

Boorowa Central School

Excellence through Respect, Responsibility and Participation

Assessment Task Notification

All tasks should be clearly outlined in the notice and give information pertaining to the nature of the task, the outcomes being assessed and the marking schedule giving individual component weightings.

Teacher: Mr Corcoran	Course: Inv. Science
Task and Number: Task 1 –False Claims Report	Task Weighting: 20%
Date Issued: 25/11/2020	Date Due: 3.20pm Friday 11 th December 2020

Syllabus component: Module 7 – Fact or Fallacy

Syllabus outcomes being assessed:

- > develops and evaluates questions and hypotheses for scientific investigation INS11/12-1
- > selects and processes appropriate qualitative and quantitative data and information using a range of appropriate media INS11/12-4
- > analyses and evaluates primary and secondary data and information INS11/12-5
- > solves scientific problems using primary and secondary data, critical thinking skills and scientific processes INS11/12-6
- > communicates scientific understanding using suitable language and terminology for a specific audience or purpose INS11/12-7
- > uses evidence-based analysis in a scientific investigation to support or refute a hypothesis INS12-14

Description of task:

You are to carry out a secondary sourced investigation and write a scientific report to investigate a scientist who has falsified their scientific experimental results. As this is a depth study you will be given 5 lessons to complete this assessment.

Conduct an investigation using secondary sources to research a scientist who has falsified their scientific experimental results, and discuss the process used to uncover the fraudulent research.

You must complete a secondary sourced scientific report using the following questions as a guide:

- 1. Conduct research to find and correctly reference 1 article related to a scientist who has falsified results, for example; William McBride, Anna Ashimastos, Bruce Murdoch, Andrew Wakefield.
- 2. Name of scientist and date experimental results were released and debunked.
- 3. Outline the findings of the original paper and write out a hypothesis for the experiment they were conducting.
- 4. Who was the scientist and/or discrepancies that alerted other scientists to the potential fraud?
- 5. Describe the method used to check and verify the fraud.
- 6. What was the final consequence for the fraudulent scientist and their paper/s?
- 7. Write out a new hypothesis as a result of the debunked research.
- 8. Evaluate how society was impacted by the falsifying of this research?
- 9. Describe the reasons why the identification of fraudulent papers often takes so long.
- 10. Suggest ways in which the detection of fraudulent papers can be improved prior to publication. What implications would this have for the practice of the wider community of scientists?

Submission of Task requirements:

Submitted onto the Google Classroom or a hardcopy before

<u>Note:</u> If a student is absent for an assessment task or fails to submit a task when it is due, then a medical certificate or other acceptable explanation must be presented on the first day the student returns to school or a zero mark is awarded.