

STRATEGIES TO SUPPORT STUDENTS' NUMBER CONCEPTS AND ADDITION COMBINATIONS DEVELOPMENT IN MULTILINGUAL CLASSROOM

PAT HEUNG CENTRAL PRIMARY SCHOOL



STUDENTS' BACKGROUND

- Grade level: P.1
- Number of students: 65 (3 classes)
- Number of NCS students: 33
- Number of local students: 32

CHARACTERISTICS IN OUR CLASSROOM

- Huge learning diversity (even within NCS group)
- Lack of support from family (Not only NCS students)
- English as medium of math education

STRATEGIES USED

- Holistic approach
- Sustainable approach
- Amendment and abridgement of textbooks' chapters

TASK / TALK / TOOL

Tasks: Counting activities, logical practice, etc

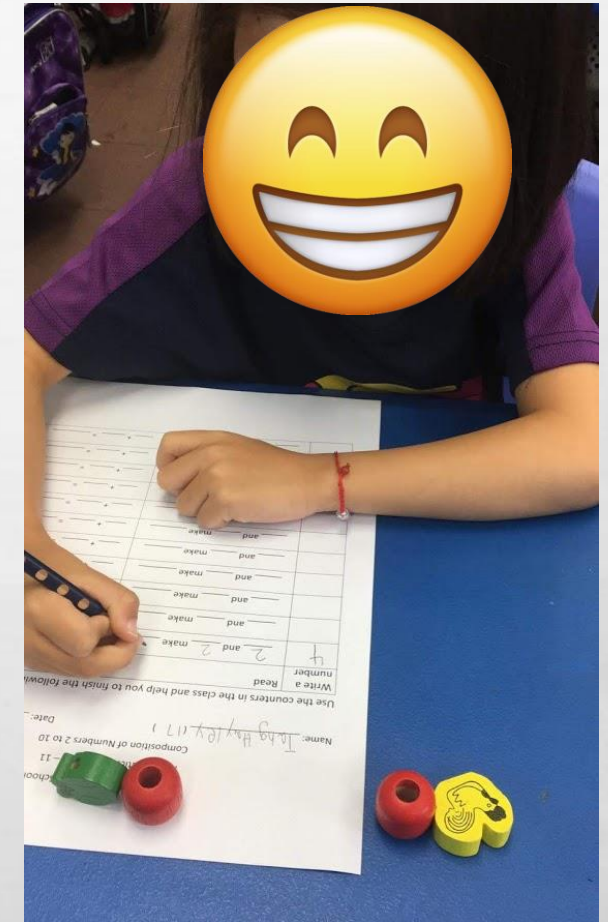
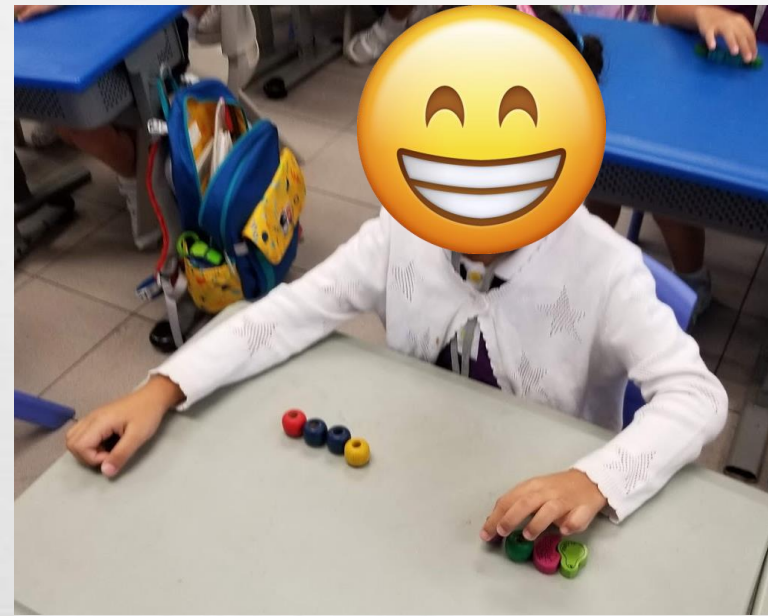
Talk: Simple consistent language ("___and___make___")

