

JOHN EDMONDSON HIGH SCHOOL Assessment Notification

Faculty: Science Course: Chemistry Year: HSC

Assessment Task: Processing Skills and Written Task

Assessment Weighting: 25% Due: April 4, 2024, Term 1, Week 10 Periods 1 and 2

Task Type: In Class

Outcomes assessed (NESA)

CH11/12-4 CH11/12-5 CH11/12-6 CH11/12-7 CH12-12 CH12-15

Syllabus Covered:

Module 5: Equilibrium and Acid Reactions

• Static and Dynamic Equilibrium

Inquiry question: What happens when chemical reactions do not go through to completion?

- Factors that Affect Equilibrium
- Inquiry question: What factors affect equilibrium and how?

• Calculating the Equilibrium Constant (Keq)

Inquiry question: How can the position of equilibrium be described and what does the equilibrium constant represent?

• Solution Equilibria

Inquiry question: How does solubility relate to chemical equilibrium?

Module 7: Organic Chemistry

Nomenclature

Inquiry question: How do we systematically name organic chemical compounds?

• Hydrocarbons

Inquiry question: How can hydrocarbons be classified based on their structure and reactivity?

- Products of Reactions Involving Hydrocarbons
- Inquiry question: What are the products of reactions of hydrocarbons and how do they react?Alcohols
- Inquiry question: How can alcohols be produced, and what are their properties?
 - Reactions of Organic Acids and Bases

Inquiry question: What are the properties of organic acids and bases?

• Polymers

Inquiry question: What are the properties and uses of polymers?

Task Description/Overview

This task requires you in class to process information and apply your knowledge of Module 5 and Module 7 concepts to answer questions during a written task.

Syllabus content to be covered as part of the research: All of Modules 5 and 7

Detailed Assessment Task Description

During class time (Period 1 and 2 on April 4, 2024), complete questions based on Modules 5 and 7.

You can bring with you TWO, double sided A4 page of handwritten notes (including diagrams) covering the syllabus content outlined in this notification. These notes will not be marked.

The written Task Will go for 90 Minutes. There will be 50 Marks.

Data sheet and periodic table will be provided

Equipment needed:

- Pen
- Pencil
- Eraser
- Calculator
- Ruler

10 Multiple Choice Questions – 1 Mark Each

40 Marks for short answer and extended response questions including graphing, first hand investigations completed during the course and calculations.

This in-class task assesses your ability to:

- Process information and demonstrate your understanding of the content
- Analyses data and problem solve using chemistry understanding and calculations
- Graph data and analyse trends
- Apply your knowledge to demonstrate understanding

Marking Criteria

10 Multiple Choice Questions – 1 Mark Each 40 Marks for short answer and extended response questions including graphs and calculations.

Assessment Criteria		
Grade	Description	Mark Range
Outstanding (O)	The student has an extensive knowledge and understanding of the content and can readily apply this knowledge. In addition, the student has achieved a very high level of competence in the processes and skills and can apply these skills to new situations.	84.5-100%
High (H)	The student has a thorough knowledge and understanding of the content and a high level of competence in the processes and skills. In addition, the student is able to apply this knowledge and these skills to most situations.	69.5-84%
Sound (S)	The student has a sound knowledge and understanding of the content and has achieved a good level of competence in the processes and skills.	49.5- 69%
Basic (B)	The student has a basic knowledge and understanding of the content and has achieved a basic level of competence in the processes and skills	27.5-49%
Limited (L)	The student has an elementary knowledge and understanding in a few areas of the content and still requires further work to achieve competence in the processes and skills.	0-27%

Satisfactory completion of courses

- A course has been satisfactorily completed, when the student has:
 Followed the course developed/endorsed by the NSW Educational Standards Authority (NESA)
- Applied himself/herself with diligence and sustained effort to the set tasks and experiences provided in the course. Achieved some or all of the course outcomes •
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