



Coonabarabran High School Assessment Notification

Subject: Year 11 Biology

Date of Notification: 9/3/23

Assessment task 1: Topic test

Date: Period 2, Monday 27th March 2023

Weighting: 25%

Teacher: K Christoff

Outcomes to be assessed

This assessment task will allow you to show evidence of having achieved the following course outcomes:

BIO11/12-2 designs and evaluates investigations in order to obtain primary and secondary data and information

BIO11/12-3 conducts investigations to collect valid and reliable primary and secondary data and information

BIO11/12-4 selects and processes appropriate qualitative and quantitative data and information using a range of appropriate media

BIO11/12-7 communicates scientific understanding using suitable language and terminology for a specific audience or purpose

BIO11-8 describes single cells as the basis for all life by analysing and explaining cells' ultrastructure and biochemical processes

Task 1 – Topic test, including practical work and working scientifically skills

Topic: Module 1 – Cells as the basis of Life

In this task you will undertake tasks that will assess the knowledge and skills developed during Module 1: Cells as the Basis of Life.

Knowledge included in this module includes:

- Cell structure – organelles and their functions, eukaryotic and prokaryotic cells
- Technologies used to determine cell structure – eg. Light and electron microscopes, stains
- The fluid mosaic model of cell membrane
- How substances move into and out of cells (osmosis, diffusion, endocytosis, exocytosis, active and passive transport, affect of concentration gradient and temperature on rate of diffusion), Surface area to volume ratio
- Cell requirements – energy, compounds, removal of wastes,
- Photosynthesis and respiration
- Enzymes – what they do and how they work

Practical tasks may include:

- Microscope work – eg. preparing a wet mount slide, using the microscope, drawing scaled diagrams of cells, drawing cells and labelling organelles using light microscopes, identifying cell organelles in electron micrographs
- Following a procedure to carry out an experiment and using your knowledge to explain the results
- Writing an aim, hypothesis, method, discussion, conclusion
- Filling in a risk assessment
- Assessing validity, reliability and accuracy of an experiment
- Identifying the independent, dependent and constant variables in an experiment
- Drawing graphs and tables
- Recording results and observations
- Analysing data to draw a valid conclusion

Equipment required Ruler, lead pencil, black pen, pencil sharpener and calculator.

Test structure

There will be three stations.

- Two stations will be 10 minutes each and you will complete them individually.
- The other station will be 20 minutes and you may complete it with a partner.

There will be multiple tasks to complete at each station.

Tasks at each station will require you to use a combination of knowledge and skills.

There will be a variety of question types eg. multiple choice, short answer and extended responses.