



JOHN EDMONDSON HIGH SCHOOL

Assessment Notification

Faculty: Science Course: Biology Year: 11

Assessment Task: 1- Practical and Problem Solving Task

Assessment Weighting: 30% Due: Term 1 Week 8 Date: 20/03/2024

Task Type: Hand in Task In Class Task Practical Task

Outcomes assessed (NESA)

BIO11/12-1 develops and evaluates questions and hypotheses for scientific investigation

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

BIO11/12-5 analyses and evaluates primary and secondary data and information

BIO11/12-6 solves scientific problems using primary and secondary data, critical thinking skills and scientific processes

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

BIO11-8

Cell Structure Inquiry question: What distinguishes one cell from another?

Students:

- investigate different cellular structures, including but not limited to:
 - examining a variety of prokaryotic and eukaryotic cells (ACSBL032, ACSBL048)
 - describe a range of technologies that are used to determine a cell's structure and function
- investigate a variety of prokaryotic and eukaryotic cell structures, including but not limited to:
 - drawing scaled diagrams of a variety of cells (ACSBL035)
 - comparing and contrasting different cell organelles and arrangements
 - modelling the structure and function of the fluid mosaic model of the cell membrane
- conduct a practical investigation to model the action of enzymes in cells (ACSBL050)
- investigate the effects of the environment on enzyme activity through the collection of primary or secondary data

Task Description/Overview

TOTAL MARKS 60

Task will take place in period 3 and 4:

11 BIO4 in D02

11 BIO5 in D01

Module Assessed: Module 1: Cells as the Basis of Life

Part A - Practical Task in the laboratory

Part B - In class written component

Detailed Assessment Task Description

Students to use their knowledge of the Module 1 content and associated skills to perform a microscopy practical, complete parts of a scientific report, answer theory questions and analyse the results and merits of an example practical.

Assessment Criteria

Grade	Description	Mark Range
Outstanding (O)	The student has an extensive knowledge and understanding of the content and can readily apply this knowledge. In addition, the student has achieved a very high level of competence in the processes and skills and can apply these skills to new situations.	84.5-100
High (H)	The student has a thorough knowledge and understanding of the content and a high level of competence in the processes and skills. In addition, the student is able to apply this knowledge and these skills to most situations	69.5-84
Sound (S)	The student has a sound knowledge and understanding of the content and has achieved a good level of competence in the processes and skills	49.5-69
Basic (B)	The student has a basic knowledge and understanding of the content and has achieved a basic level of competence in the processes and skills.	27.5-49
Limited (L)	The student has an elementary knowledge and understanding in a few areas of the content and still requires further work to achieve competence in the processes and skills	0-27

Satisfactory completion of courses

A course has been satisfactorily completed, when the student has:

- Followed the course developed/endorsed by the NSW Educational Standards Authority (NESA)
- Applied himself/herself with diligence and sustained effort to the set tasks and experiences provided in the course.
- Achieved some or all of the course outcomes