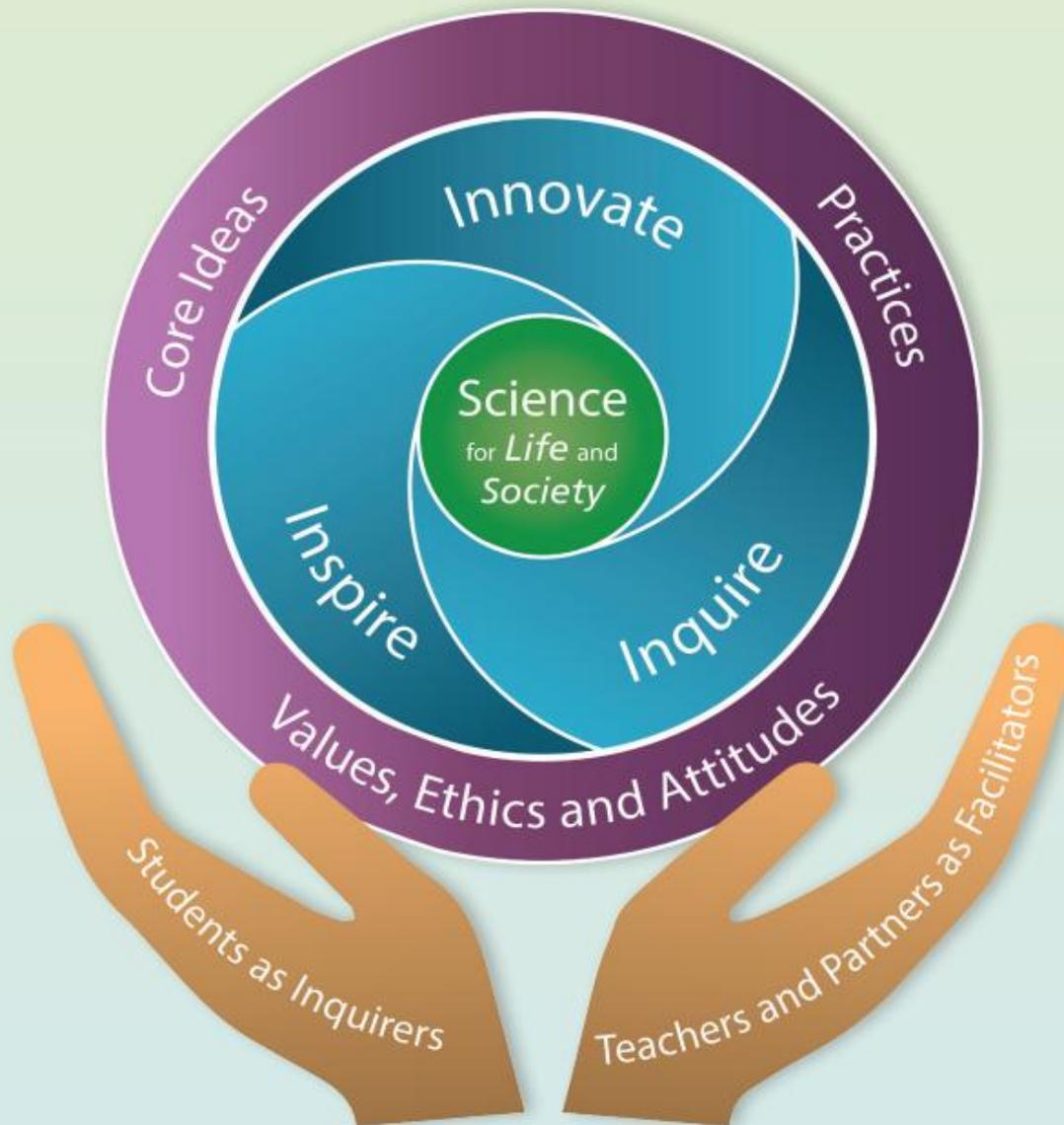


# Primary 3 Science Subject Briefing

Leaders of Character, Championing Service and Excellence



# Science Curriculum Framework



## Goals

The twin goals of Science education, as represented by the tagline *Science for Life and Society*, are central to the revised Science Curriculum Framework.

