

18 Multiple choice questions

1. all the genes present in the cells of an organism
 - a. phenotype
 - b. genetics
 - c. gene
 - d. genotype

2. alternative forms of a gene
 - a. gene
 - b. genetics
 - c. hybrid
 - d. alleles

3. the offspring of individuals that are pure-breeding for different alleles of a particular gene
 - a. monohybrid
 - b. genotype
 - c. hybrid
 - d. homozygous

4. homozygous
 - a. pure-breeding
 - b. segregate
 - c. hybrid
 - d. genetics

5. a universally accepted scientific format to represent the inheritance of a particular genetic trait over a number of generations
 - a. segregate
 - b. pedigree analysis
 - c. pure-breeding
 - d. pedigree chart

6. the detectable physical, chemical or behavioural characteristics or traits of an organism
 - a. gene
 - b. phenotype
 - c. genetics
 - d. genotype

7. the study of a pedigree chart in a group of related individuals to determine the pattern and characteristics of inheritance of a genetic trait
 - a. segregate
 - b. pedigree chart
 - c. pedigree analysis
 - d. dominant allele

8. thread-like structures made of DNA, observed in dividing cells
 - a. homozygous
 - b. genotype
 - c. chromosomes
 - d. phenotype

9. the study of heredity and variation in biological systems
 - a. gene
 - b. genotype
 - c. genetics
 - d. phenotype

10. the form of a gene which is expressed in the heterozygous (hybrid) condition, masking the other (recessive) form of the same gene
 - a. phenotype
 - b. alleles
 - c. dominant allele
 - d. recessive allele

11. the form of a gene which is only expressed in the homozygous condition, and is masked in the heterozygous condition by another (dominant) form of the same gene
 - a. alleles
 - b. segregate
 - c. recessive allele
 - d. dominant allele

12. the offspring from the cross-breeding of two distinct races, breeds, varieties, species or genera
 - a. monohybrid
 - b. alleles
 - c. hybrid
 - d. gene

13. physical, or physiological or behavioural difference between individuals in a population which may or may not make them more suited to prevailing environmental conditions
 - a. genotype
 - b. variation
 - c. genetics
 - d. alleles

14. separate (as in individual chromosomes that segregate from each homologous pair during meiosis)
 - a. gene
 - b. genetics
 - c. genotype
 - d. segregate

15. the set of principles derived by Gregor Mendel relating to the transmission of hereditary characteristics from parent organisms to their children
 - a. segregate
 - b. recessive allele
 - c. Mendel's laws
 - d. genetics

16. the smallest physical unit of heredity
 - a. genotype
 - b. alleles
 - c. gene
 - d. genetics

17. having two different alleles of a particular gene in a diploid cell for any particular hereditary characteristic
 - a. homozygous
 - b. heterozygous
 - c. chromosomes
 - d. segregate

18. having identical alleles of a particular gene in a diploid cell for any particular hereditary characteristic
 - a. homozygous
 - b. heterozygous
 - c. chromosomes
 - d. monohybrid