Tools: Counters, 10 frame, relational rods, etc

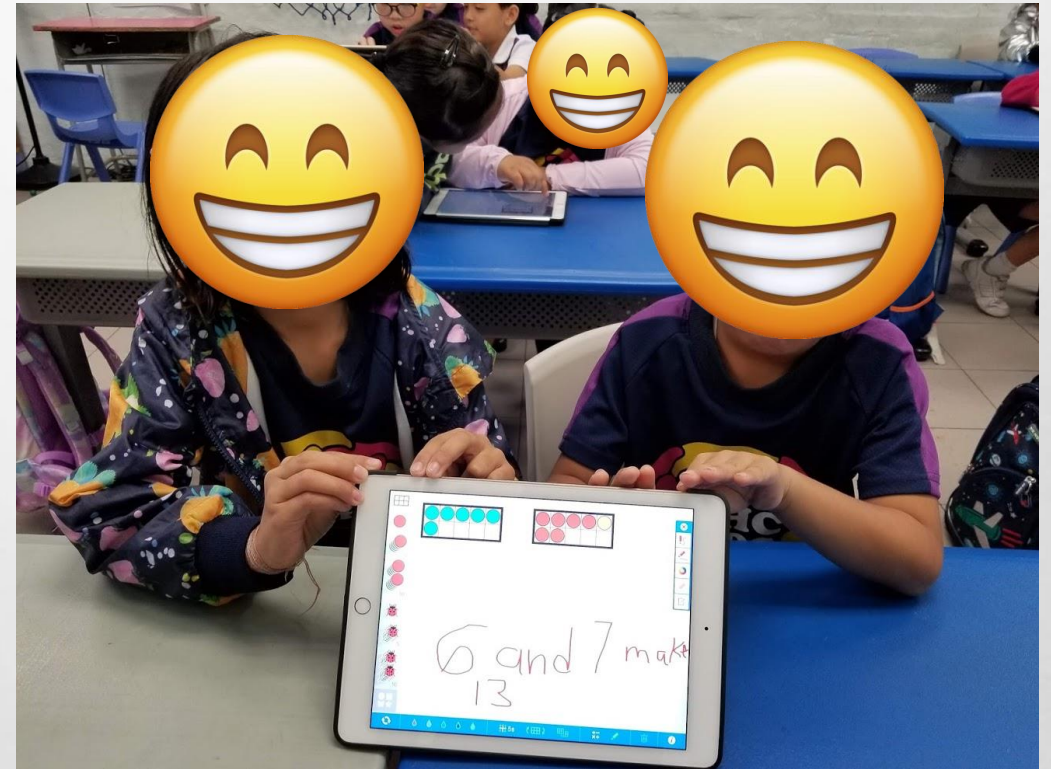
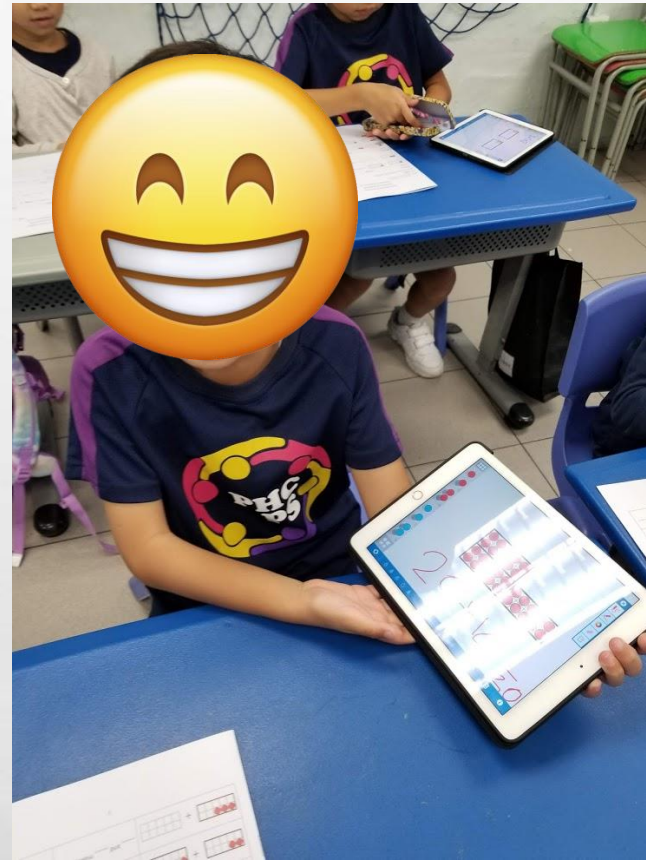
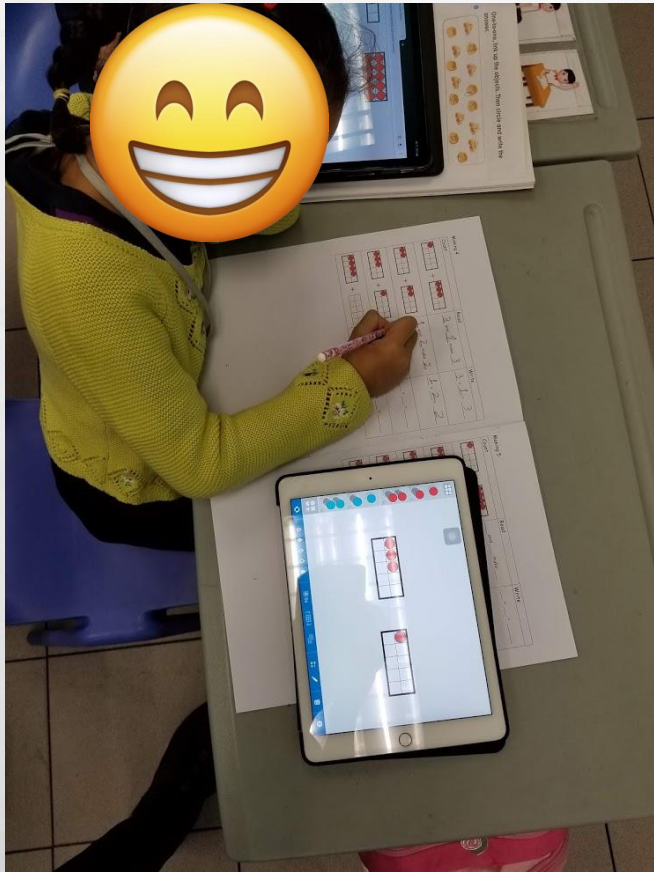
VARIOUS TOOLS AND TASKS FOR STUDENTS TO UNDERSTAND THE CONCEPTS

