

Saint Andrew's Junior School Science Department

Mission: To develop each Science pupil to be an inquirer, innovator and environmentalist

Vision: Inculcate in pupils a sense of wonder/curiosity and equip them with skills in exploring and discovering such that they aspire to make a positive impact in future



Nurturing the Holistic Thinker

Pedagogy: What IS PTA in our school?



Dept pedagogy remains- only change is addition of "challenge" to the problem

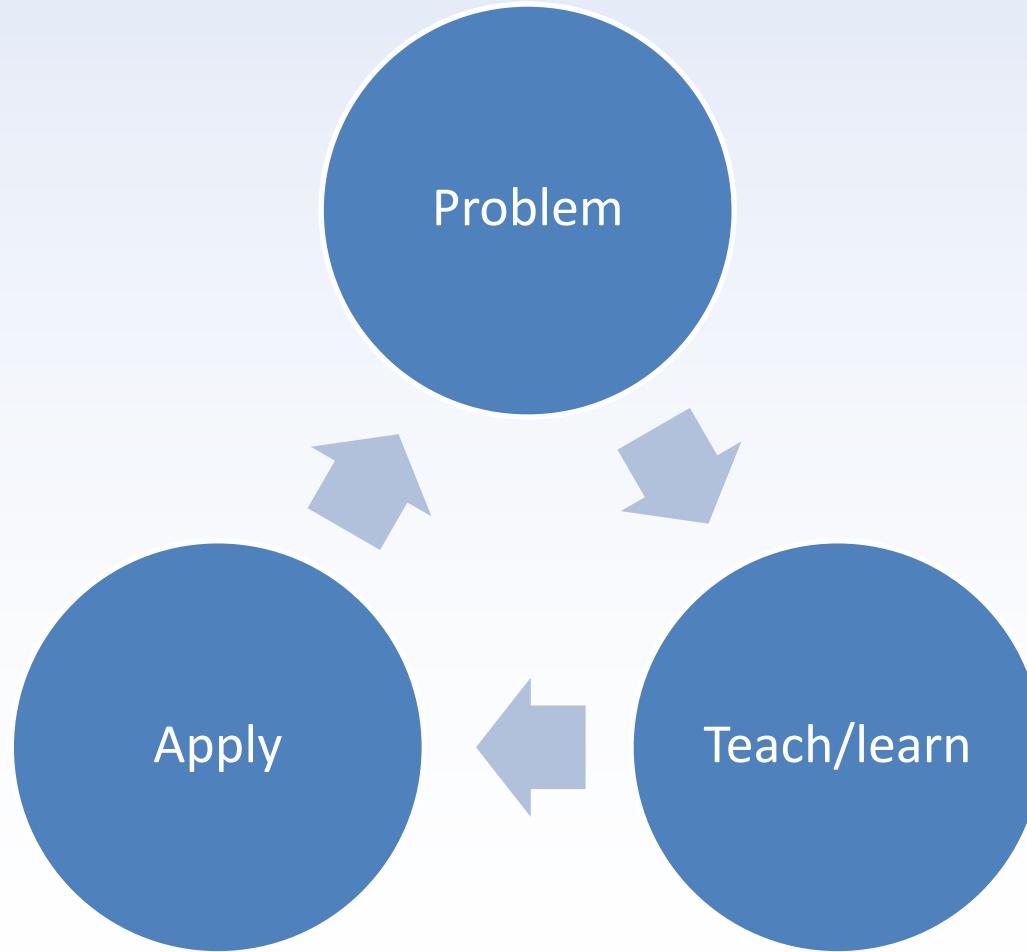
5Es pedagogical approach

- Engage
- Explore
- Explain
- Elaborate
- Evaluate



Science Pedagogical Process Flow

Problem (P), Teach/learn (T), Apply (A)



Developing the Skilled Communicator

Presentations

Group work



- Teaching slides
- Conducting experiments
- Worksheets (Activity, Process Skill, Check-out and Thematic Paper)

In addition....

