Biology 2201

Structures in Cells Pages 23 - 33

1. Which is an example of an organism with prokaryotic cells ?
   a. athlete's foot fungus
   b. butterfly
   c. E. coli
   d. spruce tree

2. Prokaryotic cells differ from eukaryotic cells in that prokaryotic cells
   a. are larger
   b. have a more complex internal structure
   c. do not possess a nucleus
   d. possess Golgi bodies

3. The term "karyon" means
   a. before
   b. nucleus
   c. true
   d. cell

4. The most abundant cells on Earth are
   a. eukaryotes
   b. prokaryotes

5. The largest organelle in the cell is the
   a. endoplasmic reticulum
   b. golgi apparatus
   c. nucleus
   d. ribosome

6. Most organelles are surrounded by a membrane i.e., they are "membrane bound". This organelle is NOT surrounded by a membrane
   a. endoplasmic reticulum
   b. golgi apparatus
   c. nucleus
   d. ribosome

7. Materials made inside this organelle are kept separate from the rest of the cell so that they do not cause it any harm
   a. endoplasmic reticulum
   b. golgi apparatus
   c. nucleus
   d. ribosome

8. DNA in the uncoiled state is called
   a. chromosomes
   b. chromatin
   c. genes
   d. chromatids

9. Built in the nucleus, this organelle is used to build the proteins the body needs
   a. endoplasmic reticulum
   b. golgi apparatus
   c. nucleolus
   d. ribosome

10. Proteins are activated and packaged in the
    a. endoplasmic reticulum
    b. golgi apparatus
    c. nucleus
    d. ribosome

11. Enzymes embedded in this organelle process molecules such as lipids.
    a. smooth endoplasmic reticulum
    b. golgi apparatus
    c. nucleolus
    d. rough endoplasmic reticulum

12. Which is a form of energy that can be used throughout the cell ?
    a. ATP
    b. glucose
    c. ADD
    d. fructose

13. These organelles could be considered the recycling centres of the cell
    a. cytoskeleton
    b. lysosomes
    c. mitochondria
    d. peroxisomes

14. Which organelles contain their own ribosomes and DNA, and duplicate in much the same way as a bacterium might ?
    a. cytoskeleton
    b. lysosomes
    c. mitochondria
    d. peroxisomes

15. Alcohol, when ingested, is a toxin. One of the jobs of these organelles is to break it down before it causes harm
    a. cytoskeleton
    b. lysosomes
    c. mitochondria
    d. peroxisomes

16. Which is a function of the cytoskeleton ?
    a. organization of organelles within the cytoplasm
    b. give the cell shape
    c. allow movement of cell structures
    d. both a and b
    e. all of the above

17. These rod-like tubes act as tracks along which organelles can move
    a. cytoskeleton
    b. centrosome
    c. microtubules
    d. plastids

18. Centrioles are
    a. found only in animal cells
    b. important in cell division
    c. involved in the formation of cilia
    d. both a and c
    e. all of the above

19. In humans, one important function of cilia would be
    a. allowing cell division to take place
    b. assistance in the movement of organelles within the cell
    c. movement of foreign partials out of the lungs
    d. movement of sperm through the reproductive system

20. In humans, one important function of flagella would be
    a. allowing cell division to take place
    b. assistance in the movement of organelles within the cell
    c. movement of foreign partials out of the lungs
    d. movement of sperm through the reproductive system

21. The cell membrane has some control over which materials pass through it
    a. true
    b. false

22. The cell wall has some control over which materials pass through it
    a. true
    b. false

23. Cell walls are present in
    a. animal cells
    b. some eukaryotic cells
    c. fungal and plant cells
    d. b and c only
    e. all of the above

24. The function of the central vacuole in a plant cell includes
    a. storage
    b. support
    c. energy production
    d. a and b only
    e. all of he above

25. Plastids are similar to mitochondria in that they
    a. contain their own DNA and ribosomes
    b. have the ability to perform photosynthesis
    c. develop pigments when exposed to light
    d. collect energy
    e. act as storage containers for starches, lipids and proteins

26. Since prokaryotes do not have a membrane-bound nucleus, their DNA is found in a
    a. single loop of double stranded DNA - the nucleoid
    b. circular DNA molecule called a plasmid
    c. mobile DNA molecule - the nucleolite
    d. either a or b
    e. all of the above

27. Even though they do not possess a membrane-bound nucleus prokaryotes are, in some ways, more efficient and widespread that eukaryotes
    a. true
    b. false