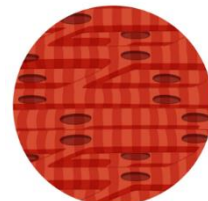


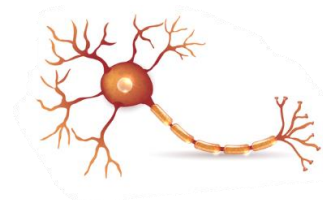
Tahnoon bin mohammed School Cycle 2
Grade 6 Science

Lesson 2 – cell structure and functions

1. cells have tiny **hairs** that move back and forth to move dust and particles out of nose.
2. **Muscle cells** need a lot of energy to perform their functions. Which of the below **characteristics** most likely occur in muscle cells?
 - A. Muscle cells carry water and nutrients from the root to the leaves.
 - B. Muscle cells have a lot of mitochondria to produce big amount of ATP energy.
 - C. Muscle cells do not have a nucleus to carry more oxygen.
 - D. Muscle cells have chloroplast to carry more oxygen.
3.open and close to **allow gases** to move in and out of the plant. Stomata are found on the
4. Which of the following is not found in the root hair cells?
 - a. Central vacuole
 - b. Chloroplast
 - c. Cell membrane
 - d. Cell wall
5. cells **carry information** over long distance from one part of our body to another.
6. Which of the cells found **in plant** leaves? (choose any two)
 - a. Muscle cells
 - b. Palisade cells
 - c. Cilia cells
 - d. Nerve cells
 - e. Root hair cells
 - f. Stomata cells
7. **absorb water** from soil.
8. **transport water** and minerals in a plant.
9. Which of the following have ability to **contract**?



muscle cells



- a. Stomata cells
- b. Nerve cells
- c. Muscle cells
- d. Xylem cells

10. which of the following is **not** a characteristic of a red blood cells?



Red blood cells

- a. They make chloroplast that helps them make their own food.
- b. Their shape helps them to move through blood vessels throughout the body.
- c. They have a flat disk-shape.
- d. They are very small.

11. Both animal cell cilia cells and plant root cells have tiny hair like structures that help them to do their functions. What is one **difference** between these two types of cells?

- A. Root cells have a cell wall while cilia cells donot
- B. cilia cells have chloroplast while root cells do not
- C. root cells have chloroplast while cilia cells do not
- D. cilia cells have cell walls while root cells do not.

12. Palisade cells are located in the leaves of a plant. How would they **differ** from root cells?

- a. palisade cells have mitochondria while root cells do not.
- b. palisade cells have chloroplast while root cells do not.
- c. palisade cells have cell wall while root cells do not.
- d. palisade cells are eukaryotic while root cells are prokaryotic.

13. How would red blood cells **differ** from other cells in an animal's body?

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14. How does a muscle cell **differ** from a palisade cell?

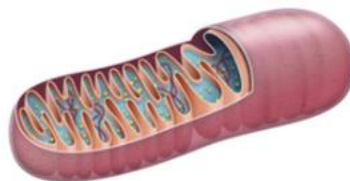
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15. Which of the following examples shows that the **shape** of a cell is related to its function?

- a. The heart pumps blood
- b. The DNA is located in the nucleus of a eukaryotic cell.
- c. Red blood cells have a flat disk-shape to be able to move through blood vessels.

- d. The chloroplast captures sun light energy.
16. The is the **rigid outer layer** of a plant cell. It provides
17. Which organelles and its functions are **mismatched**?
- Vacuole – store materials
 - Chloroplast – cellular respiration
 - Cell wall – protection
 - Ribosome – making proteins.
18. Why do cells have to be **small**?
-
-
-
19. What is the relation between a cell's **surface area and its volume** as cell **grows**?
-
-
20. What do cells **need to survive**?
- ,
21. What is the **relationship between** DNA and ribosomes?
-
-
22. Which of the following is **the largest organelle** in a cell?
- Ribosomes
 - Chloroplast
 - Nucleus
 - Mitochondria
23. changes food molecules into a usable form of energy called **ATP**. This process occurs in the
24. Label the following organelles.



How are the mitochondria and chloroplast **similar**?

.....
.....

25. Which cell structure **makes protein**?

.....

26. What do the ribosome, Golgi apparatus and vesicles have in **common**?

.....
.....

27. Which of the following organelles function in **transport**?

- a. Endoplasmic reticulum.
- b. Chloroplast
- c. Cytoplasm
- d. Vesicle
- e. Cell membrane
- f. Cell wall
- g. Golgi apparatus
- h. mitochondria

28. which of the following is **not** a function of an organelle?

- a. Protection
- b. Pumping blood
- c. Energy production
- d. Store information

29. Which of the following is a **characteristic of a cell membrane** but not cell wall?

- a. Store genetic information
- b. Rigid
- c. Provides protection
- d. Semipermeable

30. Which of the following is **not** an organelle?

- a. Heart
- b. Mitochondria
- c. Cell membrane
- d. nucleus

31. scientists use **microscope** to make cells appear

32. **Eukaryotic** cells have structures called That help cells function properly.

33. organisms are made up of **one cell**.
34. is making an object **appear larger** than it is.
35. Which of the microscope use a beam of **electrons** to see **the out side** of things like earth worms?
- a. Magnifying lens
 - b. Transmission electron microscope
 - c. Scanning electron microscope
 - d. Light microscope
36. Some animals **sit in the sun to stay warm**. This is an example of how organisms maintain
37. The image shows the different stages of a plant's life. Which **characteristics** of living things does this image shows?



-
38. The image shows a **mother elephant with her baby**. Which characteristics of living things is shown in the image?



-
39. The Is the **smallest unit of life**.
40. Which **characteristics** of a living things shown in the image?



41. Which of the following organisms is **unicellular**?
- Mushrooms
 - Bacteria
 - Trees
 - humans
42. which of the following is **not a domain** classification of organisms?
- Domain Archaea
 - Domain plantae
 - Domain bacteria
 - Domain Eukarya
43. What is the **difference** between unicellular and multicellular organisms?
-
-
-
44. Which of the following does **not** belong to domain Eukarya?
- Bacteria
 - Fungai
 - Blue – green algae
 - Butterfly
 - Grass
 - birds
45. write the **similarities** between prokaryotes and eukaryotes?
-
-
-
46. which of the following is **false** about kingdom Archaea and kingdom Protista?
- Both kingdoms include unicellular organisms
 - Both are prokaryotic
 - Protests are eukaryotic while archaea are prokaryotic
 - Protists are more complex than Archaea
47. One **common feature** of domains Archaea and bacteria is that they only includes

48. is a kingdom in the domain Eukarya. They can be unicellular or multicellular. They **get their food from dead plants and animals**.
49. Amoeba is a unicellular organism. It is a complex cell that has organelles. Amoeba lives in water and cannot make its own food. Amoeba belongs to **domain** and **kingdom**
50. organisms are made up of **two or more** cells.
51. What is the **difference** between living things and living things?
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.....
52. What are the **principles of cell theory**?
1.
2.
3.
53. Most **cells** are very tiny. How can we **see** them?
.....
54. microscope makes things appear **1,500** times larger?
55. What is the **difference** between the scanning electron microscope and transmission electron microscope?
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