- SLS (Blended learning)
- Creating PPT slides
- Attempting SLS Weekly/Topic quizzes

Different platforms



Student learning Space
(SLS)
Topic:
P4 Heat and Temperature



Blended learning (SLS)

Credited to: Yeo Peng Seng Last edited by: Lee K

-  Activities
 -  Activate Learning
 - 1. Understanding the problem
 -  Activate Learning
 - 2. Teaching and Learning
 -  Activate Learning
 - 3. Let's check if your predictions are correct!
-  Facilitate Demonstration of Learning
 - 4. Take up the challenge!
-  Facilitate Demonstration of Learning
 - 5. Let's apply understanding to answer open-ended questions!
-  Monitor and Provide Feedback
 - 6. Reflection!



- (1) PINPOINT AND HIGHLIGHT WHAT IS RELEVANT
 - (2) RESTATE/REORGANISE QUESTION
 - (3) IDENTIFY KEY CONCEPTS/FACTS**
 - (4) DECIDE CONCEPTS/FACTS THAT IS MOST APPLICABLE
 - (5) EXPLAIN USING THE SCIENTIFIC FACTS
- So have you identified the
scientific concept
involved in this problem?



Activate Learning

1. Understanding the problem

Activate Learning

2. Teaching and Learning

Activate Learning

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Facilitate Demonstration of Learning

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Monitor and Provide Feedback

6. Reflection!

What is the difference between heat and temperature?

- The difference between heat and temperature:



Beaker A



Beaker B

60°

30° C

To heat up the same amount of water to a higher temperature, more heat is needed. Thus, the water in beaker A has more heat than the water in beaker B.



Blended learning (SLS)

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Help us improve

Need help?



Blended learning (SLS)

Activate Learning

1. Understanding the problem

Activate Learning

2. Teaching and Learning

Activate Learning

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are correct!

Facilitate Demonstration of Learning

4. Take up the challenge!

Here's what you need:

- (1) Ice
- (2) a variety of surfaces made of different materials

- metal {like a pot or pan}
- plastic {like a lid, or a bowl}
- paper {like a paper plate}
- glass {like a bowl}

Choose a variety of surfaces for your ice to melt on. Compare metal, plastic, glass, and paper to see which makes a better conductor of heat.

State your prediction before conducting the experiment!

Monitor and Provide Feedback

6. Reflection!

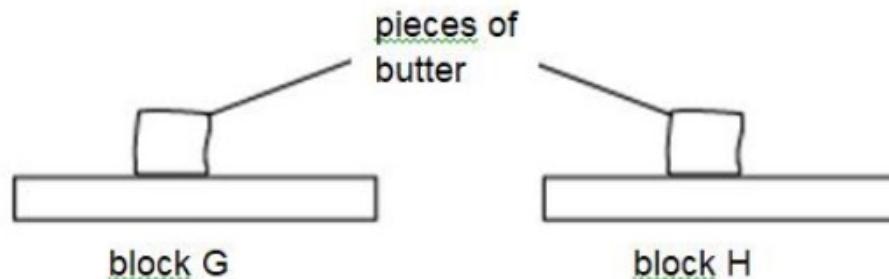


Blended learning (SLS)

Activate Learning
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ADD TO MY DRIVE

Raj placed pieces of butter on two blocks G and H of similar size as shown.



- (a) Raj placed the two blocks at room temperature. He observed that the [2] piece of butter on block H melted more quickly than the one on block G. Explain his observations.



Blended learning (SLS)

Activities

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Activate Learning

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Facilitate Demonstration of Learning

