Student Assessment Handbook for Science

(Grades 11-12)

Private Schools (Bilingual)

September 2025

Introduction

Educational assessment is one of the fundamental processes that accompanies the teaching and learning process. It aims to improve and develop its various elements by providing essential information and data on strengths and areas for improvement, thereby supporting informed judgments about the effectiveness of the educational process.

Although there are various types of educational assessment, continuous assessment, including both formative and summative approaches, is considered one of the most prominent types. It helps students identify their progress, informs parents about their children's performance levels, and provides teachers with valuable insights into the extent to which their students are achieving the intended learning objectives in science subjects. It also supports teachers in improving instructional methods and fosters genuine partnership among all stakeholders in the teaching and learning process through shared roles and responsibilities aimed at achieving quality education.

This document, dear teacher, serves as your guide for implementing the continuous assessment system for the subject you teach. It outlines a concise theoretical framework explaining the concept of continuous assessment, along with its principles, stages, and procedures. It also provides a practical reference that supports the effective use of assessment tools by clarifying implementation steps, the technical specifications required for each tool, and the methods for recording and reporting grades. Therefore, this document serves as an essential reference to help ensure the effective implementation of classroom assessment and the success of the teaching and learning process.

We direct you, dear teacher, to read and reflect on this document thoroughly in order to benefit fully from it, developing your skills and enhancing the quality of assessment. We also encourage you to contribute your expertise and creativity to support the smooth and effective implementation of continuous assessment for your students, helping to achieve the intended educational goals within the parameters and guidelines set out in the General Document for Student Learning Assessment.

Future skills assessment

In today's rapidly evolving world, equipping students with future skills is crucial for their success in education, life, and the job market. These skills, including adaptability, effective communication, technological proficiency, critical thinking, and problem solving, are vital for navigating constant change.

The National Framework for Future Skills stresses the need to embed these crucial skills into education. This means creating an assessment system that can precisely measure student skill acquisition. It requires specific assessment tools with clear indicators and the use of **E-assessment** for accurate and effective measurement.

The framework categorises these skills into three main areas:

- **Core Skills:** Reading and writing in Arabic and English, and numeracy.
- **Applied Skills:** Creativity, innovation, critical thinking, problem-solving, effective communication, teamwork, leadership, initiative, flexibility, and adaptability.
- **Technical Skills:** Information and communication technology, data handling, and media literacy.

To ensure students truly acquire these skills, some are implicitly integrated into current assessment tools, while others are explicitly stated in student assessment handbooks across subjects. This approach aims to unify assessment practices among teachers and foster a shared understanding. By building precise indicators within continuous assessment tools, teachers can identify student strengths and areas for development, ultimately enhancing their abilities.

Electronic assessment

Effective **E-assessment** plays a crucial role in improving educational quality and student outcomes. Educators, supervisors, and assessment specialists, use digital tools, software, and diverse learning materials to gather and analyse student responses. This allows for data-driven, objective judgments about academic achievement using both quantitative and qualitative insights.

It is essential to implement student learning assessments electronically through approved platforms, according to the summative assessment standards outlined in the official document. While some tools, like short test, cannot be administered electronically, others like homework and projects can be completed remotely. If electronic submission is not possible, students can submit paper copies to their teachers.

Assessment Objectives (AOs)

The assessment objectives for grades (11) and (12) include the following:

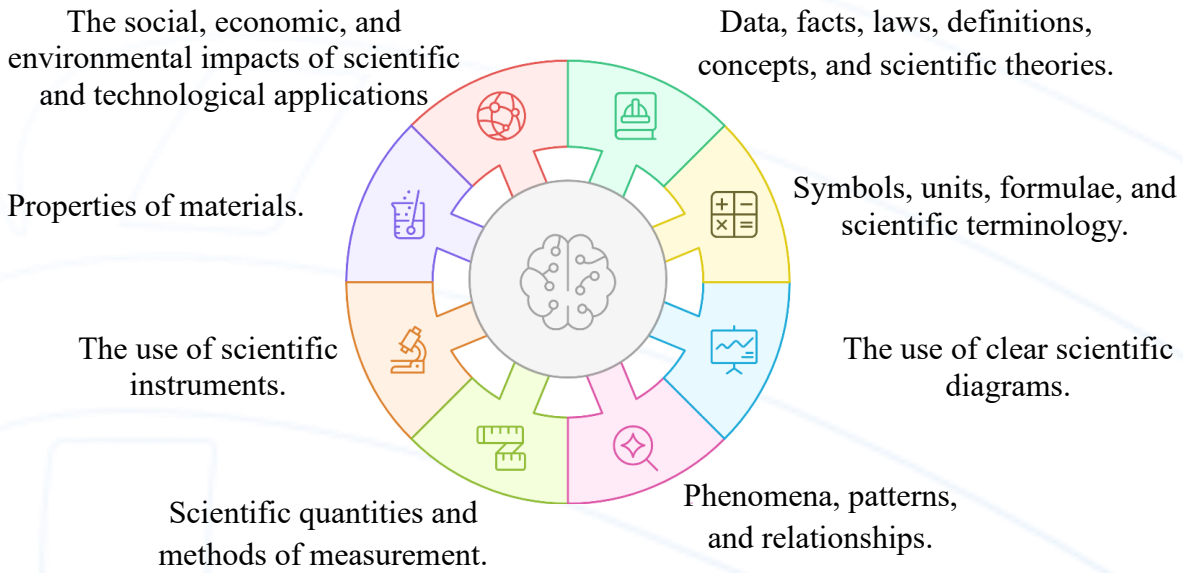
- Assessment Objective 1 (AO1): Knowledge and understanding.
- Assessment Objective 2 (AO2): Application, analysis, and evaluation.
- Assessment Objective 3 (AO3): Practical skills and scientific inquiry.

