Laboratory 3, Activity 3.2: LM Observation of Cells: Marking Criteria

Student Name: _____ Student ID: _____

Marker: _____

Facet of Inquiry	Student Autonomy Level 1 *Students research at the level of a **closed enquiry** and require a **high degree of structure/ guidance***	Student Autonomy Level 2 *Students research at the level of a **closed enquiry** and require a **some structure and guidance***	Level 3 *Students research **independently** at the level of a **closed enquiry***
A. Students embark on inquiry *and so determine a need for knowledge/ understanding*	❑ Identifies an appropriate purpose/reason for undertaking Activity 3.2 (LM Observation of Cells)	❑ Clearly & concisely identifies several principle purposes/ reasons for undertaking Activity 3.2 (LM Observation of Cells)	
B. Students find/generate *needed information/data using appropriate methodology*	Generally follows methods/ protocols, yet some aspects omitted or incomplete, for: ❑ preparation of a cell smear ❑ staining ❑ operation of microscope ❑ Q9 or Q10 correct	Rigorously adheres to methods/ protocols for: ❑ preparation of a cell smear ❑ staining ❑ operation of microscope ❑ Q9 & Q10 correct	
C. Students critically evaluate *information/data and the process to find/generate this information/data*	❑ Presents data generated after consideration & evaluation of only part of the overall activity ❑ Accurate contrast, missing some details, in Q11	❑ Presents data based on consideration & evaluation of most or all parts of the activity ❑ Accurate, detailed contrast in Q11	
D. Students organise *information collected/ generated*	❑ Produces drawings that are partially labelled & depict some structural features of the cells ❑ Ideas/ data not always presented in a logical sequence within answers	❑ Produces drawings that are appropriately labelled & accurately depict most or all observable structural features of the cells ❑ Ideas/data presented in logical sequence within answers	
E. *Students **synthesise** and **analyse** and **apply** new knowledge*	❑ Understanding of cell structure & function is based on cell smear activity only ❑ Some valid inference in Q12 or Q13 ❑ Linkage between cellular features & functions partially explained or incorrect for Q 13	❑ Understanding of cell structure & function utilises data obtained from the cell smear activity as well as other sources (e.g. interpretations of tissue section) ❑ Explanation based on evidence and valid inference in Qs 12 & 13 ❑ Linkage between cellular features and functions fully explained & accurate for Q 13	
F. *Students **communicate** knowledge and the process used to generate it, with an awareness of ethical, social and cultural issues*	❑ Aspects of the student's conduct within the laboratory indicate some awareness of safe practice protocols	❑ Student's conduct within the laboratory indicates a thorough awareness and understanding of safe practice protocols	