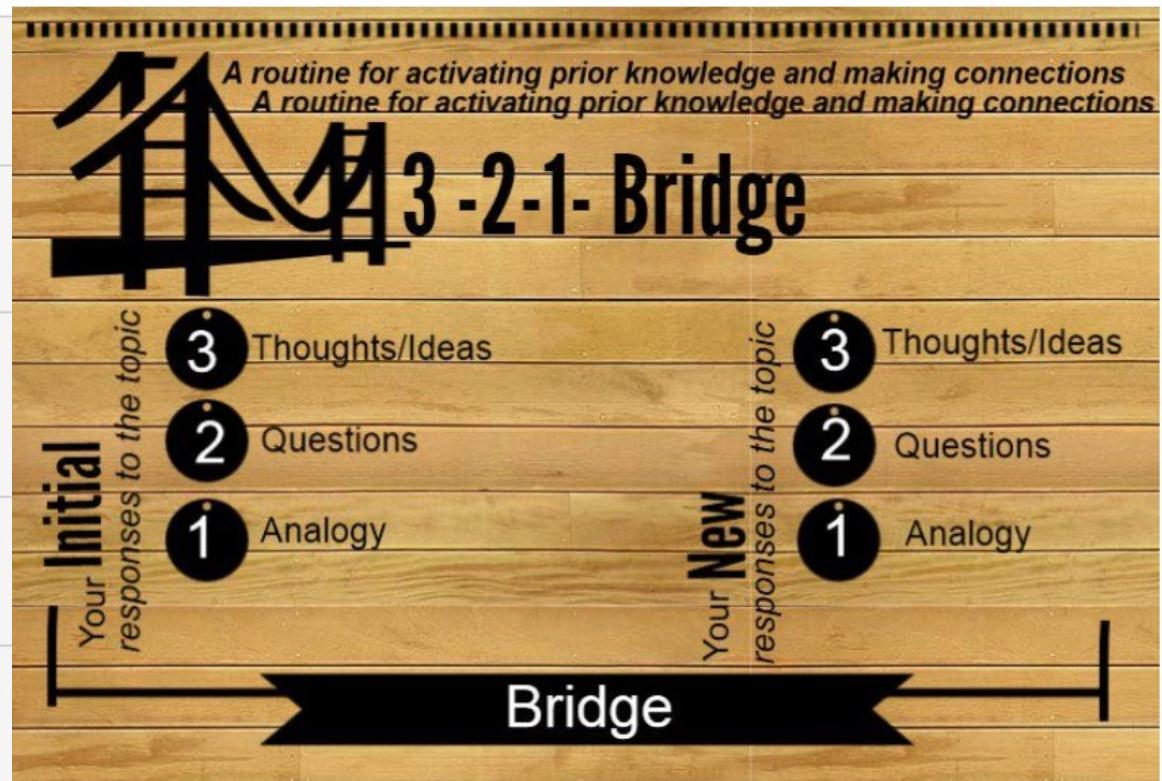
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Facilitate Demonstration of Learning

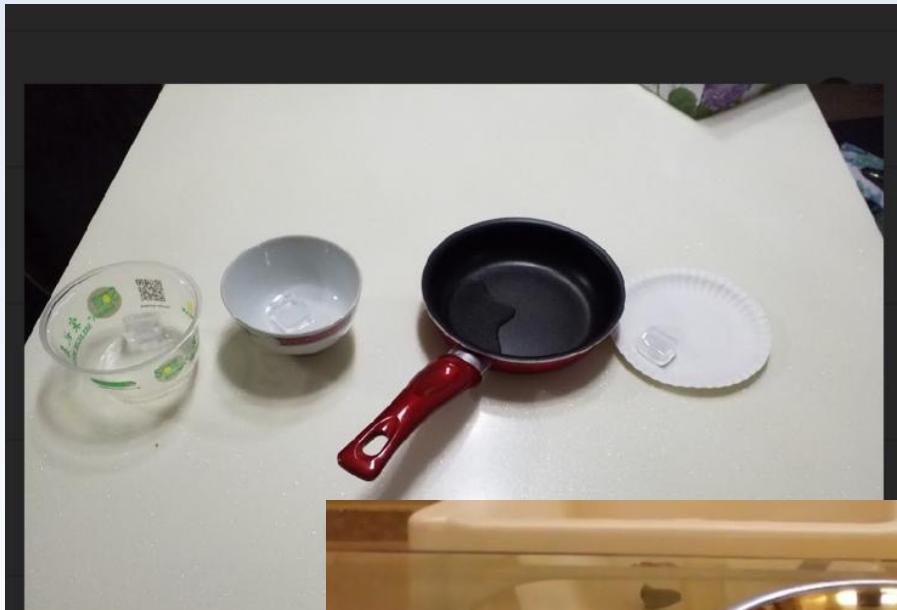
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Sample of students' work



