Let's Be The Judge (Sec)

Gallery walk of questions with incorrect and correct answers.
Determine if right/wrong and why.

Prep:

1. Chose a concept or standard(s) you want students to review.
2. Select 8-10 examples of questions with correct and incorrect responses..
3. Post each question and selected response for students to examine on chart paper or in area of the room and number them. Another option is to place each question/selected response on a Jamboard page.
4. Place students in groups of 3-4.
5. Provide students with a "Judge's Log" as they go through each question.

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Let's Be The Judge

Directions:

1. You will start at a question with your group.
2. Together, read the question and the response given. Discuss if the response is correct or incorrect and justify your answer aloud.
3. Once there is group agreement, record you decision in the numbered box corresponding to the question on your "Judge's Log".
4. When the teacher directs you, your group will move to the next question and repeat the process.

Be prepared to share your Judge's Log with other group members or the whole class at the end of the activity.

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Judge's Log

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Name: _____ Team Members: _____

#1

Correct or Incorrect: _____

Why or why not?

If incorrect, what is a correct response?

#2

Correct or Incorrect: _____

Why or why not?

If incorrect, what is a correct response?

#3

Correct or Incorrect: _____

Why or why not?

If incorrect, what is a correct response?

#4

Correct or Incorrect: _____

Why or why not?

If incorrect, what is a correct response?

Judge's Log

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Name: _____ Team Members: _____

#5

Correct or Incorrect: _____

Why or why not?

If incorrect, what is a correct response?

#6

Correct or Incorrect: _____

Why or why not?

If incorrect, what is a correct response?

#7

Correct or Incorrect: _____

Why or why not?

If incorrect, what is a correct response?

#8

Correct or Incorrect: _____

Why or why not?

If incorrect, what is a correct response?

Judge's Log

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Name: _____ Team Members: _____

#9

Correct or Incorrect: _____

Why or why not?

If incorrect, what is a correct response?

#10

Correct or Incorrect: _____

Why or why not?

If incorrect, what is a correct response?

Let's Be The Judge

Example:

- **Concept: Cell Structure and Function**
- **TEKS: B.4B (R)** - investigate and explain cellular processes, including homeostasis, and transport of molecules
- The next 9 slides are questions/responses.
- The final 9 slides are the answers with TEKS.

Question 1

Which statements best describe the difference between active transport and passive transport?

Response:

Active transport moves substances along the concentration gradient.
Passive transport moves substances against the concentration gradient

Correct? Incorrect? Why or why not?

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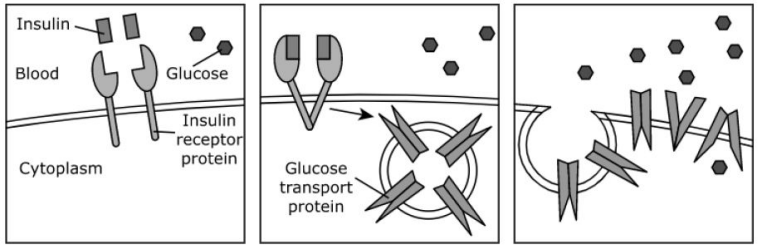
Question 2

A diagram of removing glucose from the blood by a fat cell is shown. Which statement best describes the role of insulin and glucose-transport proteins in this process?



Insulin binds to insulin receptors on the plasma membrane of a fat cell.

The insulin receptors signal the movement of glucose-transport proteins from the cytoplasm.

The glucose-transport proteins merge with the plasma membrane and remove glucose from the blood.

Response:

They help to maintain stable glucose levels both inside and outside the cell.

Correct? Incorrect? Why or why not?

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Question 3

Which type of movement across a cell's plasma membrane requires energy supplied by ATP?

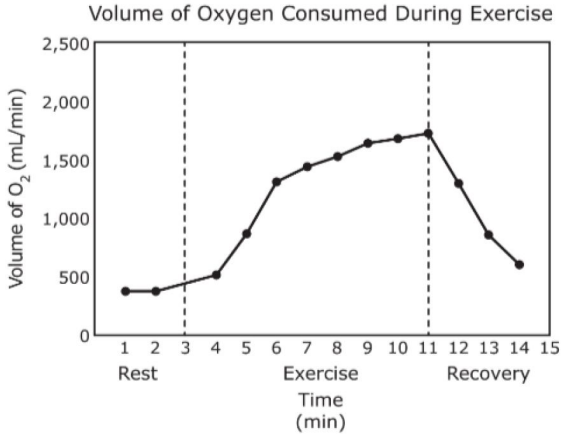
Response:

Passive Transport

Correct? Incorrect? Why or why not?

Question 4

The graph shows the oxygen consumed by an athlete during different stages of training. Based on the graph, which process is occurring between minute 5 and minute 10?



Response:

Ribosomes are building carbohydrates to increase energy output

Correct? Incorrect? Why or why not?

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Question 5

Which statement describes the process of osmosis in an animal cell?

Response:

Water molecules move across the plasma membrane until solute concentrations are equal on both sides of the membrane.

Correct? Incorrect? Why or why not?

Question 6

Which table correctly identifies how the plasma membrane contributes to the maintenance of cellular homeostasis?

Response:

Function	Yes	No
Controls materials that enter and exit the cell		X
Converts ATP to glucose for energy storage	X	
Catalyzes protein synthesis		X
Receives signals for DNA replication	X	

Correct? Incorrect? Why or why not?

Question 7

A type of cellular transport is shown. Which description best identifies this type of cellular transport?

