رؤية عُمان 2040

وزارة التعليم

Student Assessment Handbook

Bilingual Private Schools

Science Subjects (Grades 5-10)

September 2026

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 weaknesses 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 tools for the subject you teach. It provides a concise theoretical framework for the concept of continuous assessment, related concepts, its principles, foundations, stages, and procedures. It also provides a reference framework and a clear pathway for implementing continuous assessment tools by explaining the mechanisms for applying the different assessment tools, the technical specifications required for preparing and implementing each tool, and the procedures for recording marks and preparing performance reports.

We encourage you, dear teacher, to read and reflect on this document thoroughly in order to benefit fully from it, develop and refine your skills to improve the quality of assessment, and contribute your expertise and creativity to support the assessment of your students and achieve the intended educational goals within the parameters and guidelines set out in the General Document for Student Learning Assessment.

Future Skills in Student Learning Assessment Tools

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.

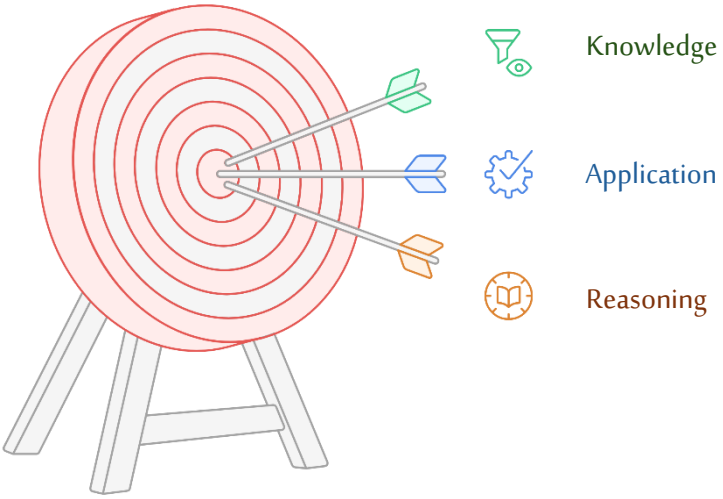
Electronic assessment

Effective **E-assessment** plays a crucial role in improving educational quality and student outcomes. Teachers, 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 necessary to implement some student learning assessment tools electronically through approved educational platforms, in accordance with the assessment standards specified in this document. Some tools may be administered directly through electronic means, depending on the school's capacity, or in paper form, such as short tests conducted in the classroom. Other tools may be completed remotely, such as homework. If a student is unable to submit the work electronically, it should be submitted to the teacher in paper form.

Assessment Objectives (AOs)

The assessment objectives include the following:



A detailed explanation of these assessment objectives is provided below:

Knowledge

This assessment objective measures the student's ability to recall and understand scientific knowledge in straightforward items through retrieving facts, terms, symbols, units, laws, and concepts, and describing properties, phenomena, or scientific processes in contexts that do not require data analysis or evidence-based inference.

This assessment objective may include:

- Recognising and using scientific terms, symbols, formulae, and units.
- Recognising the use of equipment in measuring quantities and selecting appropriate units of measurement.
- Recognising and describing the appropriate uses of tools, apparatus, and scientific methods, including safety equipment.
- Demonstrating understanding of the social, economic, and environmental implications of scientific and technological applications.
- Recalling scientific information, phenomena, facts, laws, definitions, concepts, and theories.
- Describing the properties of materials and processes.

Application

This assessment objective measures the student's ability to use scientific knowledge and skills in a range of scientific contexts by applying concepts, laws, and scientific relationships; transforming, representing, or interpreting information; and using data, figures, tables, or models to reach an appropriate answer or solution based on the information provided.

This assessment objective may include:

- Applying scientific concepts in a range of contexts.
- Using graphs, models, or equations to extract information or demonstrate knowledge.
- Explaining scientific observations and ideas.
- Recognising similarities and differences between materials or processes, and classifying or describing them.
- Converting information from one form to another.
- Using knowledge to interpret information in different forms, such as tables, drawings, or graphs.
- Presenting data in tables or graphs.
- Identifying, selecting, and organising information from different sources such as tables, drawings, or graphs.

Reasoning:

This assessment objective measures the student's ability to think logically and systematically in scientific contexts that require interpreting data or observations, analysing relationships, solving problems, and presenting conclusions, predictions, or justifications supported by evidence. It also includes evaluating explanations or scientific procedures and suggesting suitable improvements.

