



Primary 3 Science

Mr Christopher Khoo
HOD Science
4 February 2025



An Adaptive Learner, Empathetic Leader and Future-Ready Citizen

Science Teaching and Learning @ P3

Programme for Science Learning

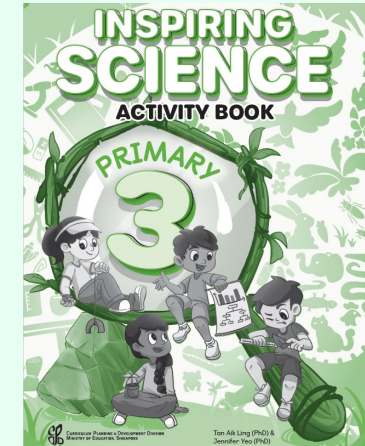
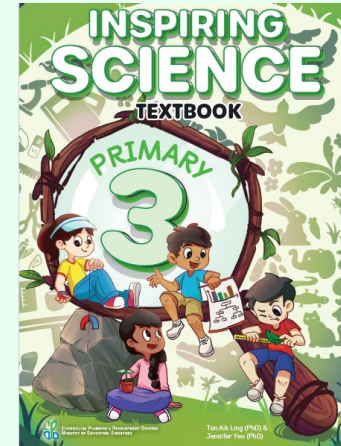
- Learning Plots – Science exploration on growing plants in the outdoor
- Science Exploration Day – Application of Science

Resources for Teaching and Learning

- Inspiring Science Textbook & Activity Book
- SAM Journals
- Topical Review & Examination Practice Paper

Additional Resources

- CER approach to tackle Open-Ended explanation questions
- Topical Checklist, Examination Review



Topical Checklist and Examination Review

Name: Aimee (1) Parent's signature: _____

Self-Assessment on: Diversity- Living and Non-living things

Choose the level that describes how well you have understood each of the Science ideas.

Levels	Descriptors
1	I have understood this Science idea the least . (I don't get it)
2	I have some understanding about this Science idea. (I partially get it)
3	I have understood this Science idea very well and can explain it to my friend. (I get it)

No.	Science ideas and Skills	Levels		
		1	2	3
1.	I can describe the characteristics of living things.			✓
2.	I can describe the characteristics of non-living things.			✓
3.	I can describe the similarities and differences of plants and animals.			
4.	Skill: I use the following senses like sense of sight, sense of smell, sense of hearing, sense of touch and sense of taste in making observations.			✓
5.	Skill: I can make some measurements in my observations.			✓

Bukit Timah Primary School
Science Primary 3 SA2 Review 2022

Science Primary 3 SA2 Review 2022

Pupils have done well in the following areas:

Living and Non-Living Things:

Pupils were able to apply the correct Science ideas to questions on characteristics of living things, the different animal groups, plants and fungi. (Q2, Q3, Q8).

Factors affecting strength of magnet:

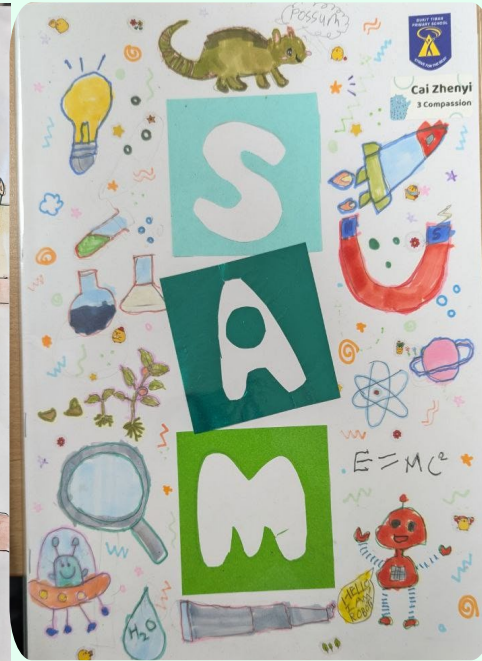
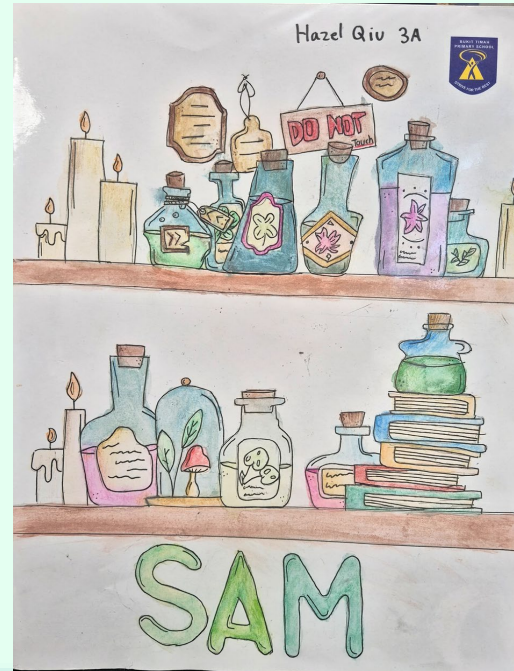
Pupils were able to identify the factors that affected the strength of temporary magnets. (Q19, Q20)

