Catholic Mission School

P.2 MULTIPLICATION JOURNEY TO THE CHOCOLATE FACTORY

By (Ms Wong, Mr Wong, Ms Yueng, Ms Huang)

Our sharing

01 Introduction

02 Lesson Sharing

03 Mission Cards

04 Senior Student storytelling

01

Introduction

Background

1. About 50% of them are non- Chinese students.
2. Our students comes from different countries with different culture.
3. They come from more than 20 different countries

Students' learning cultures

- Hate drilling Mathematics questions
- NO patience in listening to instructions
- Short attention span
- Activities and games lovers
- Enjoy learning through activities and games.

Our ideas arise from...

02

Math lesson sharing

Different methods to do multiplication

Lesson Plan for Multiplication of 3

- Warm up by Rhythm Counting
- Introduce Skip Counting using Number line and Rhythm Counting
- Introduce Repeated Addition
- Finish a worksheet with 3 different methods: Skip Counting, Repeated Addition, and Reciting Multiplication table
- Ask the students to compare and pick a favourite method

Lesson Video

Examples of lesson worksheets

Catholic Mission School

Mathematics Worksheet

Multiplication of 3 Activity worksheet

Name: Liang Yee Woai (14) Date: 12-11-2020

Class: 2 A Marks: _____

Task 2 Counting, Adding or Multiplying?

What numbers can you get when you count by 3?

Mark down the numbers: 3, 6, 9, 12

How can you get these numbers?

We can have different ways to get these numbers.

E.g.	Let's check 6
Counting by 3	Stick the colour stickers 
Repeated Addition	3 + 3 = 6
Multiplication	3 × [2] = 6

Question 1	Let's check 3
Counting by 3	Stick the colour stickers 
Repeated Addition	3=3
Multiplication	3 × [1] = 3

Question 2	Let's check 9
Counting by 3	Stick the colour stickers 
Repeated Addition	3+3+3=9
Multiplication	3 × [3] =9

Question 3	Let's check 12
Counting by 3	Stick the colour stickers 
Repeated Addition	3+3+3+3=12
Multiplication	3 × [4] =12

Question 4	Let's check 15
Counting by 3	Stick the colour stickers 
Repeated Addition	3+3+3+3+3=15
Multiplication	3 × [5] =15

Examples of lesson worksheets

Task 3 Introducing Multiplication by 3

$3 \times 1 = 3$
$3 \times 2 = 6$
$3 \times 3 = 9$
$3 \times 4 = 12$
$3 \times 5 = 15$
$3 \times 6 = 18$
$3 \times 7 = 21$
$3 \times 8 = 24$
$3 \times 9 = 27$
$3 \times 10 = 30$

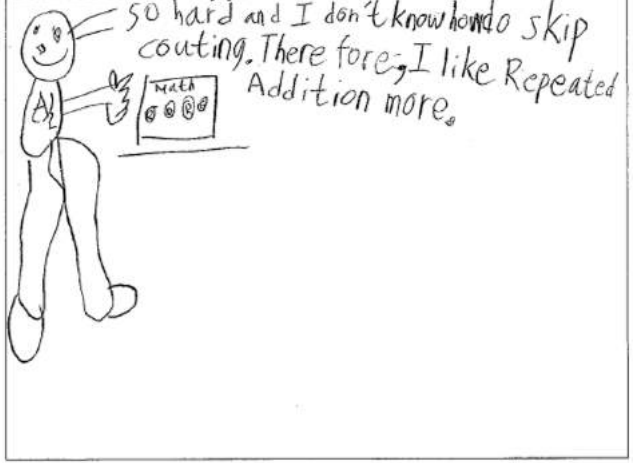
Conclusion

Which method do you like?