This assessment objective may include:

- Interpreting and evaluating experimental methods, observations, and data, and suggesting possible improvements in any of them.
- Drawing conclusions based on the information provided and demonstrating understanding of cause and effect.
- Evaluating alternative explanations.

- Planning experiments and investigations to answer scientific questions or test hypotheses, and recognising the characteristics of investigative processes.
- Predicting outcomes and assumptions based on conceptual understanding and knowledge.
- Formulating statements that generalise observed patterns.
- Analysing, describing, and using relationships in scientific information.
- Inferring, describing, and using scientific relationships.
- Justifying using evidence and scientific understanding to support explanations.

Levels of Demand

An item's level of demand is determined by the highest level of thinking required to reach the correct answer, rather than by the length of the text, the number of marks allocated, or the familiarity of the topic alone. Not all indicators associated with a particular level need to be present. Where indicators from more than one level are present, the item is assigned to the higher level. Each item is classified under one assessment objective and one level of demand.

1- Levels of Demand for the Knowledge Assessment Objective:

Level of Demand	Indicators
Low	1. Recalling a scientific fact, definition, terms, symbol, or unit of measurement directly. 2. Identifying a part in a familiar figure. 3. Demonstrating an understanding of a simple scientific property or phenomenon in a familiar context. 4. A direct response that relies on recalling or recognizing a single piece of information, without linking information or providing an explanation.
Medium	5. Demonstrating understanding of a scientific property, phenomenon, or concept requiring the linking of two clear ideas, without interpreting data or providing justifications. 6. Distinguishing between two or more concepts in a familiar context. 7. Making a simple comparison involving one similarity or one difference. 8. Using scientific terms correctly in a simple context. 9. Recalling a scientific law or rule or identifying its symbols and the meaning of its quantities and units in a direct context.
High	10. Demonstrating detailed understanding of one or more concepts, properties, phenomena, or processes within the same topic. 11. Organising several interrelated pieces of scientific information into a single, accurate answer. 12. Providing a sequential scientific description of a phenomenon requiring the accurate use of scientific terms. 13. Making a detailed comparison between concepts, processes, phenomena, or properties. 14. Providing a direct scientific explanation of a previously learned phenomenon, relationship, or process by recalling interrelated information and organising it into a clear answer, without analysing given data or observations and without drawing a conclusion based on new evidence.

2- Levels of Demand for the Application Assessment Objective:

Level of Demand	Indicators
Low	1. Extracting information directly from a table, drawing, figure, or simple model. 2. Converting information directly from one form to another, such as converting a simple description into a table or vice versa. 3. Using a scientific rule or relationship in a familiar situation with clear, specific data. 4. Performing a simple one-step calculation when the formula or method of solution is clear. 5. Applying scientific knowledge in a context close to examples from the textbook or classroom activities.
Medium	6. Linking two or more concepts to apply scientific knowledge in a partially familiar situation. 7. Using a table, graph, figure, or simple model to extract a direct piece of information or relationship for use in solving. 8. Performing a calculation requiring more than one step, such as rearrangement or unit conversion. 9. Selecting appropriate information from multiple given data to use in solving. 10. Interpreting a direct relationship or clear piece of information from a table, drawing, or simple model.
High	11. Apply several interrelated scientific concepts in an unfamiliar situation. 12. Analyse tables, graphs, diagrams, or models involving more than one relationship to extract information or a relationship, or to carry out a specified solution pathway. 13. Solve a multi-step scientific problem when the solution method is not direct. 14. Handle multiple pieces of data, two or more tables, or more than one representation, and select the appropriate solution pathway. 15. Interpret a scientific situation or representation involving more than one relationship, or requiring more than one step of data processing, to reach an appropriate answer.

3- Levels of Demand for the Reasoning Assessment Objective:

Level of Demand	Indicators
Low	1. Writing a simple conclusion based on clear evidence or direct data. 2. Interpreting a simple scientific observation based on clear evidence or a direct cause-and-effect relationship. 3. Selecting an appropriate explanation from clear alternatives based on given evidence or observation. 4. Identifying a clear error or a direct observation in a simple experiment or scientific procedure
Medium	5. Interpreting data or observations to draw a conclusion supported by evidence. 6. Providing an appropriate scientific justification that links evidence to the conclusion. 7. Predicting an outcome based on understanding of given data, a relationship, or a scientific pattern. 8. Comparing two scientific explanations or procedures in light of specific data. 9. Suggesting a simple improvement to an experiment or scientific procedure.
High	10. Evaluating a scientific explanation, hypothesis, or procedure, or choosing between alternative explanations or solutions, with a clear justification. 11. Drawing a conclusion from several related pieces of evidence or data. 12. Solving an unfamiliar scientific problem that requires multi-step logical analysis and the development of a conclusion or justification based on the evidence and information provided. 13. Interpreting unexpected results or indirect evidence. 14. Suggesting appropriate improvements to an experiment or scientific investigation and explaining the reasons for those improvements.

