



# JOHN EDMONDSON HIGH SCHOOL

## Assessment Notification

Faculty: Science Course: HSC Chemistry Year: 12

Assessment Task: Task 4 : Trial Examination

Assessment Weighting: 30% Due: Term 3 Weeks 3 and 4 Date: August 5<sup>th</sup>-16<sup>th</sup>

Task Type: Hand in Task  In Class Task  Practical Task

<b>Outcomes assessed (NESA)</b>
CH11/12-1 - develops and evaluates questions and hypotheses for scientific investigation CH11/12-4 - selects and processes appropriate qualitative and quantitative data and information using a range of appropriate media CH11/12-5 - analyses and evaluates primary and secondary data and information CH11/12-6 - solves scientific problems using primary and secondary data, critical thinking skills and scientific processes CH11/12-7 - communicates scientific understanding using suitable language and terminology for a specific audience or purpose CH12-12 - explains the characteristics of equilibrium systems, and the factors that affect these systems CH12-13 - describes, explains and quantitatively analyses acids and bases using contemporary models CH12-14 - analyses the structure of, and predicts reactions involving, carbon compounds CH12-15 - describes and evaluates chemical systems used to design and analyse chemical processes
<b>Task Description/Overview</b>
The Trial Examination will take place in the hall during the examination block.  Time: 3 hours + 5 minutes reading time Task Description: Examination will total 100 marks and include 20 multiple choice questions and a range of written responses. Multiple Choice answers to be completed on the separate answer sheet provided.
<b>Detailed Assessment Task Description</b>
Length of Examination = 3 hours with 5 minutes reading time. Modules Assessed: Module 5 Equilibrium and Acid Reactions Module 6 Acid/Base Reactions Module 7 Organic Chemistry Module 8 - Applying Chemical Ideas (only the following outcomes). Inquiry question: How are the ions present in the environment identified and measured? Students: <ul style="list-style-type: none"><li>● analyse the need for monitoring the environment</li><li>● conduct qualitative investigations – using flame tests, precipitation and complexation</li></ul>

reactions as appropriate – to test for the presence in aqueous solution of the following ions:  
 – cations: barium (Ba<sup>2+</sup>), calcium (Ca<sup>2+</sup>), magnesium (Mg<sup>2+</sup>), lead(II) (Pb<sup>2+</sup>), silver ion (Ag<sup>+</sup>), copper(II) (Cu<sup>2+</sup>), iron(II) (Fe<sup>2+</sup>), iron(III) (Fe<sup>3+</sup>) – anions: chloride (Cl<sup>-</sup>), bromide (Br<sup>-</sup>), iodide (I<sup>-</sup>), hydroxide (OH<sup>-</sup>), acetate (CH<sub>3</sub>COO<sup>-</sup>), carbonate (CO<sub>3</sub><sup>2-</sup>), sulfate (SO<sub>4</sub><sup>2-</sup>), phosphate (PO<sub>4</sub><sup>3-</sup>)

• conduct investigations and/or process data involving:

- gravimetric analysis
- precipitation titrations

Inquiry question: How is information about the reactivity and structure of organic compounds obtained?

Students:

• conduct qualitative investigations to test for the presence in organic molecules of the following functional groups: – carbon–carbon double bonds – hydroxyl groups – carboxylic acids (ACSCH130)

Inquiry question: What are the implications for society of chemical synthesis and design?

The exam will consist of two sections.

Section A- 20 Multiple Choice Questions (20 marks)

Section B- Short and Extended Response Questions ( 80 marks)

Both sections will consist of Working Scientifically as well as, Knowledge and Understanding questions.

Equipment Required:

Black/Blue pens, Pencils, Ruler, Calculator, Rubber, Sharpener, Highlighters (optional)

<b>Test/Examination Structure</b>	
<b>Section Description</b>	<b>Marks Available</b>
Section 1: Multiple Choice Questions	20
Section 2: Written responses ( Short and extended responses)	80
<b>Total Marks for this task</b>	<b>100</b>

### **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