Primary 4 Mathematics Curriculum Briefing

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Outline

- Mission

- Math Curriculum

- Approach to Teaching & Learning
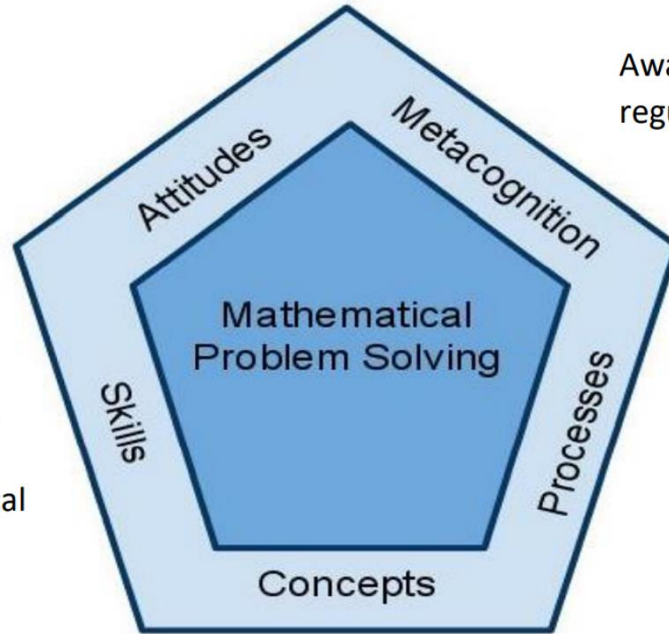
- Assessment

Mission

To develop our pupils with **mathematical concepts** and **skills** for everyday life and to equip them with **process skills to solve mathematical problems.**

Mathematics Curriculum Framework

Belief, appreciation, confidence, motivation, interest and perseverance

Awareness, monitoring and regulation of thought processes

Proficiency in carrying out operations and algorithms, visualising space, handling data and using mathematical tools

Competencies in abstracting and reasoning, representing and communicating, applying and modelling

Attitudes

Metacognition

Mathematical Problem Solving

Skills

Processes

Concepts

Understanding of the properties and relationships, operations and algorithms

Content Sequence for P4 Topics

Semester 1	Semester 2
Term 1 Numbers to 100 000 Factors and Multiples Four Operations of Whole Numbers Tables and Line Graphs	**Term 3** Decimals Four Operations of Decimals Pie Charts
Term 2 Fractions Angles Rectangles and Squares	**Term 4** Area and Perimeter Nets Symmetry

Teaching & Learning

- 11 periods of Math per week

- Use of Concrete – Pictorial – Abstract approach
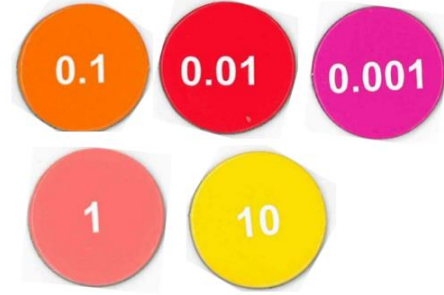
- Learning experiences

Teaching & Learning

Multi-link cubes

Fraction Discs

Number Discs

Differentiated Instructions

Choice Board

1 Use the Internet to find the distance between Singapore and the various cities	2 Use Internet to find the height of the mountains	3 Use Internet to find the length of the rivers
4 Complete the graphic organiser	Spiderman: Math Your Way Home (Compulsory question)	Complete the Math Journal
7 Complete the number pattern	8 Describe the number pattern and find the next three numbers	9 Create your own number patterns

Use of authentic data

Question 1

Use the Internet to find the distances in kilometres between Singapore and these cities. Round each distance to the nearest ten kilometres, hundred kilometres and thousand kilometres.

Complete the table.

City	Distance in km (from Singapore)	Rounded to the nearest ten km	Rounded to the nearest hundred km	Rounded to the nearest thousand km
Bangkok				
Seoul				
Tokyo				
Hong Kong				
New York				

What

When rounding to the nearest ten, I look at the digit in the _____ place.

When rounding to the nearest hundred, I look at the digit in the _____ place.

When rounding to the nearest thousand, I look at the digit in the _____ place.

Build metacognition

Question 6

(a)

The cost of the mobile phone is about $1900. Therefore, the greatest possible value of the mobile phone before it was rounded to the nearest hundred is $1899.
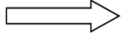
Terri

Is Terri correct? Please explain.

Heuristics Skills

Example:

Meiling wants to come up with as many 2-digit numbers as possible using the digits, 3, 5, 7 and 8. Each digit can be used more than once. How many possible 2-digit numbers can Meiling form?
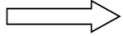
Solution:

First, write down all the possible 2-digit numbers starting with 3. → 33   35   37   38

Write down all the possible 2-digit numbers starting with 5, then with 7 and lastly with 8. →

|			
33	35	37	38
53	55	57	58
73	75	77	78
83	85	87	88

Ans: She can form **16** 2-digit numbers.

