Year 2 maths - Summer 2 Week beginning: 29.6.20

## YOU ARE NOT USING YOUR MATHS NO PROBLEM BOOK THIS WEEK!

| Theme | Word problems Lesson 1 (of 5) Using formal addition | Word problems Lesson 2 (of 5) Using formal subtraction | Word problems Lesson 3 (of 5) Using multiplication | Word problems Lesson 4 (of 5) Using division | Word problems Lesson 5 (of 5) Mixed operations |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Factual fluency (to aid fluency) | Write addition sentences to describe pictures (Complete 10 questions) | Subtract multiples of 10 (Complete 10 questions) | Multiplication sentences (Complete 10 questions) | Division facts <br> (Complete 5 questions) | Addition and subtraction word problems (Complete 10 questions) |
| Problem/ activity of the day <br> Remember, just like in class, you can still show the depth of your knowledge LINK | (Lesson 1 resources below) MAKING LINKS: <br> We have been learning to solve many different types of word problems this year, using bar models to help us. This week we are going to consolidate our learning. | (Lesson 2 resources below) MAKING LINKS: <br> Yesterday, you were solving word problems involving addition. Today you are going to solve word problems involving subtraction. | (Lesson 3 resources below) MAKING LINKS: <br> Yesterday, you were solving word problems involving subtraction. Today you are going to solve word problems involving multiplication. | (Lesson 4 resources below) MAKING LINKS: <br> Yesterday, you were solving word problems involving multiplication. Today you are going to solve word problems involving division. | (Lesson 5 resources below) MAKING LINKS: <br> This week, you have solved many different word problems involving all 4 operations. Today, you are going to solve a variety of problems involving all 4 operations. |
|  |  | THINK: (support below) |  |  |  |
|  | Can you help me with this problem? Dominic has 15 stamps. Vinnie has 3 more stamps than Dominic. How many stamps does Vinnie have? | problem? The blue ribbon is 17 cm long. The blue ribbon is 8 cm longer than the red ribbon. How long is the red ribbon? | problem? Jess sticks 5 stickers in a row. One sticker is 2 cm long. What is the total length of the row of stickers? | problem? A carpenter has a piece of wood that is 10 m long. He cuts it into 5 pieces. Each piece is the same length. How long is each piece of wood? | Can you help me with this problem? Rosa baked 15 strawberry tarts. She gave 6 tarts away. How many tarts did Rosa have left? |
|  |  |  | SEE: (model below) |  |  |
|  | SEE: (model below) <br> Watch this video to see how to solve the problem. If you have forgotten how to use formal addition, go here to remind yourself how! | SEE: (model below) <br> Watch this video to see how to solve the problem. If you have forgotten how to use formal subtraction, go here to remind yourself how! | Watch this video to see how to solve problems like these. Use the multiplication chart to help you with your times tables if you need to. Remind yourself of using multiplication methods here. | SEE: (model below) <br> Watch this video to see how to solve problems like these. Remind yourself of using division methods here. | SEE: (model below) <br> See model example below for how to solve this problem. |
|  | DO: <br> Now try to solve the problems below. | DO: <br> Now try to solve the problems below. | DO: <br> Now try to solve the problems below. | DO: <br> Now try to solve the problems below. | DO: <br> Now try to solve the problems below. |
| Methods, tips, clues \& checks | Day 1 resources and answers (below) | Day 2 resources and answers (below) | Day 3 resources and answers (below) | Day 4 resources and answers (below) | Day 5 resources and answers (below) |

## See below for resources to support you to THINK-SEE-DO

## DAY 1 RESOURCES:

IHINK: Can you help me with this problem? Dominic has 15 stamps. Vinnie has 3 more stamps than Dominic. How many stamps does Vinnie have?


SEE: Optional video link.
I can use cubes to help me solve this problem. You could use any other object at home to help you solve problems like these.


I've shown 3 more by adding on 3 more cubes. You can count on 3 from 15 to find your answer.
$16,17,18$
Equation: $15 \oplus \underline{3}=18$
Statement: Vinnie has 18 stamps.

Tip: You could draw a number line to help you add.

DO: Solve these word problems by counting on. Use the cubes to help you count.

1) Maya buys 14 sweets. Layla buys 7 more sweets than Maya. How many sweets does Layla buy?

Maya

$?$
Equation: $\qquad$ $+$ $\qquad$ $=$ $\qquad$ sweets.
2) A cardboard box weighs 19 grams. A book weighs 8 more grams


Equation: $\qquad$ $+$ $=$ $\qquad$
Statement: The book weighs $\qquad$ g.

Deepening: Can you try to draw your own cubes to solve this problem:
3) Charlotte has 23 goldfish. She goes to the store and buys 6 more. How many goldfish does she have now?

## DAY 2 RESOURCES:

THINK: Can you help me with this problem? The blue ribbon is 17 cm long. The blue ribbon is 8 cm longer than the red ribbon. How long is the red ribbon?


