Breathing TEST - BASIC Cellular respiration II

6. What are the reactants in the equation for cellular respiration?

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| a. | oxygen and lactic acid |
| b. | carbon dioxide and water |
| c. | glucose and oxygen |
| d. | water and glucose |
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7. Glycolysis provides a cell with a net gain of

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| a. | 2 ATP molecules. |
| b. | 4 ATP molecules. |
| c. | 18 ATP molecules. |
| d. | 36 ATP molecules. |
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8. The starting molecule for glycolysis is

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| a. | ADP. |
| b. | pyruvic acid. |
| c. | citric acid. |
| d. | glucose. |
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9. Which of the following acts as an electron carrier in cellular respiration?

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| a. | NAD+ |
| b. | pyruvic acid |
| c. | ADP |
| d. | ATP |
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10. Lactic acid fermentation occurs in

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| a. | bread dough. |
| b. | any environment containing oxygen. |
| c. | muscle cells. |
| d. | mitochondria. |
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11. The conversion of pyruvic acid into lactic acid requires

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| a. | alcohol. |
| b. | oxygen. |
| c. | ATP. |
| d. | NADH. |
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12. The energy of the electrons passing along the electron transport chain is used to make

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| --- | --- |
| a. | lactic acid. |
| b. | citric acid. |
| c. | alcohol. |
| d. | ATP. |
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13. Breathing heavily after running a race is your body’s way of

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| a. | making more citric acid. |
| b. | repaying an oxygen debt. |
| c. | restarting glycolysis. |
| d. | recharging the electron transport chain. |
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14. The energy needed to win a 2-minute footrace is produced mostly by

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| a. | lactic acid fermentation. |
| b. | cellular respiration. |
| c. | using up stores of ATP. |
| d. | breaking down fats. |
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15. Which statement mainly explains why even well-conditioned athletes have to pace themselves for athletic events that last several hours?

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| --- | --- |
| a. | Lactic acid fermentation can cause muscle soreness. |
| b. | Heavy breathing is needed to get rid of lactic acid. |
| c. | Cellular respiration releases energy more slowly than fermentation does. |
| d. | all of the above |
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16. All of the following are sources of energy during exercise EXCEPT

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| a. | stored ATP. |
| b. | alcoholic fermentation. |
| c. | lactic acid fermentation. |
| d. | cellular respiration. |
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17. The products of photosynthesis are the

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| a. | products of cellular respiration. |
| b. | reactants of cellular respiration. |
| c. | products of glycolysis. |
| d. | reactants of fermentation. |
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18. Which of the following is NOT a stage of cellular respiration?

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| a. | fermentation |
| b. | electron transport |
| c. | glycolysis |
| d. | Krebs cycle |
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19. Which of the following is the correct sequence of events in cellular respiration?

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| --- | --- |
| a. | glycolysis  fermentation  Krebs cycle |
| b. | Krebs cycle  electron transport  glycolysis |
| c. | glycolysis  Krebs cycle  electron transport |
| d. | Krebs cycle  glycolysis  electron transport |
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20. Which of these processes takes place in the cytoplasm of a cell?

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| --- | --- |
| a. | glycolysis |
| b. | electron transport |
| c. | Krebs cycle |
| d. | all of the above |
|  |  |

21. The electron transport chain can be found in

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| --- | --- |
| a. | prokaryotes. |
| b. | animals. |
| c. | plants. |
| d. | all of the above |
|  |  |

22. Which of the following passes high-energy electrons into the electron transport chain?

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| --- | --- |
| a. | NADH and FADH2 |
| b. | ATP and ADP |
| c. | citric acid |
| d. | acetyl – CoA |