Gap and Intervals

Questions involving gap and intervals test pupils on finding the number of gaps between the items.

Take note that the number of gaps is one less than the number of items. For example, there is 1 gap between 2 trees, 2 gaps between 3 trees, 3 gaps between 4 trees and etc.

Sample Question :

Mr Lee owns a 104 durian trees plantation. He planted the durian trees at an equal distance apart. The distance between the first durian and the last durian tree is 61.8 m. Find the distance between the first and the tenth durian tree. (give your answer in cm)

First tree   equal distance   Second tree   ....   Last tree

61.8 m
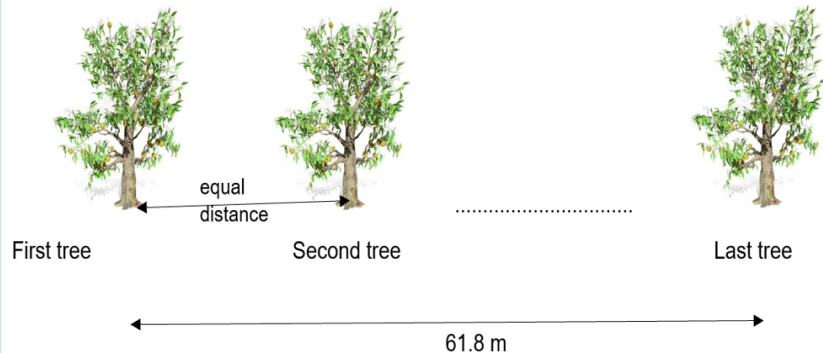
Experiential Learning

4F_Revision on P3 Time and Learning P4 Time

Oh no! Time has stopped!!!

The World Clock has been hacked into and now no one can tell time accurately!

THIS IS A DISASTER!

We need you to use your time telling skills to start the World Clock again!

Mission 1 – Time in Hours and Minutes

Mission 1

Learn how to tell **Time in Hours and Minutes** correctly! Do it quick! Time is not on our side!

What did you do on a Sunday? Now it is your turn to record your activities in the table below:

Starting time on 12-hour clock	Finishing time on 12-hour clock	Duration	Activity

Draw your timeline in the box provided below based on the activities recorded in the table.

ICT Enriched Lesson

Double click the picture below.
Join the dots to find out what is inside!
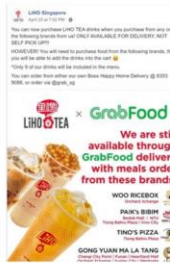
Tuning-in activity

When to use a line chart - line charts vs. bar charts
Watch later   Share

© Content in the frame is from an external source.
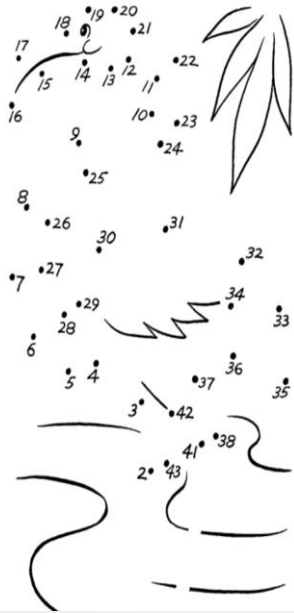
Read the reports from 3 dates below.
Use the information below and complete the line graph for LiHO Bubble Tea outlet X.

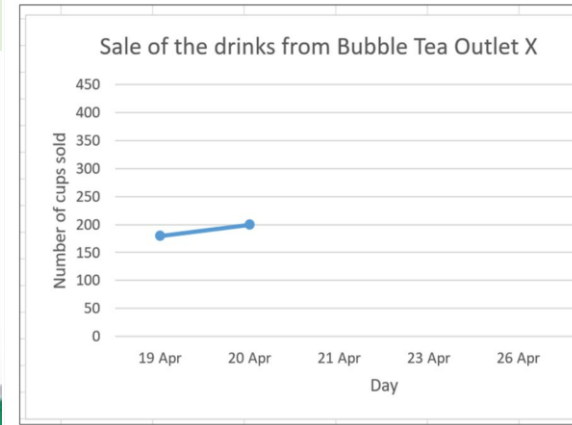**21 Apr:** Long queues at bubble tea shops before it closes right before midnight

THE STRAITS TIMES
Long queues at bubble tea shops after more businesses told to close by midnight under stricter Covid-19 measures.