Science ideas that need review:

Area(s) for Improvement	Answers Given	Learning Point(s)
Making Comparisons		
Q23(b), Q25(b) Characteristics of living things	When comparing differences, some pupils state the characteristic of only 1 organism, E.g. "Crocodiles lives on land but goldfish does not." Or "Fern reproduces by spores but the papaya plant does not."	Pupils need to specify the difference between two organisms and not simply state that the other organism does not have the characteristic. E.g. "Crocodile lives on land but goldfish lives in water." "Fern reproduces by spores but

Science Around Me (SAM Journal)

- 1) Strive for the best
- 2) Pose questions and find out more on their own
- 3) Explain their thinking using relevant science concepts
- 4) Link science learning to life
- 5) Reflect on their learning

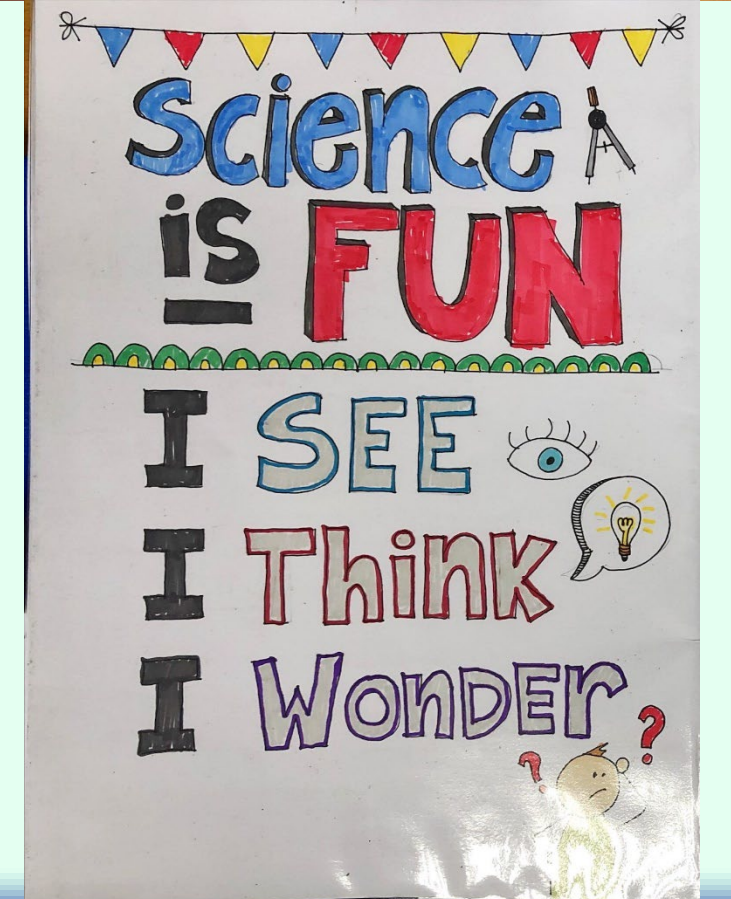


Thinking Routines

For example, Victoria looked at a picture of a bird and wrote the following,

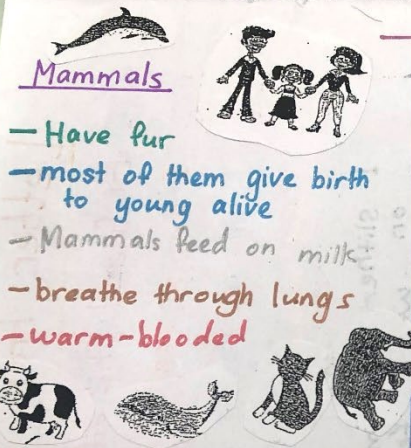
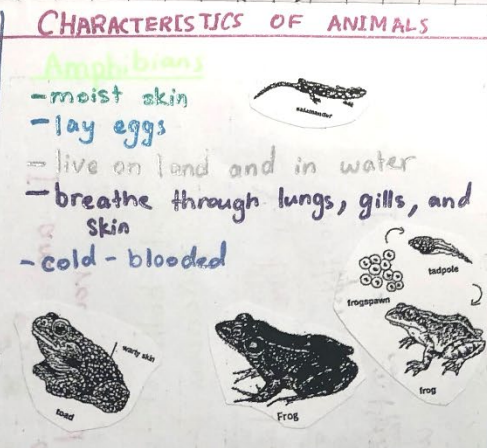
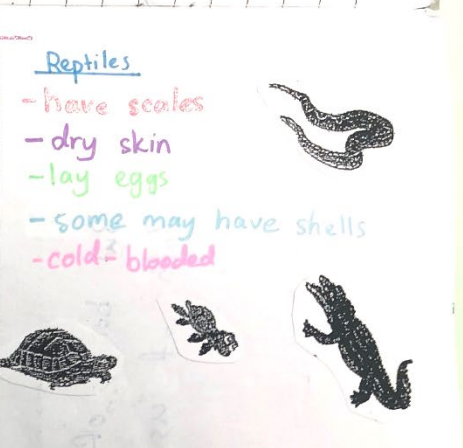
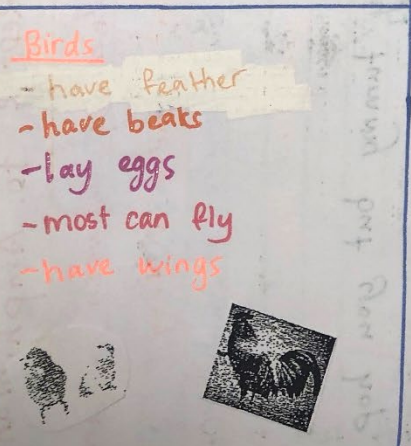
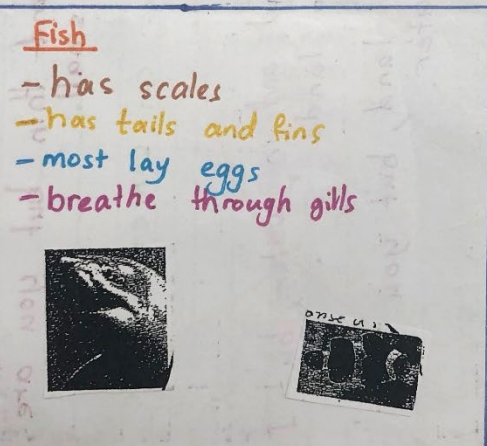
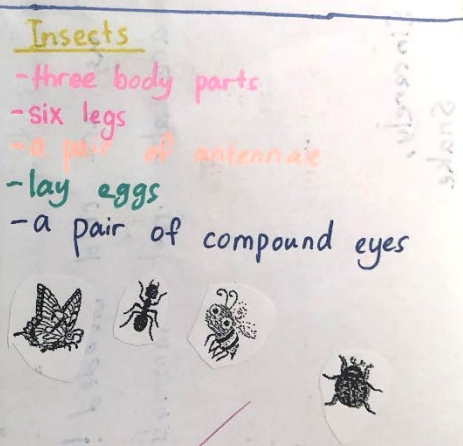


I see	I think	I wonder
a bird feathers claws eyes tail beak	birds do not have ears birds have very good eyesight	if birds have ears. if birds have senses. Are bird's feathers thick or thin? How do birds find their food?