SEE: Optional video link.
We can use bar models to help us solve subtraction word problems.
The word longer tells me that the blue ribbon is bigger than the red ribbon so we need to take away to find the answer. The red ribbon is shorter than the blue ribbon.
Equation: $17-8=9$

> The blue bar represents the blue ribbon.

l've used a number line to help me solve this equation.

## กกกกПกกด


Statement: The red ribbon is 9 cm long.

DO: Solve these word problems. Look at the bar models to help you and work out the equation.

1. The mass of an apple is 26 g . The mass of an egg is 9 g less than the apple. What is the mass of the egg?

## Bar model:



Equation: $\qquad$ - $\qquad$ $=$ $\qquad$
Statement: The mass of the egg is $\qquad$ g.
2. A drink bottle is 24 cm tall. A cup is 12 cm shorter than the drink bottle. How tall is the cup?

Bar model:


Equation: $\qquad$ - $\qquad$ $=$ $\qquad$
Statement: The cup is $\qquad$ cm tall.

## Deepening: Try to draw your own bar model for this next question.

3. A ruler is 15 cm long. A pencil is 7 cm shorter than the ruler. How long is the pencil?

THINK: Can you help me with this problem? Jess sticks 5 stickers in a row. One sticker is 2 cm long. What is the total length of the row of stickers?

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SEE: Optional video link.
We can use bar models to help us solve multiplication word problems. This bar model will look a little different to the ones we have used in the past two days. This bar model shows 5 groups of 2 because each sticker is 2 cm long.

## Bar model:

2

$2 \mathrm{~cm} \quad 2 \mathrm{~cm} \quad 2 \mathrm{~cm}$

## $2 \mathrm{~cm} \quad 2 \mathrm{~cm}$

Equation: $5 \times 2=10$
I could also use repeated addition to solve a problem like this:
$2+2+2+2+2=10$
Statement: The total length of the row of stickers is 10 cm long.

DO: Solve these word problems. Look at the bar models to help you and work out the equation from these. You can use a multiplication equation or repeated addition to solve these:

1. Katie puts 6 toothpicks in one line. Each toothpick is 10 cm long. What is the length of the line of toothpicks?

## Bar model:



Equation: $\qquad$
$\qquad$ = $\qquad$ OR $\qquad$ $+$ $\qquad$
$\qquad$ $+$ + $\qquad$
$\qquad$ $=$ $\qquad$

## Statement: The length of the line of toothpicks is <br> $\qquad$ cm .

2. 5 identical pens are arranged in one line. Each pencil is 5 cm long. What is the length of the line of pencils?

## Bar model:

Equation: $\qquad$ x $=$ $\qquad$ OR $\qquad$ $+$ $\qquad$
$\qquad$ $+$ $\qquad$ $+$ $\qquad$ _

Statement: The length of the line of toothpicks is $\qquad$ cm.

## Deepening: Try to draw your own bar model for this question:

3. 10 identical tables are joined together to form one long table. Each table is 2 m long. What is the length of the long table?

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 |
| 3 | 6 | 9 | 12 | 15 | 18 | 21 | 24 | 27 | 30 |
| 4 | 8 | 12 | 16 | 20 | 24 | 28 | 32 | 36 | 40 |
| 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 |
| 6 | 12 | 18 | 24 | 30 | 36 | 42 | 48 | 54 | 60 |
| 7 | 14 | 21 | 28 | 35 | 42 | 49 | 56 | 63 | 70 |
| 8 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 |
| 9 | 18 | 27 | 36 | 45 | 54 | 63 | 72 | 81 | 90 |
| 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |

THINK: Can you help me with this problem? A carpenter has a piece of wood that is 10 m long. He cuts it into 5 pieces. Each piece is the same length. How long is each piece of wood?


SEE: Optional video link.
We can use bar models to help us solve division word problems. We know that the length of the piece of wood is 10 m long. We also know that the carpenter cuts it into 5 equal pieces therefore we are dividing.


Equation: $10 \div 5=2$

Statement: Each piece of wood is 2 m long.

DO: Solve these word problems. You could share out the dots into each part of the bar to help you find the answers.

1. A rope is $\mathbf{3 0 m}$ long. It is cut into $\mathbf{1 0}$ pieces of equal length. What is the length of each piece?

## Bar model:



Equation: $\qquad$ $\div$ $\qquad$ $=$

Statement: The length of each piece is $\qquad$ m.
2. Joe uses $\mathbf{2 0} \mathbf{c m}$ of tape to wrap $\mathbf{5}$ identical presents. What is length of tape he uses to wrap 1 present?

## Bar model:



Equation: $\qquad$ $\div$ $\qquad$ = $\qquad$
Statement: Joe uses __cm of tape to wrap 1 present.
Deepening: Try to draw your own bar model for this question:
3. A 14 m wire is cut into 2 parts of the same length. How long is each part of wire?