23 Apr: LiHO drinks can be ordered together with meals in selected restaurants.

LiHO Singapore
You can now purchase LiHO TEA drinks when you purchase from any one of the following brands from us! ONLY AVAILABLE FOR DELIVERY, NOT SELF PICK UP!!!
HOWEVER! You will need to purchase food from the following brands, then you will be able to add the drinks into the cart
*Only 6 of our drinks will be included in the menu.
You can order from either our Boss Home Delivery @ 8333 5088, or order via @grab_sg

LiHO × GrabFood

We are still available through GrabFood delivery with meals order from these brands!
WOO RICEBOX
PAIK'S BIBIM
TINO'S PIZZA
GONG YUAN MA LA TANG

26 Apr: Many online articles reporting LiHO's launch of new "Boss Happy Delivery" website that allows order and delivery of food and LiHO drinks islandwide

GREATDEALS SINGAPORE

LiHO S'pore launches new 'Boss Happy Delivery' website so fans can order food & drinks directly

Double click the picture below and draw the graph on it.
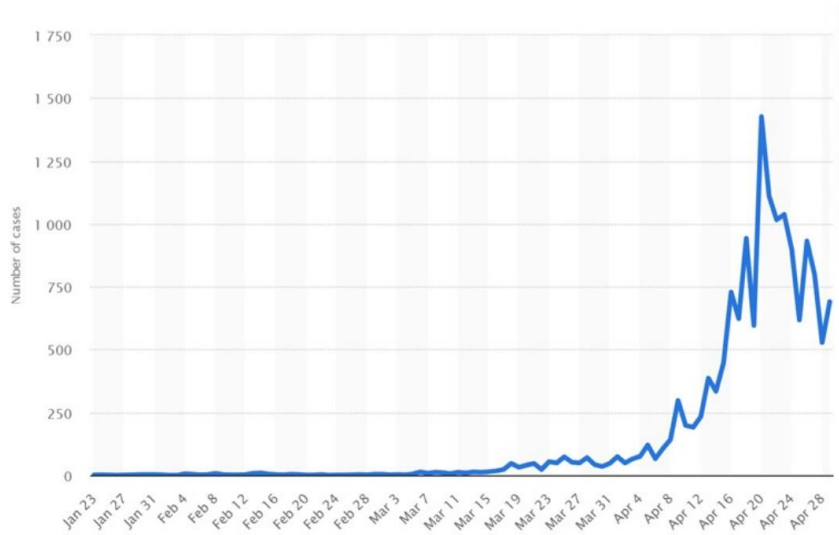
Sale of the drinks from Bubble Tea Outlet X

Plotting a line graph
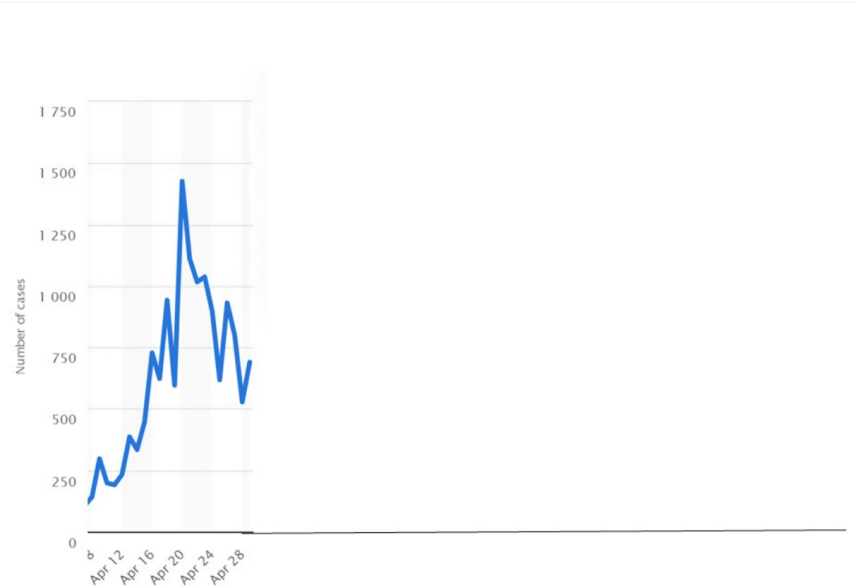
Understanding line graphs:

