

BALESTIER HILL
PRIMARY SCHOOL



to explore Connect celebrate



Primary Six Science Briefing

**BALESTIER
HILL PRIMARY**

Preparing your child for PSLE

12 Jan 2018



Overview

- Department Vision and Mission
 - Primary Science Curriculum
 - Revised Assessment Objectives
- Revised PSLE Examination Format
 - Answering Techniques
 - Parents as Facilitators
- Q & A



Primary Science Curriculum

Themes	Lower Block (Primary 3 & Primary 4)	Upper Block (Primary 5 & Primary 6)
Diversity	<ul style="list-style-type: none">• Diversity of living and non-living things• Diversity of materials	
Cycles	<ul style="list-style-type: none">• Cycles in plants and animals (Life cycles)• Cycles in matter (Matter)	<ul style="list-style-type: none">• Cycles in plants and animals (Reproduction)• Cycles in water (Water)
Systems	<ul style="list-style-type: none">• Plant system (plant parts and functions)• Human system (Digestive system)	<ul style="list-style-type: none">• Plant system (Respiratory and circulatory systems)• Human system (Respiratory and circulatory systems)• Electrical system• Cell system
Interactions	<ul style="list-style-type: none">• Interaction of forces (Magnets)	<ul style="list-style-type: none">• Interaction of forces (Frictional force, Gravitational force, Force in springs)• Interactions within the environment
Energy	<ul style="list-style-type: none">• Energy forms and uses (Light and Heat)	<ul style="list-style-type: none">• Energy forms and uses (Photosynthesis)• Energy conversion

Topics for P6 2018

Term 1	Term 2	Term 3	Term 4
Energy Units 1 -3 <ul style="list-style-type: none">• Energy in food• Forms and Uses of Energy• Sources of energy Interactions Unit 1 <ul style="list-style-type: none">• Forces• Types of Forces	Interactions Units 1 - 5 <ul style="list-style-type: none">• Forces & types of forces• Living Together• Food chains & Food Webs• Adaptations• Man's Impact on Environment	Revision of lower primary and P5 topics	PSLE



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Revised Examination Formats

Booklet	Item Type	No. of Questions	Marks per Question	Total Marks	%
A	MCQ	30	2	60	60
B	Open - Ended	14	2, 3, 4	40	40
		44		100	100

Duration: 1h 45 min



PSLE - Assessment Objectives

The assessment objectives in Science are:

- i. Knowledge with Understanding**
- ii. Application of Knowledge and Process Skills**



PSLE - Assessment Objectives

Assessment Objectives	Description
I Knowledge with Understanding	Students should be able to demonstrate knowledge and understanding of scientific facts, concepts and principles.



PSLE - Assessment Objectives

Assessment Objectives	Description
II Application of Knowledge and Process Skills	<p>Students should be able to:</p> <ul style="list-style-type: none">• apply scientific facts, concepts and principles to new situations.• interpret information (including pictorial, tabular and graphical) and investigate using one or a combination of following process skills:<ul style="list-style-type: none">• Inferring ; Predicting ; Analysing• Evaluating ; Generating possibilities ;• Formulating hypothesis ; communicating

Examination Tips

Answering MCQs

- Duration: 1h 45min for Booklets A & B
- \approx 56 min for Booklet A
 - (28 MCQ \approx **1.5 min** per question)
- Attempt Booklet A first, then Booklet B
- If unable to answer a question, **circle** it and **move on** to next question. Come back to that question after finishing the rest.
 - Manage your time!



Department's approach to conquer PSLE Science

- **Anticipated Reaction Guide (AR Guide)** – to check on prior knowledge
- **Science Spelling** – to know scientific vocabulary
- **Concept maps** – to consolidate learning
- **Comprehensive Science Notes** coupled with questions - to reinforce concepts and content knowledge



Department's approach to conquer PSLE Science

- **Certainty Respond Index (CRI)** for MCQ – assess level of understanding
- **Coding** students' answer - feedback on OE answer
- **RIIMaKe** – help comprehend Open-ended questions
- **Bi-weekly pop quiz** via LMS (MC online) - revision



Certainty Response Index (CRI)

	My Answer for MCQ	CRI Index		
		Very Sure	Not Sure	Wild Guess
1.				
2.				
3.				
4.				