Types of Items and Principles for Their Construction

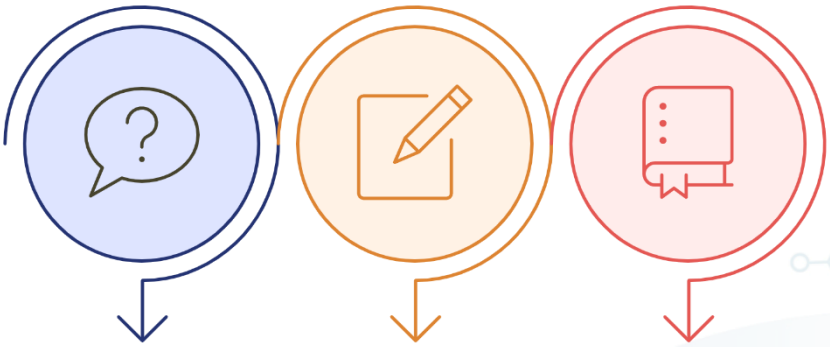
An **item** is the smallest independent assessment unit, assigned one or more marks.

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 objectives. 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.



Multiple Choice Items Short Answer Items Long Answer Items

The following table outlines these three types:

Multiple Choice Items	Short Answer Items	Long Answer Items **(For Grades 9 –10 Only)**
▪ Each item is assigned one mark only. ▪ Each item measures one learning objective only. ▪ Each item requires choosing one correct option from four alternatives. ▪ 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,". ▪ Options should be arranged in a clear and logical order, for example alphabetically, chronologically, numerically, or by option length.	▪ Each item is assigned one or two marks only. ▪ For grades (5–8), includes: one-word or short-sentence answers, fill-in-the-blank, true or false, yes or no with explanation, ordering and sequencing, matching, adding information to a network, table, or figure, and interpretation. ▪ For grades (9–10), includes: one-word or short-sentence answers, completing equations or tables, adding information to a network, table, or figure, interpretation, or yes/no with explanation.	▪ Each item is assigned three or four marks only. ▪ Each item requires a long answer involving explanation, analysis, presentation of facts, evidence, data, or problem-solving steps. ▪ Each item requires deep thinking and analysis, not just listing or recalling facts. Use command words such as explain, analyse, discuss, interpret, rather than list, name, identify.

There are several general principles that should be observed when drafting the items:

Language:

- All items should be based on the curriculum for the relevant semester.
- Only scientific, technical, and mathematical terms included in the curriculum should be used.
- Avoid double negation; items should not contain two negation words.
- Avoid negation where possible; if necessary, highlight the negation word or particle, such as "not" or "no."
- Items should be presented clearly using concise and short sentences, with simple language and correct grammar.
- Use bold for keywords, e.g., "Provide one example...," "Describe two steps...," "Present two pieces of evidence..."

Command Words:

- 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.
- The command verb should be clear and specific and should accurately indicate the response required from the student.
- An item should generally include one command verb; however, it may include two related command verbs that together serve a single, integrated requirement.
- If each command verb measures an independent requirement, the item should be split into two separate items.

Figures:

- Figures and their data should be presented clearly.
- They should include only the necessary information for answering the items.
- They should be used only if they contribute to answering the question or to clarifying the question or part of it.

- A key may be added to the figure to clarify the meaning of symbols or data, especially if they are new to the student.
- For Grades 9 and 10: figures and tables should be labelled clearly and consistently and should be referenced accurately 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.

Item Formatting:

- For all types of items, the mark should be written at the end of the answer space, in square brackets [ ].
- Specify the required extent of the answer and the steps or components it should include.

Mark 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.
- Acceptable correct scientific responses not explicitly listed in the curriculum should be included in the additional information column.
- The mark scheme should be accurate, complete, clear, and free from ambiguity.
- The answer provided in the mark scheme may include additional valid content beyond what is required from the student, provided that this is clearly indicated in the Additional Information column.

