DRAFT PERFORMANCE BANDS

CHEMISTRY

The typical performance in this band:

| Band 6 | • demonstrates an extensive knowledge and understanding of the concepts of the chemistry course content including context, prescribed focus areas and domain  
         • displays an outstanding ability to describe and explain chemistry concepts, including abstract ideas, clearly and accurately, and to apply the concepts to unfamiliar situations  
         • applies a high level of critical thinking skills in developing appropriate solutions to problems involving a long sequence of related tasks  
         • analyses, evaluates and extrapolates chemical data effectively, identifies complex relationships, quantifies explanations and descriptions, and synthesizes information to draw conclusions  
         • communicates succinctly, logically and sequentially using a variety of scientific formats  
         • demonstrates a high level ability to design an experimental procedure |
| Band 5 | • demonstrates a thorough knowledge and understanding of the concepts of the chemistry course content including context, prescribed focus areas and domain  
         • effectively communicates a detailed understanding of chemistry concepts using appropriate chemistry terminology and scientific formats, and applies the concepts to unfamiliar situations  
         • analyses information given in written, tabular, graphical and diagrammatic forms and relates this to other relevant information  
         • displays competence in manipulating equations to solve problems involving a number of steps  
         • demonstrates a thorough knowledge of the use of appropriate experimental procedures |
| Band 4 | • demonstrates a sound knowledge and understanding of the concepts of the chemistry course content including context, prescribed focus areas and domain  
         • describes concepts and information clearly in written, graphical and diagrammatic forms such as structural and electron-dot formulae, and applies these concepts in familiar situations  
         • demonstrates a broad ability to carry out calculations and or substitute into equations, to use relevant symbols and units when manipulating chemical data including stoichiometric data, and to construct balanced chemical equations  
         • displays proficiency in selecting relevant data from information given in written, tabular, graphical and diagrammatic form  
         • describes correct apparatus for a particular chemical measurement and has an adequate understanding of experimental methodology. |
| Band 3 | • demonstrates a basic knowledge and understanding of the concepts of the chemistry course content including context, prescribed focus areas and domain  
         • uses simple chemistry definitions, terms, diagrams and graphs to communicate understanding of chemistry concepts  
         • substitutes data from information given in written, tabular, graphical and diagrammatic form, and manipulates basic chemical data including stoichiometric data |
| Band 2 | • demonstrates a limited knowledge and understanding of the chemistry course content including context, prescribed focus areas and domain  
         • recalls elementary terminology and formulae related to some areas of chemistry  
         • makes simple substitutions of data in chemical calculations  
         • describes simple safety precautions in experimental procedure |
| Band 1 | • |