



Year 8 Science

First-hand Investigation 2024

TOPIC: CW2 Chemical Changes: First Hand Investigation	
SUBMISSION REQUIREMENTS: Students will undergo a First-hand investigation during <u>Term 3, Week 7</u> This will occur during a Science lesson allocated by the class teacher. The date of my Science First-hand Investigation is: Day: _____ Period: _____	MARKS: / 35
Outcomes to be assessed: SC4 - 4WS - <u>Identifies</u> questions and problems that can be tested or researched and makes predictions based on scientific knowledge. SC4 – 5WS - Collaboratively and individually produces a plan to <u>investigate</u> questions and problems. SC4 – 6WS - <u>Follows</u> a sequence of instructions to safely undertake a range of investigation types, collaboratively and individually. SC4 – 7WS - Processes and <u>analyses</u> data from a first-hand investigation and secondary sources to identify trends, patterns and relationships and draw conclusions. SC4 – 17CW - <u>Explains</u> how scientific understanding of, and discoveries about the properties of elements, compounds and mixtures relate to their uses in everyday life.	
DIRECTIONAL VERBS: <u>Analyse:</u> Identify components and the relationship between them; draw out and relate implications <u>Explain:</u> Relate cause and effect; make the relationships between things evident; provide why and/or how. <u>Identify:</u> Recognise and name <u>Investigate:</u> Plan, inquire into and draw conclusions about <u>Produce:</u> Make or manufacture	
TASK DESCRIPTION: Students will engage in a first-hand investigation focused on physical and chemical changes. The assessment will involve following a sequence of instructions and analysing data related to these changes. Students are required to explain the concepts behind these changes and their significance in scientific contexts. Duration: 55 minutes IN CLASS Extensive feedback will be provided to students upon the return of the completed assessment.	

ASSESSMENT CRITERIA

You will need to apply your knowledge of chemical and physical reactions in a laboratory setting by **following** a sequence of instructions and performing chemical testing on various substances safely.

You will need to be able to **analyse** the data to **identify** if a change you see is a chemical change or a physical change by applying the signs of physical and chemical changes accurately.

You should **explain** the signs of a chemical reaction and understand how to tell whether a chemical change or a physical change is taking place.

You should also ensure you understand all the laboratory safety rules and can conduct testing by yourself safely.