

Education Bureau Circular Memorandum No. 98/2024

From : Permanent Secretary for Education To : Supervisors / Principals of all
primary schools offering
local primary curriculum

Ref : (3) in EDB/CSD/SC/821/18

Date : 26 April 2024

Curriculum Resources for Primary Science

Summary

The purpose of this circular memorandum (CM) is to inform schools of the details regarding curriculum resources for Primary Science.

Background

2. To tie in with further stepping up of the promotion of STEAM education as advocated in the “Chief Executive’s 2023 Policy Address”, among others, the introduction of Primary Science was proposed to strengthen students’ scientific and creative thinking, with implementation scheduled to start from the 2025/26 school year. The Education Bureau (EDB) has announced the “Science (Primary 1 – 6) Curriculum Framework” (Final Version) in March 2024, and continues to provide a series of related support measures for schools, including the provision of a one-off grant for the introduction of Primary Science, systematic professional training for in-service teachers, and related curriculum resources.

Details

Learning and Teaching Resources on Science Inquiry Activities

3. In line with the Primary Science curriculum content, EDB will provide “Learning and Teaching Resources on Science Inquiry Activities” on various topics to assist teachers in leading students to conduct science inquiry activities during classroom instruction. The first 10 sets of “Learning and Teaching Resources on Science Inquiry Activities” on various topics (see **Annex 1**) have been uploaded to the Primary Science webpage of the Science Education Section, EDB (<https://www.edb.gov.hk/ps>). Teachers can flexibly utilise the aforementioned learning and teaching resources on inquiry activities in science-related classes according to students’ abilities, interests and learning needs when piloting the new curriculum in 2024/25 school year. Learning and teaching resources on other topics will be released in due course.

“Safety Handbook for Primary Science”

4. The two curriculum emphases of Primary Science are “Science Inquiry” and “Engineering Design and Innovation”, which highlight providing students with diversified “hands-on and minds-on” learning activities. To this end, EDB has compiled the “Safety Handbook for Primary Science” to provide relevant safety consideration and guidelines for inquiry activities for teachers’ reference, so that schools can take appropriate safety measures to prevent accidents when planning and conducting learning activities related to Primary Science, and take appropriate actions promptly when an accident happens. The “Safety Handbook for Primary Science” (Chinese version) has been uploaded to the Primary Science webpage of the Science Education Section, EDB (<https://www.edb.gov.hk/ps>). EDB will also enrich the content related to safety and risk management in the teacher professional training courses of Primary Science to enhance teachers’ safety awareness.

The document can be downloaded from the following website:

https://www.edb.gov.hk/attachment/tc/curriculum-development/kla/science-edu/pri-sci/PS_Safety_Handbook_Chi_2024.pdf



List of Suggested Teaching Aids and Equipment for Primary Science

5. In line with the provision of a one-off grant for the introduction of Primary Science, EDB has introduced the “List of Suggested Teaching Aids and Equipment for Primary Science”, which details teaching aids and equipment suitable for the Primary Science curriculum, as a reference for teachers when purchasing or supplementing relevant teaching aids and equipment. The “List of Suggested Teaching Aids and Equipment for Primary Science” has been uploaded to the Primary Science webpage of the Science Education Section, EDB (<https://www.edb.gov.hk/ps>).

The document can be downloaded from the following website:

https://www.edb.gov.hk/attachment/tc/curriculum-development/kla/science-edu/pri-sci/List_of_Suggested_Teaching_Aids_and_Equipment_for_Primary_Science.pdf



Primary Science Online Learning Platform

6. To enhance students' interest in learning science and support the promotion of Primary Science, EDB has established the “Primary Science Online Learning Platform” (Chinese version only), combining e-learning strategies to provide learning and teaching resources, including virtual inquiry activities and self-learning materials. Teachers can flexibly incorporate interactive games from the platform into classroom teaching or assign upper primary students to self-learn the relevant content at home, according to the teaching arrangements and actual needs. The “Primary Science Online Learning Platform” will be accessible to students by the end of June 2024. Students can access the content in the platform by logging in to their Hong Kong Education City (HKEdCity) accounts. For more details, please refer to **Annex 2**. The platform provides six interactive learning modules in the first phase, and learning modules on other topics will be released in due course.

