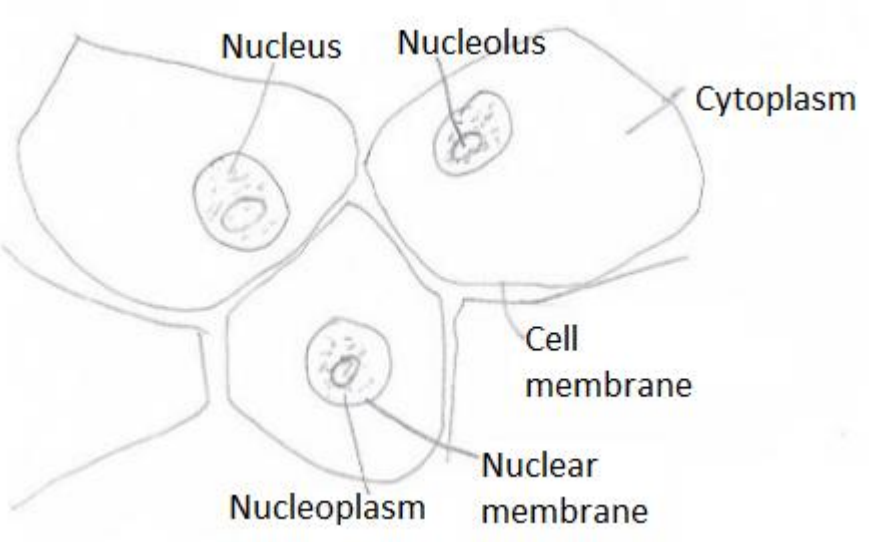
Unit 15 – Assignment 1 – P1

Light microscopy

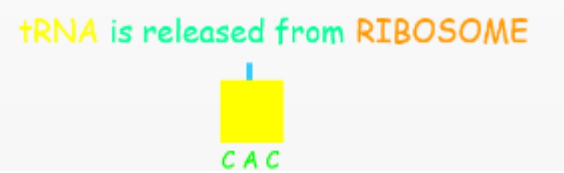
Animal cell:



Plant cell:

Fungal cell:

8. A peptide bond forms between the second and third amino acids.



9. The ribosome moves along the mRNA and the next codon is read

Electron microscope

To be able to identify the function of the organelles of a cell, you will need to use an electron microscope as it is able to magnify up to 500,000x. The cell must be dead as it is held in a vacuum in order to look at it. As the cell must be dead to be able to observe it, you cannot observe the process of protein synthesis as it is occurring. The cell is covered in gold. If there were 10 cells, held in a vacuum at different stages of protein synthesis, we would be able to identify each stage. Because of the high magnification, we are able to see what is happening in each organelle of the cell.