Unit 4 Vocational Numeracy – AOS 5: Dimension & Direction, AOS 8: Systematics

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| **Excelling** | Demonstrates thorough understanding of location and direction in relation to maps and technologies | Gives clear and accurate direction and location instructions between multiple destinations, including unfamiliar locations. | Confidently and competently sets and adjusts parameters of inputs to optimise outputs and solutions for the context | Confidentally and competently makes informed decisions on inputs and interprets outputs mathematically from relevant mapping tools. | Comprehensively shows confidence working with analogue equipment for both AOS | Shows confidence in selecting and working with digital tools for both AOS | Can confidently select the most appropriate tool as needed (analogue or digital) and justify its use within the context | Can provide thorough details when identifying the purpose of the task, and identify the mathematics involved | Can provide thorough details when performing the mathematics calculations and processes accurately | Can provide thorough details when reflecting on results, looks for accuracies and inaccuracies, and reflect on processes | Can provide thoroughly effective methods to communicate details; and can effectively communicate findings |
| **Achieving** | Demonstrates clear understanding of location and direction in relation to maps and technologies | Gives generally clear and accurate direction and location instructions between multiple destinations, including unfamiliar locations. | Sets and adjusts parameters of inputs to optimise outputs and solutions for the context | Makes informed decisions on inputs and interprets outputs mathematically from relevant mapping tools | Consistently attempts to work with analogue equipment with both AOS | Can select and work with an array of different digital tools for both AOS | Can consistently select the most appropriate tool as needed (analogue or digital) and justify its use within the context | Can provide details to the purpose of the task and the mathematics involved | Can provide details when performing the mathematics calculations and processes accurately | Can provide details when reflecting on results, looks for accuracies and inaccuracies, and reflect on processes | Can choose effective methods to communicate details; and can effectively communicate findings |
| **Satisfactory** | Demonstrates some understanding of location and direction in relation to maps and technologies | Gives direction and location instructions between multiple destinations, including some unfamiliar locations, with some competency | Sets and adjusts parameters of inputs to optimise outputs and solutions for the context with some competency. | Makes decisions on inputs and interprets outputs mathematically from relevant mapping tools | Satisfactory use of selected analogue tools, needing some support to use with accuracy | Satisfactory use of selected digital tools, needing some support to use with accuracy | Satisfactory selection process but lacks justification within the context | Satisfactory identification of the purpose and the mathematics | Satisfactory details when performing the mathematics calculations and processes accurately | Satisfactory details when reflecting on results, looks for accuracies and inaccuracies, and reflection on processes | Satisfactory details when communicating findings |
| **Not yet satisfactory** | Demonstrates limited understanding of location and direction in relation to maps and technologies | Limited ability to give direction and location instructions between multiple destinations. | Attempts to set parameters of inputs to optimise outputs and solutions for the context. | Attempts to make decisions on inputs and attempts to interpret outputs mathematically from relevant mapping tools | Shows limited understanding of selecting the most appropriate analogue tool/how to use it | Shows limited understanding of selecting the most appropriate digital tool/how to use it | Shows limited understanding of selecting the best tool and connecting it to the context | Limited identification of the purpose and the mathematics | Limited details provided when performing the mathematics calculations and processes accurately | Limited details when reflecting, looking for accuracies and inaccuracies, and reflection on process | Limited details communicating findings; messages being communicated are unclear and hard to understand |
| Not Shown | Not Shown | Not Shown | Not Shown | Not Shown | Not Shown | Not Shown | Not Shown | Not Shown | Not Shown | Not Shown |
| **Criteria** | **Understanding of location and direction.** | **Giving direction and location instructions.** | **Setting and adjusting parameters to optimise outputs and solutions.** | **Making decisions on inputs and interpreting outputs.** | **Using a variety of analogue tools** | **Using a variety of digital tools** | **Can select the appropriate tool** | **Step 1**  **Identify the mathematics** | **Step 2**  **Act on and use the mathematics** | **Step 3**  **Evaluate and reflect** | **Step 4**  **Communicate and report** |
| **Outcome 1** | | | | **Outcome 3** | | | **Outcome 2** | | | |
| Unit 4  Vocational Numeracy – AOS5 Dimension and Direction & AOS 8 Systematics  Amazing Amazing Melbourne | | | | Mathematical Toolkit | | | Problem Solving Cycle | | | |