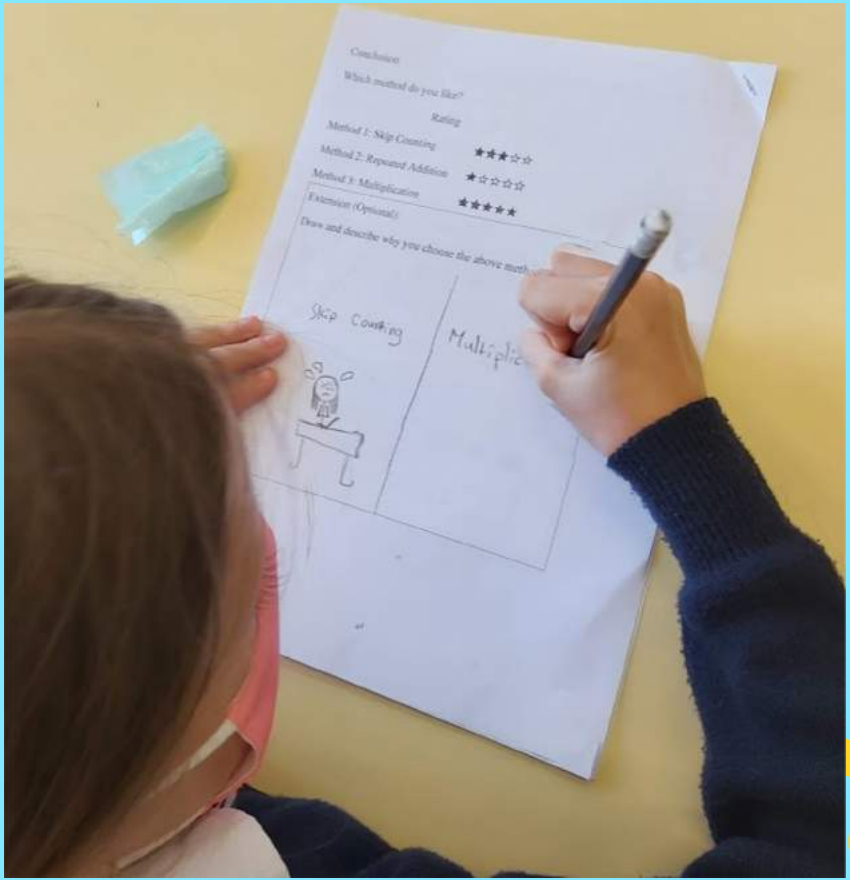
	Rating
Method 1: Skip Counting	★☆☆☆☆
Method 2: Repeated Addition	★★★★☆
Method 3: Multiplication	★★★★☆

Extension (Optional):

Draw and describe why you choose the above method?



Examples of lesson worksheets



Examples of lesson worksheets

Conclusion

Which method do you like?

Rating

Method 1: Skip Counting ★★★★★

Method 2: Repeated Addition ★★★★☆

Method 3: Multiplication ★★★★★

Extension (Optional):

Draw and describe why you choose the above method?

Conclusion

Which method do you like?

Rating

Method 1: Skip Counting ☆☆☆☆☆ ?

Method 2: Repeated Addition ☆☆☆☆☆ ? You Don't like any of it ?

Method 3: Multiplication ☆☆☆☆☆ ?

Extension (Optional):

Draw and describe why you choose the above method?

I choose Method 3 because
Because I can check the answer
from multiplication table

Is good !

B

Conclusion

Which method do you like?

Rating

Method 1: Skip Counting ★☆☆☆☆

Method 2: Repeated Addition ☆☆☆☆☆

Method 3: Multiplication ★★★★★

Extension (Optional):

Draw and describe why you choose the above method?

Teacher as a facilitator

- Invite students to lead class to chant
- Instruct students to use TouchCount to show multiples of three and thus other students could visualize them
- Engage the whole class via joint-activities skip counting
- Use Worksheets to solidify the ideas and knowledge learnt
- Allow the student to choose their favourite method to increase their learning interests

03

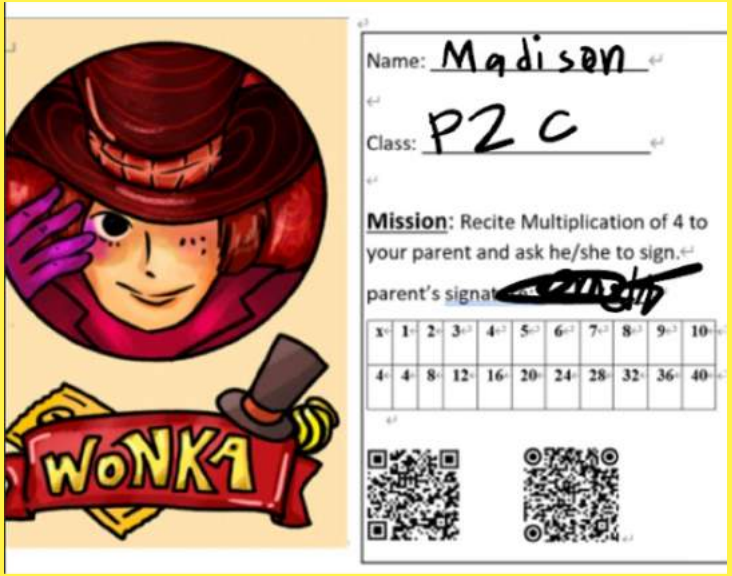
Math Mission cards

英 e: _____

Class: _____

Mission: Rap Multiplication of 3 and take a video then upload to Google classroom.

x	1	2	3	4	5	6	7	8	9	10
3	3	6	9	12	15	18	21	24	27	30



Name: Madison

Class: P2 C

Mission: Recite Multiplication of 4 to your parent and ask he/she to sign.