Used as a diagnostic tool to assess students' level of misconception and the level of mastery of concepts in science.



Coding the types of error made in open – ended questions

Qn	Incomplete Answer (IA)	Misconception (MC)	Wrong Concept Applied (WCA)	Wrong Word Used (WWU)	Problem With Phrasing (PWP)	Spelling Error (SP)	Remarks from teacher

Used as a self – monitoring tool to help students identify the common errors in their answering technique in open – ended questions





Answering Question Technique

RIIMaKe



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RIIMaKe approach

RIIMaKe

R

Read question thoroughly

I

Identify topic(s) and concept(s)

I

Interpret data / information and find relationship

Ma

Make the link with concept(s) identified

Ke

Use **KEY** words/phrases in your answer.



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RIIMaKe approach

RIIMaKe

R Read question thoroughly

I Identify topic and concept(s)

I Interpret data relationship

Ma Make the link

Ke Use KEY words

Highlight or circle important words in question

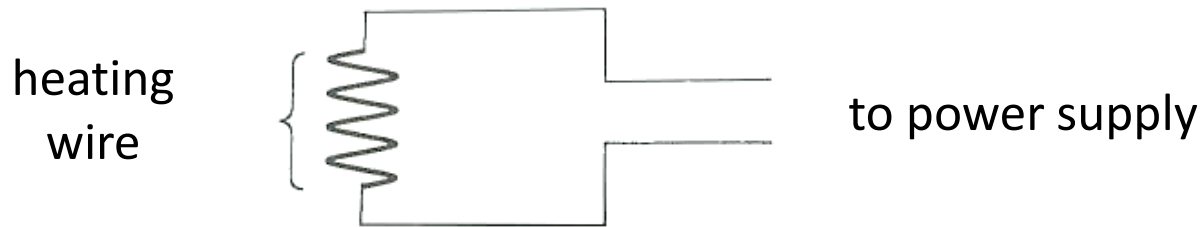


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RIIMaKe approach

A simple electric circuit inside the electric iron is shown below. It consists of a heating wire connected to a power supply.



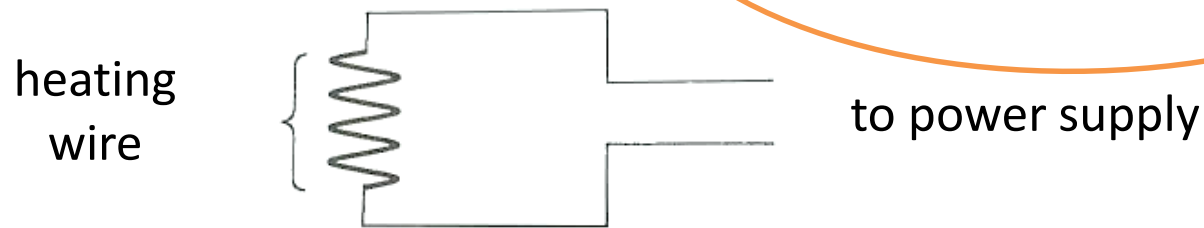
The heating wire is made of a metal with a high melting point. When an electric current passes through the circuit, the heating wire gets heated to a high temperature.

- (i) What will happen if a metal with a lower melting point is used as the heating wire?
- (ii) Explain why the electric iron in **(i)** will not work.

RIIMaKe approach

A simple electric circuit inside the
consists of a heating wire connected

R: Highlight or
circle important
words in question



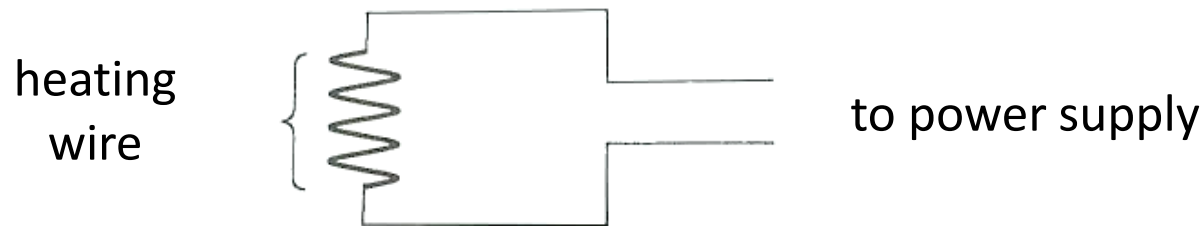
The heating wire is made of a metal with a high melting point.
When an electric current passes through the circuit, the
heating wire gets heated to a high temperature.

