

# CHEMISTRY

## INTRODUCTION

The public assessment of this subject is based on the Curriculum and Assessment Guide (Secondary 4-6) Chemistry jointly prepared by the Curriculum Development Council and the Hong Kong Examinations and Assessment Authority. Candidates have to refer to the section on 'Curriculum Framework' in this Guide for the knowledge, understanding, skills and attitudes they are required to demonstrate in the assessment. Candidates are expected to have a general knowledge of the materials contained in the Science Curriculum (Secondary 1-3). The mathematical skills required in the assessment are mainly based on those covered in the Compulsory Part of the Hong Kong Diploma of Secondary Education Mathematics Curriculum.

## ASSESSMENT OBJECTIVES

The assessment objectives of Chemistry are to evaluate the abilities of candidates to:

1. recall and show understanding of chemical facts, patterns, principles, terminology and conventions;
2. show an understanding of the use of apparatus and materials in performing experiments;
3. handle materials, manipulate apparatus, carry out experiments safely and make accurate observations;
4. demonstrate an understanding of the method used in chemical investigation;
5. analyse and interpret data from various sources, and draw relevant conclusions;
6. manipulate and translate chemical data and to perform calculations;
7. apply chemical knowledge to explain observations and to solve problems which may involve unfamiliar situations;
8. select and organise scientific information from appropriate sources and to communicate this information in an appropriate and logical manner;
9. understand and evaluate the social, economic, environmental and technological implications of the applications of chemistry; and
10. make decisions based on the examination of evidence and arguments.

## MODE OF ASSESSMENT

The public assessment of Chemistry consists of a public examination component and a school-based assessment component as outlined in the following table:

Component		Weighting	Duration
Public Examination	Paper 1 Compulsory part of the curriculum	60%	2 hours 30 minutes
	Paper 2 Elective part of the curriculum	20%	1 hour
School-based Assessment (SBA)		20%	

## PUBLIC EXAMINATION

Paper 1 comprises two sections: A and B. Section A consists of multiple-choice questions and carries 18% of the subject mark. Section B includes short questions, structured questions and essay questions, and carries 42% of the subject mark. In each of the sections A and B, Part I will set questions mainly on topics I to VIII of the curriculum, while Part II mainly on topics IX to XII. Candidates have to attempt **all** questions in this paper.

Paper 2 consists of structured questions and carries 20% of the subject mark. Candidates are required to answer the questions on the 2 electives selected.

## SCHOOL-BASED ASSESSMENT (SBA)

School-based assessment (SBA) is compulsory for **all** school candidates. Candidates will be assessed by their teachers on their performance of a wide range of skills involved in practical work throughout S5 and S6. Candidates are required to perform a stipulated amount of practical work, which may include designing experiments, reporting and interpreting experimental results, etc. The work should be integrated closely with the curriculum and form a part of the normal learning and teaching process. Apart from these, candidates may also be required to design and conduct a group-based experimental investigative study with a view to solving an authentic problem. They are expected to make use of their knowledge and understanding of chemistry in performing such an investigative study, through which their generic skills, practical skills, process skills and reporting skills, etc. would be developed and assessed.

The table below summarises the minimum numbers of assessments and the weightings in subject required in S5 and S6 for the SBA:

	Minimum number of assessments*	Weighting in subject
S5	2	10%
S6	2	10%

\* Over the two years of S5 and S6, there should be at least one assessment for Volumetric Analysis (VA), one assessment for Qualitative Analysis (QA) and two assessments for Other Experiments (EXPT).

\* Investigative Study (IS) can be done in lieu of Other Experiments (EXPT). In this case, one assessment on 'proposal' and one assessment on 'process and report' should be performed. These two assessments can satisfy the minimum requirement for Other Experiments (EXPT).

For monitoring and authentication purposes, candidates are required to keep good custody of all their work in SBA until the publication of the HKDSE examination results.

Private candidates need not complete the SBA component. Their subject result will be based entirely on their public examination results.

The detailed requirements, regulations, assessment criteria, guidelines and methods of assessment are provided in the SBA Handbook for HKDSE Chemistry and Combined Science (Chemistry part) published by the Hong Kong Examinations and Assessment Authority.