
GAME
SHOW

Cell Organelles

Cell membrane

Passive transport

Active Transport

Photosynthesis

Cellular Respiration

Cell Organelles	Cell Membrane	Passive Transport	Active Transport	Photo synthesis	Cellular Respiration
$100	$100	$100	$100	$100	$100
$200	$200	$200	$200	$200	$200
$300	$300	$300	$300	$300	$300
$400	$400	$400	$400	$400	$400
$500	$500	$500	$500	$500	$500

Double Jeopardy!

Topic 1

State any two principles of cell theory

$100

Topic 1

All organisms are made of cells. Cells are produced from pre-existing cells.

$100

Back

Topic 1

Give two functions of Lysosomes

$200

Topic 1

1. Protection against germs
2. Disposal or recycling of worn out parts

$200

Back

Topic 1

Structure correlates with ---------- at all levels of biological organization. An example?

$300

Topic 1

Function Example….

Back

$300

Topic 1

Give any 2 differences between prokaryotic and eukaryotic cells.

$400

Topic 1

Eukaryotes have a definite nucleus and other membrane bound organelles.

Back

$400

Topic 1

Name three organelles associated with making proteins and how.

$500

Topic 1

Ribosomes,roughER, Golgi.(Explain how)

Back

$500

Topic 2

Name the major chemical component of cell membrane

$100

Topic 2

Phospholipid

Back

$100

Topic 2

1.Name the model that describes cell membrane.
2.Explain the same.

$200

Topic 2

Fluid Mosaic model. Fluid like mobility of PL and randomly placed proteins.

$200

Back

Topic 2

Explain the structure of a phospholipid

$300

Topic 2

Polar head that is hydrophilic. Non polar tail is hydrophobic

Back

$300

Topic 2

What stabilizes cell membrane? Does it increase or decrease fluidity?

$400

Topic 2

Cholesterol decreases fluidity

Back

$400

Topic 2

What is the role of receptors and ligands?

$500

Topic 2

Ligands bind to a receptor for cell signaling and communication.

Back

$500

Topic 3

What is diffusion?

$100

Topic 3

A passive transport of molecules in a fluid or a gas from……

Back

$100

Topic 3

Differentiate osmosis from diffusion

$200

Topic 3

Osmosis- solvent/water across a semipermeable membrane, whereas…

Back

$200

Topic 3

What are the three types of tonicities? Explain.

$300

Topic 3

Hypo, hyper and isotonic solutions-in relation to the cell sap

Back

$300

Topic 3

What will happen to an RBC placed in water?

$400

Topic 3

RBCs will swell to burst because water is extremely hypotonic to this cell.

$400

Back

Topic 3

What is the difference between concentration gradience and electrochemical gradience?

$500

Topic 3

Concentration of solutes Vs. electrically charged ions.

Back

$500

Topic 4

What is the key difference between active and passive transport?

$100

Topic 4

Active transport uses cellular energy.

Back

$100

Topic 4

Why is there a need to use energy in active transport?

$200

Topic 4

In order to move substances against the concentration gradient.

$200

Back

Topic 4

What are the 2 types of endocytosis and what is the difference between them?

$300

Topic 4

Phagocytosis is cell eating; Pinocytosis is cell drinking

Back

$300

Topic 4

Explain your understanding of a protein pump?

$400

Topic 4

Explain the sodium potassium pump.

Back

$400

Topic 4

How do transport proteins that are pumps differ from protein channels?

$500

Topic 4

Protein pumps aid in active transport of ions against concentration gradient based on

Topic 5

Name the protein that gives plants the unique ability to photosynthesize.

$100

Topic 5

Chlorophyll

Back

$100

Topic 5

Describe the membrane system inside the chloroplast.

$200

Topic 5

Thylakoids stacked up into grana that are connected by frets.

Back

$200

Topic 5

What is photolysis of water?

$300

Topic 5

The splitting up of water in to its ions using solar energy.

$300

Back

Topic 5

What are the 2 major events in light-dependent reactions and their outcomes?

$400

Topic 5

Photolysis of water and photophosphorylation leading to the synthesis of ATP, NADPH and Oxygen

Topic 5

Explain the significant features of Calvin cycle.

$500

Topic 5

Carbon dioxide is fixed into a glucose molecule using ATP and NADPH in the stroma of chloroplast.

Topic 6

What are the two types of respiration? Give the key difference between them.

$100

Topic 6

Aerobic - requires oxygen…..

Back

$100

Topic 6

What is the first phase of cellular respiration and its location.

$200

Topic 6

Glycolysis – in cytoplasm

Back

$200

Topic 6

Enumerate the outcomes of the second phase of cellular respiration.

$300

Topic 6

Krebs cycle in the mitochondrial matrix when CO_2 is released. ATP, NADH, FADH are formed.

Topic 6

What is ETC and it’s significance?

$400

Topic 6

Electron Transport Chain inside the cristae of mitochondria, generates most ATPs

Topic 6

Discuss the commercial significance of the different types of fermentation.

$300

Topic 6

Alcoholic and Lactic acid fermentations, mainly in prokaryotes.
In bakery and