\_

18. Where is the most recent common ancestor of Primates and Birds?  
\_\_\_\_\_

19. Where would dolphins fit into this cladogram? Why?  
\_\_\_\_\_  
\_\_\_\_\_