- (i) What will happen if a metal with a lower melting point is used as the heating wire? [1]

RIIMaKe an

I: Topic: Electrical Energy, Energy Conversion, Heat, State of Matter

A simple electric circuit inside the electric iron is shown below. It consists of a heating wire connected to a power supply.



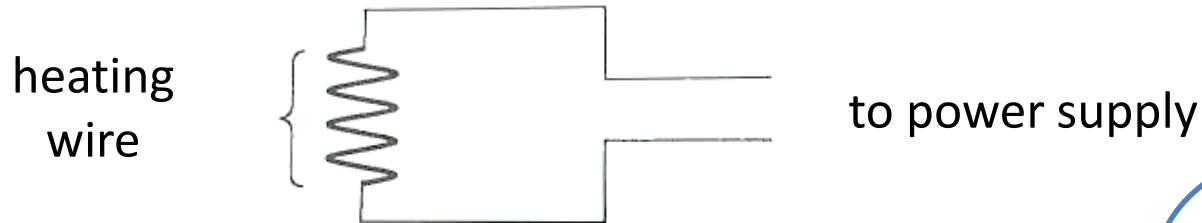
The heating wire is made of a metal with a high melting point. When an electric current passes through the circuit, the heating wire gets heated to a high temperature.

- (i) What will happen if a metal with a lower melting point is used as the heating wire? [1]

RIIMaKe app

I: Interpret
data / find
relationship

A simple electric circuit inside the electric iron is shown below. It consists of a heating wire connected to a power supply.



The heating wire is made of a metal with a high melting point. When an electric current passes through the circuit, the heating wire gets heated to a high temperature.

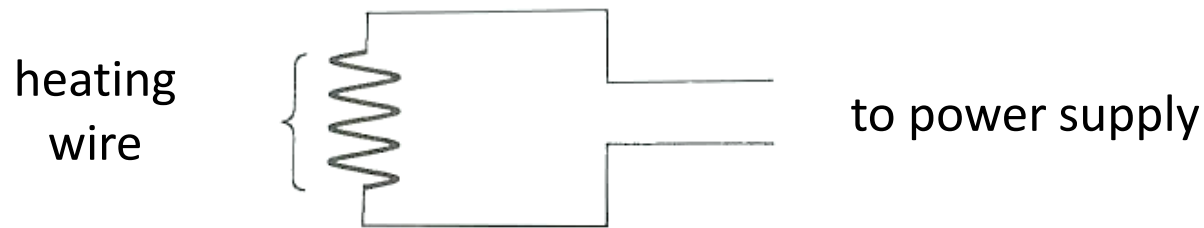
How it
works.

- (i) What will happen if a metal with a lower melting point is used as the heating wire? [1]

RIIMaKe an

Ma Ke: 1) Electrical energy converted to heat energy. 2) Heat - Effect on the heating wire

A simple electric circuit inside the electric iron is shown below. It consists of a heating wire connected to a power supply.



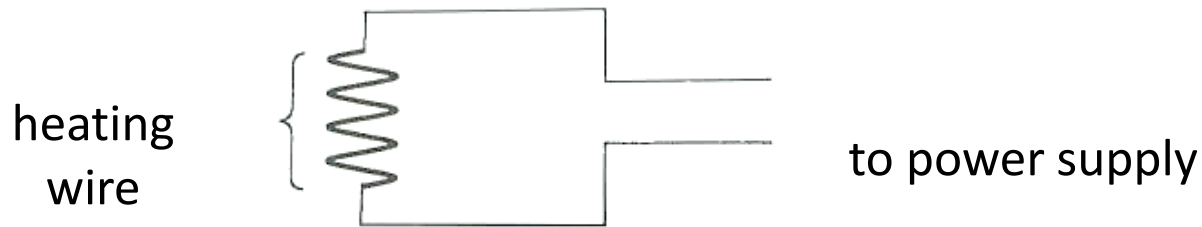
The heating wire is made of a metal with a high melting point. When an electric current passes through the circuit, the heating wire gets heated to a high temperature.

