

Name:

Class:



Describe a test to show if a food sample contains reducing sugars.

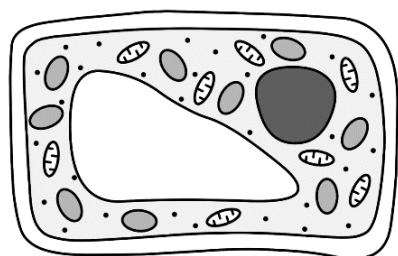
Test: add a few drops of Benedict's solution to the sample and heat the sample.

Result: if glucose is present a colour change will be seen. Accept a red or red brick colour.

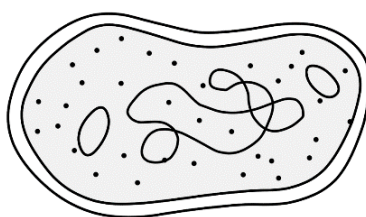
A gene can be homozygous dominant. What is a homozygous dominant genotype?

A gene that has two dominant alleles.

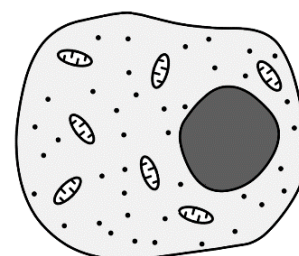
The figure below shows three different types of cells.



0.5 mm



1 μ m



30 μ m

i. Give **two** similarities between the prokaryotic cell and the eukaryotic cells in the figure above.

Any **two** from: they both have

- cytoplasm
- (cell) membrane
- DNA / genetic material
- ribosomes

ii. Give **three** differences between the prokaryotic cell and the eukaryotic cells in the figure above.

Any **three** from:

- prokaryotic cell is smaller
- prokaryotic cell has no mitochondria
- prokaryotic cell has no nucleus or DNA is free in the cytoplasm or genetic material is free in the cytoplasm.
- prokaryotic cell has a single loop of DNA or prokaryotic cell has a single loop of genetic material.
- prokaryotic cells have plasmids.

Describe how malaria is transmitted.

By the bite of an infected mosquito, which is the vector for the disease.

i. State the enzyme that digests lipids.

Lipase

ii. State the products of this digestion.

Three fatty acids and one glycerol molecule.