1) Strive for the best

CHARACTERISTICS OF ANIMALS

<p><u>Mammals</u></p> <ul style="list-style-type: none"> - Have fur - most of them give birth to young alive - Mammals feed on milk - breathe through lungs - warm-blooded 	<p><u>Amphibians</u></p> <ul style="list-style-type: none"> - moist skin - lay eggs - live on land and in water - breathe through lungs, gills, and skin - cold-blooded 	<p><u>Reptiles</u></p> <ul style="list-style-type: none"> - have scales - dry skin - lay eggs - some may have shells - cold-blooded 
<p><u>Birds</u></p> <ul style="list-style-type: none"> - have feather - have beaks - lay eggs - most can fly - have wings 	<p><u>Fish</u></p> <ul style="list-style-type: none"> - has scales - has tails and fins - most lay eggs - breathe through gills 	<p><u>Insects</u></p> <ul style="list-style-type: none"> - three body parts - six legs - a pair of antennae - lay eggs - a pair of compound eyes 

Classifying animals into different groups

Thursday 12th Jan

Observation #3

see

1. It looks like a lime green fruit
2. It looks like a lime green fruit
3. It looks crumpled

touch

1. It feels spikey
2. It is hard
3. It feels like a dried flower


hear

1. Its sound is like dropping a rock
2. I hear bugs in it
3. I hear a loud sound from it

smell

1. It smells like pepper
2. It doesn't have a nice smell
3. Its smell is disgusting

Wonderful observations and documenting of it. I enjoyed reading your entries!



Use of 5 senses for observation

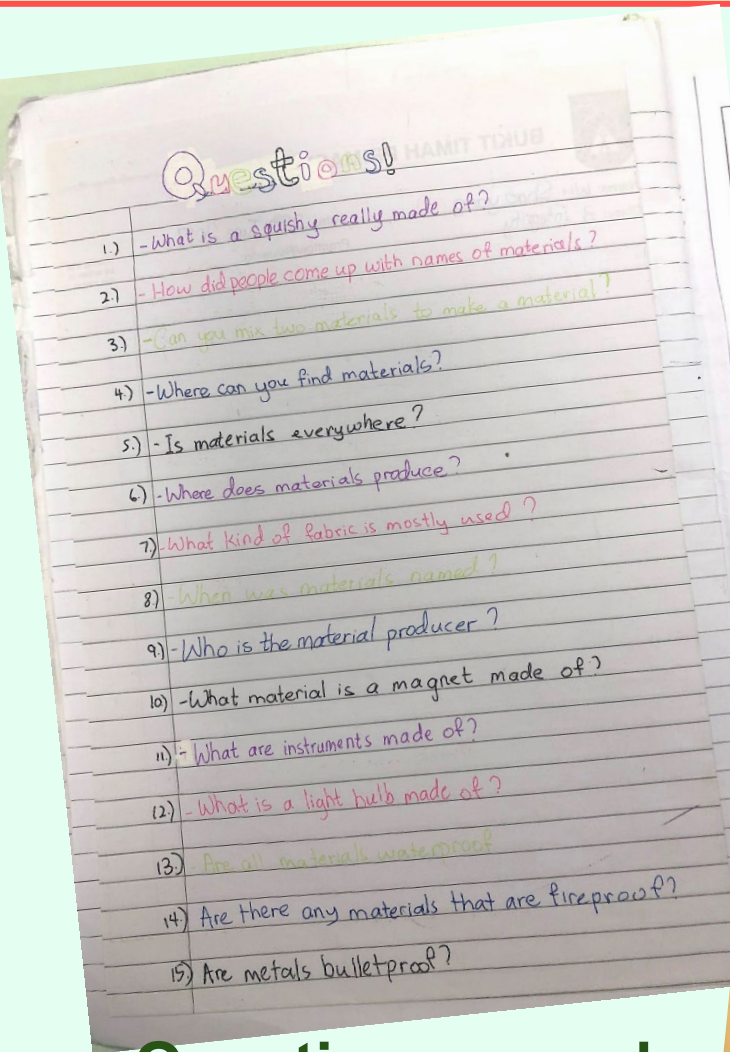
Reflection

The most important thing I learnt was we cannot just write any easy observations. We should explore deeper.

Thanks for your reply...
You're right!
Include details and make your thinking visible by writing it down! Way to go! 😊

Yes, you're right!
How do you think we can do it?
If we just right It feels like a flower. That is not enough! We should write like which part of it feels like a which part of a flower and how does it feel like a flower.