parent's signat

x	1	2	3	4	5	6	7	8	9	10
4	4	8	12	16	20	24	28	32	36	40

Mission Card as an informal curriculum

1. Facilitating Maths conversation outside classroom

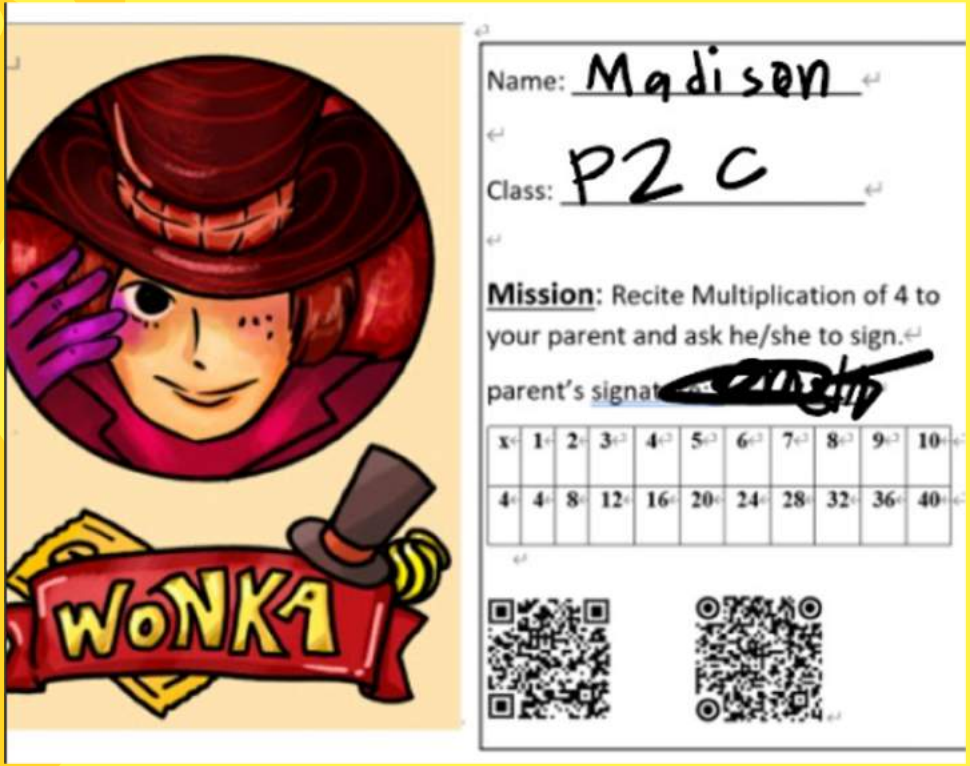
1. Motivate students to learn multiplication in a less stressful way

1. A spontaneous process, practice at their own pace

1. Family, friends teachers, work together to help pass the missions.

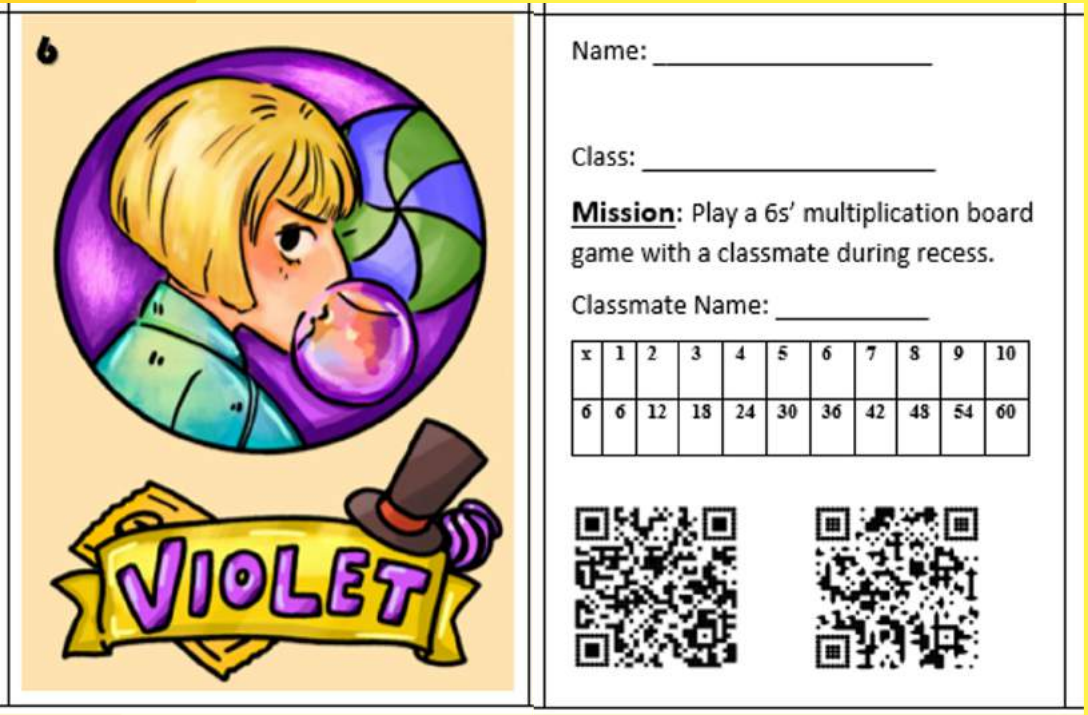
Each of them will receive a mission card with different tasks, 3 Times per week. During school suspension, we upload mission cards to google classroom.