## Vision (3 Ins)

Surrounding the innermost circle, the Vision of Science Education 2030 is articulated through the 3 Ins – *Inspire, Inquire, Innovate*.

## Three Domains

The outermost layer of the framework shows three domains, *Core Ideas, Practices, and Values, Ethics and Attitudes*.

## Stakeholders

The pair of hands shows *students as inquirers*, supported by *teachers and partners as facilitators* of the students' learning experiences.

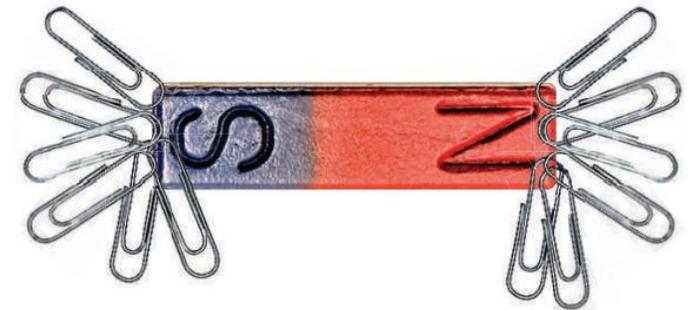
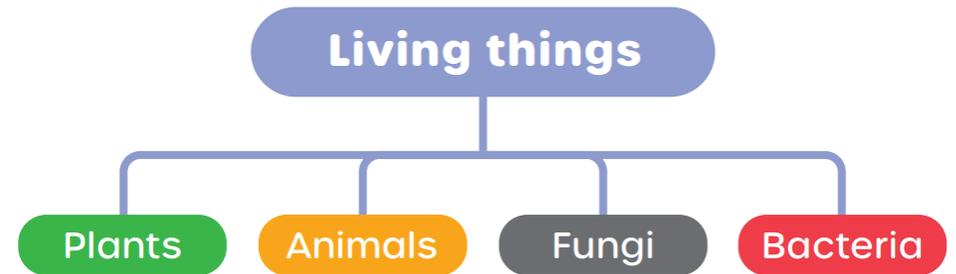
# P3 Science @ PVPS

- Teacher-designed activity book
- Cohort Workshop
- Recess Activities
- Connections between subjects  
E.g. Project Work, Learning Festival,  
InnoSpace activities



# P3 Science @ PVPS – Content and Skills

- Diversity of living and non-living things
- Diversity of materials
- Life cycles of plants and animals
- Magnets
- Skills of observing, comparing and classifying
- Simple interpretation of diagrams and data



# P3 Science @ PVPS – some common misconceptions

- Spider is an insect. **X**
- Dolphins and whales are fish. **X**
- A mushroom is a plant. **X**
- Life cycle of an insect start with the egg stage. **X**
- Only objects that are lightweight can float. **X**
- All metals are magnetic materials. **X**