The following provides a detailed explanation of these assessment objectives:

Assessment Objective 1 (AO1): Knowledge and Understanding

This assessment objective assesses the ability to recall and understand scientific vocabulary, concepts, facts, and related procedures, including the ability to comprehend, interpret, and explain them in a simplified manner.

This assessment objective involves <u>knowledge and understanding</u> of the following:



This assessment objective requires certain mathematical skills, including:

- Calculating basic geometric dimensions.
- Defenestrating answers from single-step calculations.
- Substituting numbers into remembered or provided formulae.
- Recalling, recognising, and using formulae as outlined in the learning objectives.
- Identifying correct data from a small set of numerical values provided in the question.
- Performing simple rearrangements or manipulations of formulae, data, or given values.

Assessment Objective 2 (AO2): Application, Analysis, and Evaluation

This assessment objective assesses students' ability to apply their knowledge of scientific concepts in unfamiliar contexts, using logical and structured thinking. Students are expected to analyse data, solve or evaluate problems using their understanding and skills in new situations, reaching deeper levels of critical thinking and forming well-informed judgements or perspectives.

This assessment objective includes the ability to:

- Solve problems.
- Link scientific knowledge to unfamiliar contexts.
- Use diagrams or models to demonstrate understanding
- Calculate and process numerical and other forms of data.
- Explain observations, phenomena, patterns, and relationships.
- Locate, select, organise, and present information from a variety of sources.
- Use information to identify patterns, describe trends, and draw conclusions.
- Present and interpret information visually, including in tables, graphs, images, diagrams, or charts.
- Make predictions, construct arguments to support hypotheses, and evaluate information and hypotheses.
- Demonstrate awareness of the limitations of physical theories and models.

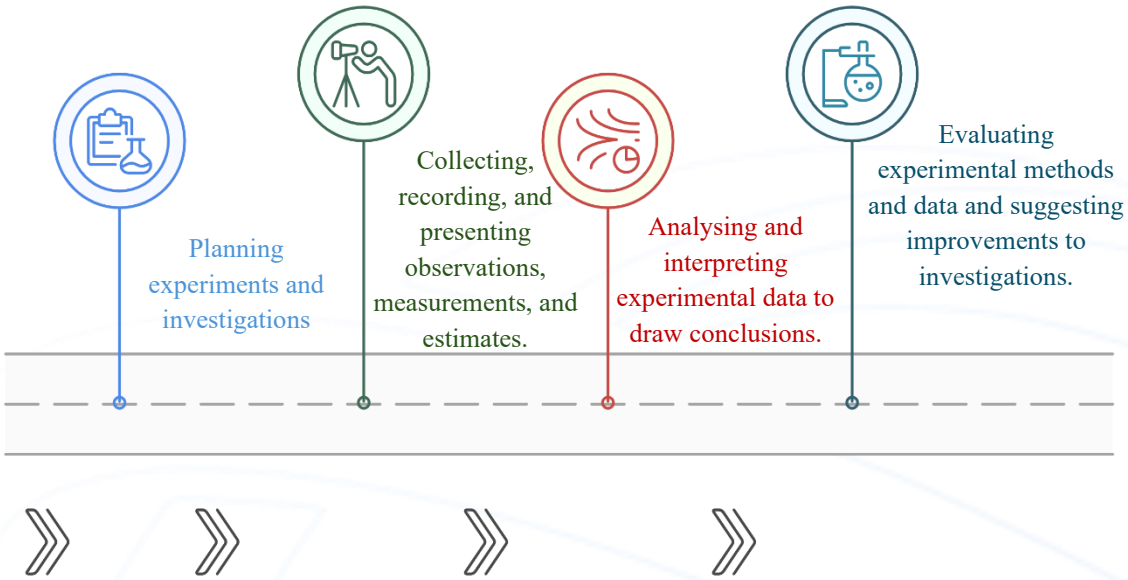
This assessment objective may require some mathematical skills, such as:

- Performing multi-step calculations.
- Rearranging or manipulating formulas or given data/numbers.
- Identifying correct data from a large set of numerical values provided in the question.
- Interpreting and applying data from graphs and using this data in mathematical formulas.

Assessment Objective 3 (AO3): Scientific Inquiry and Practical Skills

This assessment objective assesses students' understanding of practical skills and their ability to carry out scientific investigations. The items may relate to familiar or unfamiliar contexts, provided they align with the curriculum outcomes.

This assessment objective includes the following practical skills:



Levels of Demand

The following table outlines the three levels of demand along with the abilities associated with each level:

Level of Demand	Associated Abilities
Low	• Demonstrates some knowledge and understanding, such as simple answers, explanations, or analysis. • Uses basic technical vocabulary (scientific terms), and demonstrates communication and numerical skills. • Performs simple calculations and applies formulas. • Solves simple problems within a limited range of situations. • Demonstrates some knowledge and understanding of experimental techniques by describing methods for making observations or measurements. • Writes simple conclusions based on collected or provided evidence.
Medium	• Demonstrates good knowledge and understanding. • Uses technical vocabulary accurately, and demonstrates communication and numerical skills across a range of contexts. • Performs moderately complex calculations and manipulates formulas. • Solves moderately difficult problems across a range of situations. • Demonstrates understanding of experimental techniques by explaining methods for obtaining reliable evidence. • Links concepts when analysing information. • Writes and justifies conclusions based on collected or provided evidence.
High	• Demonstrates detailed knowledge and excellent understanding. • Uses technical vocabulary proficiently, and demonstrates communication and numerical skills across a range of contexts. • Performs multi-step calculations when instructions are unclear. • Solves complex problems in unfamiliar situations. • Demonstrates strong familiarity with experimental techniques by describing detailed methods for obtaining accurate and reliable evidence. • Links concepts when analysing and evaluating information. • Writes and justifies detailed conclusions based on collected or provided evidence.