Mission Card example 1



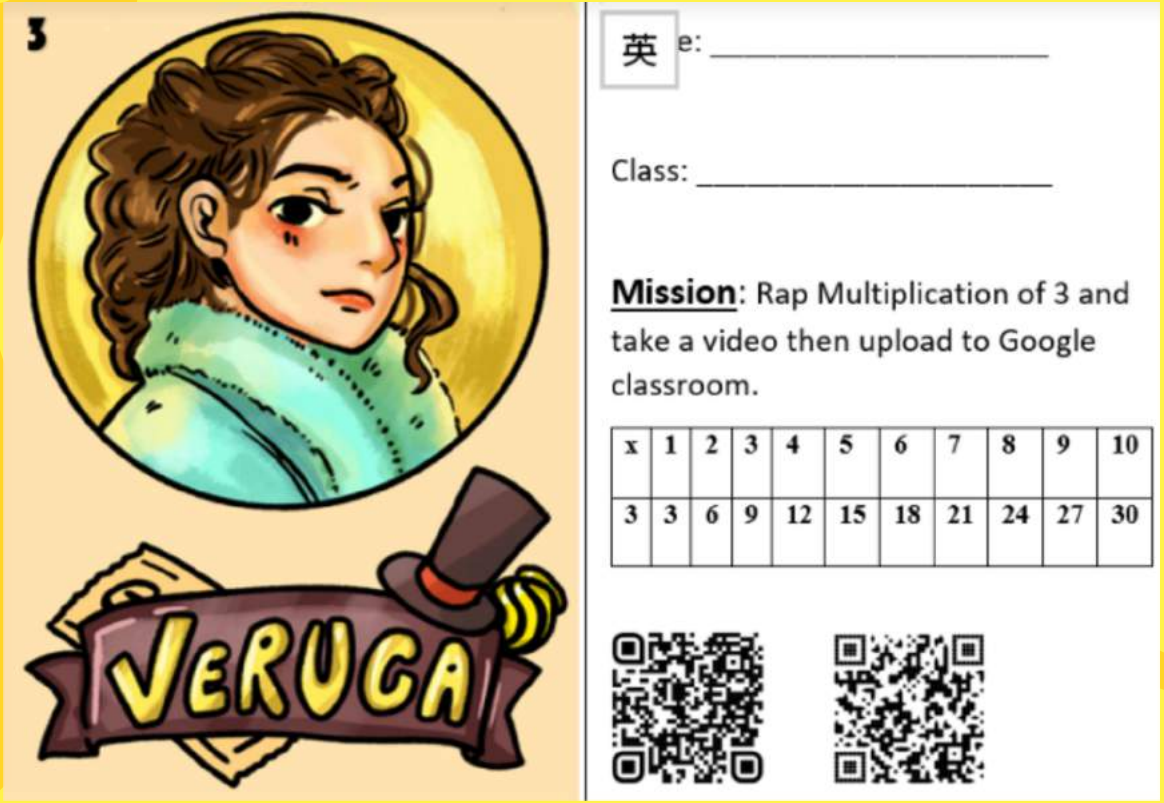
For example,
recite times table of 4 to an adult around them (helper, tutor, granny, etc) and ask the person to sign it afterward.

Mission Card example 2



The task is to play a 6s' multiplication board game with classmates during recess.

Mission Card example 3



英 e: _____

Class: _____

Mission: Rap Multiplication of 3 and take a video then upload to Google classroom.