# P3 Science @ PVPS – School-based Strategies

**READ** – a strategy to increase students' comprehension of science questions

**R**ecall key concepts related to the question

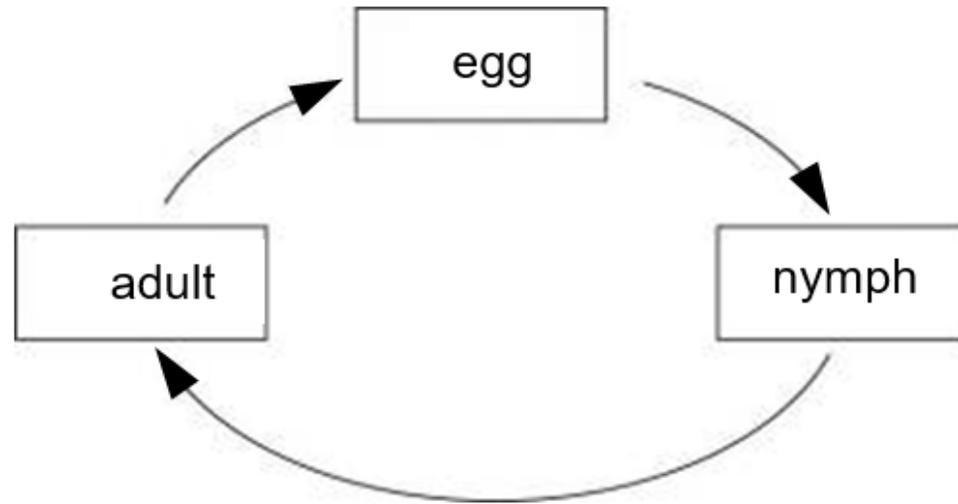
**E**liminate wrong options (especially for MCQ)

**A**nalyse and interpret data

**D**o annotations

# P3 Science @ PVPS – School-based Strategies (READ)

The diagram below shows the life cycle of an animal.



Which animal has the life cycle as shown above?

- (1) Frog
- (2) Beetle
- (3) Chicken
- (4) Cockroach

**READ** strategy suggested thinking process

**Recall** animals with 3-stage life cycle.

**Eliminate** option (2)

**Analyse** the diagram and **annotate** important information by highlighting 'nymph'.

**Recall** that only insects have nymph.

**Eliminate** options (1) and (3)

# P3 Science @ PVPS – School-based Strategies

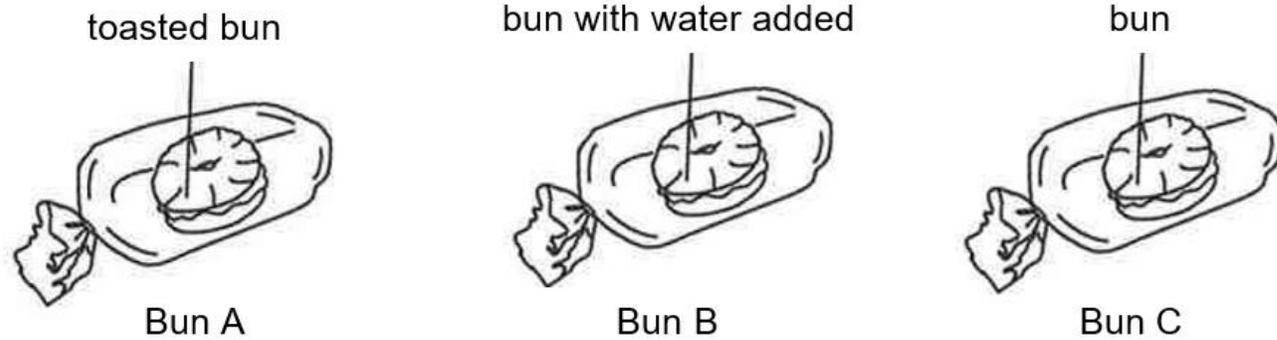
**CER** – a scaffold for giving a scientific explanation  
(usually for **open-ended questions**)

**Claim** – a direct answer to make a stand

**Evidence** – an observation / data taken from  
information provided in the question

**Reason** – a scientific concept that supports the claim

# P3 Science @ PVPS – School-based Strategies (CER)



Which bun had the least amount of mould on it after one week?  
Explain your answer.

Bun A. It had the least moisture  
so least mould grows as it needs  
water to survive.