Continuous Assessment Tools

1. Continuous Assessment Tools for Grades (5-9):

Assessment Tool	Marks	Evaluation During the Semester
Homework	10	Twice (5 marks each)
Dialogue	10	Twice (5 marks each)
Practical Activity	10	Once
Short tests	30	Twice (15 marks each)
End-of-Semester Exam	40	Once
Total	**100**	

2.Continuous Assessment Tools for Grade (10):

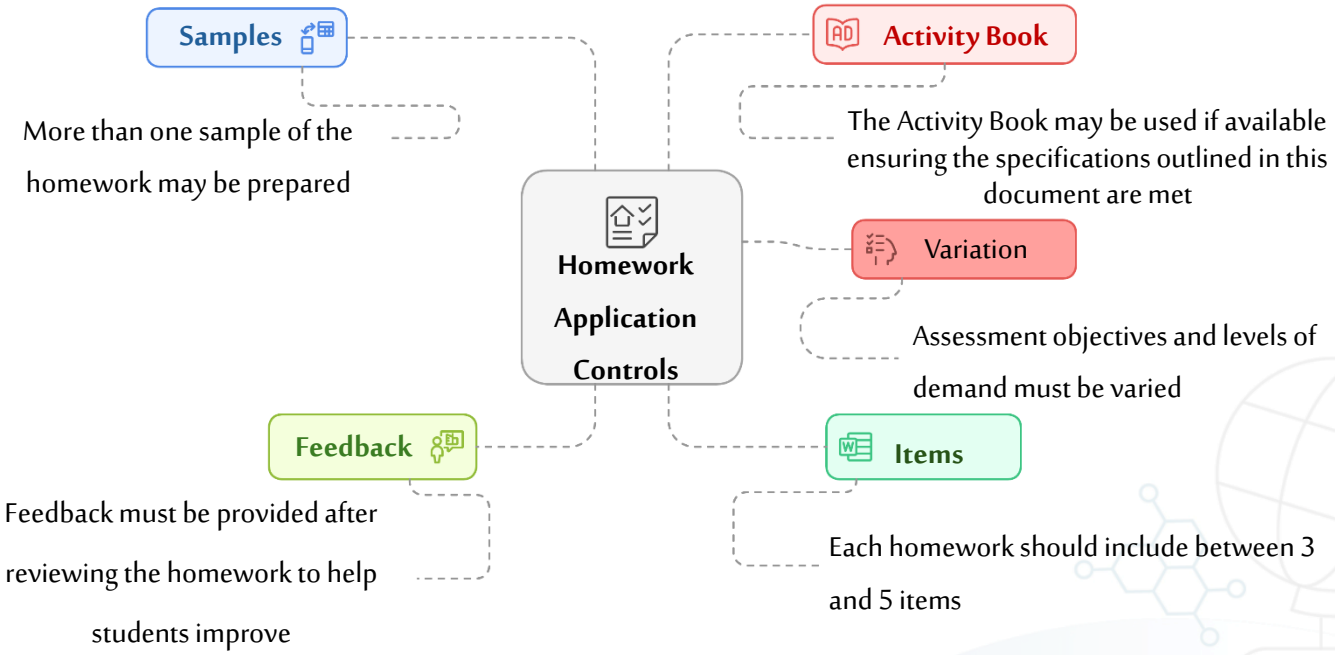
Assessment Tool	Marks	Evaluation During the Semester
Homework	5	Once
Dialogue	5	Once
Practical Activity	10	Once
Short tests	20	Twice (10 marks each)
End-of-Semester Exam	60	Once
Total	**100**	

Specifications for Continuous Assessment Tools

1- Homework

A planned assessment tool designed to achieve specific objectives and Learning objectives 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 implementing homework:



2- Dialogue

Dialogue is a tool used to promote interaction between the teacher and students, among peers, or within small groups. It assesses students' understanding of lesson content, forms part of regular formative assessment, and offers opportunities to address misconceptions and consolidate learning.