- Counters
- Various representations of concepts : number frame (10-frame), number lines, cheery model, bar model, c-rods, drawings, etc.
- Story books
- In class math Game
- Nursery rhymes and songs

COUNTERS



VARIOUS REPRESENTATIONS: 10 FRAME



VARIOUS REPRESENTATIONS: 10 FRAME AND CHERRY MODEL

Pat Heung Central Primary School
Mathematics - WS 22
Name: Summer (1)
Date: 3-10-2019
Class: 1 A / B / C

1. $9 + 5$ $= \frac{10}{10} + \frac{4}{4}$ $= \underline{14}$	
2. $9 + 6$ $= \frac{10}{10} + \frac{6}{6}$ $= \underline{15}$	
3. $9 + 7$ $= \frac{10}{10} + \frac{7}{7}$ $= \underline{17}$	
4. $9 + 8$ $= \frac{10}{10} + \frac{8}{8}$ $= \underline{18}$	

Pat Heung Central Primary School
Mathematics - WS 22
Name: Abushka Rana (13)
Date: 3-10-2019
Class: 1 A / B / C

1. $9 + 5$ $= \frac{10}{10} + \frac{4}{4}$ $= \underline{14}$	
2. $9 + 6$ $= \frac{10}{10} + \frac{6}{6}$ $= \underline{15}$	
3. $9 + 7$ $= \frac{10}{10} + \frac{7}{7}$ $= \underline{16}$	
4. $9 + 8$ $= \frac{10}{10} + \frac{8}{8}$ $= \underline{17}$	

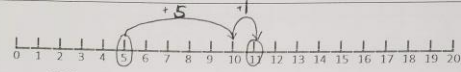
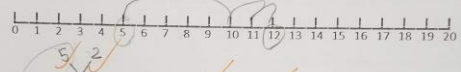
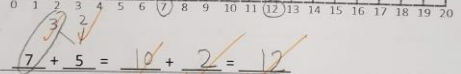
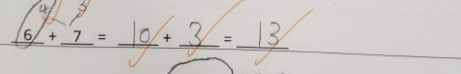
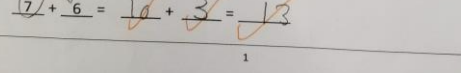
VARIOUS REPRESENTATIONS: NUMBER LINE

Pat Heung Central Primary School
Mathematics - WS 27 (Number Line)

Name: Anushka Rana Date: 18-11-20

P.1 A / (B) / C

Use the number line to make 10 and do the addition.