- (i) What will happen if a metal with a lower melting point is used as the heating wire? [1]

The heating wire will melt.

RIIMaKe approach

A simple electric circuit inside the electric iron is shown below. It consists of a heating wire connected to a power supply.



The heating wire is made of a metal with a high melting point. When an electric current passes through the circuit, the heating wire gets heated to a high temperature.

- (i) What will happen if a metal with a lower melting point is used as the heating wire? [1]
- (ii) Explain why the electric iron in (i) will not work.
The circuit will become an open circuit. No electric current can flow through the electric iron.



*How to better help your child
in the learning of Science?*



Parents as facilitators

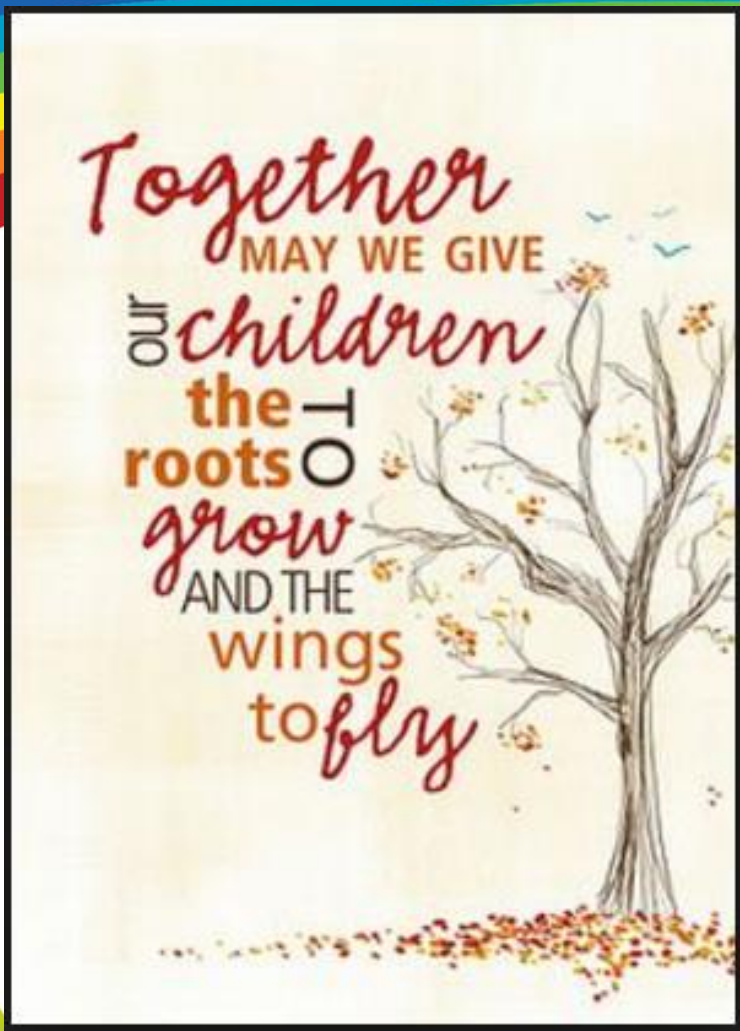
Help your child to

1. **develop a routine** for revision and homework
2. revise P3 to P6 topics using **concept mapping / Science Revision Notes**
3. be familiar with the type of PSLE questions in the **PSLE booklets**
4. revise the **Practice Papers** done in school and previous years examination scripts
5. Get exposure to scientific knowledge from **other sources:** print and online (LMS portal)
6. Revise the **spelling** words
7. Organise their worksheets

In summary , parental support can be for the following:

- Monitor Spelling
- Go through school worksheets
- Encourage use of **RIIMaKE** approach
- Use of CRI & Coding feedback during practice papers
- Link concepts to daily lives





Thank you