Note: - Note: It is not necessary that the level of demand of an item is linked to the type of assessment objective. For example, a high demand item may still fall under the Knowledge and Understanding assessment objective

Types of Items and Principles for Their Construction

An **item** is the smallest independent assessment unit, assigned one or more marks.

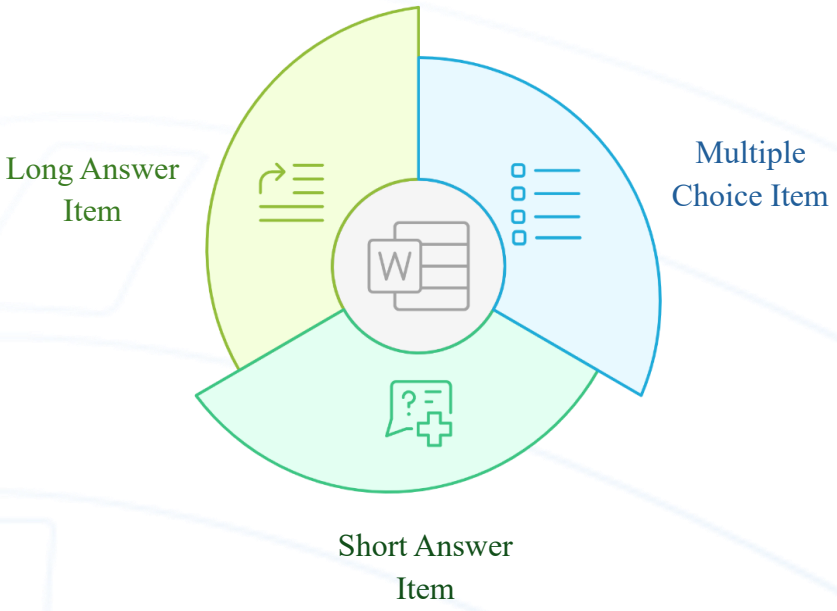
A **question** is a broader construct consisting of one or more items (compound question) and is typically presented within a defined cognitive context, known as the stem.

When constructing items, consideration must be taken to ensure that the guessing rate does not exceed 25%, particularly for multiple-choice items, to maintain accuracy and fairness in assessment.

Closed-ended items, such as "Is the unit of mass (kg)?", should be avoided, as they allow a 50% chance of a correct response by guessing, without demonstrating the student's understanding or their ability to accurately distinguish scientific concepts.

Assessment items—whether constructed for homework, short tests, or final examination papers—are developed to measure the achievement of curriculum-based learning outcomes. They fall into three types, none of which require separate categorisation.

Any type may appear as a stand-alone item or be integrated into a compound question alongside other types.



The following table outlines these three types:

Multiple Choice Item	Short Answer Item	Long Answer Item
▪ Each item is assigned one mark only. ▪ Each item measures one learning outcomes only. ▪ Each item requires selecting one correct answer from four options. ▪ Distractor (alternative option) must be appealing and topic related. ▪ Incorrect alternatives (distractors) must be plausible, yet completely wrong. ▪ All options must be independent and clear; avoid choices such as "all of the above," "none of the above," only options A and B,". ▪ The stem may present information in text, diagrams, charts, graphs, tables, or pose the question directly. ▪ Direct questions may be used instead of command words, e.g., "What...?" ▪ Options should be arranged in a clear and logical order (alphabetically, chronologically, numerically, or by option length). Similar items may be grouped in pairs.	▪ Each item is assigned 1 to 3 marks, with no half marks awarded. ▪ Each item requires brief answers such as: symbols, words, numbers, short sentences, definitions, explanations, completing equations, or adding information to networks, tables, figures, or graphs.	▪ Each item assigned 4–6 marks for Grade 11, and 4–8 marks for Grade 12, with no half marks awarded. ▪ Each item requires a detailed response, which may involve explanations, descriptions of properties, presenting facts or evidence, analysing data, writing equations, or solving problems step-by-step. ▪ Demands higher-order thinking and analytical interpretation of scientific concepts, rather than simple recall or listing. To achieve this, imperative verbs such as explain, analyse, discuss, interpret should be used instead of list, name, identify. ▪ No more than two command words may be included in a single item, provided they are interconnected and serve a single integrated task measuring higher-order or related skills. Each command word should begin on a new line as a separate sentence, yet the item is still considered one unit.

General Principles for writing Items:

Language:

- All items should be based on the curriculum for the relevant grade.
- Only scientific, technical, and mathematical terms included in the curriculum should be used.
- Avoid negation where possible; if necessary, highlight the negation word or particle, such as "not" or "no."
- The command verb should align with the learning objective, assessment objective, and level of demand.
- Items should be formulated using a command word unless the nature of the item requires a direct interrogative style.
- Avoid double negation; items should not contain two negation words.
- Use bold for keywords, e.g., "Provide **one** example...," "Describe **two** steps...," "Present **two** pieces of evidence..."
- Items should be presented clearly using concise and short sentences, with simple language and correct grammar.

Diagrams:

- Diagrams and their data should be presented clearly.
- Should include only the necessary information for answering the items.
- Should be used only if they contribute to the answer or clarify the question or part of it.
- A key may be added to the diagram to clarify the meaning of symbols or data, especially if they are new to the student.
- Diagrams and tables should be labelled clearly and consistently, and referenced correctly in the questions.

Graphs:

- Axes should be defined and labelled, where appropriate, with correct scales and origins.
- Any labelling should be added as needed, e.g., equations of lines/curves or specific points.
- Table titles and graph axis labels should include units so that numbers in the table or on the graph are dimensionless.

Units:

- All data should be rounded to the appropriate number of significant figures.
- Measurement units should be appropriate and specified in relevance to the curriculum.
- Units should be included in the answer space unless a separate mark is allocated for them.
- At this level, negative exponents should be used (e.g. ms^{-1})

Item Formatting:

- For all types of items, the mark should be written at the end of the answer space, in square brackets [ ].
- The mark awarded to the item should reflect the required answer including the steps or explanations.