2) Pose questions to find out more



Questions posed on Materials & Animals

Name: Aimee () Parent's signature: _____

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a) One important Science idea I have learnt about Living Things is the characteristics of living things are: air, food, water and respond to changes from

b) 1 thing I will like to find out more is dolphin

I will find out more (tick one):

on my own	<input checked="" type="checkbox"/>	by asking my friend	<input type="checkbox"/>	by asking my teacher	<input type="checkbox"/>
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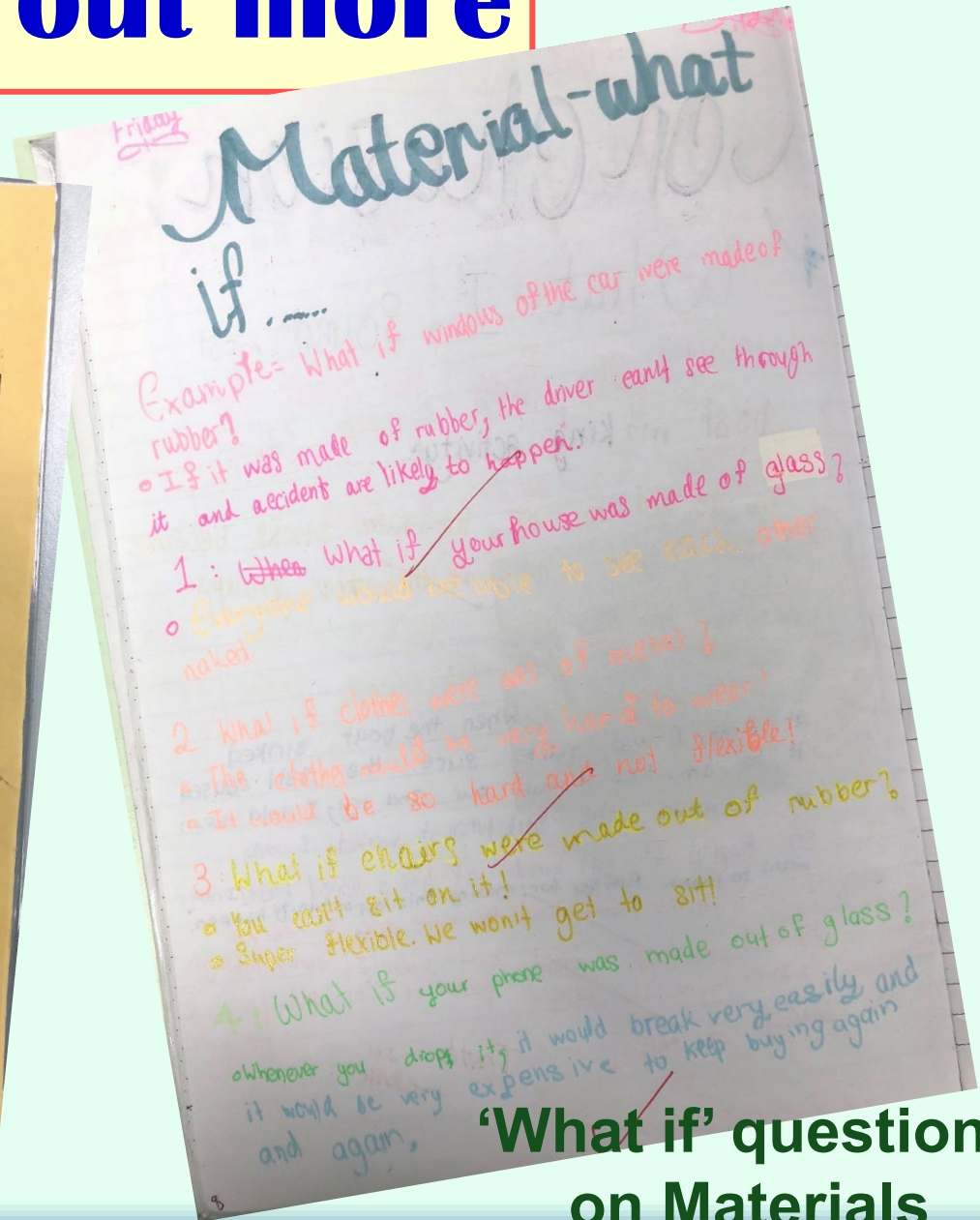
c) Write down or draw what you have learnt after you have carried out step (b).