The following guidelines should be considered when implementing oral assessment:

Implementation Procedure

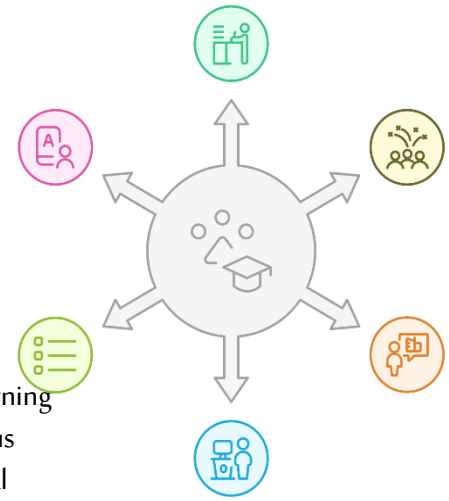
Oral dialogue may be conducted with the student standing in the front of classmate and teacher to engage in a discussion on a specific topic. It may also be conducted between the teacher and the student, or between one student and a peer.

Short oral questions

Oral dialogue may include short questions requiring precise and quick responses

Targeted students

Each session may focus on a specific group of students within the class



Learning objectives

Oral assessment is used to evaluate Learning objectives, taking into account various assessment objectives and individual differences

Feedback

The teacher provides immediate feedback to support learning

Performance Assessment

The oral 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, submission of a PowerPoint presentation, or recording a video

3- Practical Activity

It is an assessment tool that engages students in activities related to what they have learned, with the aim of reinforcing scientific understanding, encouraging students to apply their knowledge in new contexts, promoting the use of scientific language, and developing a range of scientific inquiry skills. It may be conducted within the school setting—either in the laboratory or the classroom—or outside the school during a scientific visit or field trip.

The following guidelines should be considered when implementing practical activity:

Setting Objective

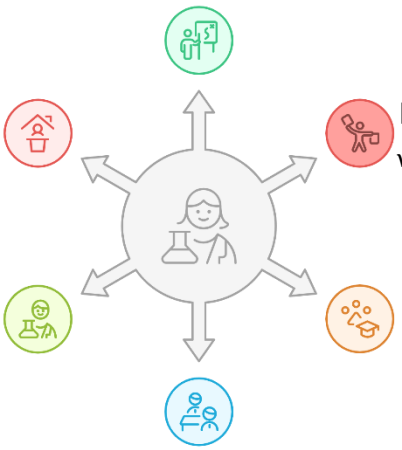
The teacher should determine the scientific inquiry objectives and practical skills outlined in the teacher's guide, based on the requirements of the experiment

Restrictions

Students must not be assigned practical activities to complete at home

Worksheets

The teacher may use the worksheets provided in the students' activity book when available, ensuring adherence to these guidelines



Practical lesson

It is recommended to conduct the practical lesson individually or in small groups when sufficient tools are available. If the tools are insufficient, the practical lesson may be delivered as a demonstration

Student Distribution

The teacher may use the table on page (33) to assign students to practical activity groups

Student evaluation

Practical work is assessed through observation and discussion during the activity, with a focus on scientific inquiry objectives and practical skills, using the assessment forms provided on pages (31)

4- Short tests

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.

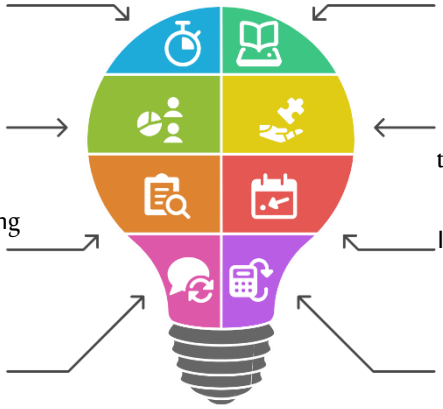
The following guidelines should be considered when preparing and administering short tests:

Test time: one class.

Figures and illustrations should be integrated appropriately within questions and answers.

Mark Scheme should be prepared using the proposed format found on page (**Error! Bookmark not defined.**).

Students must be given immediate feedback after the test is marked.



The short test covers content from 2 to 5 specific topics.

Outcomes should be varied, and repetition of the same objective within a single test should be avoided.

If a student is absent, the reason for absence must be verified, and an alternative version of the test should be scheduled.

Calculators are not permitted in Grades (5–6). In Grades (7–10), calculators may be used as long as they are not programmable, do not store information (PRGM), and do not support graphing or equation solving functions.