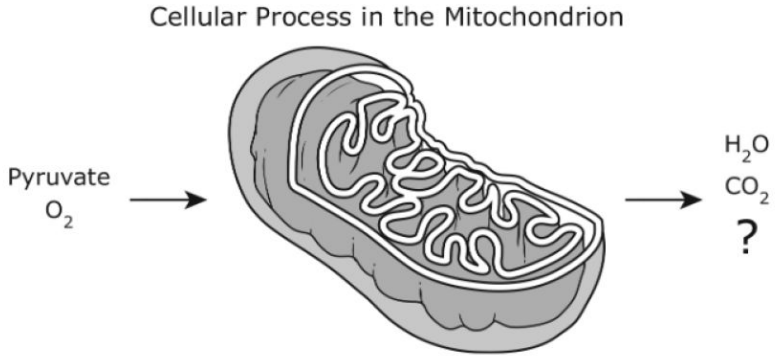
Response:

Active transport, because energy is being used to move molecules against the concentration gradient.

Correct? Incorrect? Why or why not?

Question 8

The diagram shows molecules that a mitochondrion uses and produces during a cellular process. Which other molecule is a product of this process?



Response:

ATP

Correct? Incorrect? Why or why not?

Question 9

In a study of physical endurance, researchers observed significant increases in the heart rates and breathing rates of participants immediately after they engaged in strenuous exercise. Which statement best explains the increase in the heart rate and the breathing rate during exercise?

Response:

An increase in muscle activity causes increases in glucose levels in red blood cells.

Correct? Incorrect? Why or why not?

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Answer Key

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Question 1

Which statements best describe the difference between active transport and passive transport?

Response:

Active transport moves substances along the concentration gradient.
Passive transport moves substances against the concentration gradient

Correct Response:

Active transport requires ATP
Passive transport does not require ATP

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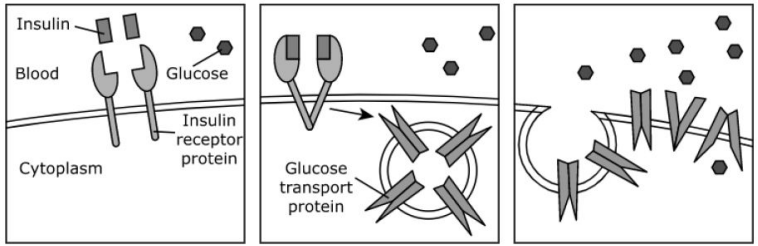
Question 2

A diagram of removing glucose from the blood by a fat cell is shown. Which statement best describes the role of insulin and glucose-transport proteins in this process?



Insulin binds to insulin receptors on the plasma membrane of a fat cell.

The insulin receptors signal the movement of glucose-transport proteins from the cytoplasm.

The glucose-transport proteins merge with the plasma membrane and remove glucose from the blood.

Response:

They help to maintain stable glucose levels both inside and outside the cell.

This is the correct response.

Question 3

Which type of movement across a cell's plasma membrane requires energy supplied by ATP?

Response:

Passive Transport

Correct Response

Active Transport

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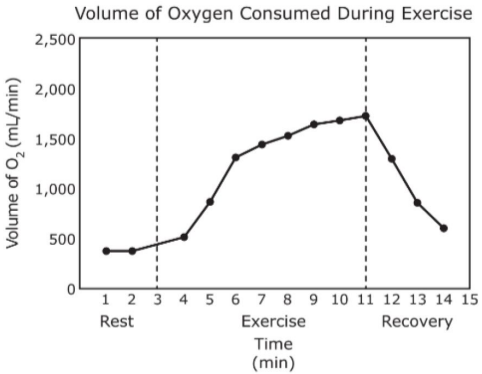
Question 4

The graph shows the oxygen consumed by an athlete during different stages of training. Based on the graph, which process is occurring between minute 5 and minute 10?



Response:

Ribosomes are building carbohydrates to increase energy output

Correct Response

Mitochondria are using oxygen to produce ATP

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Question 5

Which statement describes the process of osmosis in an animal cell?

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Water molecules move across the plasma membrane until solute concentrations are equal on both sides of the membrane.

This is the correct response.

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Which table correctly identifies how the plasma membrane contributes to the maintenance of cellular homeostasis?

Response:

Function	Yes	No
Controls materials that enter and exit the cell		X
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Catalyzes protein synthesis		X
Receives signals for DNA replication	X	

Correct Response

Function	Yes	No
Controls materials that enter and exit the cell	X	
Converts ATP to glucose for energy storage		X
Catalyzes protein synthesis		X
Receives signals for DNA replication		X

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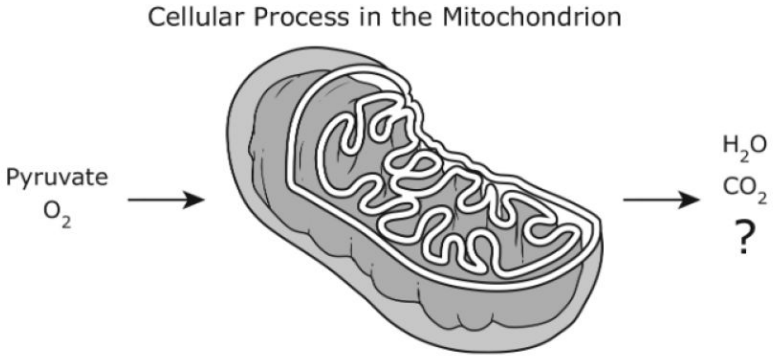

Response:

ATP

This is the correct response.

Question 9

In a study of physical endurance, researchers observed significant increases in the heart rates and breathing rates of participants immediately after they engaged in strenuous exercise. Which statement best explains the increase in the heart rate and the breathing rate during exercise?

Response:

An increase in muscle activity causes increases in glucose levels in red blood cells.

Correct Response

Body cells require increased oxygen as energy is expended.