Coonabarabran High School
Assessment Notification

Subject: Year 7 Science **Date of Notification:** 23/8/21
Assessment Task 4: First Hand Investigation - Forces **Due date:** Term 3 Week 10
Weighting: 25% **Teacher:** S Moore, H Deasey, R Blanch

Topic: Forces
Task: In this modified task, students will design a force meter and determine if there is a relationship between the mass of an object and the force required to pull that object across a surface.

Students will research forces and friction and design and conduct an investigation using their force meter. Students will complete their investigative report in the scaffolded booklet provided.

A marking criteria is attached to the First-Hand Investigation.

Outcomes being assessed:

Knowledge and Understanding	Skills
SC4-10PW Describes the action of unbalanced forces in everyday situations. **PW1 –** Changes to an object's motion is caused by unbalanced forces acting on the object.	**SC4-WS4** Students question and predict **SC4-WS5.3** Students choose suitable equipment or resources for an investigation **SC4-WS5.2** Students plan first-hand investigations **SC4-WS6** Students conduct first-hand investigations **SC4-WS7.1** Students process data and information **SC4-WS7.2** Students analyse data and information
Students should be able to: ☐ Identify changes that take place when particular forces are acting. ☐ Predict the effect of unbalanced forces acting in everyday situations ☐ Analyse some everyday common situations where friction operates to oppose motion and produce heat. ☐ Investigate factors that influence the size and effect of frictional forces	**Students should be able to:** ☐ Make predictions based on scientific knowledge and their own observations. ☐ Propose the type of information and data that needs to be collected ☐ Locate sources of data and information ☐ Outline a logical procedure for undertaking a range of investigations to collect valid first-hand data, including fair tests. ☐ Identify in fair tests, variables to be controlled, measured and changed ☐ Describe safety guidelines ☐ Identify and select suitable equipment or resources to perform a task ☐ Work collaboratively and independently to conduct an investigation ☐ Follow a planned procedure ☐ Record observations and measurements accurately, using appropriate units ☐ Summarise and process data ☐ Use a range of representations to organise data and calculate a mean ☐ Use scientific understanding to identify relationships and draw conclusions based on data and secondary sources ☐ Reflect on the method used to investigate a question or solve a problem