Primary Science Frequently Asked Questions (FAQs)

1. How much time should be allotted to teaching Science?

Year Group	Entitlement per week
Year 1	Depending on the project
Year 2	
Year 3	2½ hours (three 45-minute lessons)
Year 4	
Year 5	
Year 6	

Cross-curricular integration is highly encouraged, particularly during the planning stage, for efficiency and effective teaching and learning.

Example 1: Factual information on the topic Plants can be covered during a language comprehension lesson. The information acquired from the comprehension text may then be referred to during a Science investigation on plants.

Example 2: Data gathered during a Science investigation on the topic Forces may be referred to or used during a Mathematics lesson on bar graphs.

2. What weighting does Continuous Assessment carry?

Year 3

Continuous Assessment in Year 3 does not carry weighting. However, 15 Broad Learning Outcomes have been selected and will be reported through the MySchool portal by the class teacher. Parents/guardians will

receive these reports on a termly basis (5 Broad Learning Outcomes per term, as chosen by teacher).

Year 4, Year 5 and Year 6

A total of 7 Broad Learning Outcomes have been selected for Continuous Assessment and will be reported by the class teacher. Parents/guardians will receive these reports on a termly basis (2 to 3 Broad Learning Outcomes per term, as chosen by teacher). The mark for continuous assessment will be reported by the class teacher and parents/guardians will receive the mark issued twice yearly (in February and July).

Please click on the following links to view the Broad Learning Outcomes for each year group:

Year 4 Broad learning Outcomes

Year 5 Broad Learning Outcomes

Year 6 Broad Learning Outcomes

The final Continuous Assessment mark will carry 40% of the final global mark and will be reported in the annual report. The class teacher should ensure that all 7 Broad Learning Outcomes are assessed till the end of the scholastic year.

Student/s absent on the day when the Continuous Assessment task is carried out, will be assessed on another task (assessing the respective Broad Learning Outcome) carried out during the scholastic year.

3. What weighting does the annual written assessment carry?

The annual written assessment in Year 4, Year 5 and Year 6 carries 60% of the final global mark.

4. What are the proposed tasks for Continuous Assessment?

Year 3 to Year 6

Throughout all year groups, different tasks and activities are to be used as tools to assess the Broad Learning Outcomes. It is suggested that at least the following tasks/activities are to be used for continuous assessment:

- 4 investigations
- 1 science project
- 1 fieldwork activity
- 1 other authentic meaningful task e.g. conducting research, quiz, school STEM activity that may render itself to be used for continuous assessment purposes.

It is highly recommended that each Broad Learning Outcome is assessed individually to ensure a valid, reliable and accurate assessment. Students should be adequately prepared beforehand and should have engaged in tasks that reflect the skills required to assess the specific Broad Learning Outcome.

Example 1 (Year 3):

A project related to 'Keeping Healthy' may provide an opportunity to assess Broad Learning Outcome 3.3.2. *I can demonstrate some things I should do to keep myself healthy.* Students can also be required to conduct research on the same topic to assess Broad Learning Outcome 3.1.2. *I can find out about a simple scientific idea.*

An investigation related to Electricity may be used to assess Broad Learning Outcome 3.5.5. *I can build a simple electric circuit and show that all parts need to be connected.* During the investigation, the teacher may also assess Broad Learning Outcome 3.1.4. *I can carry out a simple practical investigation with the teacher's support.*

Example 2 (Year 4):

An investigation related to Forces may be used to assess Broad Learning Outcome 4.1.4 *I can carry out a simple practical investigation with the teacher's support, ensuring it is a fair test.*

A fieldwork activity related to Habitats may be used to assess Broad Learning Outcome 4.1.5 *I can record observations in a simple format.*

A project related to Space may be used to assess Broad Learning Outcome 4.1.2 *I can find out about a simple scientific idea.*

Further examples can be found in the Mapping Documents for each year:
Mapping Document Year 4
Mapping Document Year 5
Mapping Document Year 6

5. How will the Continuous Assessment tasks be assessed?

A rubric has been specifically designed to assess the Broad Learning Outcomes through the Continuous Assessment tasks assigned for all year groups. The suggested Rubric for Year 3 can be used to assess the 15 Broad Learning Outcomes. The suggested Rubric for Year 4, Year 5 and Year 6 can be used to assess the 7 Broad Learning Outcomes and aid in assigning a mark (out of 20) to the Continuous Assessment task chosen.