The platform can be accessed via the following link:

<https://priscplatform.edb.edcity.hk>

(will be open for use by the end of June 2024)



“Science (Primary 1 – 6) Curriculum Framework” (Final Version) (English Version)

7. The “Science (Primary 1 – 6) Curriculum Framework” (Final Version) (English version) has been uploaded to the Primary Science webpage of the Science Education Section, EDB (<https://www.edb.gov.hk/en/curriculum-development/cla/science-edu/primary-science.html>).

Briefing Session on Primary Science Curriculum Resources

8. EDB will organise an online briefing session on 29 May 2024 (Wednesday) to provide schools with more details of the learning and teaching resources on science inquiry activities, the “Safety Handbook for Primary Science” and the “Primary Science Online Learning Platform”. Schools may apply for the briefing session via the Training Calendar System (Website: <https://tcs.edb.gov.hk>; Course ID: CSD020240564).

Enquiry

9. For enquiries, please contact Dr CHEUNG Kam-wah, Thomas (Tel: 3698 3522) of the Science Education Section, Curriculum Support Division, EDB.

Dr William LAM
for Secretary for Education

c.c. Heads of Sections – for information

Primary Science

Learning and Teaching Resources on Science Inquiry Activities

Level	Activity Name	Strand/ Topic	Learning Objective
P1	How to make a hand shadow and change its size?	Matter, Energy and Changes/ Properties of light and related phenomena	Be aware that light shining on opaque objects produces shadows
P2	How do mung beans grow?	Life and Environment/ Ecological environment	Be aware that plants need (sun) light, air and water provide the energy required for life processes (growth, reproduction)
P3	Can salt be extracted from salt solution?	Matter, Energy and Changes/ Properties of matter	Recognise some methods of separating mixtures
	How to make sugar dissolve faster in lemon tea?	Matter, Energy and Changes/ Physical change and chemical change	Be aware of some factors that speed up the dissolving of substances in water
	How does water travel around the world?	Earth and Space/ Daily weather phenomena	State the processes of water cycle (evaporation, condensation, precipitation)
P4	Why does the flashlight not light up?	Matter, Energy and Changes/ Properties of electricity and related phenomena	Recognise simple closed circuits
	Do shadows in sunlight change over time?	Matter, Energy and Changes/ Characteristics of light and related phenomena	Recognise the changes in length and position of shadow under sunlight at different times
	What materials can conduct electricity?	Matter, Energy and Changes/ Properties of matter	Compare some physical properties (electrical conductivity) of metals and non-metals

Level	Activity Name	Strand/ Topic	Learning Objective
P5	Why do we add yeast in bread making?	Life and Environment/ Common microorganisms	Recognise the benefits and negative impacts of microorganisms to human
	What causes iron to rust?	Matter, Energy and Changes/ Physical change and chemical change	Recognise the necessary conditions for corrosion of metals (using rusting as an example)

Primary Science Online Learning Platform

Introduction

To enhance students' interest in learning science and support the promotion of Primary Science, EDB has established the "Primary Science Online Learning Platform" (Chinese version only), combining e-learning strategies to provide learning and teaching resources, including virtual inquiry activities and self-learning materials. Teachers can flexibly incorporate interactive games from the platform into classroom teaching or assign senior primary students to self-learn the relevant content at home, according to the teaching arrangements and actual needs.

Content

The "Primary Science Online Learning Platform" comprises "Science Inquiry Zone", "Challenge Zone" and "My Progress", providing interactive learning modules on various topics in line with the curriculum content of Primary Science. The six interactive learning modules launched in the first phase include "Cells and Microscopes", "Our Body", "Useful First-aid Kit", "Classification of Living Things", "Properties and Reflection of Light" and "Properties of Sound".

Zone	Function
Science Inquiry Zone	Provide interactive learning modules on various topics. The module content includes relevant virtual inquiry activities and self-learning materials, which teachers can flexibly use in conjunction with classroom teaching or arrange for students to self-learn at home.
Challenge Zone	Provide engaging interactive electronic assessment for the modules in the "Science Inquiry Zone" that allow students to review relevant learning content and understand their own learning progress.
My Progress	Enable students to review their learning progress in different modules, and download personal electronic certificate upon completion of all modules.

Login Method

At the end of June 2024, students can log in to the online learning platform (Chinese version only) (<https://priscplatform.edb.edcity.hk>) with their Hong Kong Education City (HKEdCity) accounts.