Dolphins

Dolphins are carnivores. Known for their playful behavior, dolphins are highly intelligent. They are as smart as apes, and the evolution of their larger brains is surprisingly similar to humans.

BTPS Science Around Me (SAM) Self-assessment

So interesting, Aimee



'What if' questions on Materials

3) Explain thinking using relevant science concepts

Day 1 First day of growth
 It takes about 30 to 40 days to grow.
 many days pass, we wait for it to grow.

Day 2 Second day of growth
 Look guys the roots are growing. I'm so happy.
 In I'm Mommo Can you teach me about plants?
 Aww you're so cute. Ok I will teach you about plants. But first how many steps it takes to become a dirt plant.

1st:- Roots
 when seeds germinated, roots grow first. Why? Roots need to grow to help the plant absorb water and nutrients from the soil. * Roots anchor the plant to the ground.

2nd:- Shoots and stem
 After the roots grow, shoot/stem will start to grow. Why? Shoots/stem give support to the plant. * transport water and nutrients to other parts of the plant.

3rd:- Leaves
 After shoots/stem have grown, leaves will start to appear. Why? Leaves will trap sunlight which allow the plant to make its own food.

4th:- Flowers and Fruits
 Flower to be beautiful to attract animals. Understand, Mommo.
 Flower fruits will start to appear. Why? Fruit reproduce seed to allow the plant to continue its life cycle.

The group forgot about the plant and teach Mommo instead.
 RIP
 You were sleeping, Mommo!
 WAKE UP, MOMMO!
 THE END.

This is wonderful, SoCinta! it is nice doing a revision on what was discussed in class - you made it interesting with a comic!

Explaining Plant growth and Characteristics of Living Things

Zoey Helena Hyun

Characteristic: All living things can reproduce.

the fish is laying eggs
 RIP
 Lay eggs give birth
 eggs
 or
 baby
 The mother has given birth.

