Science 9 Cells and Reproduction Practice Multiple Choice

1. Robert Brown is known for discovering
   a. Mitochondrion b. Cytoplasm c. The nucleus d. Ribosomes

2. Theodor Schwann concluded that
   a. Only plants are made of cells
   b. Only animals are made of cells
   c. The nucleus carries the DNA
   d. The mitochondrion is the powerhouse of the cell

3. Matthais Schleiden concluded that
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4. The microscope that sues electron beams to view a 3D image is the
   a. Compound light microscope b. TEM c. SEM d. PEM

5. The jelly like substance where the work is done in the cell is the:
   a. Cell membrane b. Cytoplasm c. Lysosome d. Nucleus

6. The whip like tail responsible for moving some cells from place to place.
   a. Endoplasmic reticulum b. Golgi apparatus c. Flagellum d. Centriole

7. The structure responsible for storing proteins until they are needed by the cell is the
   a. ribosome b. Mitochondrion c. Golgi apparatus d. Nucleus

8. Animal cells are different from plant cells in that
   a. Animal cells have a cell wall and plant cells do not
   b. Plant cells have a nucleus and animal cells do not
   c. Animal cells have mitochondria and plant cells do not
   d. Plant cells have a cell wall, animal cells do not

9. The structure responsible for making protein in the cell is the
   a. ER b. Gogli apparatus c. Mitochondria d. Ribosome

10. A series of "canals" that carry materials thoughout the cell:
    a. ribosome b. Centriole c. Endoplasmic reticulum d. Nucleus

Use the figure below to answer to next two questions

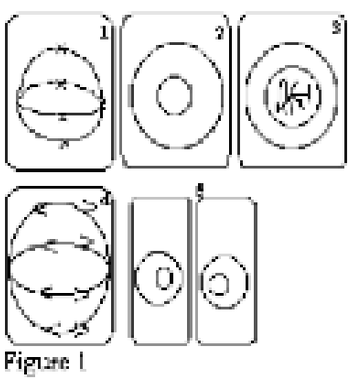

Figure 1

11. In the figure above, the correct sequence of events is:
    a. 1,2,3,4,5 b. 2,3,1,4,5 c. 5,4,3,2,1 d. 4,3,2,5,1

12. In the figure above metaphase is represented by figure:
    a. 1 b. 3 c. 4 d. 5

13. A fertilized egg in sexual reproduction is called a(n):
    a. Zygote b. anther c. cilia d. bud

14. Genetic information is organized into threadlike structures called:
    a. Genes b. nucleuolus c. nucleus d. chromosomes

15. Humans have this number of chromosomes
    a. 23 b. 43 c. 46 d. 49

16. Which of the following is not a form of asexual reproduction:
    a. Budding b. spore formation c. external fertilization d. binary fission

17. When an offspring begins to form a small outgrown from the parent is it called:
    a. Binary fission b. fragmentation c. spore formation d. budding

18. As a result of asexual reproduction, the daughter cells are:
    a. Different from the mother cell
    b. Identical to each other and the mother cell
    c. Different from each other and the mother cell
    d. None of the above

19. Choose the one that doesn't belong:
    a. Adenine b. thymine c. uracil d. cytosine

20. In the DNA code the letter that is paired up with C is?
    a. G b. T c. A d. C

21. Any substance known to cause cancer is called a(n);
    a. Carcinogen b. toxin c. antioxidant d. enhancer

22. A cancer cell differs from a normal cell in that:
    a. Cancer cells can take a specialized role in the body
    b. Normal cells continue to divide while cancer cells cannot
    c. Cancer cells take up space and energy but serve no purpose in the body
    d. Normal cell division is uncontrollable

23. A mutation is:
    a. A change in the DNA that may be harmful
    b. A change in the DNA that may be harmless
    c. Can be caused be chemicals, radiation or viruses
    d. All of the above

24. An enucleated cell is:
    a. A cell with a double nucleus
    b. A cell without a nucleus
    c. A cell that has only a nucleus but no other organelles

25. An example of a cloned animal is
    a. Dog b. scrat c. dolly d. sid the sloth