

Smart Edu Hub / Smart Exam Resources

9700 / CAIE A level Biology / Paper-1/ Multiple Choice
Questions

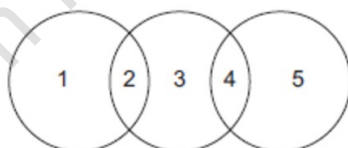
1.2.27-Comparing-Cell-Types-Set-1-qp

Total Questions: 11

Questions

Question 1:

The diagram shows some similarities between chloroplasts, mitochondria and typical prokaryotes.



Which row is correct?

	1	2	3	4	5
A	chloroplasts	circular DNA	mitochondria	linear DNA	prokaryotes
B	mitochondria	70S ribosomes	chloroplasts	linear DNA	prokaryotes
C	mitochondria	linear DNA	chloroplasts	70S ribosomes	prokaryotes
D	prokaryotes	70S ribosomes	mitochondria	70S ribosomes	chloroplasts

Question 2:

Which structure is present in cells of eukaryotes but not present in cells of prokaryotes?

- A 70s ribosome
- B chromatin
- C mesosome
- D plasmid

Question 3:

What are found in both mitochondria and typical prokaryotic cells?

- A 70S ribosomes and circular DNA
- B 70S ribosomes only
- C 80S ribosomes and circular DNA
- D circular DNA only

Questions (Continued)

Question 4:

What are found in both chloroplasts and typical prokaryotic cells?

- A 70S ribosomes and circular DNA
- B 70S ribosomes only
- C 80S ribosomes and circular DNA
- D circular DNA only

Question 5:

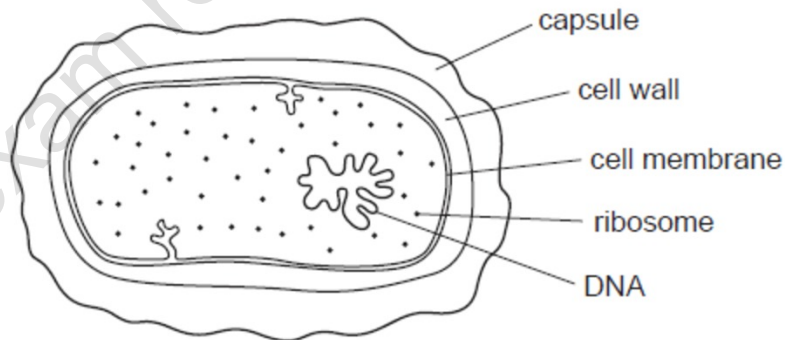
Which structure is present in **all** eukaryotic cells but **not** present in prokaryotic cells?

- A 70S ribosome
- B cell wall
- C chromatin
- D plasmid

Questions (Continued)

Question 6:

The diagram shows a high-power drawing of a bacterium.



Which three components are found in **both** this bacterium and an animal cell?

- A capsule, cell membrane and cell wall
- B capsule, DNA and ribosome
- C cell membrane, cell wall and DNA
- D cell membrane, DNA and ribosome

Question 7:

Some features of cells are listed.

- 1 cell wall
- 2 cell surface membrane
- 3 ribosomes

Which features can be found in plant cells and in prokaryotic cells?

- A 1, 2 and 3 B 1 and 2 only C 1 and 3 only D 2 and 3 only

Questions (Continued)

Question 8:

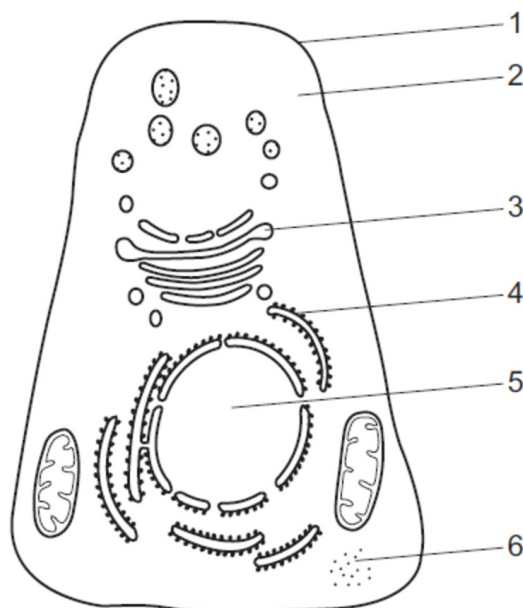
Mitochondria are thought to have evolved from prokaryotic cells that were ingested by an ancestral cell.

Which feature have the prokaryotes lost during their evolution into mitochondria?

- A cell wall
- B circular chromosome
- C endoplasmic reticulum
- D ribosomes

Question 9:

The diagram shows a typical animal cell.



Which features are also found in **both** plant cells and prokaryotic cells?

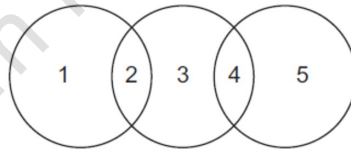
	1	2	3	4	5	6
A	✓	✓	✓	✓	✓	✓
B	✓	✓	x	x	x	✓
C	✓	x	x	✓	x	x
D	x	✓	✓	✓	✓	x

key
 ✓ = present
 x = absent

Questions (Continued)

Question 10:

The diagram shows some similarities between chloroplasts, mitochondria and typical prokaryotes.



Which row is correct?

	1	2	3	4	5
A	chloroplasts	circular DNA	mitochondr	80S ribosomes	prokaryotes
B	chloroplasts	80S ribosomes	mitochondria	circular DNA	prokaryotes
C	prokaryotes	circular DNA	mitochondria	circular DNA	chloroplasts
D	prokaryotes	70S ribosomes	chloroplasts	80S ribosomes	mitochondria

Question 11:

Which comparison of bacteria cell walls and plant cell walls is correct?

	bacteria cell wall	plant cell wall
A	made of a polymer of α -glucose	made of cellulose
B	made of a polymer of β -glucose	made of a polymer of amino sugars
C	made of a polymer of amino sugars	made of a polymer of α -glucose
D	made of peptidoglycan	made of a polymer of β -glucose