x	1	2	3	4	5	6	7	8	9	10
3	3	6	9	12	15	18	21	24	27	30

Learning journey of multiplication Board

P2 classrooms

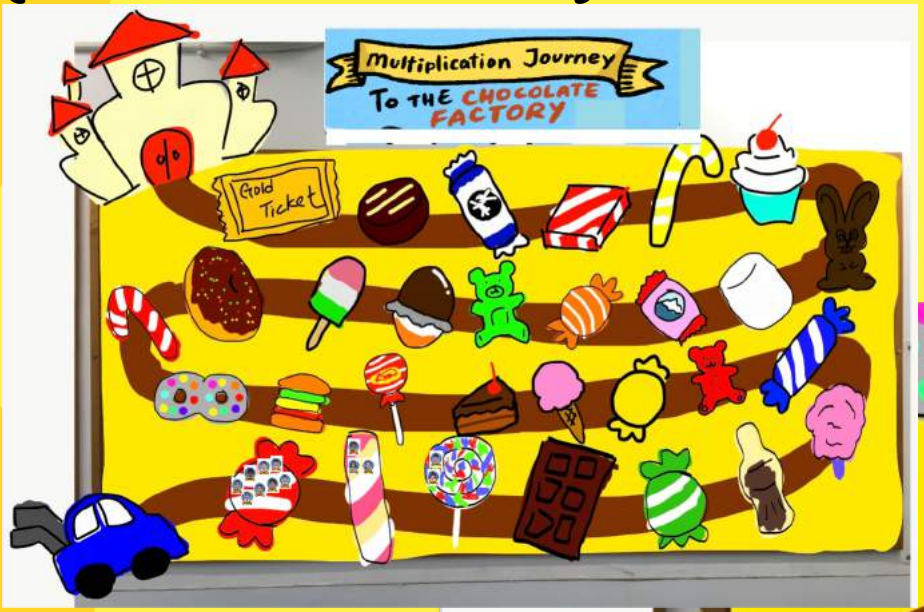
Mission 2 completed, 1 step further

Mission 1 completed, 1 step further

Learning journey of multiplication Board (online version)

1.A visual path of their achievement

2.Complete all the missions and arrive at the chocolate factory to earn a golden ticket (a reward and recognition of their achievement)



Is shared on google classroom allowing students to see their progress any time

We can achieve...

1.Learning as assessment

2.Self-regulation

3.Self-assessment , peer- assessment facilitate home-school support for the students

4.attitude: persistence

04

Mathematics Storytelling

Nurturing Mathematics Story reading culture with the help of senior form students