- 
 $5 + 6 = 10 + 1 = 11$
- 
 $5 + 7 = 10 + 2 = 12$
- 
 $7 + 5 = 10 + 2 = 12$
- 
 $6 + 7 = 10 + 3 = 13$
- 
 $7 + 6 = 10 + 3 = 13$

1

VARIOUS REPRESENTATIONS


Pat Heung Central Primary School
2019-2020
Mathematics Worksheet - Revision of Addition

Name: Ian (2) Date: 13-12-2019
Class: P.1 A / B / C

Show different expressions of the following questions of addition.

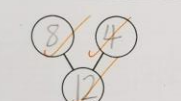
$8 + 4 = ?$

Number Line



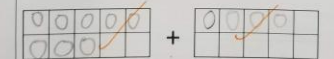
$8 + 4 = 12$

Cherry Model



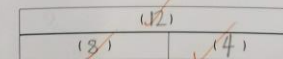
$8 + 4 = 12$

Ten Frame



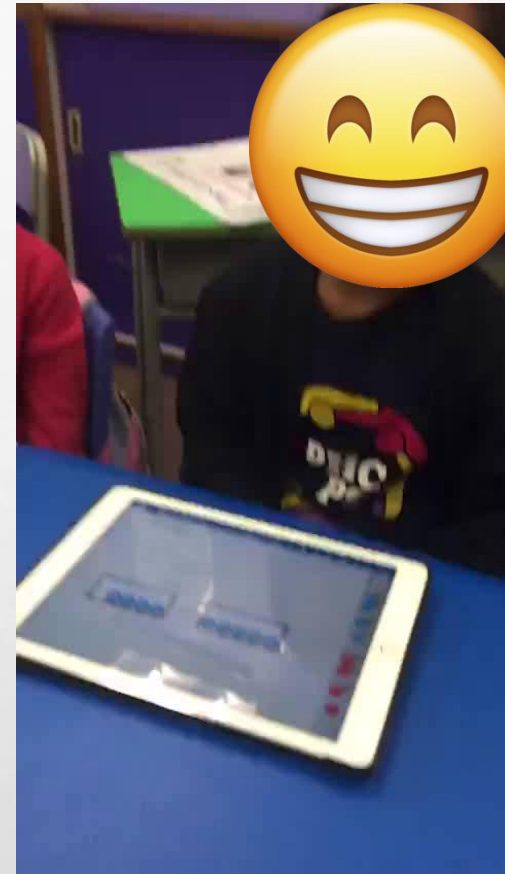
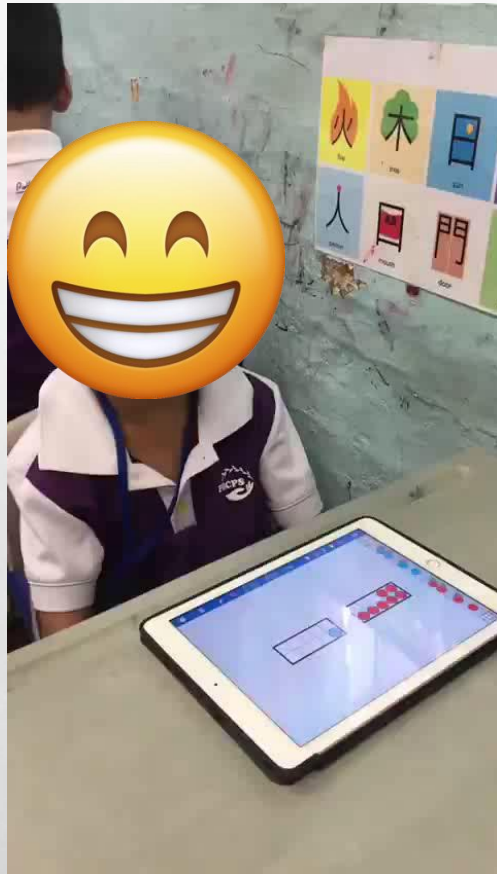
$8 + 4 = 12$

