

**Harris Federation**

# **BTEC National Portfolio Cover Sheet**

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| Candidate Name |  |

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| Unit Title | **Unit 3 – Biology and our Environment** |

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| **Unit Number** | **3** | **Date Issued** | **19th September 2011** |

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| **Assessor(s)** |  | **Date Due 27th January 2012** | **Date Submitted** |

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| **Assessment Decisions:** | **Have you completed a grading grid evidence sheet (see overleaf)** | Yes | No |
| **Have you annotated within the student’s work where the criteria are covered eg, P1, M2 etc** | Yes | No |

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| **Grading Decision** | **Pass / Merit / Distinction****P1, P2, P3, P4, P5, P6, M1, M2, M3, M4, D1, D2, D3** |
| **Points Awarded** | **25/30/35** | **Assignment IV’d?** | Yes |
| **Has interim feedback sheet been completed?** | **Yes/No** | **Have witness statements and observation records been included (if relevant)?** | Yes/No |

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| **Overall assessor’s Feedback should be recorded below:** |
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| **Assessor Signature** |  | **Date** |  |

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| **Student Signature** |  | **Date** |  |

INTERIM FEEDBACK SHEET –

TO BE COMPLETED DURING

COMPLETION OF ASSIGNMENT

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| FEEDBACK SESSION ONE:DATE \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_What task evidence has been produced thus far? | Interim assessment evidence – How is your work progressing? What is the quality of the work like?Are you presently working towards pass/merit/distinction level |
| Interim targets for improvement:1)2) |

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| FEEDBACK SESSION TWO:DATE \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_What additional task evidence has been produced thus far? | Interim assessment evidence – How is your work progressing? What is the quality of the work like?Student is presently working towards pass/merit/distinction level |
| Final targets for improvement:1)2) |



RECORDING EVIDENCE AGAINST EACH

CRITERIA FROM THE GRADING GRID

Unit \_\_ **Unit 3 – Biology and our Environment** Student \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| Assessment Criteria | Achieved | Evidence /Page No’s in the portfolio | Comments/Feedback/Date |
| P1 describe how the functioning of organisms relates to the genes in their cells | **Yes/No** | Assignment 1 | Describe how genes code for proteinsDescribe how the cell function is related to the proteins that different genes make.Give 5 examples of different proteins and their functions e.g. intracellular enzymes |
| P2construct simple identification keys to show how variation between species can be classified | **Yes/No** | Assignment 2 | Create an identification **key** to allow identification of the major classification groups (Fungi, Bacteria, Viruses, Procists, Vertebrates, Invertebrates, Flowering plants, Non-flowering plants)Pick 5 organisms and create a second identification key. |
| P3describe the interdependence and adaptation of organisms | **Yes/No** | Assignment 3 | Use the food web provided to describe the what would happen if one of the species were to **decrease** in number (what other species would increase in number, what would decrease in number)Use the food web provided to describe the what would happen if one of the species were to **increase** in number (what other species would increase in number, what would decrease in number)Give 3 adaptations of 3 organisms that make them well suited to survive in their environment |
| P4carry out an investigation into the impact of human activity on an environment | **Yes/No** | Assignment 4 | Create a questionnaire with 10 or more questions about one way that humans affect the environment (good or bad)Ask a minimum of 10 people to complete your questionnaireWrite a paragraph explaining what your findings show |
| P5describe the effect of different internal and external factors on human health | **Yes/No** | Assignment 5 | Research one **medical** health factor (Micro-organisms, carcinogens, immunisations) and state how it affects your health, add to you human health mind map.Research one **social** health factor (Drug use and abuse e.g. cannabis, alcohol, Exercise and Diet, Sunbathing, Loud music) and state how it affects your health, add to you human health mind map.Research one **inherited** health factor (sickle cell, cystic fibrosis) and state how it affects your health, add to you human health mind map. |
| P6identify the control mechanisms which enable the human body to maintain optimal health. | **Yes/No** | Assignment 6 | Create 2 flow charts showing how the body controls its state to maintain health |
| M1describe how variation within a species brings about evolutionary change | **Yes/No** | Assignment 3 | Choose 2 organisms; describe some of the variations within the species.Describe how this variation could be an advantage or disadvantage to their survivalExplain why the features that help the species survive are passed on and how this brings about evolutionary change |
| M2explain how organisms within an ecosystem interact over time | **Yes/No** | Assignment 3 | Draw a predator-prey cycle graph showing the changing population of foxes and rabbits in an areaAnnotate this graph explaining what is happening at the low and the high points on the graph. |
| M3describe how to measure the effect of human activity on an environment | **Yes/No** | Assignment 4 | In your report explain the different ways a lake can be affected by humansExplain in your report how we could measure the impact these affects are having on the lake ecosystem. |
| M4explain how selected medical, social and inherited factors disrupt body systems to cause ill health. | **Yes/No** | Assignment 5 | Make a card describing how the **medical** factor you chose in P5 makes you ill/wellMake a card describing how the **social** factor you chose in P5 makes you ill/affects youMake a card describing how the **inherited** factor you chose in P5 makes you ill |
| D1explain how genes control variation within a species using a simple coded message | **Yes/No** | Assignment 1 | Explain what the triplet code is (when making proteins)Explain how DNA causes variation within a species |
| D2explain how the environmental effect of human activity might be minimised in the future | **Yes/No** | Assignment 4 | In your presentation, think of the ways humans could reduce the affects mentioned in your report for M3 (more than one way for each) |
| D3describe the social issues which arise as a result of the selected medical, social and inherited factors and the illnesses they cause. | **Yes/No** | Assignment 5 | Make a leaflet explaining the social issues caused by the **medical** factor chosen in P5 e.g. how much they cost the government, how they affect relationships with family and friendsMake a leaflet explaining the social issues caused by the **social** factor chosen in P5 e.g. how much they cost the government, how they affect relationships with family and friendsMake a leaflet explaining the social issues caused by the **inherited** factor chosen in P5 e.g. how much they cost the government, how they affect relationships with family and friends |

Assessor Signature \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Student Signature \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_