**TAS FACULTYASSESSMENT TASK NOTIFICATION**

**Subject: Technology (Mandatory)**

**Task: STEM Fundamentals Report**

**Stage: 5 Year: 9**

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| TOPIC/MODULE/UNIT OF WORK: |

Aeronautical Challenge Design Folio

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| WEIGHTING (AS PER ASSESSMENT SCHEDULE): |

25%

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| DUE DATE: |

Term 2, Week 7

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| TIME ALLOWED: |

2 weeks

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| OUTCOMES: |

5.1.2, 5.2.2, 5.3.2, 5.5.1, 5.6.1

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| OUTLINE OF TASK: |

During the Aeronautical Velocity Challenge task, students record decision making in their iSTEM folios. The folios are assessed as follows:

* Student describes the technologies used to produce their team’s prototype experimental design.
* Students describe the problems they faced during construction of their models and use correct aeronautical terms in their explanation.
* Includes a personal evaluation that analyses how the student overcame the challenges using initiative and flexibility of thinking.
* Uses a range of written, graphical and ICT skills to record information in their iSTEM folio.

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| ADDITIONAL INFORMATION & CAMPUS ASSESSMENT POLICY: |

This is a formal assessment item. Absence due to illness, funeral, family situation, etc. must be supported by a medical certificate, presented to the Head Teacher on the first day of your return to school, irrespective of your timetable for this subject. You must be prepared to attempt the task on the first day of your return to school – i.e. when your medical certificate expires.

**Penalties for unacceptable late submission and non-attempt of assessment** are as follows: One day late- 10% of total mark; Two days late- 20% of total mark; Three days late- 30% of total mark; Four days late- 40% of total mark; Five days late- 50% of total mark; More than five days late- mark of zero. If the work has not been submitted after a week the student/s involved will re-attempt the task in order to meet course outcomes.

**If plagiarism is evident an automatic mark of zero will be given and the student/s involved will re-attempt the assessment.**

If the assessment is a serious non-attempt or non-attempt noted by both the Teacher and Head Teacher the student will receive zero and will re-attempt the assessment in order to meet course outcomes. Any form of malpractice and misadventure will also result in parental contact by the respective teacher and student/s involved in the **malpractice may be further supported through the ‘Leichhardt Way’.**

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| ASSESSMENT CRITERIA: |

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| Outcome | Mark | A – Outstanding (5) | B – Very Good (4) | C – Good (3) | D – Satisfactory (2) | E – Insufficient Detail (1) |
| 5.1.2 demonstrated initiative, entrepreneurship, resilience and cognitive flexibility through the completion of practical STEM based activities |  | Student writes a personal evaluation that *critically evaluates* the challenges faced in all aspects of the task. | Student writes a personal evaluation that *evaluates* the challenges faced in all aspects of the task. | Student writes a personal evaluation that *analyses* the challenges faced in all aspects of the task. | Student writes a final unit evaluation that *describes* the challenges faced in all aspects of the task. | Student does not clearly *describes* the challenges faced in all aspects of the task. |
| 5.2.2 applies cognitive processes to address real world STEM based problems in a variety of contexts |  | Student *analyses* the aeronautical principles involved in the testing and construction of the prototype. | Student *clearly describes* the aeronautical principles involved in the testing and construction of the prototype. | Student *describes* the aeronautical principles involved in the testing and construction of the prototype. | Student *identifies* the aeronautical principles involved in the testing and construction of the prototype. | Student does not clearly *identify* the aeronautical principles. |
| 5.3.2 identifies and uses a range of technologies in the development of solutions to STEM based problems |  | Student *analyses* the technologies used in the procedure list for their prototype. | Student *clearly describes* the technologies used in the procedure list for their prototype. | Student *describes* the technologies used in the procedure list for their prototype. | Student *identifies* the technologies used in the procedure list for their prototype. | Student does not clearly *identify* the technologies used. |
| 5.5.1 applies a range of communication techniques in the presentation of research and design solutions |  | Student completes the Skylap research and the modification and testing sheets. Clear sketches are included.Student extends with  | Student completes the Skylap research and the modification and testing sheets. Clear sketches are included. | Student completes the Skylap research and the modification and testing sheets. Sketches are included. | Student completes most of the Skylap research (>80%) and the modification and testing sheets. | Student dopes not complete the Skylap research (<80%) and the modification and testing sheets. |
| 5.6.1 selects and uses appropriate problem solving and decision making techniques in a range of STEM contexts |  | Student *evaluates* how they solved problems during prototype construction and testing. | Student *analyses* how they solved problems during prototype construction and testing. | Student *describes* how they solved problems during prototype construction and testing. | Student *identifies* how they solved problems during prototype construction and testing. | Student does not clearly identify problems in the challenge.  |
| TOTAL MARK |  |  |  |  |  |  |
| Weighted Mark |  |  |  |  |  |  |

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| SAMPLES (INDICATING DIFFERING STANDARDS OF ACHIEVEMENT): |  |

Samples are not available as this is the first time this unit of work has been run. A scaffold will be provided and examples of ALARM reports will be run through in class.