THINK: Can you help me with this problem? Rosa baked 15 strawberry tarts. She gave 6 tarts away. How many tarts did Rosa have left?

SE. You can watch any of the other videos from this week to support you in your learning today. This week you have solved word problems involving all operations. Today we will solve a variety of problems.

For this problem, the word left tells me I need to subtract. If she has given away tarts then we are subtracting. I can draw a bar model to help me solve this.


DO: Solve these word problems using the bar models to help you. Solve the equations using the different methods you have used this week.

1. George had 13 stickers. He bought 6 more stickers. How many stickers does he have altogether?

## Bar model:



## Equation:

$\qquad$ $+$ $\qquad$ $=$
Statement: George has $\qquad$ stickers altogether.
2. Ethan has 8 bags of sweets. Each bag has 5 sweets in it. How many sweets does Ethan have altogether?
$\qquad$ 5 $=$

Equation: $\qquad$
$\qquad$
$\qquad$ $=$
$\qquad$ $+$ $+$ $\qquad$
$\qquad$ $+$ $\qquad$ $+$ $\qquad$ =

Statement: Ethan has $\qquad$ sweets altogether.

## Deepening: Can you draw your own bar model to solve this problem?

 Tip: This is a division problem.3. The total mass of 5 equal bags of flour is 50 kg . Each bag of flour has the same mass. What is the mass of each bag of flour?

## ANSWERS:

## DAY 1:



## DAY 2:

DO: Solve these word problems. Look at the bar models to help you and work out the equation from these.

1. The mass of an apple is 26 g . The mass of an egg is 9 g less than the apple. What is the mass of the egg?
Bar model:


Equation: $26-9=17$

Statement: The mass of the egg is 17 g .
2. A drink bottle is 24 cm tall. A cup is 12 cm shorter than the drink bottle. How tall is the cup?

Bar model:


Equation: $24-12=12$
Statement: The cup is 12 cm tall.
Deepening: Try to draw your own bar model for this next question.
3. A ruler is 15 cm long. A pencil is 7 cm shorter than the ruler. How long is the pencil? Share your bar model with your teacher. $15-7=8 \quad$ The pencil is 8 cm long.

## DAY 3:

DO: Solve these word problems. Look at the bar models to help you and work out the equation from these. You can use a multiplication equation or repeated addition to solve these:

1. Katie puts 6 toothpicks in one line. Each toothpick is 10 cm long. What is the length of the line of toothpicks?

## Bar model:



Equation: $6 \times 10=60$ OR $10+10+10+10+10+10=60 \mathrm{~cm}$ Statement: The length of the line of toothpicks is 60 cm .
2. 5 identical pens are arranged in one line. Each pencil is 5 cm long. What is the length of the line of pencils?

## Bar model:

?


Equation: $5 \times 5=25$ OR $5+5+5+5+5=25 \mathrm{~cm}$
Statement: The length of the line of toothpicks is 25 cm .

Deepening: Try to draw your own bar model for this question:
3. 10 identical tables are joined together to form one long table. Each table is 2 m long. What is the length of the long table formed? Share your bar model with your teacher.
$10 \times 2=20$ OR $2+2+2+2+2+2+2+2+2+2=20$
The length of the long table formed is 20 m .

DAY 4:
DO: Solve these word problems. You could share out the dots into each part of the bar to help you find the answers.

1. A rope is 30 m long. It is cut into 10 pieces of equal length. What is the length of each piece?

## Bar model:



Equation: $30 \div 10=3$
Statement: The length of each piece is 3 m .
2. Joe uses 20 cm of tape to wrap 5 identical presents. What is length of tape he uses to wrap 1 present? Bar model:


Equation: $20 \div 5=4$
Statement: Joe uses 4 cm of tape to wrap 1 present.

## Deepening: Try to draw your own bar model for this question:

3. A 14 m wire is cut into 2 parts of the same length. How long is each part of wire? Share your bar model with your teacher.
$14 \div 2=7 \quad$ Each part of wire is 7 m long.

## DAY 5:

Do: Solwe these word problems using the bar models to help you. Solve the equations using the dfferent methods you have used this week.

1. George hod 13 stickers. He bought 6 more stickers. How many stickers does he hove altogether?
Bar model:


Equation: $13+6=19$
Statement: George has 19 stickers altogether.
2. Ethan hos 3 bogs of sweets. Each bag has 5 sweets in it. How many sweets does Ethan have altogether?


Equation: $8 \times 5=40$
$\mathrm{OR} 5+5+5+5+5+5+5+5=40$
Statement: Ethan has 40 sweets altogether.
Deepening: Can you draw your own bar model to solve this problem?
Tip: This is a division problem.
3. The total mass of 5 equal bags of flour is sokg. Eoch bug of flour has the same mass. What is the mass of each bag of fiour? share your bar model with your teacher.
$50 \div 5=10 \quad$ The mass of each bag is 10 kg .

