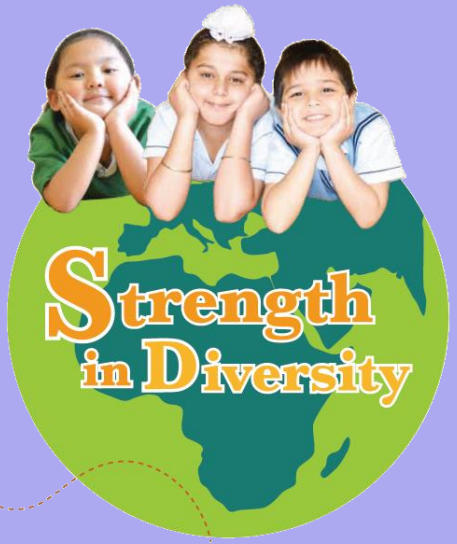
Hong Kong Taoist Association Wun Tsuen School



Mr. Pong Ka Leung
Mr. Ho Po Kwong

P.5 Numbers

Division of Fractions

Solve problem of division of fraction by non-calculation method:

1. (Sharing)
2. (Grouping)

Objectives of the lesson (sharing):

- Understand divided by a whole number can also be calculate by time one over that whole number.

Solve the problem with different method.

1) A ribbon is $9\frac{1}{5}$ cm long. Peter cuts it into 4 equal parts for decoration.
How many centimetre is each part of ribbon now?

Number sentence: _____

Method 1:*Solve the problem using paper strip.*

I cut a paper strip of _____cm _____mm to represent the original length of the ribbon.

I fold it into _____ equal parts.

I measure the length of each part, it is _____cm _____mm long.

Therefore, the answer is _____cm.

Checking

From my measure, each part of the ribbon is _____cm

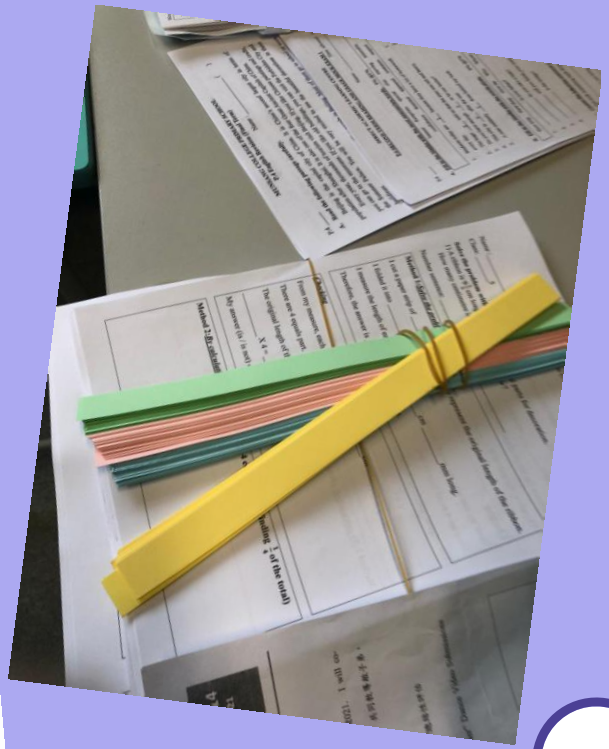
There are 4 equals part.

