What are the functions of the following cellular organelles?

Cell membrane—

Nucleus—

Cytoplasm—

Mitochondria—

Chloroplasts—

Cell wall—

Vacuole—

Ribosomes—

What is the equation to calculate magnification?

Calculate the magnification of a cell that appears to be 20mm in length down the microscope, but is actually 200µm in length.

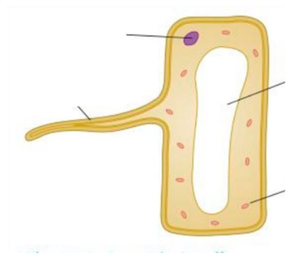
GCSE Biology

How are light and electron microscopes different?

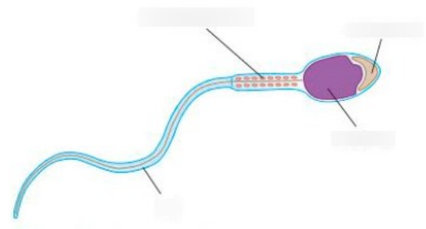
Draw and label a plant and animal cell:

Describe the adaptations of the villi in the small intestine.

Label the adaptations of the root hair cell.



Label the adaptations of the sperm cell.



Calculate the actual size of a root hair cell, that appears to be 0.68mm under x40 magnification.

_____µm

Draw and label a bacterial cell

How are prokaryotes different to eukaryotes?

What is diffusion?

Example:

What is active transport?

Example:

What is the equation to calculate density?

How would you find the density of a cube?

How would you find the density of a statue?

What are renewable energy sources?

Examples:

What are finite energy sources?

Examples:

GCSE Physics/Chemistry

What makes up the National Grid?

What is an ore?

Name two advantages and disadvantages of wind turbines:

Advantages—

Disadvantages—

Name two advantages and disadvantages of solar panels.

Advantages—

Disadvantages—

Name two advantages and disadvantages of fossil fuels.

Advantages—

Disadvantages—

Write out the reactivity series:

Complete the following equations:

Iron + copper sulphate —>

Potassium + zinc carbonate —>

Lead + magnesium oxide —>

What reaction takes place in a blast furnace?

Explain what is happening in this reaction:

Magnesium + iron oxide —> magnesium oxide + iron

Name two advantages and disadvantages of Nuclear power

Advantages—

Disadvantages—