

Answers to Ch.11 Test Review Questions

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1. C 2. A 3. A 4. C 5. C
6. D 7. D 8. D 9. D

#13 – 18; #22 – 24

13. 1 YY : 2 Yy : 1 yy

	Y	y
Y	YY	Yy
y	Yy	yy

14. A gene has multiple alleles if it has more than possible alleles in the population. Two or more GENES control polygenic traits (such as skin color in humans – controlled by several genes).

15. With two alleles for a trait, up to three phenotypes are possible. With three alleles, up to six phenotypes are possible.

16. No, genes provide a plan for development, but how the plan unfolds depends on the environment.

17. Four

18. Homozygous black coat: BB; heterozygous black coat: Bb

22. By crossing the white ram to a number of black ewes; if any offspring are black, then the white ram is heterozygous.

23.

	Mitosis	Meiosis
Number of cells produced	2	4
Type of cell	Body	Gamete
Chromosome number	Diploid (2N)	Haploid(N)

24. Both parents are heterozygous.