- 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 Science Subjects (Grades 5–10)

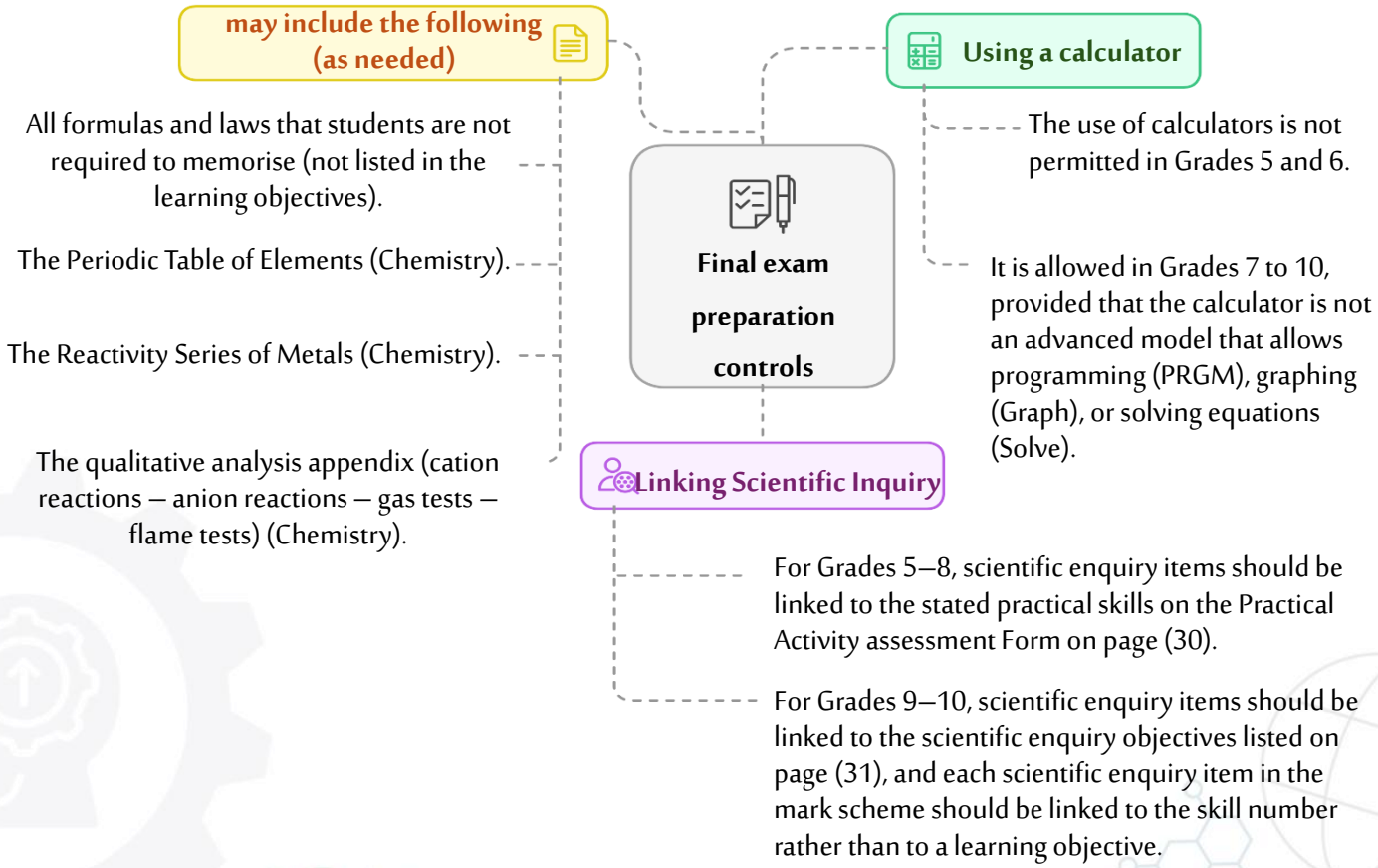
Short Test Specifications for Grades (5–9)	
Number of items	9 - 12 items.
Total marks	15 marks.
Marks According to the Assessment Objectives	Knowledge: 6 marks (40%) Application: 6 marks (40%) Reasoning: 3 marks (20%)
Types of items	**Grades (5-8):** - Three multiple choice items covering at least two different assessment objectives. - Six to nine short answer items. **Grade (9):** - Three multiple choice items covering at least two different assessment objectives. - One long answer item. - The remaining marks are distributed across short answer items, ensuring the total number of items falls within the specified range.

Short Test Specifications for Grade (10)	
Number of items	5 - 7 items.
Total mark	10 marks.
Marks according to the assessment objectives	Knowledge: 4 marks (40%) Application: 4 marks (40%) Reasoning: 2 marks (20%)
Types of items	- Two multiple choice items. - One long answer item. - 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 academic semester.

