Chemistry Practical Learning Portfolio Scheme (2025/26) <u>Interim Experiment List - Secondary 4</u>

[Submission deadline: 13 March 2026 (Friday)]

School Information:

Name of Teacher- E-mail Address	ge:
in-Charge: Teacher-in-Charge:	

Scheme Period: 1 September 2025 – 30 June 2026

Instructions:

- Please list the Secondary 4 Chemistry experiments conducted and planned for the 2025/26 school year in chronological order. This list will serve as an aid for teachers to prepare the final experiment list and will allow Science Education Section to provide advice to schools when necessary.
- For an experiment to be counted for this portfolio, it should:
 - a) be conducted by students (individually or in groups) under teacher supervision, and related to Chemistry curriculum topics;
 - b) involve clear objectives and experimental procedures distinct from other experiments conducted;
 - c) not be conducted in the date same as any of those of submitted experiments within a class / subject group (i.e. no more than one experiment information submitted for a specific date for a class / subject group);
 - d) include <u>at least two</u> of the following elements: data collection, observation recording, use of standard laboratory apparatus, data analysis (or calculation), and reasoning (or discussion) of results; and
 - e) include <u>at least one</u> higher-order thinking question to promote scientific reasoning or inquiry skills.
- Please note that when schools submit the final experiment list by July 2026, additional documents will be required. These include: (i) One sample copy of students' worksheet for each experiment, showing students' written answers and teachers/students' marking; and (ii) students' attendance list for each experiment.

No.	Date of Experiment	No. of student participated	Experiment Title	Objective	Higher-order thinking questions ¹ (At least ONE for each experiment)
e.g.	3/11/2025	24	Determining the empirical formula of magnesium oxide	To determine the empirical formula of magnesium oxide by combustion of magnesium	Could we use the same experimental procedures to determine the empirical formula of an oxide of copper? Explain your answer.
e.g.	10/11/2025	23	Thermal decomposition of baking soda.	To study the thermal decomposition of baking soda and solve the related stoichiometric problems	 A student measured a residue mass that was higher than the theoretical expected value after heating baking soda. Propose two potential reasons for this discrepancy. Suggest an improvement to the weighing procedure to enhance accuracy.
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3					
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¹ Please refer to the information sheet about higher-order thinking questions at https://www.edb.gov.hk/en/curriculum-development/kla/science-edu/portfolio-scheme.html.

No.	Date of Experiment	No. of student participated	Experiment Title	Objective	Higher-order thinking questions ¹ (At least ONE for each experiment)
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6					
7					
8					
9					
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