Marking Scheme:

- Marks must be integer numbers (0, 1, 2,...), not fractions or half marks.
- The mark awarded should reflect the level of effort, steps taken, and skills demonstrated.
- Use the suggested answer scheme on page 35.
- Acceptable correct scientific responses not explicitly listed in the curriculum should be included in the additional information column.
- The answer scheme should be accurate, complete, clear, and free from ambiguity.
- The answer scheme may include additional valid content beyond what is required, provided this is indicated in the additional information section.
- The additional information section is essential to ensure that markers apply a clear and consistent marking approach.

Continuous Assessment Tools

1. Continuous Assessment Tools for Grade (11):

Assessment Tool	Marks	Evaluation During the Semester
Homework	5	Once
Dialogue	5	Once
Scientific Inquiry and Practical Skills Test	10	Once
Short tests	20	Twice (10 marks each)
End-of-Semester Examination	60	Once
Total	**100**	

2.Continuous Assessment Tools for Grade (12):

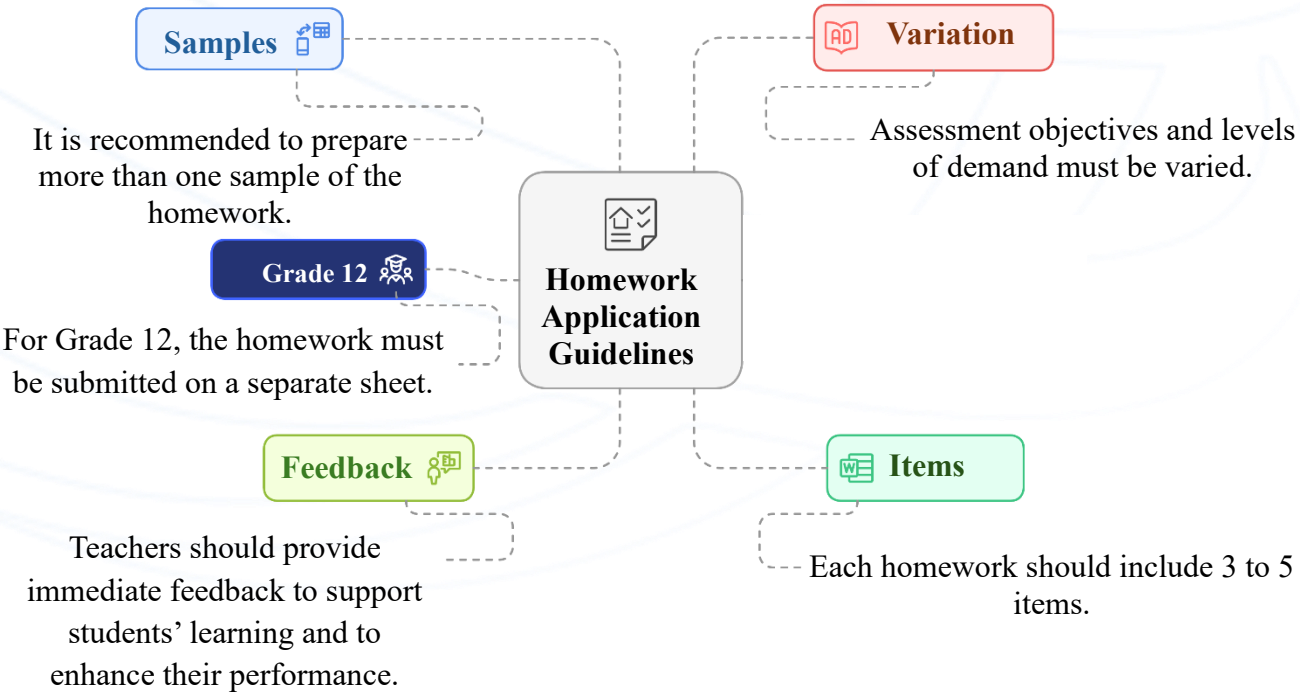
Assessment Tool	Marks	Evaluation During the Semester
Homework	10	Twice (5 marks each)
Scientific Inquiry and Practical Skills Test	10	Once
Short tests	10	Twice (10 marks each, average is taken)
End-of-Semester Examination	70	Once
Total	**100**	

Specifications for Continuous Assessment Tools

1- Homework

A planned assessment tool designed to achieve specific learning outcomes from the curriculum. It is assigned by the teacher for students to complete at home, taking into account their individual differences and ensuring appropriateness for each learner. Homework must be marked accurately, and timely feedback must be provided to students. It serves as an opportunity for students to practise answering various item types that reflect different assessment objectives and levels of demand. Therefore, the teacher is advised to assign a series of formative tasks before using homework as a summative assessment tool.

The following must be considered when administering homework:



2. Dialogue (Applicable to Grade 11 only)

An assessment tool used to promote interaction between the teacher and students, or among students working in small groups. Its purpose is to assess students' understanding of learning outcomes. It forms part of daily formative assessment and provides opportunities to address misconceptions and reinforce learning.

The following guidelines should be considered when implementing the dialogue:

Implementation Procedure

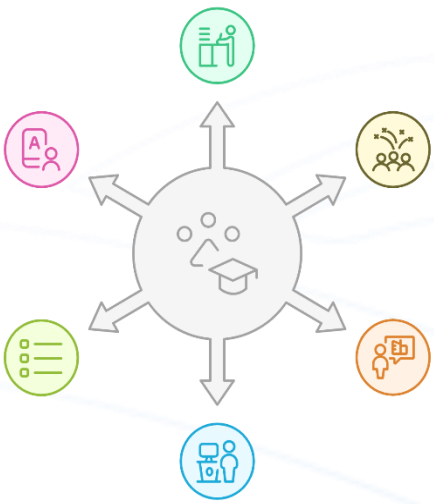
Dialogue may be conducted with the student standing in the front of classmate and teacher to engage in a discussion on a specific topic. It may also be conducted between the teacher and the student, or between one student and a peer.