Creating PPT slides
Topic: P4 Life cycle of Animal



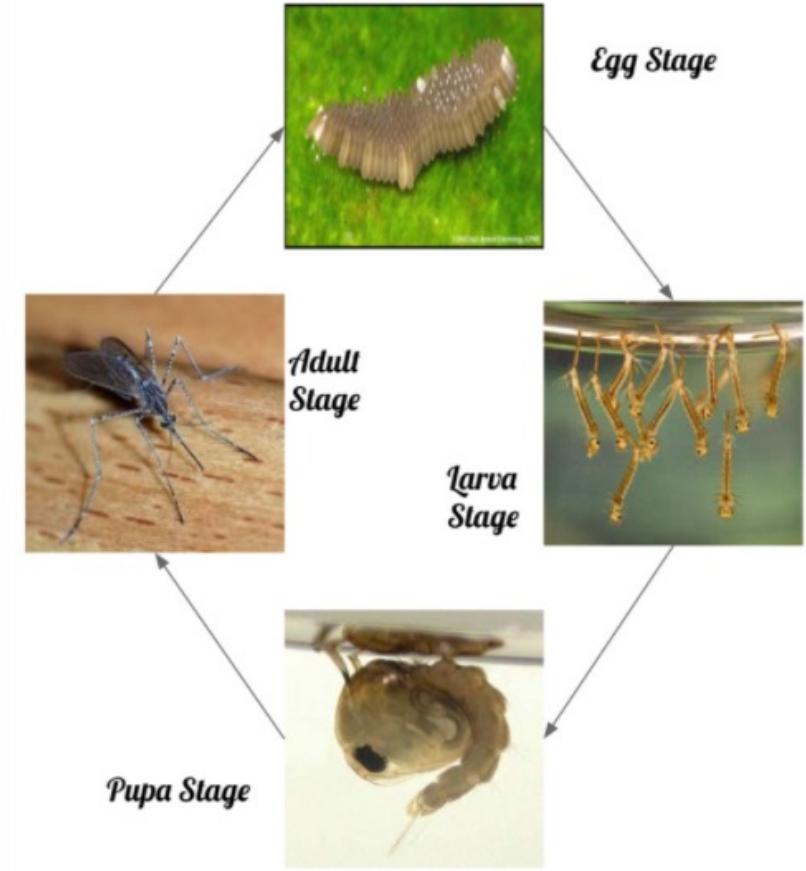
PROJECT: POSTER DESIGN/ POWER-POINT PRESENTATION(MOSQUITO)

- i) Common places for breeding of mosquitoes.
- ii) Ways to prevent mosquitoes from breeding.



Sample of students' work

Life cycle of mosquito



COMMON BREEDING AREAS OF THE MOSQUITO

1. Flower pots
2. Buckets with still water
3. Air-con drip trays
4. Trash cans
5. Pools and Spas (not likely)
6. Birdbaths
7. Gutters/Drains
8. Rooftops
9. Rain Puddles
10. Toilet bowl water
(Only if not in use)



Weekly/Topic SLS quizzes

Lesson Title

2020 Primary 4 Science - Term 2 - Week 3 - Revision Quiz 3 

Description

Primary Four weekly quiz

Credited to: Ngin Chor Hong Last edited by: Ngin Chor Hong on 16 Mar 2020 12 : 02 PM

