

**Common Assessment Task, Learning Sequence 3, 2017**

**Subject: Science (STEM)**

**Year Level: 7**

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| **Student Name:** |
| This COMMON ASSESSMENT TASK will be used to measure your achievement against the skills and understandings that we studied during this learning sequence.  You are required to complete each part of this assessment, and finish within **the 4 periods allocated, using data collected at the Field Investigation Excursion**.  You need to work through the assessment from beginning to end, using the scaffolds and instructions included within each part of the task.  Use your rubric and feedback from your teacher to guide you from one part of the assessment to the next. Make sure you evaluate the accuracy and success of each part before moving on to the next. After you complete your own checking, you need to show your teacher who will advise you if your work is at the expected level.  The report or poster is an independent task but you may ask questions to clarify the requirements of the task. Remember that your teacher will NOT do the work for you; he/she will help you with the thinking you need to employ to complete the work.  Remember to organise your time appropriately so you can complete as much of the assessment task as possible in the time given.  You are permitted to use the following resources during the Common Assessment Task:   * Student Workbook * Internet * Laptop * Library and Printed resources * Photos of the results at the excursion (**DO NOT INCLUDE PEOPLE**) * Photos of diagrams you have drawn yourself, such as food webs or profiles   During the Common Assessment Task period, the conditions you will work under will be:   * Collaboration as a team to investigate and collect results * Independent creation of the report |

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| **Common Assessment Task Overview** | |
| Create a Field Investigation Report or Scientific Poster to show the health of the ecosystem at the Heatherton Road Wetlands. | |
| **Part 1:** | **Plan and conduct** a field investigation, collecting and presenting the results of your investigation |
| **Part 2:** | Include an **analysis of the data collected** to conclude how healthy the ecosystem is |
| **Part 3:** | Include an **evaluation** of the methodology used to investigate the ecosystem, the human impacts in this ecosystem and **suggest** strategies for improving the health of the ecosystem |

**Planning your Investigation of the wetlands at Heatherton Road**

**Scientific Question**

What is the Scientific Investigation Question you seek to answer?

**Hypothesis**

What do you think the answer to this question will be? Write as If...then...because…

**Prediction**

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| **Factor** | **Prediction** |
| Transect and Profile of the wetlands, showing plants growing outside and inside the wetland |  |
| Ponding for Water bugs (Aquatic Invertebrates) |  |
| Listening and looking for Frogs |  |
| Temperature of the air |  |
| Temperature of the water |  |
| Turbidity (cloudiness) of the water |  |
| pH of the water |  |
| Dissolved Oxygen |  |
| Phosphates |  |
| Nitrates |  |
| Electrical Conductivity |  |

**Collecting data at the Wetlands**

Draw a Transect and Profile of the Heatherton Road Wetlands. Consider taking photos as qualitative data to support your transect and profile. How will you display this data?

**Analysis of Results**

Look at all of the data you collected.   
What does this data tell you about the health of the wetlands at Heatherton Road?   
How can this data help you answer your scientific investigation question?  
Were any of the results surprising? How could you check that these results are correct (accurate)?

Are there any human impacts on this ecosystem? What could be done to reduce these impacts?  
  
You will need to write an explanation text in this section of your report. See the section [**How can we collect and use evidence (data) to support our explanations?**](http://stemlyndalesc.weebly.com/how-can-we-collect-and-use-evidence-data-to-support-our-explanations.html) to help you write this section.

**Conclusion**

What can you conclude about the health of the wetlands at Heatherton Road?

Write a summary of your findings and what they mean for the health of the wetland.

**Communicating your findings**

How will you present your findings?

Choose either:

* Scientific Poster
* Field Investigation Report or
* Conference Presentation (You will need to made an oral presentation in front of the class or a video of your presentation to submit to Compass)