Reading aloud of Math Story Book by senior form students help students

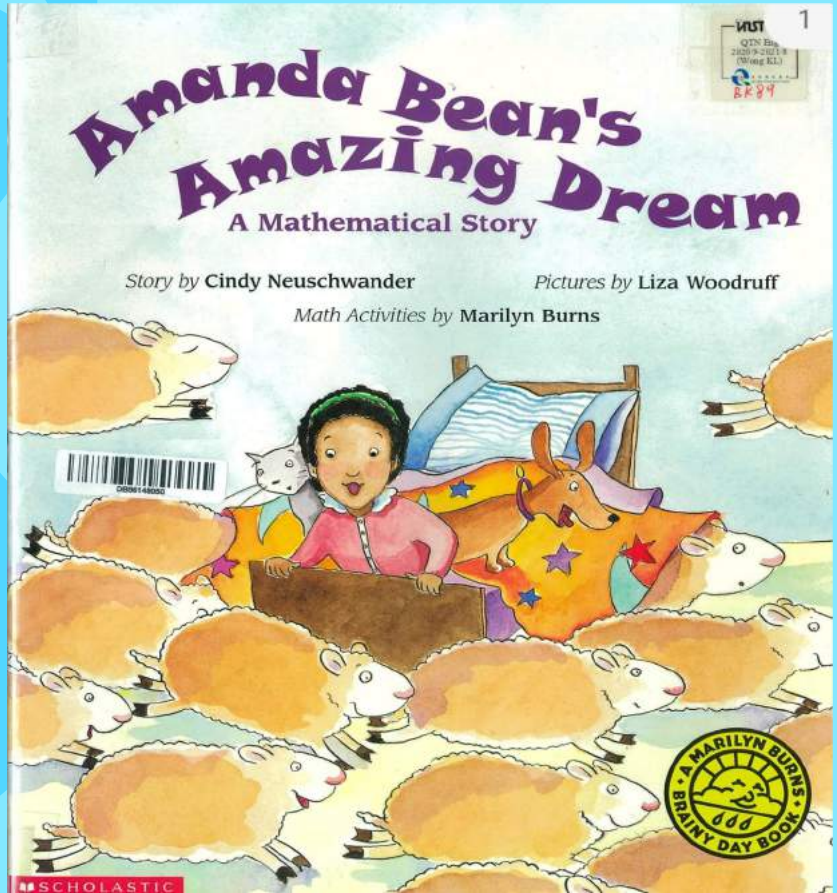
1. create a lifetime interest in Maths

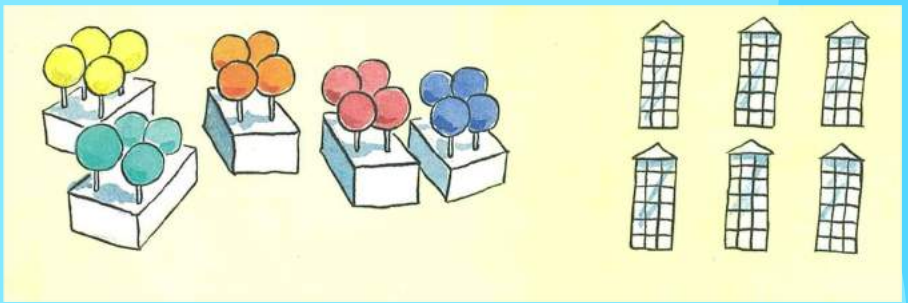
1. extend their attention spans

1. aid in both language and Maths development

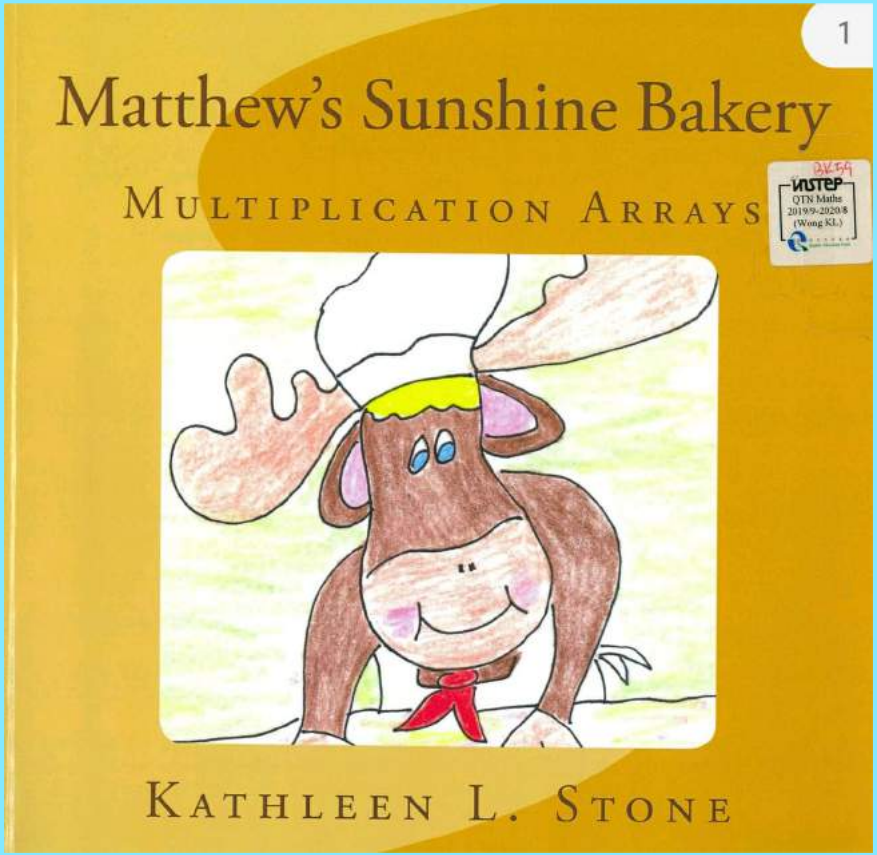
1. build their comprehension of Maths' concept