Activities

Custom

1. Complete this quiz

Complete this quiz

2020 Primary 4 Science - Term 2 - Week 3 - Revision Quiz 3

Show more details

Feedback given after Quiz Submission

Total

Not shown

Recommended

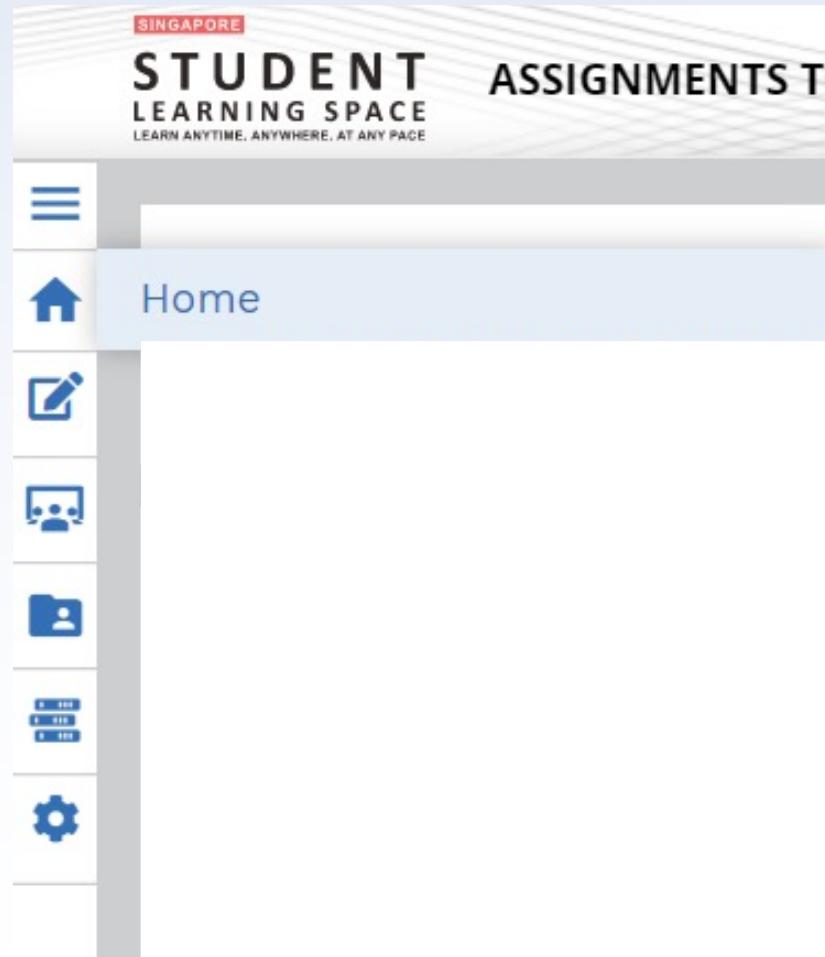
Help us improve

Need



How find these quizzes?

- Login to SLS then
- click Home page



P4 Checkpoints

Themes	Term 1	Term 2
<p>P3 topics</p> <ul style="list-style-type: none"> • Diversity • Systems • Interactions <p>P4 topics</p> <p>Cycles</p> <ul style="list-style-type: none"> • Life cycles of some animals • Life cycles of plants • Matter <p>Energy</p> <ul style="list-style-type: none"> • Light and shadows • Heat and temperature 	<p><u>Topical review 1 (Not weighted)</u></p> <p>MCQs and Open ended questions</p> <p>Topics</p> <ul style="list-style-type: none"> • Include all P3 topics • Life cycles of some animals 	<p><u>Semestral Assessment 1 (30%)</u></p> <p>Booklet A, 28 MCQs (56 marks)</p> <p>Booklet B, 12-13 OEs (44 marks)</p> <ul style="list-style-type: none"> • Total: 100 marks • Duration: 1h 45 min <p>Topics</p> <ul style="list-style-type: none"> • Include all P3 topics • P4 topics <p><u>Cycles</u></p> <ol style="list-style-type: none"> 1) Life cycles of some animals 2) Life cycles of plants 3) Matter
21	ST ANDREW'S CAMPUS	

P4 Checkpoints

Themes	Term 3	Term 4
P3 topics <ul style="list-style-type: none"> • Diversity • Systems • Interactions 	<u>Performance-based assessment,</u> <u>PA1 (Formative)</u> <ul style="list-style-type: none"> • Practical Assessment • 1 booklet • 2 to 3 questions • 10 marks • Duration: 20 min 	<u>Semestral Assessment 2 (70%)</u> <ul style="list-style-type: none"> • Booklet A, 28 MCQs (56 marks) • Booklet B, 12-13 OEs (44 marks) • Total: 100 marks • Duration: 1h 45 min • 30% basic items
P4 topics		
Cycles <ul style="list-style-type: none"> • Life cycles of some animals • Life cycles of plants • Matter 	<u>Topical review 2</u> MCQs and Open ended questions	Topics <ul style="list-style-type: none"> • Include all P3 and 4 topics
Energy <ul style="list-style-type: none"> • Light and shadows • Heat and temperature 	Topics Light and shadow	



Home routines that can support learning of Science

- Linkage of Science to everyday activities or phenomena.
- Guide him in research – information from books / websites
- Ensure that he completes all assignments / corrections.



Resources

- Science Notes
- Weekly MCQ on SLS
- Answering techniques
 - P.R.I.D.E
 - C.E.R

