



SUMMATIVE TEST

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Score: \_\_\_\_\_

I. Multiple Choice. Choose the letter of the best answer. Write only the letter on the blank provided before each number.

1. What is the basic unit of life?

- a. Tissue
- b. Organ
- c. Cell
- d. Organism

2. Which organelle is known as the powerhouse of the cell?

- a. Nucleus
- b. Ribosome
- c. Vacuole
- d. Mitochondria

3. Which of the following is found in plant cells but NOT in animal cells?

- a. Cell membrane
- b. Nucleus
- c. Cell wall
- d. Mitochondria

4. What process do plants use to make their own food?

- a. Respiration
- b. Photosynthesis
- c. Fermentation
- d. Digestion

5. The organelle responsible for protein synthesis is the:

- a. Golgi apparatus
- b. Lysosome
- c. Ribosome
- d. Endoplasmic reticulum

6. Which type of cell has a defined nucleus enclosed in a membrane?

- a. Prokaryotic
- b. Eukaryotic
- c. Bacterial
- d. Viral

7. The process by which cells divide to produce two identical daughter cells is called:

- a. Meiosis
- b. Fertilization
- c. Mitosis
- d. Mutation

8. DNA is stored in which organelle?

- a. Ribosome
- b. Nucleus
- c. Vacuole
- d. Chloroplast

9. A dominant allele is best described as:

- a. An allele that is always expressed in the phenotype
- b. An allele only expressed when two copies are present
- c. An allele that causes mutations
- d. An allele found only in females

10. If a pea plant is homozygous dominant (TT) for tallness, its genotype is:

- a. tt
- b. Tt
- c. TT
- d. tT

11. Gregor Mendel is known as the father of:

- a. Cell theory
- b. Evolution
- c. Genetics
- d. Microbiology

12. Which of the following correctly describes a recessive trait?

a. It is always visible in the organism

b. It is only visible when two recessive alleles are present

c. It dominates over all other alleles

d. It skips every other generation

**13. A cell with two identical alleles for a trait is called:**

a. Heterozygous

b. Hybrid

c. Homozygous

d. Codominant

**14. The physical appearance of an organism resulting from its genes is its:**

a. Genotype

b. Phenotype

c. Allele

d. Chromosome

**15. In a monohybrid cross between two heterozygous parents ( $Tt \times Tt$ ), what is the expected phenotype ratio?**

a. 1:2:1

b. 3:1

c. 1:1

d. 2:1:1