Short Oral Questions

Dialogue may include short questions requiring precise and quick responses.

Targeted Students

Each time, a specific group of students from the class may be targeted.



Learning Outcomes

Dialogue assessment is used to evaluate learning outcomes, taking into account various assessment goals and individual differences.

Feedback

The teacher provides immediate feedback to support students' learning and improve their performance.

Performance Assessment

The dialogue mark is awarded based on the criteria listed in the form on page (36), and is not determined by the student's behaviour, attendance, preparation of resources, written work, notebook organization or submission of a PowerPoint.

3- Scientific Inquiry and Practical Skills Test

Scientific Inquiry is a systematic process through which students apply scientific thinking to formulate questions, construct hypotheses, design experiments, collect and analyse data, and draw evidence-based conclusions. It is closely integrated with practical skills applied during the execution of experiments, such as using scientific equipment, taking accurate measurements, and systematically recording observations and results.

Together, scientific inquiry skills and practical skills form a comprehensive framework of competencies that should be emphasised and assessed during the planning and implementation of the scientific inquiry and practical skills test.

These practical skills are categorised into two main types:

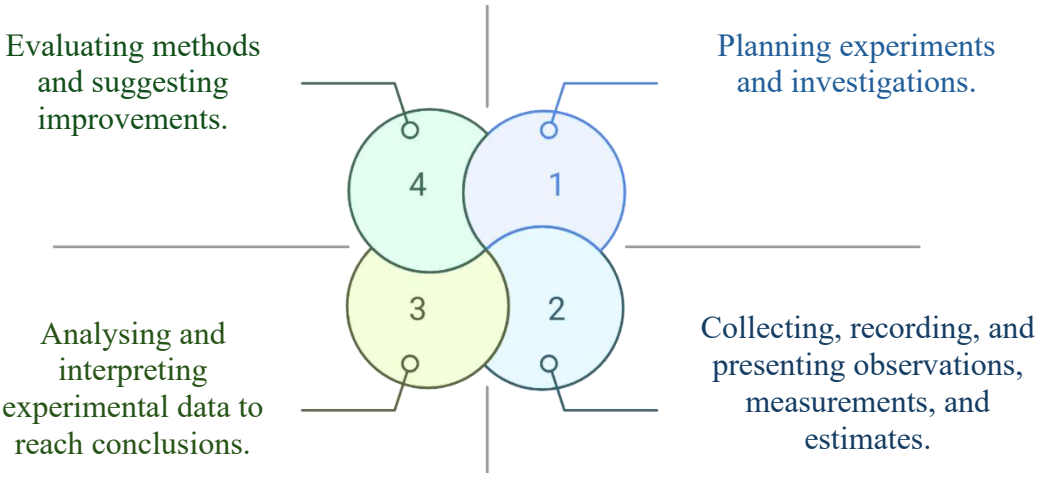
Scientific inquiry skills: including formulating hypotheses, designing experiments, interpreting data, drawing conclusions, and evaluating scientific methods.

Practical skills: including the use of tools and equipment, taking accurate measurements, recording data, and presenting it in a structured and precise manner.

The test aims to assess scientific inquiry and practical skills, with items designed based on a defined set of skills rather than requiring detailed knowledge of subject content. All test items align with the assessment objective 3 (AO3).

AO3 is used specifically in the Scientific Inquiry and Practical Skills Test, which is administered to students at the end of the semester as a form of continuous assessment. This objective evaluates students' understanding of experimental skills and their ability to conduct scientific investigations. Test items may relate to familiar or unfamiliar topics, provided they remain within the scope of the curriculum outcomes. The formulation of items for this test is closely linked to the nature of each type of skill being assessed. These skills serve as a reference framework for constructing precise and objective assessment items that effectively measure students' attainment of the targeted competencies.

These skills are classified into four main categories, which are:



The following table classifies scientific inquiry skills and practical skills:

Skill Number	Skill Name
	Planning experiments and investigations.
1-1	Identify and control independent and dependent variables and describe how they are measured and controlled.
1-2	Describe experimental procedures and techniques for collecting reliable and accurate data.
1-3	Use clear, labelled diagrams or charts to show the arrangement of equipment when necessary.
1-4	Describe appropriate control experiments.
1-5	Explain the choice of equipment that measures with adequate accuracy.
1-6	Explain the choice of materials to be used in conducting the experiments.
1-7	Describe the risks in the experiment and how to minimize them.
1-8	Predict the results and make hypotheses based on understanding and knowledge of general concepts.
1-9	Describe how to use the data to reach a conclusion, including the derived quantities that must be calculated from the raw data to draw an appropriate graph/create an appropriate chart.
	Collecting, recording, and presenting observations, measurements, and estimates
2-1	Apply the concept of control and accuracy.
2-2	Determine the values of uncertainty in measurement either as absolute uncertainty or as a percentage.
2-3	Collect and record measurements and observations systematically. Present data using appropriate units, numbers, and measurement ranges with appropriate degrees of accuracy.
2-4	Use appropriate mathematical or statistical methods to process raw data and record the correct significant figures (this number must be the same as or greater than the smallest number of significant figures in the data provided).
2-5	Draw and label schematic diagrams of samples, and calculate the actual sizes of tissues, cells, or organelles.