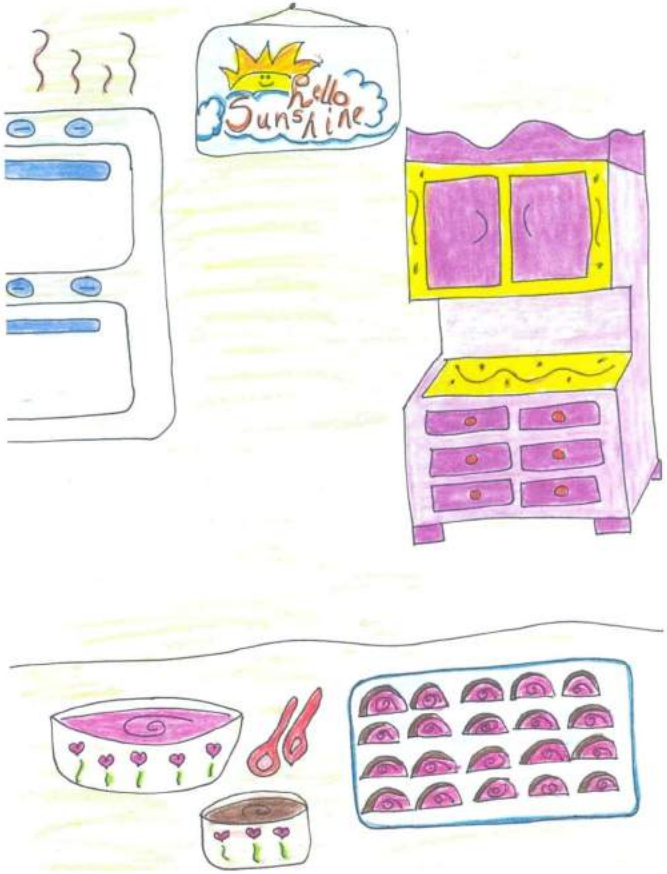
Amanda Bean's Amazing Dream



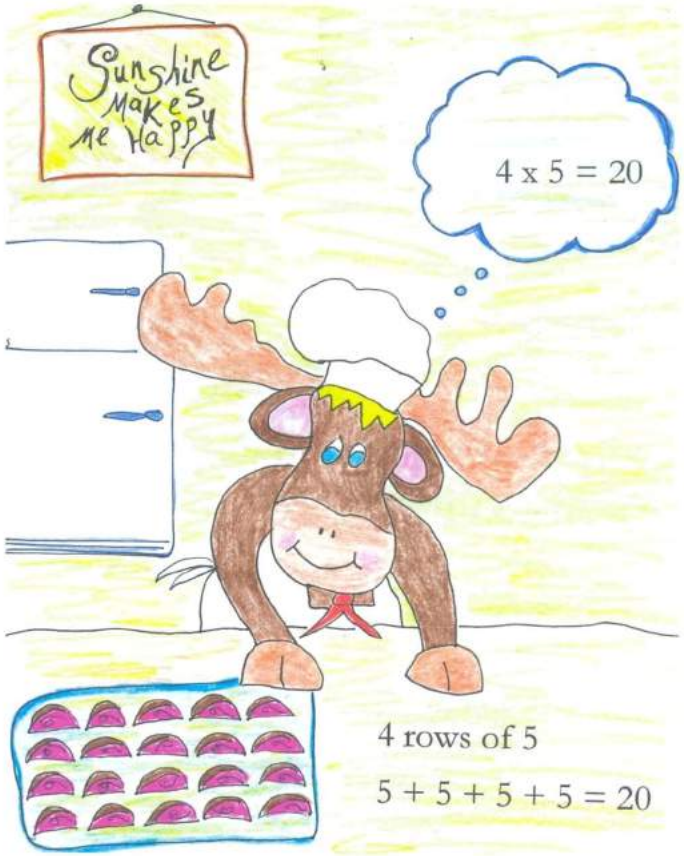


Matthew's Sunshine bakery





There are *four* rows of *five* candies
Arranged on Matthew's tray.
So what's the multiplication equation
You would say for this array?



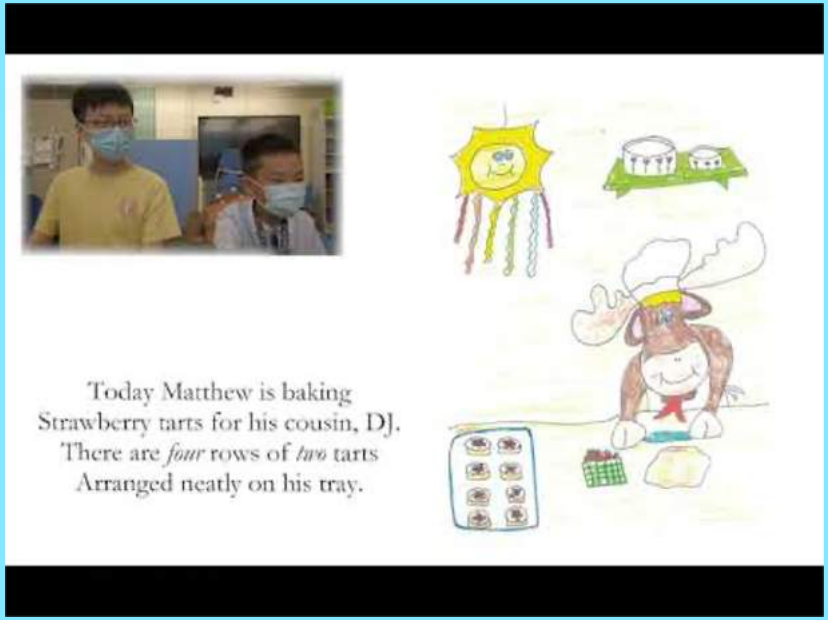
Did you say *four* times *five* equals *twenty*?
If you did, you were right!
You are a great mathematician.
A quick thinker and very bright!

Why do we invite P6 students to do story telling instead of teachers?