Bar Model

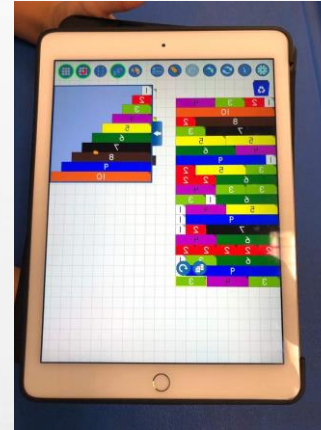
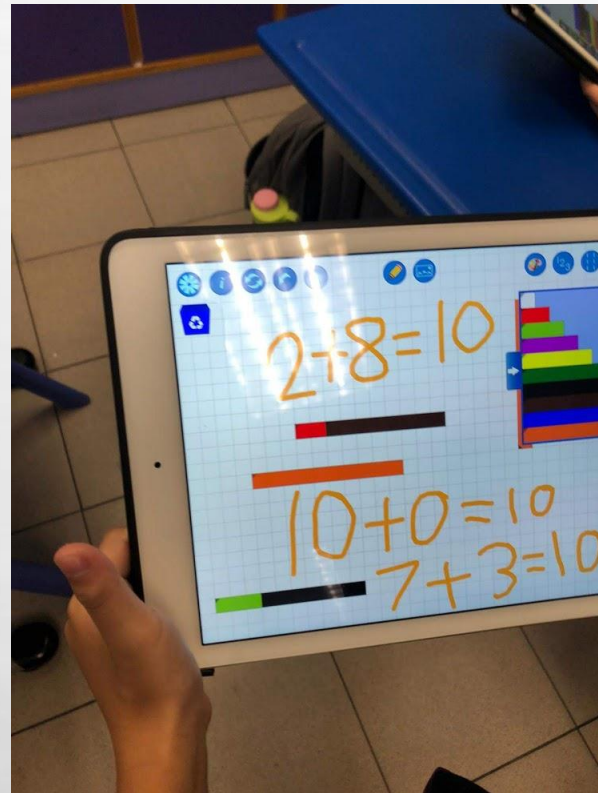


$8 + 4 = 12$

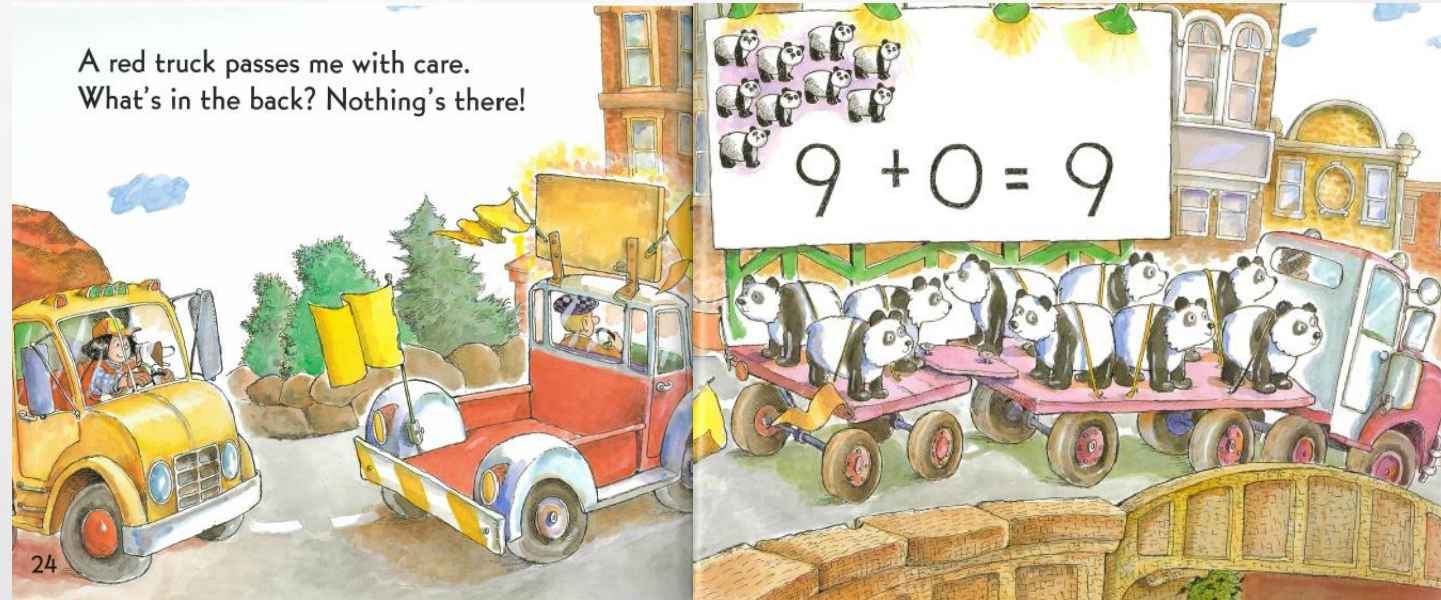
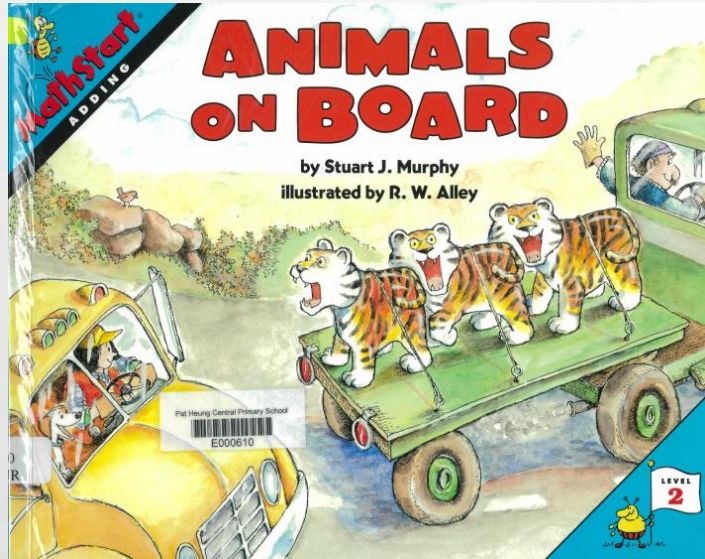
10 FRAMES AND MATH LANGUAGE