	Analysing and interpreting experimental data to reach conclusions.
3-1	Processing and presenting data, including representing it in statistical tables, graphs, and charts with the most appropriate straight lines or curves. Analysing graphs, including curves.
3-2	Combining values of uncertainty when adding or subtracting quantities and combining percentages of uncertainty when multiplying or dividing quantities.
3-3	Drawing error bars in both directions where necessary, for each point on the graph, and drawing the best-fit straight line and worst-fit straight line through the points on the graph.
3-4	Use standard deviation or standard error values, or graphs with standard error bars, to determine whether differences in mean values are likely to be statistically significant.
3-5	Interpret and evaluate observations and experimental data, identify and deal with unusual results appropriately.
3-6	Describe patterns and trends shown in data and graphs. Predict patterns and trends shown in data.
3-7	Draw appropriate conclusions, justifying them by referring to the data and using appropriate explanations.
3-8	Discuss evidence supporting hypotheses.
3-9	Determine the *y*-intercept of a straight-line graph and the gradient of a tangent to a curve, including identifying their positions on graphical representation, even when the graphs don't pass through the origine.
3-10	Estimate the absolute uncertainty in the gradient and the *y*-intercept of the graph.
	Evaluating methods and suggesting improvements.
4-1	Identify possible causes of uncertainty in the data or conclusions and suggest appropriate improvements to procedures and experimental methods.
4-2	Explain the effects of systematic errors (including zero errors) and random errors in measurements.
4-3	Describe modifications to the experiment that would improve the accuracy of the data or broaden the investigation.

General Principles for Constructing Items in the Scientific Inquiry and Practical Skills Test

- Test items are often presented within a clear and understandable inquiry-based context.
- The test may include a variety of contexts drawn from different experiments, without the need for complete investigations.
- The test may include contexts from the curriculum or new contexts, ensuring they are explained in sufficient detail to be understood by the students.
- Items must align with the scientific inquiry skills and practical skills listed on pages (19-20).
- Items should be designed to assess scientific inquiry and practical skills, in a balanced and integrated way, addressing the requirements of the assessment objective 3 (AO3). The test should include a variety of items that reflect all the four skills listed on pages (19-20).
- Each item should provide all necessary formulas and information to reach the answer, as the aim is not to assess recall of curriculum content.
- Provided data in each item should be selected carefully to facilitate accurate interpretation and graph drawing.
- The format of the marking scheme should match that used in short tests.
- Each item in the mark scheme should be linked to the skill number, rather than to a learning outcome.

Specifications for the Scientific Inquiry and Practical Skills Test

- Time allowed: One hour only.
- The use of calculators is permitted, provided they are not advanced models that can be programmed, store information (PRGM), graph functions (Graph), or solve equations (Solve).

Specifications for Scientific Inquiry and Practical Skills Tests Grades (11–12)	
Number of items	6 to 10
Total marks	20 marks, recorded out of 10 marks.
Marks by level of demand	- Low demand: 8 marks (40%) - Medium demand: 8 marks (40%) - High demand: 4 marks (20%)
Types of items	- No multiple-choice items - Short-answer items, each worth between one and three marks - At least one long answer item worth between four and six marks

