

Name _____ Date _____ Period _____

Chapter 6 Concept Review

BIOLOGY

Directions: Answer the following questions using your notes and textbook

1. _____ Cells- body cells. Make up most of your _____ tissues and organs.
2. _____ Cells- cells in your reproductive organs, the ovaries and testes, can develop into _____ (called sex cells) and form egg and sperm cellsj
3. Organisms differ from each other because of way genes are _____, not because they have different genes.
4. Your body has _____ pairs of chromosomes
5. _____ - chromosome pairs 1-22 are called autosomes (are homologous)
6. _____ chromosomes- pair of chromosomes
7. _____ reproduction involves fusion of two gametes
8. _____ and _____ only have half usual number of chromosomes.
9. Diploid and Haploid cells
 - a. Body cells are _____ (_____ copies of each chromosome)
 - b. Gametes are _____ (have _____ copy of each chromosome)
10. Meiosis produces _____ haploid cells from _____ diploid cell
11. Mendel laid the groundwork for _____.
12. Mendel made three key decisions in his experiments
 - a. Control over _____
 - b. Use of _____ plants
 - c. Observation of "either-or" _____ (only appear two alternate forms)
13. Two other key conclusions collectively called the law of _____.
 - a. Organisms inherit two copies of each gene, one from each _____.
 - b. Organisms donate only one copy of each gene in their _____ (two copies of each gene segregate, or separate, during gamete formation.

14. _____ - a "piece" of DNA that provides a set of instructions to a cell to make a certain protein.

15. You have _____ alleles for each gene`

a. _____ - means two of same allele

b. _____ - two different alleles

16. _____ - refers to genetic makeup of a specific set of genes

17. _____ - physical characteristics of organism (white or purple flowers)

18. _____ alleles- allele that is expressed when two different alleles or two dominant alleles are present (use _____ letter to represent)

19. _____ alleles- only expressed if have two copies of recessive present (use _____ - _____ letter to represent)

20. Monohybrid cross involves one trait

a. Homozygous dominant X Homozygous recessive

genotypic ratio = _____% white flowers

phenotypic ratio = _____% Ff

b. . Heterozygous X Heterozygous

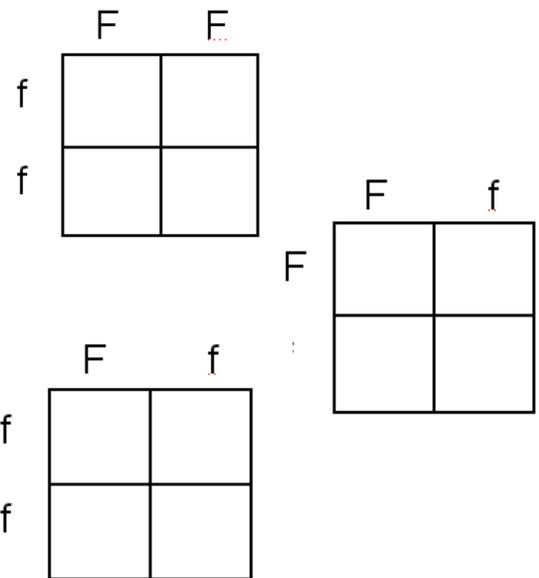
genotypic ratio = ____:____:____

phenotypic ratio = ____:____

c. Heterozygous X Homozygous recessive

genotypic ratio = ____:____

phenotypic ratio = ____:____



21. The law of independent _____ states that allele pairs separate independently of each other during meiosis

22. _____ - the likelihood that a particular event will happen

23. Sexual reproduction creates _____ gene combinations

24. Sexual reproduction creates unique combination of _____.

25. _____ - exchange of chromosome segments between homologous chromosomes during Prophase I of Meiosis I