RELATIONAL RODS



NUMBER STORY



DRAWING THE ANSWERS

Draw some animals in the trucks and answer the following question.

Read the question, write the number sentence and complete the answering sentence in the box below.

How many animals are there in all?

$$2 + 5 = 7$$

There are 7 animals in all.

Draw some animals in the trucks and answer the following question.

Read the question, write the number sentence and complete the answering sentence in the box below.

How many animals are there in all?

$$5 + 3 = 8$$

There are 8 animals in all.

2. Mr Tang has 6 books. Mr P. Lui has 5 books.
How many books do they have in total?

same size

$$5 + 6 = 11$$

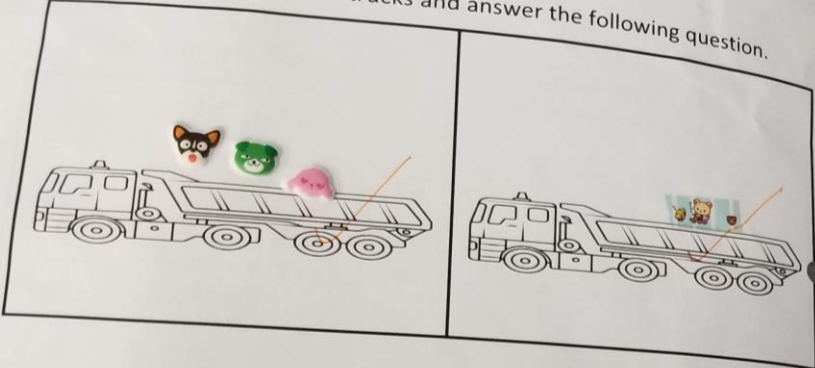
$$6 + 5 = 11$$

They have 11 books in total.

DRAWING THE ANSWERS

7
8

Draw some animals in the trucks and answer the following question.



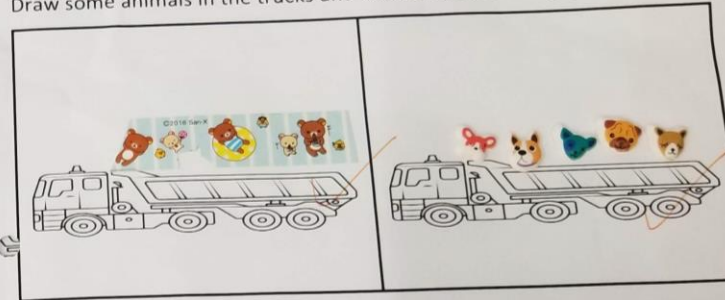
Read the question, write the number sentence and complete the answering sentence in the box below.