Example 1 (Year 4):

An investigation on materials that conduct electricity and materials that are insulators of electricity (LO 4.5.4) may be used to assess Broad Learning Outcome 4.1.3 (I can make a prediction about a situation from a limited number of options) as follows:

Fully achieved (16-20 marks) – *"I think the light bulb will light up if a coin is used to complete the circuit because the coin is made of metal and metals are good conductors of electricity."*

The student gives a prediction and supports it with relevant scientific knowledge.

Satisfactorily achieved (10-15 marks) – *"I think the light bulb will light up if a coin is used to complete the circuit because electricity can pass through the coin."*
The student gives a prediction and provides a reason linked to the outcome, although the explanation lacks scientific detail.

Partially achieved (5-9 marks) – *"I think the light bulb will light up if a coin is used to complete the circuit."*
The student gives a simple prediction but does not provide a reason.

Started to be achieved (0-4 marks) – *"I think the coin is shiny."* or *"The light bulb is bright."*
The response does not provide a relevant prediction about the investigation or does not support the prediction.

<u>Example 2 (Year 5)</u>
An investigation on seed dispersal in nature (LO 5.7.1) may be used to assess Broad Learning Outcome 5.1.6 (I can make simple conclusions from my direct observations and link these using key scientific terms) as follows:

Fully achieved (16-20 marks) – *"I conclude that seeds are dispersed in different ways. Some seeds are carried by the wind, some are dispersed by animals and others are dispersed by explosion."*
The student draws a conclusion from observations and uses appropriate scientific vocabulary with relevant examples.

Satisfactorily achieved (10-15 marks) – *"I conclude that seeds are dispersed in different ways, such as by wind and animals."*

The student draws a conclusion from observations and includes some relevant scientific vocabulary.

Partially achieved (5-9 marks) – *"I conclude that seeds are dispersed in different ways."*
The student draws a simple conclusion from observations but provides no further explanation or scientific terms.

Started to be achieved (0-4 marks) – *"I saw different seeds."*
The student states an observation but does not draw a conclusion from it.

Example 3 (Year 6)
An investigation on the types of materials that muffle sound (LO 6.4.2) may be used to assess Broad Learning Outcome 6.1.1 (I can ask questions that can be investigated scientifically) as follows:

Fully achieved (16-20 marks) – *"Does the type of material affect how much sound is muffled?"*
The student poses a clear, focused and investigable question directly linked to the variable being tested. is clear, focused, can be tested, and is linked to what is being changed.

Satisfactorily achieved (10-15 marks) – *"Which materials can muffle sound?"*
The student poses a relevant scientific question linked to the investigation and can be tested.

Partially achieved (5-9 marks) – *"Can materials stop sound?"*
The student poses a simple question that is partly related to the investigation but is too general to test.

Started to be achieved (0-4 marks) – *"How is sound made?"*

The question is not directly related to the investigation topic being carried out. It is about sound in general, not about how materials muffle sound.

6. How are marks for Continuous Assessment tasks inputted?

Years 4 to 6

An Excel Sheet may be used to input the mark (out of 20) for each Broad Learning Outcome:

Excel Sheet to compute the Continuous Assessment Mark – Year 4, 5, 6

The Excel sheet has space for practice activities. It automatically selects the best practice mark and calculates the total Continuous Assessment mark (out of 100), which the class teacher then enters in the MySchool portal.

7. How are the marks for the written annual assessment and global mark worked out?

All written annual assessment marks for Years 4, 5 and 6 are to be inputted in the MySchool portal (out of 100). An Excel sheet is provided for this conversion (refer to FAQ 6).

The portal will automatically work out the global mark by extracting 40% of the continuous assessment mark and 60% of the written annual assessment mark.

8. Are there any resources to support the teaching of Science?

Teacher's Lesson Plans and resources including the Student's Book, Student's Workbook, Interactive Activities and Quizzes for Year 3 to Year 6 have been compiled by the Primary Science team to support the implementation of the Learning Outcomes. The comprehensive resources and other resources can be accessed through the following links:

Year 3 resources
Year 4 resources
Year 5 resources
Year 6 resources

For further information, clarification and/or suggestions kindly contact Ms Isabel Zerafa (Education Officer, Primary Science) on isabel.zerafa@ilearn.edu.mt or on primarysciencemalta@gmail.com.

Note: All documentation/resources mentioned in this document are hyperlinked to facilitate access.