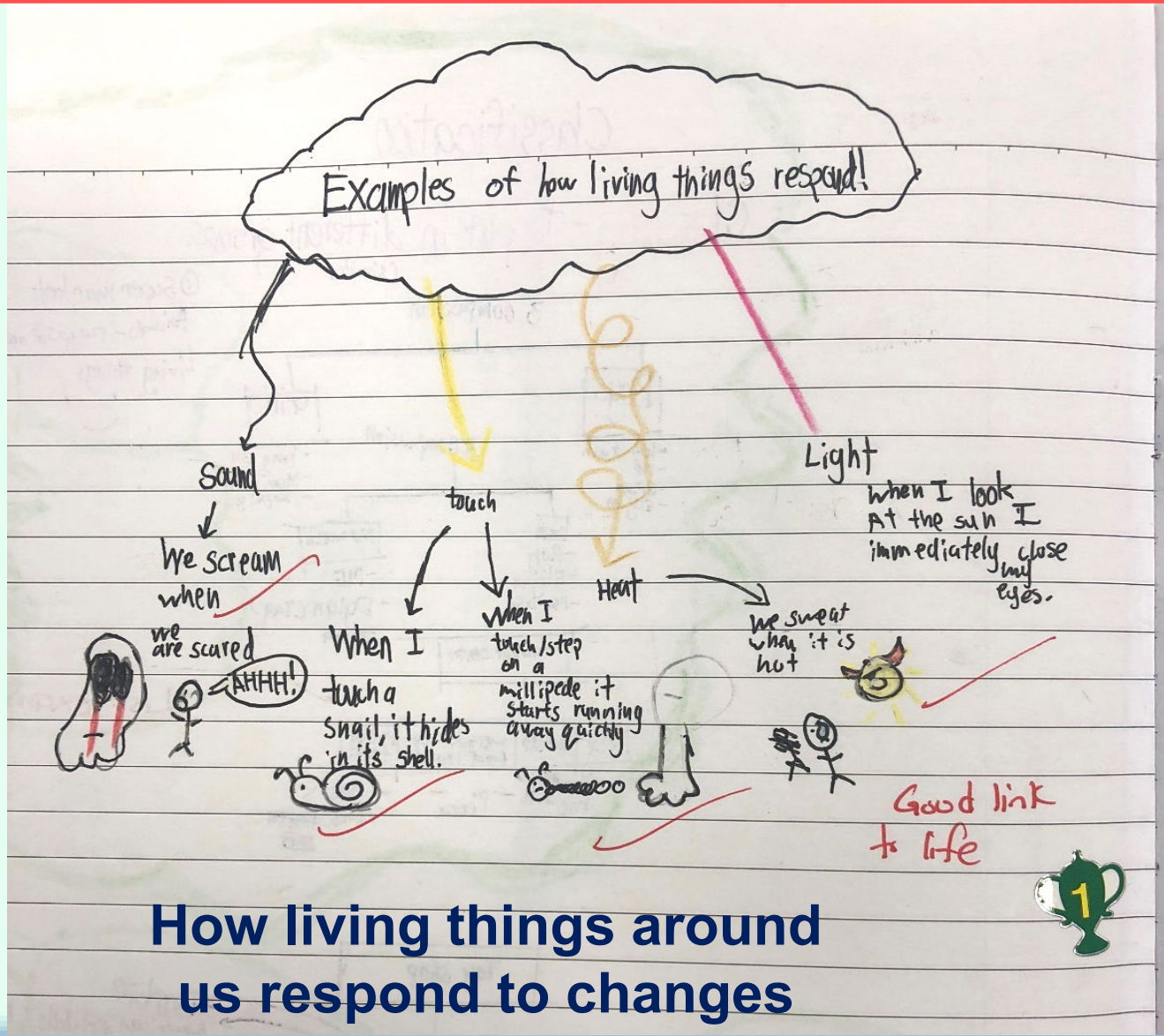
Reproduce
 taste heat touch light

Characteristic: All living things can respond to changes. - sound

Sight how does it respond?
 Mimosa plant
 it will respond when you touch it!
 of the mimosa plant the leaves will close up when you touch it.
 Living things can respond to changes.

Good Effort!

4) Link science learning to life



How living things around us respond to changes

Use of Magnets in everyday objects!

- 1.) List down at least 2 objects.
- 2.) Explain how the magnets work in the objects.

1.) Microphones

- Scrap yard cranes
- Cameras
- Refrigerator
- Rollercoaster
- Satellite
- Microwave
- Speakers
- Credit Cards
- Maglev train



