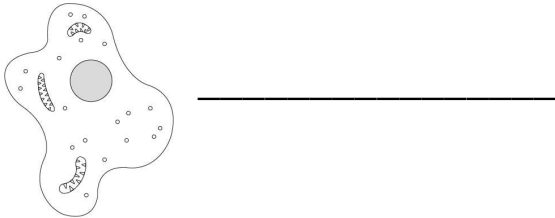
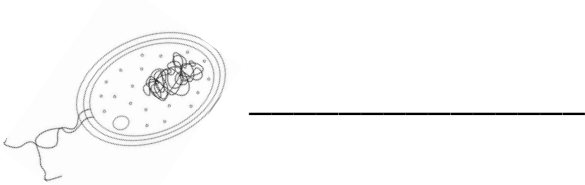


Prokaryotic and eukaryotic cells



Task 1: Define prokaryotic and eukaryotic cells

a) **Complete** the label to say if the cell is eukaryotic or prokaryotic.



b) **Fill in** the missing words below.

_____ cells **do not** have a membrane bound _____.

_____ cell **do** have a membrane bound _____.

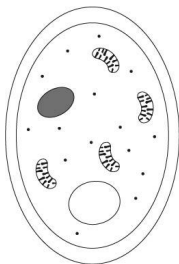
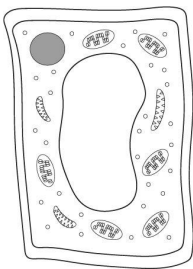
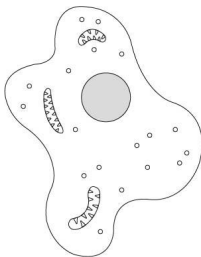
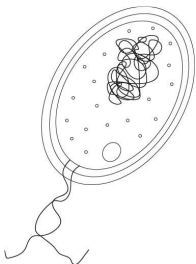
prokaryotic *nucleus* *eukaryotic*

Task 2: Identifying examples of prokaryotic and eukaryotic cells

a) **Complete** the table to give examples of prokaryotic and eukaryotic organisms.

Eukaryotic	Prokaryotic

b) **Name** the cell in each diagram.



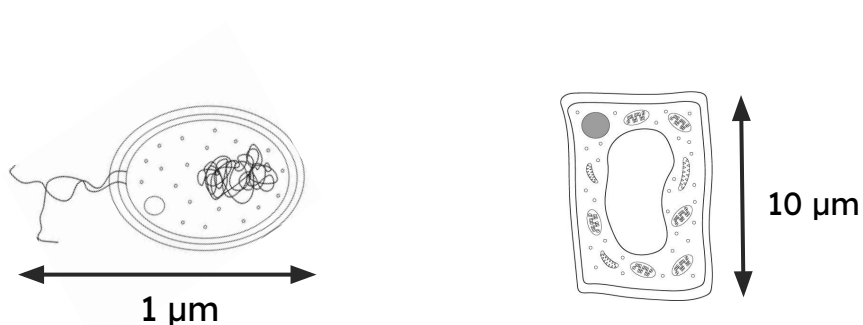


Task 3: Comparing prokaryotic and eukaryotic cells

a) **Complete** the table to compare the features of prokaryotic and eukaryotic cells.

Feature	Prokaryotic	Eukaryotic
Membrane bound subcellular structures		
DNA		
Size		
Cell division		
Cell walls		

b) **Use** these diagrams to answer the questions.



i) **Identify** three similarities between the prokaryotic cell and the eukaryotic cell in the diagram.

i) **Identify** three differences between the prokaryotic cell and the eukaryotic cell in the diagram.

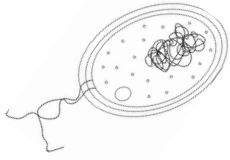
Prokaryotic and eukaryotic cells

Answers

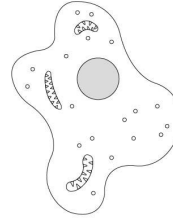


Task 1: Define prokaryotic and eukaryotic cells

a) **Complete** the label to say if the cell is eukaryotic or prokaryotic.



prokaryotic



eukaryotic

b) **Fill in** the missing words below.

Prokaryotic cells **do not** have a membrane bound nucleus.

Eukaryotic cell **do** have a membrane bound nucleus.

prokaryotic

nucleus

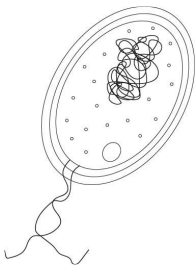
eukaryotic

Task 2: Identifying examples of prokaryotic and eukaryotic cells

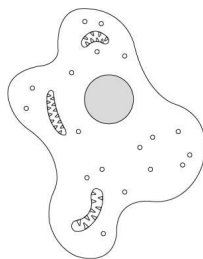
a) **Complete** the table to give examples of prokaryotic and eukaryotic organisms.

Eukaryotic	Prokaryotic
<i>animal</i> <i>plant</i> <i>fungi (yeast)</i>	<i>bacteria</i>

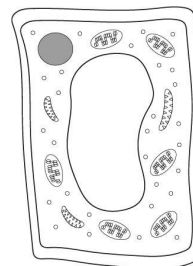
b) **Name** the cell in each diagram.



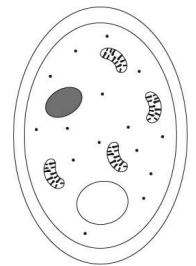
bacteria



animal



plant



fungi (yeast)

Name _____

Science Prokaryotic and eukaryotic cells

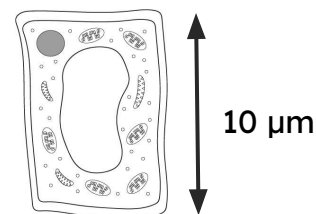
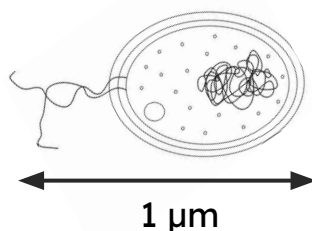


Task 3: Comparing prokaryotic and eukaryotic cells

a) **Complete** the table to compare the features of prokaryotic and eukaryotic cells.

Feature	Prokaryotic	Eukaryotic
Membrane bound subcellular structures	<i>do not have any membrane bound sub-cellular structures</i>	<i>have membrane bound sub-cellular structures such as a nucleus, mitochondria and chloroplasts</i>
DNA	<i>DNA floating in cytoplasm</i>	<i>DNA inside membrane bound nucleus</i>
Size	<i>smaller 1-5 μm</i>	<i>bigger 5-100 μm</i>
Cell division	<i>binary fission</i>	<i>mitosis</i>
Cell walls	<i>cell walls made of peptidoglycan</i>	<i>Animal cells do not have cell walls. Plants have cell wall made of cellulose.</i>

b) **Use** these diagrams to answer the questions.



i) **Identify** three similarities between the prokaryotic cell and the eukaryotic cell in the diagram.

- *both have cytoplasm*
- *both have a cell membrane*
- *both have DNA*
- *both have ribosomes*

i) **Identify** three differences between the prokaryotic cell and the eukaryotic cell in the diagram.

- *Prokaryotic cell has no nucleus **OR** DNA is free in the cytoplasm*
- *Prokaryotic cell has no mitochondria*
- *Prokaryotic cell has loop of DNA*
- *Prokaryotic cell is smaller*