The following guidelines must be considered when preparing the examination:



End-of-Semester Exam Specifications for Grades (5-9)	
Number of items	25-35 items
Total mark	40 marks
Duration of the Exam	One and a Half Hours
Marks According to Assessment Objectives	Knowledge: 16 marks (40%) Application: 16 marks (40%) Reasoning: 8 marks (20%)
Marks According to Level of Demand	Low: 16 marks (40%) Medium: 16 marks (40%) High: 8 marks (20%)
Types of Items for Grades (5–8)	- Eight multiple choice items, each worth one mark, ensuring a balance across the three assessment objectives: knowledge, application, and reasoning. - The remaining marks are allocated to short answer items, based on the total required number of items. - Between 6 to 8 marks are allocated for the scientific inquiry items.
Types of Items for Grade 9	- Eight multiple choice items, each worth one mark, ensuring a balance across the three assessment objectives: knowledge, application, and reasoning. - At least two long answer items are included. - The remaining marks are allocated to short answer items, based on the total required number of items. - Between 6 to 8 marks are allocated for the scientific inquiry items.

End-of-Semester Exam Specifications for Science Subjects (Physics, Chemistry, Biology) Grade (10)	
Number of items	30-40 items
Total mark	60 marks
Duration of the Exam	Two Hours
Marks According to Assessment Objectives	Knowledge: 24 marks (40%) Application: 24marks (40%) Reasoning: 12 marks (20%)
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 balance across the three assessment objectives: knowledge, application, and reasoning. - At least two long answer items are included. - The remaining marks are allocated to short answer items, considering the total required number of items. - Between 8 to 10 marks are allocated for the scientific inquiry items.

Weighting of the End of Semester Examination Paper

The weighting of curriculum units in the end-of-semester examination shall be determined by each school in accordance with the curriculum sequence adopted by the school. A weighting table shall be prepared for all units included in the examination using both the number of Learning objectives and the number of teaching periods allocated to each unit during the semester.

The weighting of each unit shall be calculated using the following formula:

Unit Weighting (%) = [(% of Unit Learning objectives) + (% of Unit Teaching Periods)] ÷ 2

Where:

- **% of Unit Learning objectives** = (Number of Learning objectives in the unit ÷ Total number of Learning objectives in the syllabus) × 100
- **% of Unit Teaching Periods** = (Number of teaching periods allocated to the unit ÷ Total number of teaching periods in the semester) × 100

The resulting percentage represents the relative weighting of the unit in the end-of-semester examination. After calculating the weightings of all units, schools should adjust the figures, where necessary, to ensure that the total weighting equals **100%**.

Each school is required to prepare and document the unit weighting table using the approved template. The completed table shall be reviewed and approved by the School Performance Development Department in the relevant Educational Governorate and shall be adopted as the official reference for examination specification and preparation.

A suggested template for preparing the unit weightings is provided below.

Suggested Template for Calculating Unit Weightings in the End-of-Semester Examination for Grades (5-9)

Grade	Subject	Semester	Topic of the Units	Weighting (%)	Marks According to Assessment Objectives			Mark
					knowledge	Application	Reasoning	
5	Science	First			16	16	8	
			Total	100	40			40

Suggested Template for Calculating Unit Weightings in the End-of-Semester Examination for Grade (10)

Grade	Subject	Semester	Topic of the Units	Weighting (%)	Marks According to Assessment Objectives			Mark
					knowledge	Application	Reasoning	
5	Science	Second			24	24	12	
			Total	100	60			60

Appendices

Appendix (1): Practical Activity assessment

Practical Activity assessment Form for Grade 5

Activity title		Day and date	
Class		Group number	
Student names	1.	2.	3.
	4.	5.	6.