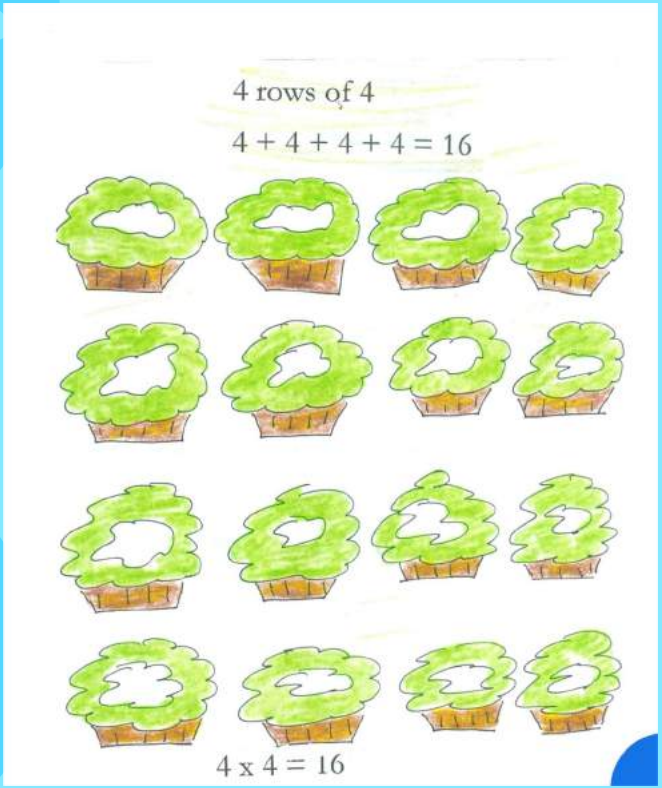
1. senior students show as good model to junior students

1. P6 students students receive praise and appreciation from teachers -to build up positive learning attitude

Matthew's Sunshine bakery



Arrays



- an arrangement of objects, pictures, or numbers in columns and rows.
- useful representations of repeated addition and multiplication concepts.
- Encourage children to think of "real life" arrays they have seen e.g. eggs in an egg carton, paints in a watercolor tray, crayons in a crayon box, etc.

Expected Outcome for story telling of Math:

1. promote students’ participation and interest

1. build up their Maths’ concept

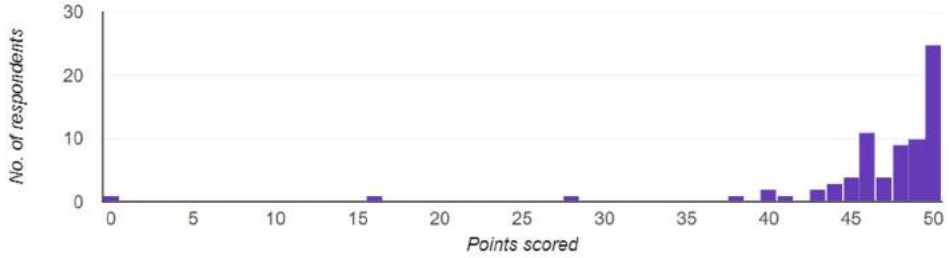
1. Learn language and Math representation

Multiplication Pre-test

Insights

Average	Median	Range
46.23/50 points	48/50 points	0-50 points

Total points distribution



Result of the 75/100 responses

Google form

Multiplication Pre-Test

No Calculator, no multiplication table.
Let's see how much you can answer!

8 x 6 = ? *

Short-answer text

12 x 10 = ? *

Short-answer text

7 x 6 = ? *

Short-answer text

Paper Version

Name: _____ Class: _____ Time: _____

1.	8 x 6 = _____	26.	6 x 11 = _____
2.	12 x 10 = _____	27.	4 x 3 = _____
3.	7 x 6 = _____	28.	6 x 6 = _____
4.	12 x 11 = _____	29.	8 x 8 = _____
5.	8 x 3 = _____	30.	9 x 4 = _____
6.	9 x 12 = _____	31.	5 x 5 = _____
7.	6 x 9 = _____	32.	8 x 4 = _____
8.	0 x 17 = _____	33.	9 x 5 = _____
9.	9 x 7 = _____	34.	9 x 3 = _____
10.	5 x 9 = _____	35.	6 x 5 = _____
11.	12 x 6 = _____	36.	6 x 7 = _____
12.	5 x 7 = _____	37.	3 x 5 = _____
13.	5 x 2 = _____	38.	6 x 2 = _____
14.	3 x 10 = _____	39.	5 x 7 = _____
15.	11 x 4 = _____	40.	12 x 5 = _____
16.	3 x 7 = _____	41.	7 x 4 = _____
17.	9 x 11 = _____	42.	9 x 8 = _____
18.	6 x 4 = _____	43.	9 x 11 = _____
19.	5 x 8 = _____	44.	7 x 9 = _____
20.	2 x 7 = _____	45.	1 x 12 = _____
21.	3 x 6 = _____	46.	9 x 6 = _____
22.	6 x 6 = _____	47.	2 x 2 = _____
23.	8 x 3 = _____	48.	8 x 12 = _____
24.	2 x 2 = _____	49.	3 x 8 = _____
25.	8 x 2 = _____	50.	10 x 3 = _____

Positive Impact on NCS students

- Unbelievable high score in the Pre-test
- Request for mission cards proactively
- Students gain confidence in reciting multiplication table
- Parents take part in helping their children

Thank You !