

Coonabarabran High School Assessment Notification

Subject: Year 12 Chemistry Assessment task 1: Module 6 Topic Test Weighting: 20% Date of Notification: 28/2/23 Date: Period 2, Friday 17/3/23 Teacher: K Christoff

Outcomes to be assessed

This assessment task will allow you to show evidence of having achieved the following course outcomes:

A student:

- selects and processes appropriate qualitative and quantitative data and information using a range of appropriate media CHEM11/12-4
- > analyses and evaluates primary and secondary data and information CHEM11/12-5
- > solves scientific problems using primary and secondary data, critical thinking skills and scientific processes CHEM11/12-6
- > communicates scientific understanding using suitable language and terminology for a specific audience or purpose CHEM11/12-7
- > describes, explains and quantitatively analyses acids and bases using contemporary models CHEM12-13

Task 1 – Topic Test

Topic: Module 6 – Acid/base reactions

Equipment required	Ruler, lead pencil, black pen, pencil sharpener, eraser, calculator
Test structure	45 minutes working time There will be a variety of question types including multiple choice, short answer and extended responses.

Study guide

- Nomenclature and properties of common inorganic acids and bases
- Uses of indicators, examples of indicators
- Write balanced chemical equations for reactions of acids and bases; acids and carbonates; acids and metals
- Applications of neutralisation reactions
- How to measure and calculate the enthalpy of neutralisation
- Changes in definitions of acids and bases and the limitations of different models
- Measuring the pH of solutions
- Distinguishing between strong, weak, concentrated and dilute
- Write ionic equations to represent the dissociation of acids and bases in water and identify conjugate acid/base pairs
- Calculate pH, pOH, hydrogen ion concentration and hydroxide ion concentrations for a range of solutions
- Using dissociation constant (K_a) and pK_a to determine the difference between strong and weak acids
- Analyse data from titration investigations
- Assess models
- Evaluate data