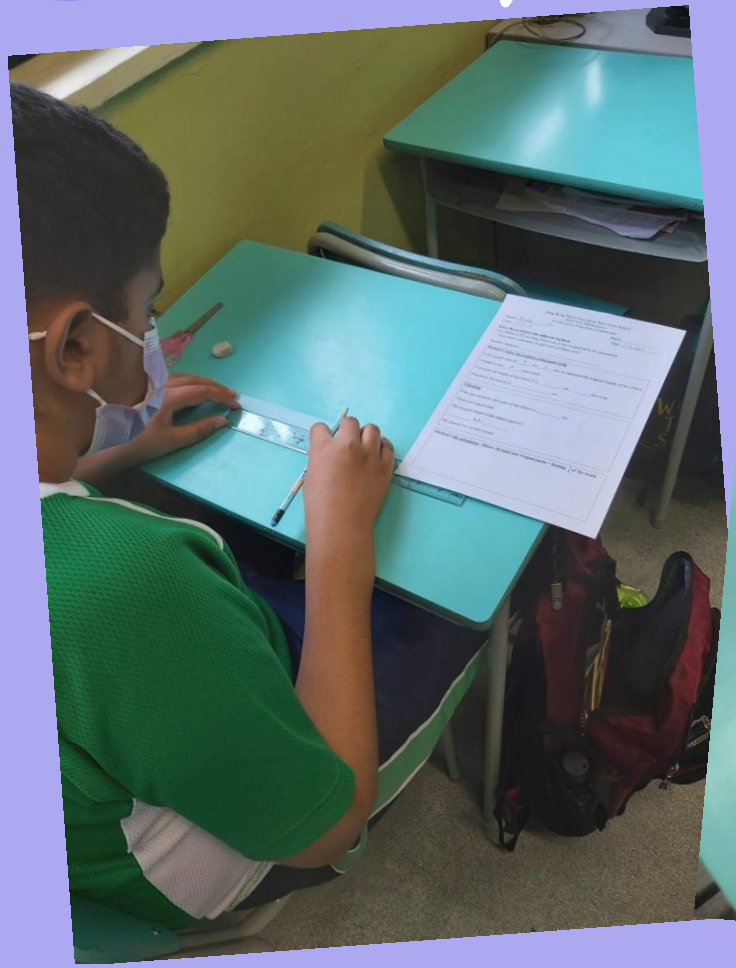
The original length of the ribbon equal to:

