BRITISH COLUMBIA LIFE SCIENCES 11 (MLFSC11) · UNIT A · 25 QUESTIONS

Characteristics of Living Things and Cell Biology — Practice Test

This practice test was made by AI and there may be mistakes. If a question or answer looks wrong, use the Flag a mistake button to let Brett know so he can fix it.

1 **Which characteristic is shown when a seedling grows taller and develops new leaves over several weeks**



A reproduction

B growth and development

C evolution of a population

D response to stimuli

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2 **A living thing keeps its internal temperature steady even when the outside temperature changes. This is**



A diffusion

B homeostasis

C photosynthesis

D fermentation

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3 **Which process lets a cell obtain usable energy from food**



A protein folding

B water uptake

C energy processing

D cell division

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4

A plant bending toward a window is an example of a living thing showing

A reproduction without a partner

B change in allele frequency

C loss of genetic material

D response to a stimulus

Understand It with Pulse

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5 **Which statement best describes the cell theory**



A all living things are made of one or more cells

B only animals are made of cells

C cells form only from nonliving matter

D viruses are made of many cells

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6 **The structure that controls what enters and leaves a cell is the**

A cytoplasm

B cell membrane

C ribosome

D vacuole

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7 **The nucleus of a eukaryotic cell is best described as the**

A organelle that digests waste

B site of protein assembly

C structure that holds most of the DNA

D fluid that fills the cell

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8 **Which organelle is the main site of cellular respiration**

A Golgi apparatus

B chloroplast

C ribosome

D mitochondrion

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9 **Chloroplasts are found in plant cells and are the site of**



A photosynthesis

B cell division

C protein digestion

D DNA replication

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10 **Ribosomes in a cell are responsible for**

A controlling water movement

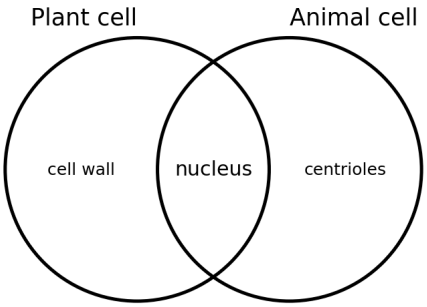
B making proteins from amino acids

C storing water for the cell

D breaking down sunlight

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11 **The diagram compares a plant cell and an animal cell. The feature found in both cells is the**



A centriole

B large central vacuole

C nucleus

D cell wall

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12 **A plant cell differs from an animal cell because the plant cell has**

- **A** no nucleus and no membrane
- **B** centrioles but no vacuole
- **C** no cytoplasm and no DNA
- **D** a cell wall and chloroplasts

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13 **The Golgi apparatus in a cell mainly**

- **A** packages and ships proteins
- **B** makes energy from glucose
- **C** captures light energy
- **D** stores genetic code

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14 **The endoplasmic reticulum is best described as a network that**

- A copies the whole genome
- B moves materials inside the cell
- C digests whole bacteria
- D forms the outer cell wall

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15 **A lysosome is most useful to a cell because it**

- A produces oxygen gas
- B controls cell shape alone
- C breaks down waste and worn parts
- D makes chlorophyll for leaves

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16 **A prokaryotic cell differs from a eukaryotic cell because it has**

A no DNA at all

B no cell membrane

C many chloroplasts

D no membrane-bound nucleus

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17 **Which organism is made of prokaryotic cells**

A bacterium

B mushroom

C oak tree

D house cat

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18 **In DNA, the base adenine always pairs with**



A cytosine

B thymine

C uracil

D guanine

Understand It with Pulse | Flag a mistake

19 **In DNA, the base guanine always pairs with**

A adenine

B thymine

C cytosine

D uracil

Understand It with Pulse | Flag a mistake

20 **The main role of DNA in a cell is to**

A carry oxygen in blood

B break down glucose

C form the cell wall

D store hereditary information

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21 **RNA differs from DNA because RNA usually is**

A single-stranded and uses uracil

B double-stranded and uses thymine

C made of amino acids

D found only in viruses

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22 **During protein synthesis, messenger RNA carries instructions from the**

A membrane to the vacuole

B nucleus to the ribosome

C ribosome to the nucleus

D vacuole to the membrane

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23 **The graph shows oxygen released by a pondweed plant at different light levels. At light level 4, the release is**

- A 28 units
- B 10 units
- C 18 units
- D 20 units

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24 **Cellular respiration in most cells uses glucose and oxygen to make**

- A glucose, oxygen, and light
- B protein, starch, and sunlight
- C nitrogen, water, and chlorophyll
- D carbon dioxide, water, and energy

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25

The graph shows bacterial cells in a dish over time. The number of cells at hour 2 is

ANSWER

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ANSWER KEY

1. B
2. B
3. C
4. D
5. A
6. B
7. C
8. D
9. A
10. B
11. C
12. D
13. A
14. B
15. C
16. D
17. A
18. B
19. C
20. D
21. A
22. B
23. C
24. D
25. 400

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