magnet Maglev train

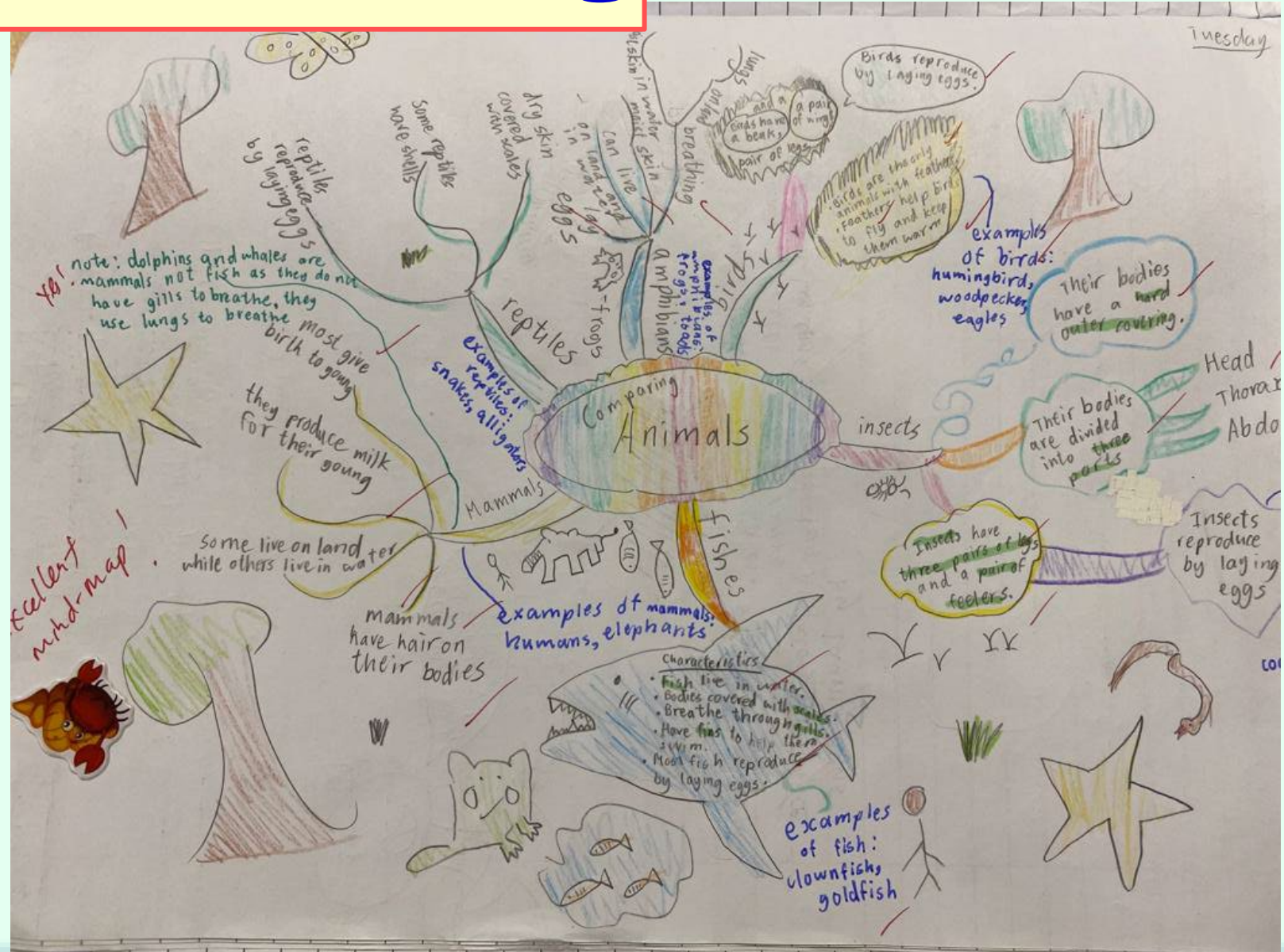
2.) Scrap yard cranes is to pick up heavy scrap metal with the magnet at the crane.

In the maglev train that levitate by magnetic attraction, the bottom of the train wraps around the guideway. Levitation magnets on the underside of the guideway are position to attract the opposite poles of magnets on the wraparound section of the maglev. This raises the train off the track.

The stripe on the back of a credit card is a magnetic stripe, often called a magstripe is made up of tiny iron-based magnetic particles in a plastic-like film. Each particle is really a very tiny bar magnet about 20 millionths of an inch long.

How magnets are used in things around us

5) Reflect on their learning



Drawing a Mindmap on Animals

Science Weighted Assessment @ P3

	Term 1	Term 2	Term 3
Base Mark	20	30	30
Weightage	10%	15%	15%
Schedule	17 Feb-7 Mar	28 Apr -16 May	4-22 Aug
Format	MCQ, Structured Questions	MCQ, Structured Questions	MCQ, Structured Questions
Duration	30 min	40 min	40 min



P3 Science End-of-Year Examination (EYE) Format

	Term 4
Weightage	60%
Schedule	23-29 Oct

Duration: 1 h 30 min

Booklet	Type of Questions	Number of Questions	Marks
A	MCQ (2 marks)	24	48
B	Structured (2-5 marks)	10-11	32
TOTAL	TOTAL	34-35	80



FAQs on learning Science...



- What assessment books do you recommend?
 - None.
- How many practice papers must my child do?
 - Just what our school gives.
- What are all the words my child needs to memorise for Science?
 - Understand the concepts. Simply memorising words without understanding won't help much.
- Do I need to give my child spelling for Science?
 - No.

Partnership with Parents

How can you help your child?

- ✓ Monitor their homework and gradually guide them towards taking ownership of their own learning.
- ✓ Encourage them to:
 - ✓ Read Science materials such as books and magazines or watch Science documentaries.
 - ✓ Pose questions and explore answers independently.
 - ✓ Create Mind Maps to summarise their knowledge.
- ✓ Help them observe the world around them and relate their observations to the Science concepts they learn in school.
- ✓ Most importantly, be encouraging and supportive!





Thank You