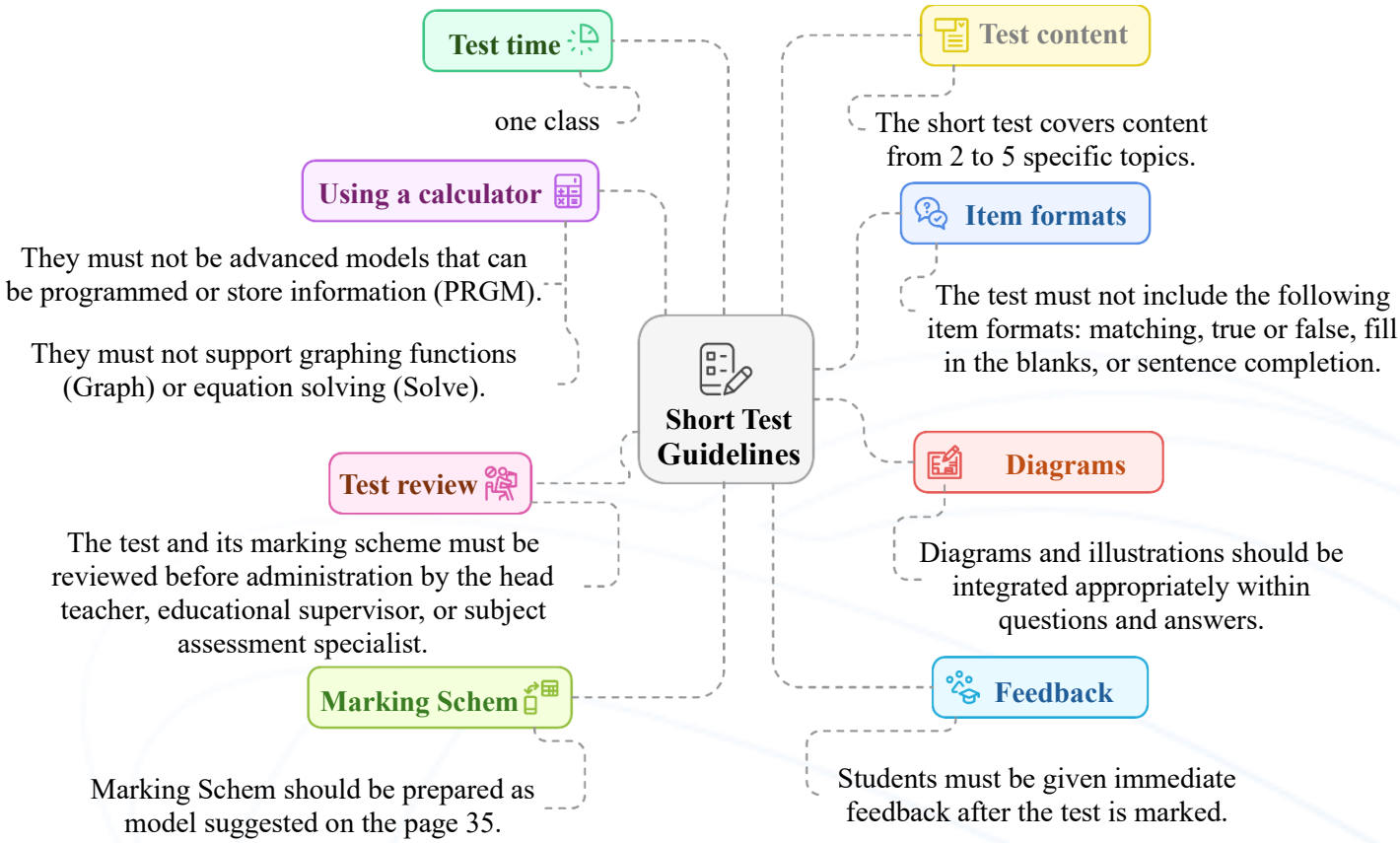
Mathematical requirements

- Understanding and using prefixes: giga (G), mega (M), kilo (k), milli (m), micro (μ), and nano (n).
- Selecting and using the most appropriate units for recording data and calculation results.
- Recognise and use numbers in decimal and standard form.
- Understand and use symbols: < (less than), > (greater than), ⩽ (less than or equal to), ⩾ (greater than or equal to), / (slash followed by a unit in table headings and graph axis labels), ∝ (proportional to), and Σ (sum).
- Estimating the results of calculations.
- Use a calculator to add, subtract, multiply, divide, calculate squares (x^2), square roots $\sqrt{x}$, reciprocals, logarithms (log), and arithmetic means ($\bar{x}$).
- Take into account the significant figures in calculations so that they are not unnecessarily lost or carried further than justified. (The correct number of significant figures for calculated quantities is the same as, or greater than, the smallest number of significant figures in the data used in the calculation).
- Record data from experiments with appropriate accuracy and consistency.
- Calculate magnitudes and actual sizes.
- Calculate the arithmetic mean, median, mode, and range for a set of values.
- Recognise and use ratios.
- Calculate percentages and percentage changes.
- Express errors in experiments as percentages.
- Represent information graphically, numerically, and algebraically.
- Create and interpret graphical representations of data, including line graphs, pie charts, bar charts, and statistical tables.
- Understand when to present data in a bar chart, statistical table, or line graph.
- Plot points on graph paper with the variables correctly oriented on the axes and each axis appropriately scaled.
- Know when it is appropriate to connect the points on a graph with straight lines and when it is more appropriate to use a curve (straight or curved).
- Calculate the rate of change from the slope of a straight line and calculate the slope of the tangent to a curve on a graph.

4- Short Test:

A short test is an assessment tool prepared and administered by the teacher at the end of a section of the curriculum, a specific topic, a chapter, or a unit during the semester.

The following guidelines should be considered when preparing and administering short tests:



- Repetition of the short test is only allowed in special cases and with approval from school administration and the senior teacher. Special cases include:
  - A sudden emergency that prevents a student from completing the test (e.g. illness or urgent situation), in which case a different version of the test must be administered.
  - Organisational or technical issues that compromise the test's credibility. In such cases, the test should be repeated for all students.
  - Serious scientific or technical errors due to lack of proper review, requiring the test to be repeated for all students.

Short test specifications for grades (11 and 12)	
Number of items	At least 5 items.
Total mark	10 marks.
Marks by Assessment Objective	Assessment Objective 1 (AO1): 3 marks Assessment Objective 2 (AO2): 7 marks
Types of items	- Two multiple-choice items covering both AO1 and AO2 - One long answer item worth four to five marks. - The remaining marks are distributed across short answer items, ensuring the total number of items falls within the specified range.

5- End-of-Semester Examination

The end-of-semester examination is a summative assessment tool administered at the end of each semester.

The following guidelines must be considered when preparing the examination:

- The use of calculators is permitted, provided they are not advanced models that allow programming (PRGM), graph plotting (Graph), or equation solving (Solve).
- The examination may include the following (as needed):
  - All formulas and laws that students are not required to **memorise** (not listed in the learning objectives).
  - The periodic table of elements (Chemistry).
  - The standard reduction potential series (Chemistry).
  - The colours and approximate pH ranges of some chemical indicators (Chemistry).
  - The DNA triplet table and RNA codon table (Biology).

End-of-Semester Exam Specifications for Grade (11)	
Number of items	30-40 items
Total mark	60 marks
Duration of the Exam	Two and a half Hours
Marks According to Assessment Objectives	Assessment Objective 1 (AO1): 20 marks. Assessment Objective 2 (AO2): 40 marks.
Marks According to Level of Demand	Low: 24 marks (40%) Medium: 24 marks (40%) High: 12 marks (20%)
Types of Items	- Ten multiple choice items, each worth one mark, ensuring a variety across Assessment Objective 1 (AO1) and Assessment Objective 2 (AO2). - At least two long answer items. - The remaining marks are distributed across short answer items, ensuring the total number of items falls within the specified range.

End-of-Semester Exam Specifications for Grade (12)	
Number of items	35-45 items
Total mark	70 marks
Duration of the Exam	Three hours
Marks According to Assessment Objectives	Assessment Objective 1 (AO1): 24 marks. Assessment Objective 2 (AO2): 46 Marks
Marks According to Level of Demand	Low: 28 marks (40%) Medium: 28 marks (40%) High: 14 marks (20%)
Types of Items	- Twelve multiple choice items, each worth one mark, ensuring a variety across Assessment Objective 1 (AO1) and Assessment Objective 2 (AO2). - At least two long answer items. - The remaining marks are distributed across short answer items, ensuring the total number of items falls within the specified range.