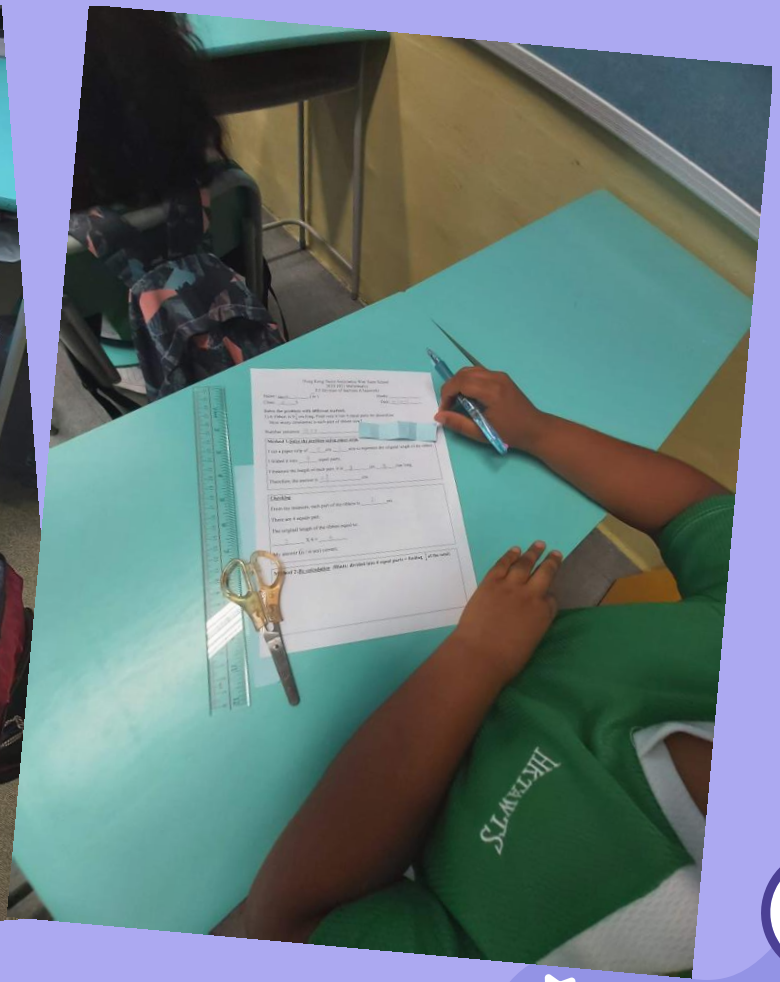
_____ X 4 = _____

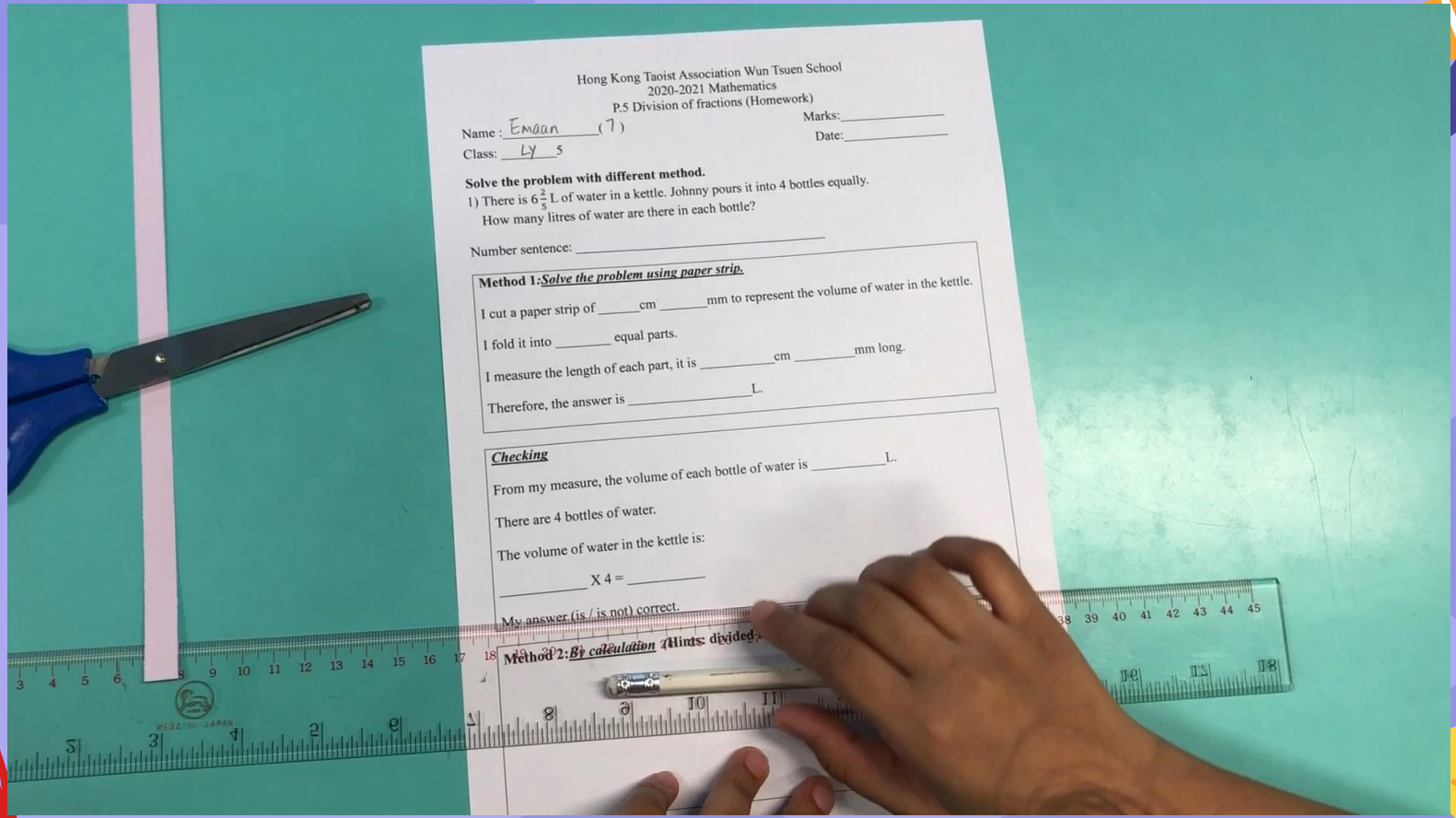
My answer (is / is not) correct.

