



# **2023 PARENTS' BRIEFING**

## **Primary 4**

# **CURRICULUM AND ASSESSMENT**

## **SCIENCE**



# Content

A. Themes and Topics

B. Assessment

C. Strategies to Support our Pupils



## Focus of Theme

### Thematic Approach (scientific ideas)

#### Cycles

- There are repeated patterns of change around us
- Observing cycles helps us to make predictions and understand things around us

#### Energy

- Energy is required to enable things to work or move.

#### Interactions

- Actions between and within living and non-living systems in the environment
- See relationships between the factors/variables



## Syllabus Organisation

Levels	P3	P4	P5	P6
Themes	Diversity Cycles Systems	Cycles Energy Interactions	System Cycles	Energy Interactions
Topics	<ul style="list-style-type: none"><li>• Diversity of living and non-living things (General characteristics and classification)</li><li>• Diversity of materials</li><li>• Cycles in plants and animals (Life cycles)</li><li>• Human system (Digestive System)</li><li>• Plant system (Plant parts and functions)</li></ul>	<ul style="list-style-type: none"><li>• Cycles in matter and water (Matter)</li><li>• Energy forms and uses (Light energy)</li><li>• Energy forms and uses (Heat energy)</li><li>• Interactions of forces (Magnets)</li></ul>	<ul style="list-style-type: none"><li>• Systems (Cells)</li><li>• Systems (Plant system)</li><li>• Systems (Respiratory and circulatory system)</li><li>• Systems (Electrical)</li><li>• Cycles in plants and animals (Reproduction)</li><li>• Cycles in matter and water (Water)</li></ul>	<ul style="list-style-type: none"><li>• Energy forms and uses (Photosynthesis)</li><li>• Energy conversion</li><li>• Interaction of forces (Frictional force, gravitational force, elastic spring force)</li><li>• Interactions within the environment</li></ul>