Weighting of the End of Semester Examination Paper

1. Weighting of the End of Semester Examination Paper for Biology Grade 11

Semester One:

Grade	Subject	Semester	The Unit	Weighting (%)	Marks According to Assessment Objectives		Mark
					AO1	AO2	
11	Biology	One	First	24	20	40	14
			Second	44			26
			Third	16			10
			Fourth	16			10
			Total	100	60		60

Semester Tow:

Grade	Subject	Semester	The Unit	Weighting (%)	Marks According to Assessment Objectives		Mark
					AO1	AO2	
11	Biology	Tow	Fifth	21	20	40	13
			Sixth	29			17
			Seventh	36			22
			Eighth	14			8
			Total	100	60		60

2. Weighting of the End of Semester Examination Paper for Physics Grade 11

Semester One:

Grade	Subject	Semester	The Unit	Weighting (%)	Marks According to Assessment Objectives		Mark
					AO1	AO2	
11	Physics	One	First	10	20	40	6
			Second	24			14
			Third	34			20
			Fourth	19			12
			Fifth	13			8
			Total	100	60		60

Semester Tow:

Grade	Subject	Semester	The Unit	Weighting (%)	Marks According to Assessment Objectives		Mark
					AO1	AO2	
11	Physics	two	Sixth	11	20	40	7
			Seventh	24			14
			Eighth	28			17
			Ninth	37			22
			Total	100	60		60

3. Weighting of the End of Semester Examination Paper for Chemistry Grade 11

Semester One:

Grade	Subject	Semester	The Unit	Weighting (%)	Marks According to Assessment Objectives		Mark
					AO1	AO2	
11	Chemistry	One	First	18	20	40	11
			Second	21			13
			Third	16			10
			Fourth	13			7
			Fifth	32			19
			Total	100	60		60

Semester Tow:

Grade	Subject	Semester	The Unit	Weighting (%)	Marks According to Assessment Objectives		Mark
					AO1	AO2	
11	Chemistry	Tow	Sixth	24	20	40	15
			Seventh	24			14
			Eighth	29			17
			Ninth	23			14
			Total	100	60		60

4. Weighting of the End of Semester Examination Paper for Biology Grade 12

Semester One:

Grade	Subject	Semester	The Unit	Weighting (%)	Marks According to Assessment Objectives		Mark
					AO1	AO2	
12	Biology	One	First	20	24	46	14
			Second	23			16
			Third	20			14
			Fourth	20			14
			Fifth	17			12
			Total	100	70		70

Semester Tow:

Grade	Subject	Semester	The Unit	Weighting (%)	Marks According to Assessment Objectives		Mark
					AO1	AO2	
12	Biology	Tow	Sixth	26	24	46	18
			Seventh	26			18
			Eighth	26			18
			Ninth	22			16
			Total	100	70		70

5. Weighting of the End of Semester Examination Paper for Physics Grade 12

Semester One:

Grade	Subject	Semester	The Unit	Weighting (%)	Marks According to Assessment Objectives		Mark
					AO1	AO2	
12	Physics	One	First	38	24	46	26
			Second	13			9
			Third	21			15
			Fourth	10			7
			Fifth	18			13
			Total	100	70		70

Semester Tow:

Grade	Subject	Semester	The Units	Weighting (%)	Marks According to Assessment Objectives		Mark
					AO1	AO2	
12	Physics	Tow	Sixth	19	24	46	13
			Seventh	34			24
			Eighth	22			15
			Ninth	25			18
			Total	100	70		70

6. Weighting of the End of Semester Examination Paper for Chemistry Grade 12

Semester One:

Grade	Subject	Semester	The Unit	Weighting (%)	Marks According to Assessment Objectives		Mark
					AO1	AO2	
12	Chemistry	One	First	23	24	46	16
			Second	38			27
			Third	19			13
			Fourth	20			14
			Total	100	70		70

Semester Tow:

Grade	Subject	Semester	The Unit	Weighting (%)	Marks According to Assessment Objectives		Mark
					AO1	AO2	
12	Chemistry	Two	Fifth	32	24	46	22
			Sixth	24			17
			Seventh	17			12
			Eighth	27			19
			Total	100	70		70

Appendices

Appendix (1): Proposed Template for the Short Test

Scan QR to Download

Use the Times New Roman font.

First short test for Biology, Grade 12

Semester One - Academic year 2025/2026

Student name: _____ Class:_____ Date:_____

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Governorate.....
School.....

1) Item number followed by a bracket (bold)

Item text in size 16 (regular)

_____ [1]

The mark is placed directly next to the answer.

2)

(Shade the shape (▭) corresponding to the correct answer).

▭ ▭

▭ ▭

Use this phrase for each multiple-choice item

3) In the compound questions, item letter should be in bold, followed by a dot, leaving a space from the beginning of the text.

a. _____ [1]

Use lines for answers instead of dots

b. _____ [1]

No frame or page borders

- End of the Short test -

Number the pages at the bottom

1

Appendix (2): Suggested Template for the Marking Scheme

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Marking Scheme for the First Short Test – Grade …

Semester One – Academic Year 2025/2026

Subject:……

Item		Answer	Mark	Additional information	Unit	Page	Learning outcomes	Assessment objectives
1								
2								
3	a.							
	b.							

Appendix (3): Proposal Dialogue Evaluation Form for Grade 11

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	Student Name	Date	Asks Questions or Responds Effectively	Uses Scientific Terminology	Clarity of Voice and Language	Links Responses to Previous Points and Provides Logical Answers	Accuracy of Scientific Content	Total (5 Marks)

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Appendix (4): Student Performance Monitoring and Record Sheet Grade 11

Class:		Student Performance Monitoring and Record Sheet Grade 11						Total	End-of-Term Examination	Overall Total
Teacher:										
Academic year:										
No.	Student name	Homework (5 marks)	Dialogue (5 marks)	Scientific Inquiry and Practical Skills Test (10 marks)	Short tests (20) marks			40	60	100
					First (10)	Second (10)	Total			
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										

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Appendix (5): Student Performance Monitoring and Record Sheet Grade 12

Class		Student Performance Monitoring and Record Sheet Grade 12								Total	End-of-Term Exam	Overall Total
Teacher												
Academic year												
No.	Student name	Homework (10)		Total (10)	Scientific Inquiry and Practical Skills Test (10)	Short tests (10) marks		Average (10)		30	70	100
		First (5)	Second (5)			First (10)	Second (10)					
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												

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