Using **CER** as a scaffold for the explanation

**Claim :** Bun A

**Evidence:** least moisture as it is toasted

**Reason:** mould needs water to survive.

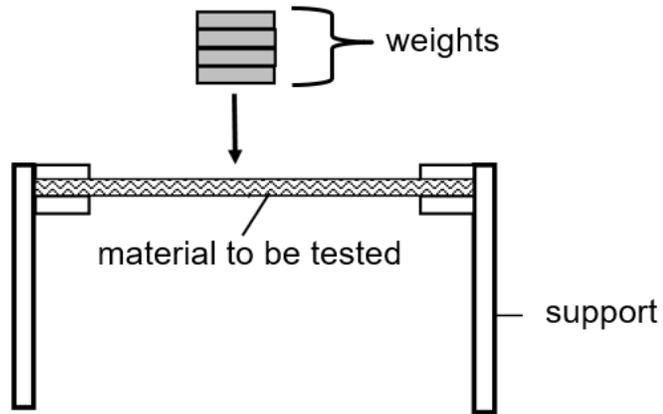
# P3 Science @ PVPS – Ways of Thinking and Doing Science

In the second semester, students will learn to identify the different variables in a science investigation.

- **Changed variable** – *the factor being investigated*
- **Measured variable** – *the result caused by what is changed which is being measured or observed*
- **Variables kept the same** – *the factors that also affect the result*

# P3 Science @ PVPS – Ways of Thinking and Doing Science

Zhi Kai carried out an experiment to test the strength of four different types of materials, R, S, T and W. These materials were of the same thickness and length. Weights were dropped onto each material until it broke.



- (a) Put a tick (✓) in the correct boxes to indicate how the different variables should be controlled so that the experiment is fair.

Variables	Kept the same	Changed	Measured
Type of material		✓	
Number of weights dropped			✓
Height the weights were dropped	✓		
Distance between the 2 supports	✓		

# P3 Science @ PVPS – Assessment

Students are assessed on their understanding and application of science concepts and the mastery of process skills.

1. Written assessment (weighted)
2. Performance Task (weighted)
3. Topical worksheets and practice papers (non-weighted)

# P3 Science @ PVPS – The Parents' Guide

- Help your child relate science to the things he observes in his everyday life. *E.g. the poster about how to stop dengue can be related to life cycle of mosquito*
- Process skills such as observing, using apparatus and making measurements are skills often used in daily lives.
- Ask questions that require your child to describe or explain his observation.



# P3 Science @ PVPS – The Parents' Guide

Help your child to study science effectively.

**(1) Equip your child with appropriate reading skills.**

*E.g. read slowly, make connections, read more than once*

**(2) Adopt good study habits** *e.g. revise what the teacher taught every week, read up on topic in the textbook, jot down questions to ask in class*

**(3) Make notes effectively** *e.g. in point form, mapping information using graphic organiser*

# P3 Science @ PVPS – The Parents' Guide

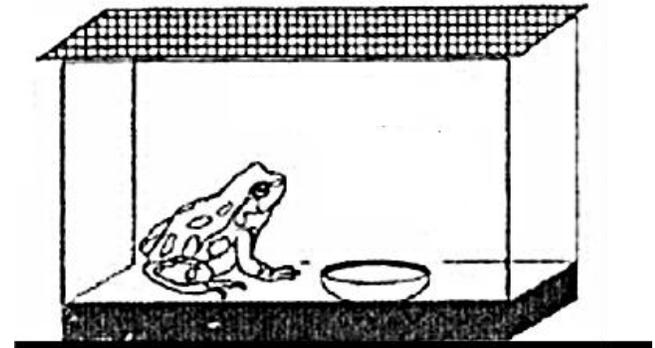
Reminders when answering science questions

(1) Avoid giving general statements. Answer by making reference to the question. This can be done by citing evidence from the question.

e.g. Why did the frog in the tank die eventually?

Living things need air, food and water to survive. (X)

The frog did not have food. (✓)



# P3 Science @ PVPS – The Parents' Guide

Reminders when answering science questions

(2) Avoid using pronouns as they tend to be ambiguous.

e.g. What will happen to the plants in set-up P and set-up Q?

**It** will dry up and die while the other plant will continue to grow well. (X)

The plant in set-up P will dry up and die while the plant in set-up Q will continue to grow well. (✓)

(3) Good to know the spelling of key scientific vocabulary.

# Thank you

If there are further questions, feel free to contact your child's Science teacher.

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