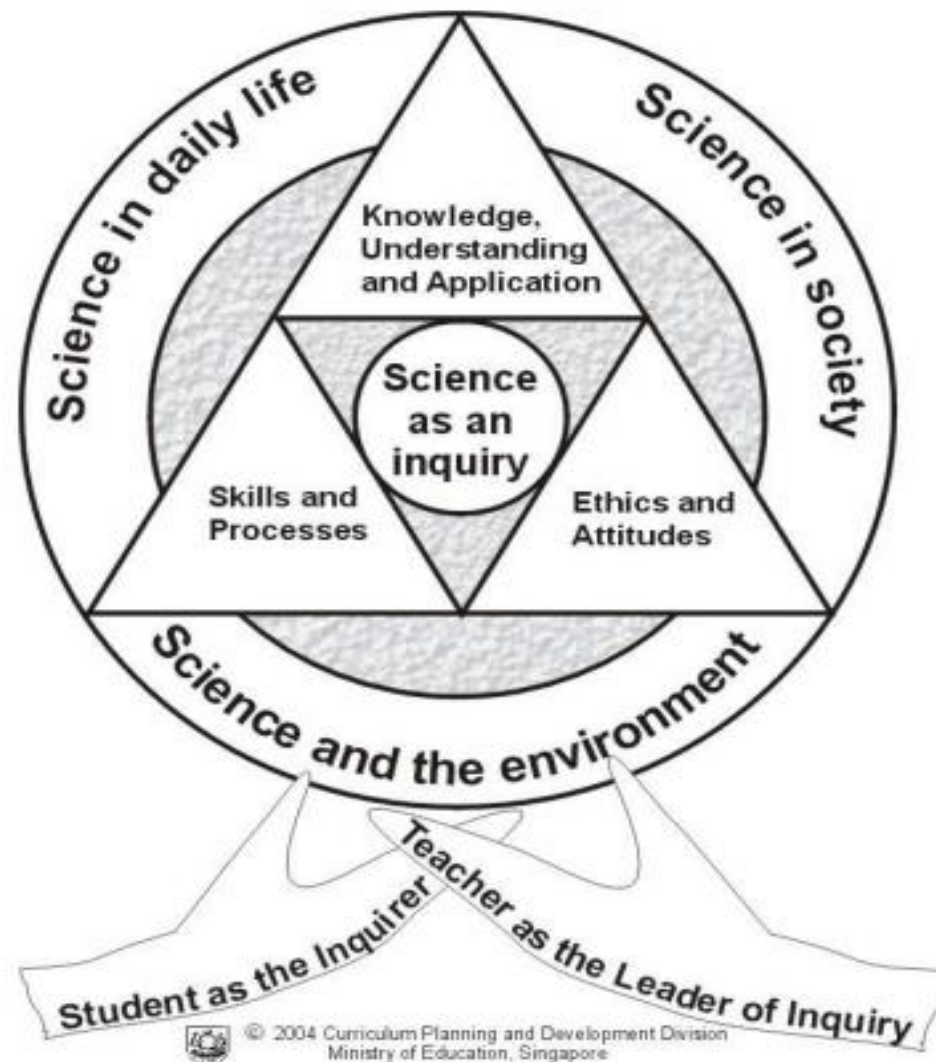


## Sequence of Topics in 2023

Primary	Term 1	Term 2
4	<ul style="list-style-type: none"><li>• Matter</li><li>• Light and Shadows</li></ul>	<ul style="list-style-type: none"><li>• Heat and Temperature</li></ul>
	Term 3	Term 4
	<ul style="list-style-type: none"><li>• Magnets</li></ul>	<ul style="list-style-type: none"><li>• Magnets</li></ul>



## Primary Science Curriculum Framework





## Assessment

Purpose?

- Understanding of core concepts
- Readiness of child
- Close learning gap

How?

### Weighted Assessments

#### WA1: Pen and Paper

Booklet A: MCQ

Booklet B: Open-ended / & *Structured Question*\*

#### WA2: Pen and Paper

Booklet A: MCQ

Booklet B: Open-ended / & *Structured Question*\*

### End of Year Assessment

Booklet A: MCQ

Booklet B: Open-ended / &  
*Structured Question*\*



## Presentation of Learning Materials



Textbook and Activity Book

*Please Note:*

*To keep all the Science materials till child sits for PSLE*

Science Journal  
Science-Know-It-All  
Process Skill Package  
Topical Worksheets





Frictional Force

- Frictional force is a contact force.
- It is present when two surfaces are in contact.
- It can slow down or stop a moving object as it acts in the opposite direction of motion.
- A force that opposes motion when two surfaces are in contact.
- The texture of a surface affects frictional force.
- A moving object moves a shorter distance and more slowly on the rough surfaces.
- There is greater frictional force between a moving object and a rough surface than between the object and a smooth surface.
- The amount of frictional force between the moving object and a surface does not depend on the surface area in contact.
- When we rub our hands together, there is frictional force between our palms.
- When we strike a match, the frictional force between the matchstick and matchbox causes the matchstick to light.
- Frictional force from the rubbing of sticks together can start a fire.

Frictional force can be useful:

- Frictional force helps us to grip objects without dropping them.
- It prevents us from slipping while walking.
- It helps to slow down or stop a moving object.
- (It helps to light a match/lighter)

notes taking

Name: Amyl Class: 4Respect

I used to think that Matter doesn't have weight.

But now I know that matter has weight mass.

VTR

## Our Class Chart

### Matter

pencil  
fire extinguisher  
blood  
air  
table  
boy  
water  
air freshener  
door  
shark