How many animals are there in all?

$$3 + 3 = 6$$

There are 6 animals in all.

Draw some animals in the trucks and answer the following question.



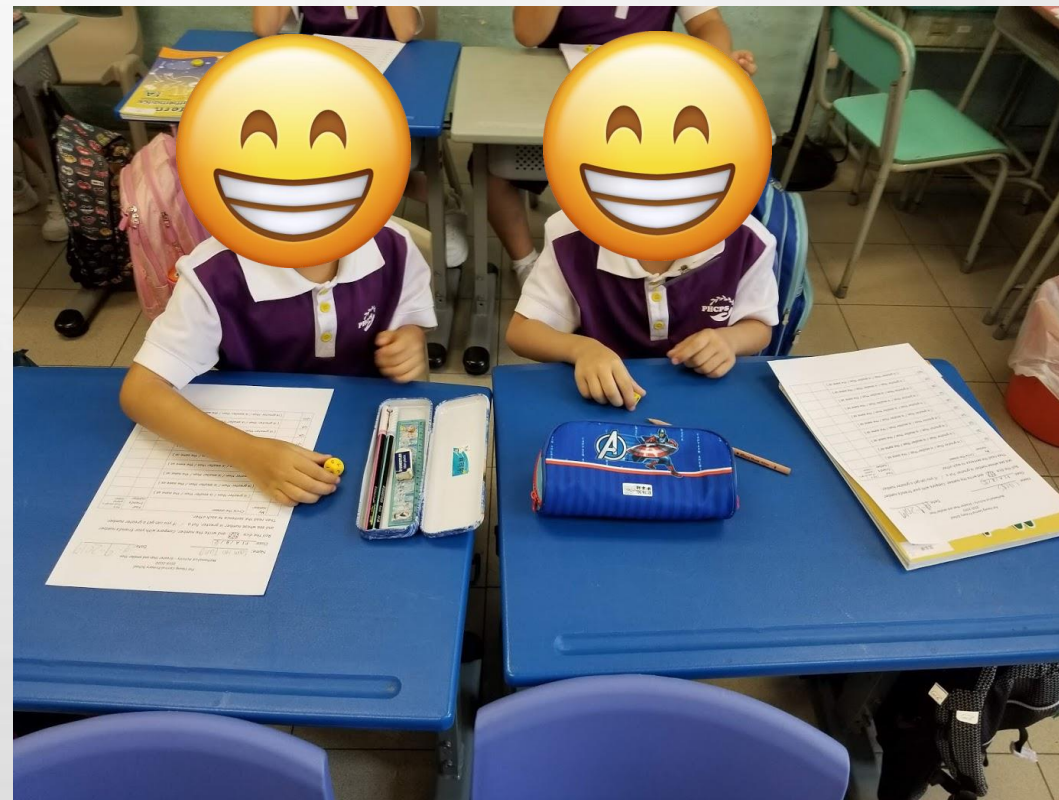
Read the question, write the number sentence and complete the answering sentence in the box below.

How many animals are there in all?

$$8 + 5 = 13$$

There are 13 animals in all.

IN-CLASS MATH GAMES

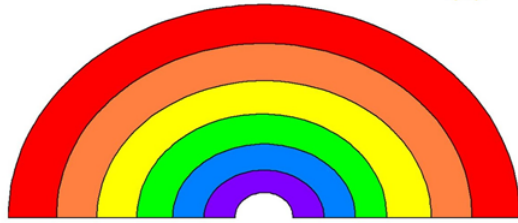


KAHOOT



NURSERY RHYMES AND SONGS

BONDS TO 10 



0 1 2 3 4 5 5 6 7 8 9 10

0 and 10 3 and 7

1 and 9 4 and 6


 2 and 8 5 and 5


Name: _____ ()

P.1 _____

This Old Man (song)

One and nine, 

Two and eight, 

Three and seven, 

Four and six, 

Five and Five, 

Become ten.

We are the friends of ten.

Sing this song to your classmates, teachers or parents.

Write the dates and get their signatures.

30 / 9	30 / 9	

CONCLUSION

- Holistic approach
- Sustainable approach
- Amendment and cut of textbooks' chapters

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FINAL CONCLUSION: TEAMWORK