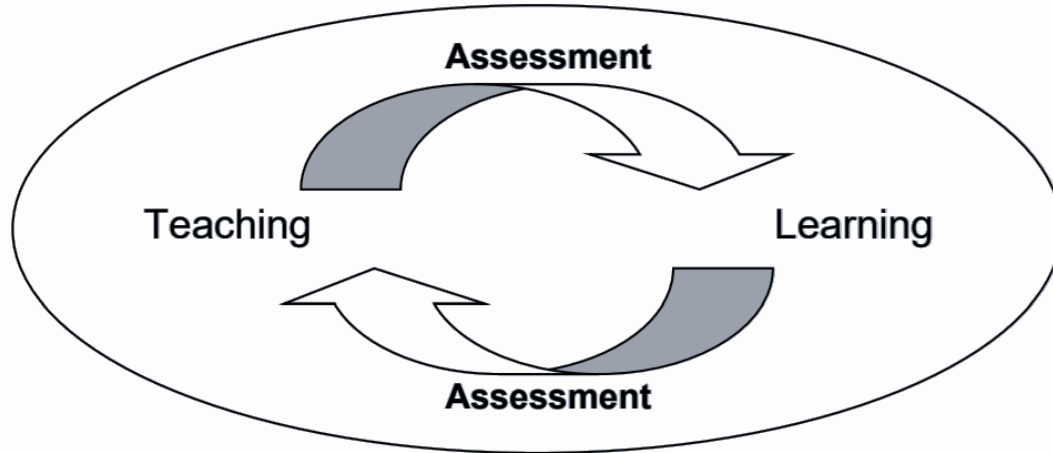The graph below shows the number of new Covid-19 cases in Singapore

In terms of the number of Covid-19 cases, complete the line graph with a trend that you wish for Singapore in the future.

Making connections between Mathematics and the real world

Assessment Matters

Assessment Matters

...lue of each digit in a number (Q1)

☐ To round numbers to the nearest ten, hundred and thousand (Q2,10)

☐ Write a number as the sum of the values of each digit in the number (Q3,4,7,8)

☐ Look for a pattern to solve a problem (Q5)

☐ Translate numerals to words (Q9)

☐ Compare and order numbers up to 100 000 (Q6)

☐ Solving word problems involving numbers to 100 000 (Q 11 - 14)

I am 🙂 🙁 🫣 🤦 😡 over my performance because

_____

_____

Page Number & Question Number	Learning Outcomes
Pupil's Book 4A • Pg 7 to11 **WB 4A Chapter 1** • Pg 5 to 6	**Numbers to 100 000** • Recognise that 10 thousands = 1 ten thousand. • Translate numbers (10 000 to 99 999) from: (i)numerals and words to place value models (ii)numerals to words and (iii) words to numerals • Recognise that 10 ten thousands = 1 hundred thousand. • State the place and value of each digit in a number (10 000 to 99 999). • Write a number as the sum of the values of each digit in the number
Pupil's Book 4A • Pg 12 to 18 **WB 4A Chapter 1** • Pg 7 to 8	**Comparing and Ordering Numbers** • Compare and order numbers up to 100 000.
Pupil's Book 4A • Pg 19 to 22 **WB 4A Chapter 1** • Pg 9 to 10	**Number Patterns** • Look for a pattern to complete a number sequence.
Pupil's Book 4A • P... **WB 4A...** • P...	**Rounding & Estimation** ... • Make a list of numbers that can round to a number. • Use the rounding strategy to estimate the answers in calculations involving addition and subtraction. • Estimate to check the reasonableness of answers by rounding the number in calculations involving addition and subtraction.

Summative Assessments

Weighted Assessment 1	Weighted Assessment 2	End-Year-Examination	Total
15%	15%	70%	100%

Summative Assessments

	Weighted Assessment 1	Weighted Assessment 2
Date	Term 2 Week 5	Term 3 Week 5
Marks (Duration)	30 marks (50 min)	30 marks (50 min)
Topics	Numbers to 100 000 Factors & Multiples Four Operations on Whole Numbers Tables & Line Graphs	Fractions Angles Squares & Rectangles

Weighted Assessment Feedback

P4 Math - Teacher Assessment Checklist (WA1)

Name: _____ Class: _____ |

Qn	Learning Objectives	Have understanding	Lack understanding	Computation errors
1	Number notation, representation and place values (thousands, hundreds, tens and ones)			
2	Reading and writing numbers in numerals and in words			
3	Finding sum *(without renaming)*			
4	Finding difference *(without renaming)*			
5	Finding product			
6	Finding quotient and remainder			
7	Comparing and ordering numbers			
8	Add with renaming (up to 4 digits)			
9	Odd and even numbers			
10	Patterns related to whole numbers			
11	Division (up to 3-digits by 1 digit)			

Student's reflection:

I am (*satisfied / not satisfied) with my performance in WA1.
I need to work on the following area(s) :

_____

_____

End-Year Examination

Duration: 1 h 45 min

Section	No. of Questions	Item Type	Marks
Section A	20	Multiple Choice	40
Section B	20	Short Answer	40
Section C	5	Word Problems	20
Total	45		100

How can you help your child?

○
- Make math **Fun**

- Show the relevance of Math in real-life

- Provide a **supportive** environment

- Ensure that they have shown you their work and filed it properly to facilitate revision.

- **Be encouraging** and adopt a **positive mindset,** celebrate every success!

Thank you!