### Not matter

music  
thunder  
shadow  
heat  
light

Consolidated post-lesson  
discussion print-out

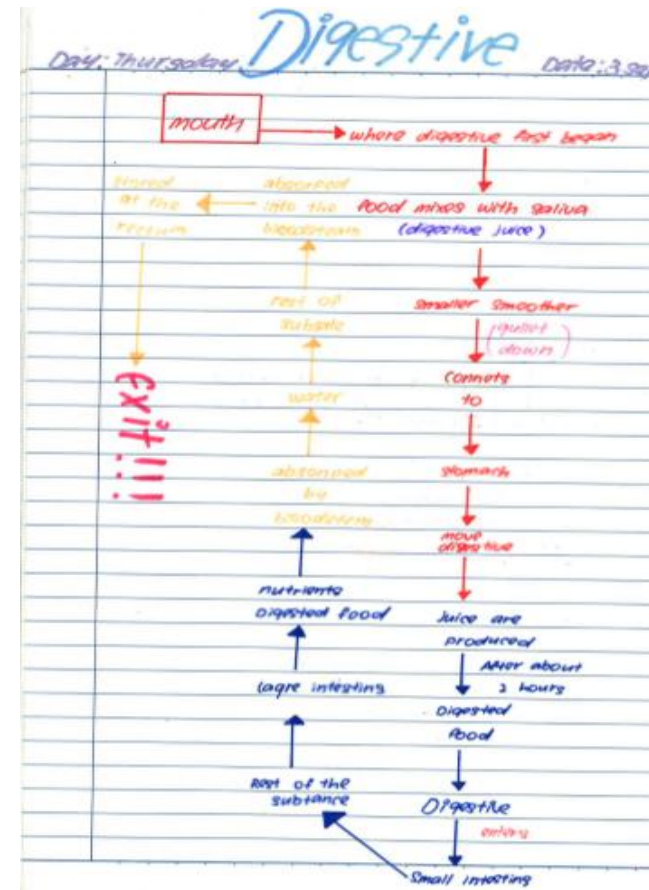
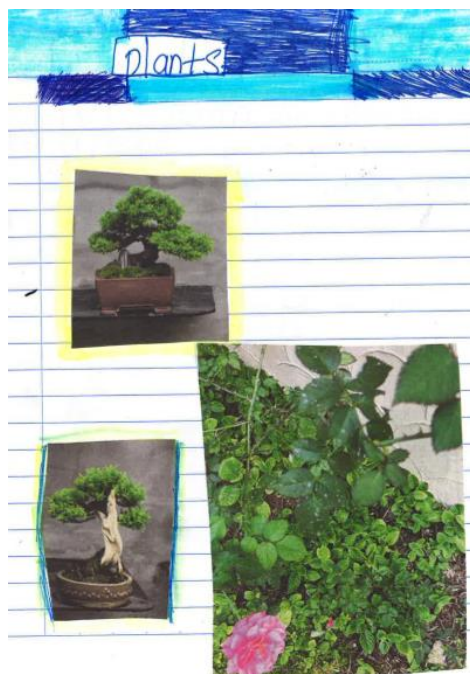
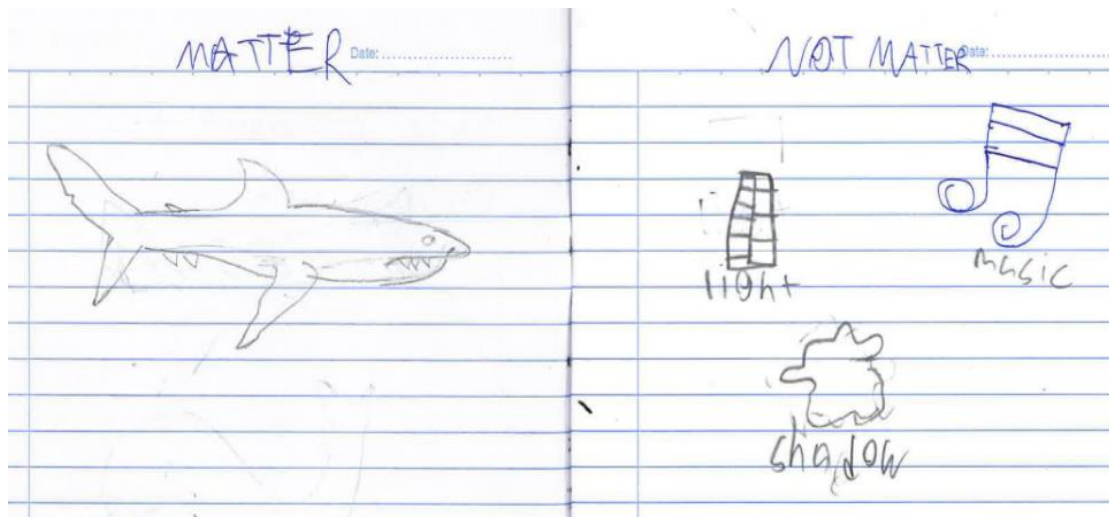
Characteristic of  
living things

1. Move
2. Reproduce
3. Respond to changes
4. Grow

Quizzes

Allow No light to pass through	Allow some light to pass through	Allow No light to pass through
clear glass clear plastic water air	some fabrics some plastic frosted glass ice thin paper	rock cardboard wood metal rubber ceramic

Classification table



Students using different styles that they consolidate/validate their own learning



## Tips on Parental Involvement

### - Encourage curiosity

Encourage pupils to ask questions about things that happen around them. *Give praise* when a good question is asked. It is **perfectly alright not to know the topic your child is interested in**. The process of discovering new information and facts together encourage bonding.

### - Be positive and supportive

If you can role model and display a genuine interest in science and how things work around us, it will have a positive impact on your child's attitudes towards science.

### - Point out the everyday Science around us

Use everyday objects or phenomenon to highlight the connection and importance of science to the world we live in.

### - Provide ample **opportunities or stimulating environments** for informal science learning

- family outings to Zoo, Botanic Gardens, Science Centre
- a short film shown on a television or video clip from an internet website
- visit the library



## Parents' Workshop



<https://go.gov.sg/parentswkshop2023>







# Thank You