

# INTEGRATED SCIENCE

## INTRODUCTION

The public assessment of this subject is based on the Integrated Science Curriculum and Assessment Guide (Secondary 4-6) 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 general knowledge of the materials contained in the Science Curriculum (Secondary 1-3). The mathematical skills required in the assessment will not exceed those covered in the Compulsory Part of the Hong Kong Diploma of Secondary Education Mathematics Curriculum.

## ASSESSMENT OBJECTIVES

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

1. to recall and show understanding of facts, concepts and principles of science, and the relationships between different topic areas of the curriculum framework;
2. to apply scientific knowledge, concepts and principles to explain phenomena and observations, and to solve problems;
3. to formulate working hypotheses, to plan and to perform tests for them;
4. to show practical skills related to the study of science;
5. to present data in various forms, such as tables, graphs, charts, drawings, diagrams, and to transpose them from one form into another;
6. to analyse and interpret data including numerical and non-numerical data such as those in the form of continuous prose, diagrams, photographs, charts and graphs; to make inferences, logical deductions and draw conclusions from them;
7. to formulate arguments, justify claims, evaluate evidence and detect errors;
8. to select, synthesise, and communicate ideas and information clearly, precisely and logically;
9. to show understanding of the applications of science to daily life and the contributions of science to the modern world;
10. to show awareness of the ethical, moral, social, economic and technological implications of science, and to critically evaluate science-related issues; and
11. to make suggestions, choices and judgements based on scientific knowledge and principles.

## MODE OF ASSESSMENT

The public assessment of Integrated Science 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	Questions set on Compulsory part	45%	2 hours
	Paper 2	Section A	Multiple-choice questions set on Compulsory part	1 hour 30 minutes
	Section B	Questions set on Elective part	20%	
School-based Assessment (SBA)		20%		

## PUBLIC EXAMINATION

In Paper 1 and in Paper 2 Section A, all questions are compulsory. In Paper 2 Section B, a choice of two out of the three electives is allowed.

In Paper 1 and in Paper 2 Section B, the types of items include short questions, structured data-response questions and short essays. Some of the questions may be set on unfamiliar situations. In such cases, candidates will be required to study a given piece of information which may be presented in the form of text, diagrams or graphs, and to apply their skills and knowledge to answer questions set on the information given.

## SCHOOL-BASED ASSESSMENT (SBA)

School-based assessment (SBA) is compulsory to **all** school candidates. Candidates are required to perform a stipulated amount of practical work, which refer to activities that require the use of science apparatus and/or fieldwork. In S5 and S6, they will be assessed by their teachers in two ability areas: A and B. Each of the ability areas carries 10% of the subject mark. Details of the two ability areas are as follows:

### Ability area A:

- (a) to organise and perform practical work, including the use of suitable apparatus and equipment, and the appropriate manipulative skills in carrying out experiments;
- (b) to make accurate observations and measurements.

Ability area B:

- (a) to identify the problem to be investigated and to formulate a hypothesis, where applicable, and put it into a testable form;
- (b) to devise a plan of investigation in accordance with the problem being investigated;
- (c) to record and to present data in an appropriate form;
- (d) to interpret experimental results and to draw appropriate conclusions.

The table below summarises the percentage weighting and the minimum number of assessments required in S5 and S6 for the two ability areas of the SBA:

		Ability area A	Ability area B
Weighting in subject		10%	10%
Minimum number of assessments	S5	1	1
	S6	1	1

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 result.

The detailed requirements, regulations, assessment criteria, guidelines and method of assessment are provided in the SBA Handbook for HKDSE Integrated Science published by the Hong Kong Examinations and Assessment Authority.