Method 2:*By calculation* **(Hints: divided into 4 equal parts = finding $\frac{1}{4}$ of the total)**









Hong Kong Taoist Association Wun Tsuen School
2020-2021 Mathematics
P.5 Division of fractions (Homework)

Name : Emaan (7) Marks:_____
Class: 5Y 5 Date:_____

Solve the problem with different method.

1) There is $6\frac{2}{5}$ L of water in a kettle. Johnny pours it into 4 bottles equally.
How many litres of water are there in each bottle?

Number sentence: _____

Method 1:*Solve the problem using paper strip.*

I cut a paper strip of _____cm _____mm to represent the volume of water in the kettle.

I fold it into _____ equal parts.

I measure the length of each part, it is _____cm _____mm long.

Therefore, the answer is _____L.

Checking

From my measure, the volume of each bottle of water is _____L.

There are 4 bottles of water.

The volume of water in the kettle is:

_____ X 4 = _____

My answer (is / is not) correct.

Method 2:*By calculation* (Hints: divided

Objectives of the lesson (grouping):

- Students are able to understand the concept of division of fractions (Grouping).

Hong Kong Taoist Association Wun Tsuen School
Mathematics
Division of Fractions

Students A (_____)

Task 1 – Share your ideas
Explore with Mathigon and to solve the problems below.
Copy the images in Mathigon to the box on the right.

2 kg of sugar are divided into bags of $\frac{1}{5}$ kg, how many bags of sugar are there?

_____ ÷ _____

= _____

There are _____ bags of sugar.

Help your friends to check their understanding.

- ☐ The pictures match the question.
- ☐ The number sentence is correct.
- ☐ The answer is correct.
- ☐ The explanation is clear.
- ☐ I like the work.

Task 2 - Try it out on your own
Explore with Mathigon and to solve the problems below.
Copy the images in Mathigon to the box on the right.

4 kg of baking powder are divided into bag of $\frac{1}{3}$ kg, how many bags of baking powder are there?

Hong Kong Taoist Association Wun Tsuen School
Mathematics
Division of Fractions

Students B (_____)

Task 1 – Share your ideas
Help your friends to check their understanding.

- ☐ The pictures match the question.
- ☐ The number sentence is correct.
- ☐ The answer is correct.
- ☐ The explanation is clear.
- ☐ I like the work.

Explore with Mathigon and to solve the problems below.
Copy the images in Mathigon to the box on the right.

3 kg of salt are divided into bag of $\frac{1}{4}$ kg, how many bags of salt are there?

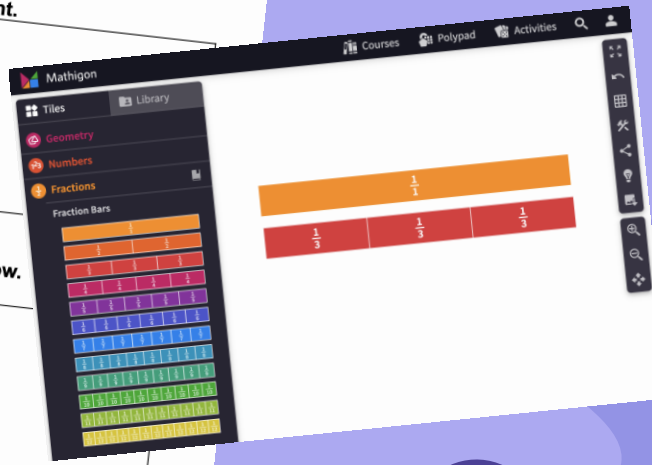
_____ ÷ _____

= _____

There are _____ bags of salt.

Task 2 - Try it out on your own
Explore with Mathigon and to solve the problems below.
Copy the images in Mathigon to the box on the right.

$3\frac{1}{2}$ kg of sugar are divided into bag of $\frac{1}{2}$ kg, how many bags of sugar are there?



