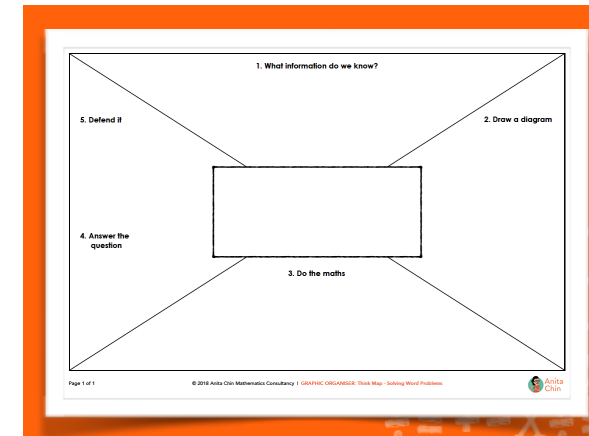


Graphic Organiser: Think Map

(solving word problems using multiplicative thinking)

Contents

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1. What information do we know?

2. Draw a diagram

5. Defend it

Cows in The Paddock

There are three cows in a paddock. How many legs are in the paddock altogether?

MA1-6NA (Y1, MD); ACMNA031 (Y2, MD).

3. Do the maths

4. Answer the question

1. What information do we know?

GIVENS

Number of groups (cows) = 3

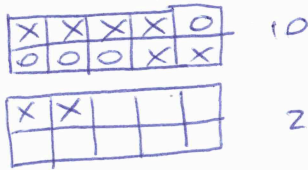
Number in each group (legs) = 4

How many legs altogether = ?

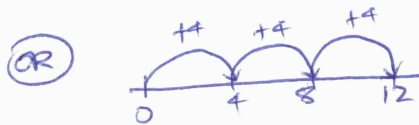
GAP

2. Draw a diagram

5. Defend it



$$4 + 4 + 4 = 10 + 2 = 12$$



4. Answer the question

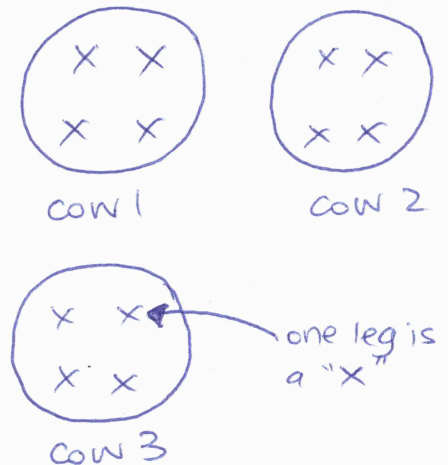
GOAL

There are 12 legs in the paddock altogether.

Cows in The Paddock

There are three cows in a paddock. How many legs are in the paddock altogether?

MA1-6NA (Y1, MD); ACMNA031 (Y2, MD).



3. Do the maths

GAP

(Y3) $4 \times 3 = 12$ Known fact

(Y1) $4 + 4 + 4 = 8 + 4 = 10 + 2 = 12$ use of mental strategies

(Y1) $4 + 4 + 4 = 12$ use of known facts

(K) 1, 2, 3, 4 | 5, 6, 7, 8 | 9, 10, 11, 12 | counts by ones



1. What information do we know?

2. Draw a diagram

5. Defend it

4. Answer the question

Fruit Sticks

Mona is making fruit sticks for 5 people. She puts 3 pieces of fruit on each stick and makes 2 fruit sticks for each person. How many pieces of fruit will Mona need?

REF: NAPLAN Y3 (2017, Q29, 28%)

3. Do the maths

1. What information do we know?

GIVENS

Number of groups (people) = 5

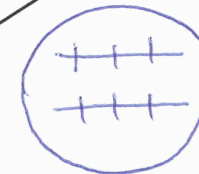
Number in each group (pieces of fruit) = $3 + 3 = 6$

2 fruit sticks with 3 pieces on each

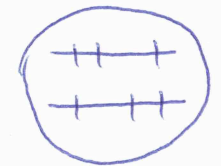
How much fruit altogether = ?

GAP

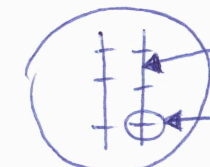
2. Draw a diagram



person 1

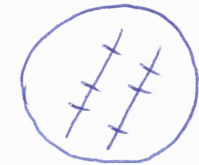


person 2

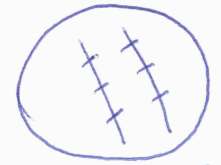


person 3

one fruit stick
one piece of fruit



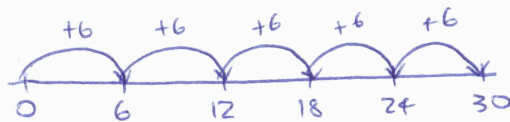
person 4



person 5

"5 groups of 6"

5. Defend it



$$6 + 6 + 6 + 6 + 6 = 6 \times 5 = 30$$

4. Answer the question

GOAL

Mona will need 30 pieces of fruit.

Fruit Sticks

Mona is making fruit sticks for 5 people. She puts 3 pieces of fruit on each stick and makes 2 fruit sticks for each person. How many pieces of fruit will Mona need?

REF: NAPLAN Y3 (2017, Q29, 28%)

3. Do the maths

GAP

(Y3)

$$6 \times 5 = 30$$

known fact

(Y1)

$$\begin{aligned} & \overset{12}{6 + 6} + \overset{12}{6 + 6} + 6 = \overset{24}{12 + 12} + 6 \\ & = 24 + 6 \\ & = 30 \end{aligned}$$

use of mental strategies

(K) 1, 2, 3 | 4, 5, 6 | 7, 8, 9 | 10, 11, 12 | 13, 14, 15 | 16, 17, 18 | 19, 20, 21 | 22, 23, 24 | 25, 26, 27 | 28, 29, 30

counts by ones

Think Map

sample solutions by Anita Chin



Anita Chin

inspired mathematics teaching

1. What information do we know?

2. Draw a diagram

3. Do the maths

5. Defend it

4. Answer the question