Practical skills	Practical Skills Assessment Criteria	Mark	Student number					
			1	2	3	4	5	6
Ideas and evidence	☐ Recognises that scientists combine evidence with creative thinking to propose new ideas and explanations for phenomena. ☐ Uses observation and measurement to test predictions and establish connections.	2						
Planning a scientific enquiry	☐ Predicts outcomes based on scientific knowledge and understanding, proposes ways to test these predictions, and communicates them effectively to others. ☐ Applies understanding and knowledge to plan a fair test. ☐ Collects sufficient evidence to investigate an idea. ☐ Identifies factors that need to be considered in different contexts.	2						
Obtaining and presenting evidence	☐ Makes relevant observations. ☐ Measures volume, temperature, time, length, and force. ☐ Discusses the importance of repeated observations and measurements. ☐ Presents results using bar charts and line graphs.	3						
Considering and Comparing Evidence	☐ Decides whether the results support the predictions. ☐ Begins to evaluate repeated results. ☐ Identifies patterns in the data and makes predictions based on them. ☐ Proposes explanations using scientific understanding and knowledge. ☐ Interprets data and judges whether it is sufficient to draw a conclusion.	3						
Total		**10**						

Scan the QR code to download the practical activity evaluation form for the different Grades.

5th Grade	6th Grade	7th Grade	8th Grade	Grades 9 & 10

Appendix (2): Scientific inquiry objectives for grade (9-10)

Skill Number	Skill Name Use of scientific techniques, equipment, and tools.
1-1 1-2	Justifies the selection of equipment, materials, and tools for conducting experiments, evaluates potential hazards, and explains the safety measures implemented to ensure safe practice.
	Planning
2-1 2-2 2-3	Describes and explains the experimental procedures and techniques applied. Forms predictions and hypotheses based on a sound understanding of scientific concepts and knowledge. Identifies variables, explains how they can be measured, and justifies why certain variables need to be controlled.
	Observation, Measurement, and Recording
3-1 3-2	Draws schematic figures of the apparatus and labels its components accurately. Records observations systematically, applying appropriate units, numerical values, measurement ranges, and the required degree of accuracy.
	Interpretation and Evaluation of observations and Data.
4-1 4-2	Interprets and evaluates observations and experimental data, identifying unexpected results and addressing them appropriately. Processes, organises, and presents data clearly, including the use of calculators, graphical representations, and calculation of gradients.
	Evaluation Methods
5-1 5-2	Draws well-founded conclusions and justifies them by referencing data and providing appropriate scientific interpretations. Identifies potential sources of inaccuracy in data or conclusions and recommends suitable improvements to experimental procedures and techniques used.

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Appendix (3): Student Group Allocation Form for Practical Activity

Student Allocation Form for Practical Activity			
Group	Practical Activity Title	Date	Names of students in the group
			1-
			2-
			3-
			4-
			5-
			6-
			1-
			2-
			3-
			4-
			5-
			6-
			1-
			2-
			3-
			4-
			5-
			6-

Appendix (4): Proposed Template for the Short Test

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First short test for Biology, Grade 10
First semester- Academic year 2025/2026

Student name: _____ Class:_____ Date:_____

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

Item number followed by a bracket (bold)
Item text in size 16 (regular)

Use the Times New Roman font.

1) _____[1]

The mark is placed directly next to the

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

▭ ▭ ▭ ▭

Use this phrase for each multiple-choice item

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

3)

a. _____[1]

Use lines for answers instead of dots

b. _____[1]

No frame or page borders

End

Number the pages at the bottom

Appendix (5): Mark Scheme

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Mark Scheme for the First Short Test – Grade …

Semester One – Academic Year 2025/2026

Subject……

Item		Answer	Mark	Additional information	Unit	Page	Outcomes	Assessment objectives	Level of Demand
1									
2									
3	a.								
	b.								

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Appendix (6): Proposal Dialogue Evaluation Form for Grades (5–10)

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

Appendix (7): Student Performance Monitoring and Record Sheet Grades (5-9)

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وزارة التعليم

Class:		Student Performance Monitoring and Record Sheet Grades (5-9)										Total	End-of-Semester Examination	Overall Total
Teacher:														
Academic year:														
No.	Student Name	Homework (10 marks)			Dialogue (10 marks)			Practical Activity (marks 10)	Short tests (30) marks			60	40	100
		First	Second	Total	First	Second	Total		First	Second	Total			
1														
2														
3														
4														
5														
6														
7														
8														
9														
10														

Appendix (8): Student Performance Monitoring and Record Sheet Grades (10)

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وزارة التعليم

Class:		Student Performance Monitoring and Record Sheet Grade 10						Total	End-of-Semester Examination	Overall Total
Teacher:										
Academic year:										
No.	Student name	Homework (5 marks)	Dialogue (5 marks)	Practical Activity (marks 10)	Short tests (20) marks					
					First (10)	Second (10)	Total	40	60	100
1										
2										
3										
4										
5										
6										
7										
8										
9										
10