Now, let’s experience using mathigon……

Question 1:

Solving the following problem by using Mathigon.

2 kg of sugar are divided into bags of $\frac{1}{4}$ kg, how many bags of sugar are there? _____ ÷ _____ = _____ There are _____ bags of sugar.	

Question 2:

Solving the following problem by using Mathigon.

2 kg of salt are divided into bag of $\frac{2}{3}$ kg, how many bags of salt are there? _____ ÷ _____ = _____ There are _____ bags of salt.	

Students' work:

Hong Kong Taoist Association Wun Tsuen School
Mathematics
Division of Fractions

Students A (Daniyal LE5)

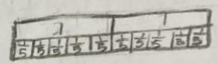
Task 1
Explore with Mathigon and to solve the problems below.
Copy the images in Mathigon to the box on the right.

2 kg of sugar are divided into bags of $\frac{1}{5}$ kg, how many bags of sugar are there?

2 ÷ $\frac{1}{5}$

= 10

There are 10 bags of sugar.



Task 2
Help your friends to check their understanding.
☑ The pictures match the question.
☑ The number sentence is correct.
☑ The answer is correct.
☑ The explanation is clear.
☑ I like the work.

Task 2
Help your friends to check their understanding.
☑ The pictures match the question.
☑ The number sentence is correct.
☑ The answer is correct.
☑ The explanation is clear.
☑ I like the work.

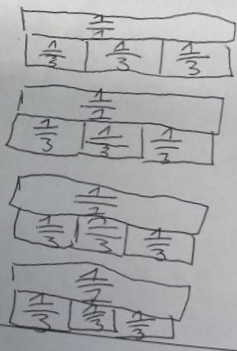
Task 3 - Try it out on your own
Explore with Mathigon and to solve the problems below.
Copy the images in Mathigon to the box on the right.

4 kg of baking powder are divided into bag of $\frac{1}{3}$ kg, how many bags of baking powder are there?

4 ÷ $\frac{1}{3}$

= 12

There are 12 bags of baking powder.



Students' work:

Hong Kong Taoist Association Wun Tsuen School
Mathematics
Division of Fractions

Students B (Carrie)

Task 1
Help your friends to check their understanding.

- ☑ The pictures match the question.
- ☑ The number sentence is correct.
- ☑ The answer is correct.
- ☑ The explanation is clear.
- ☑ I like the work.

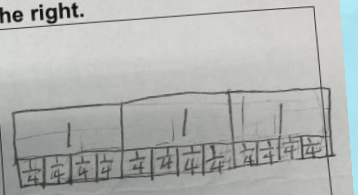
Task 2
Explore with Mathigon and to solve the problems below.
Copy the images in Mathigon to the box on the right.

3 kg of salt are divided into bag of $\frac{1}{4}$ kg, how many bags of salt are there?

3 ÷ $\frac{1}{4}$

= 12

There are 12 bags of salt.



Hong Kong Taoist Association Wun Tsuen School
Mathematics
Division of Fractions

Students A ([illegible])

Task 1 – Share your ideas
Explore with Mathigon and to solve the problems below.
Copy the images in Mathigon to the box on the right.

2 kg of sugar are divided into bags of $\frac{1}{5}$ kg, how many bags of sugar are there?

2 ÷ $\frac{1}{5}$

= 10

There are 10 bags of sugar.

Students' work (Creating video):

Solving the following problem by using Mathigon.

2 kg of sugar are divided into bags of $\frac{1}{4}$ kg, how many bags of sugar are there? _____ ÷ _____ = _____ There are _____ bags of sugar.	

Students' work (Creating video):

Solving the following problem by using Mathigon.

2 kg of salt are divided into bag of $\frac{2}{3}$ kg, how many bags of salt are there? _____ ÷ _____ = _____ There are _____ bags of salt.	

Padlet:

- Provide a channel to let students upload their video and share to with their peers.
- Students can build up his learning profile.

Conclusion:

- Through this learning mode and platform, it is easier for students to understand and get these knowledge visually.

- Great opportunities to revise the concept of division.