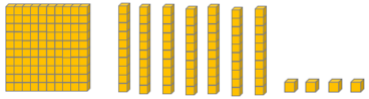
Year 2 maths – Summer 2 Week beginning: 13.7.20
YOU WILL NEED TO USE YOUR MATHS WORKBOOK THIS WEEK

Theme	Volume Lesson 6 (of 8) Solving Word Problems	Volume Lesson 7 (of 8) Solving Word Problems	Volume Lesson 8 (of 8) Solving Word Problems	Place Value HTO Lesson 1 (of 1) NO WORKBOOK TODAY	Addition Lesson 1 (of 1) Addition of 3 numbers NO WORKBOOK TODAY
Factual fluency (to aid fluency)	**Addition and subtraction word problems** **(complete 10 questions)**	**Write multiplication sentences for arrays** **(complete 10 questions)**	**Divide by 5** **(complete 10 questions)**	**Add two 2-digit numbers with regrouping** **(complete 10 questions)**	**Multiplication facts for 2, 5 and 10** **(complete 10 questions)**
Problem/ activity of the day **Remember, just like in class, you can still show the depth of your knowledge** LINK	**(Lesson 1 resources below)** **MAKING LINKS:** You have solved many word problems involving bar models in year 2 over the course of the year. Today you will be solving word problems on volume of liquid in litres, involving addition and subtraction. **THINK: (support below)** Can you help me with this problem? My friend washed her vegetables and fruit. How much water did she use altogether? Our problem is on textbook page 194. Look at it now. *If you have online parent access this lesson is based on Year 2 textbook 2B, chapter 15, lesson 5.* **SEE: (model below)** The problem and the solution is shown on page 194 in your textbook. Watch the lesson video here. **DO:** Use what you have learnt today to solve: Part 1: Questions 1 and 2 from textbook page 195. Check your answers before moving onto: Part 2: Workbook, Chapter 15, Worksheet 5, pages 163-164.	**(Lesson 2 resources below)** **MAKING LINKS:** Yesterday you solved word problems on volume, involving addition and subtraction. Today you will be solving more word problems on volume of liquid involving addition and subtraction. **THINK: (support below)** Can you help me with this problem? The red cup can hold 22ml more water than the green cup. If the red cup holds 85ml of water, how much water can the green cup hold? Our problem is on textbook page 196. Look at it now. *If you have online parent access this lesson is based on Year 2 textbook 2B, chapter 15, lesson 6.* **SEE: (model below)** The problem and the solution is shown on page 196 in your textbook. Watch the lesson video here. **DO:** Use what you have learnt today to solve: Part 1: Questions a and b from textbook page 197. Check your answers before moving onto: Part 2: Workbook, Chapter 15, Worksheet 6, pages 165-167.	**(Lesson 3 resources below)** **MAKING LINKS:** The past two days you have been solving word problems on volume, involving addition and subtraction. Today you will be solving word problems on volume of liquid, involving multiplication and division. **THINK: (support below)** Can you help me with this problem? My friend needed to water his plants. He used 5 buckets of water to water the plants. Each bucket contained 4 litres of water. How much water did he use? Our problem is on textbook page 198. Look at it now. *If you have online parent access this lesson is based on Year 2 textbook 2B, chapter 15, lesson 7.* **SEE: (model below)** The problem and the solution is shown on page 198 in your textbook. Watch the lesson video here. **DO:** Use what you have learnt today to solve: Part 1: Question 2 from textbook page 198. Check your answers before moving onto: Part 2: Workbook, Chapter 15, Worksheet 7, pages 168-169.	**(Lesson 4 resources below)** **MAKING LINKS:** At the beginning of Year 2, you learnt about the place value of each digit in a 2-digit number. Today you will be learning about the place value of each digit in a 3-digit number. **THINK:(support below)** Can you help me with this problem? There are 174 cubes. What does the digit 1 in 174 stand for? What does the digit 7 in 174 stand for? What does the digit 4 in 174 stand for?  **SEE: (model below)** Look at the model below to see how to solve this problem. **DO:** Use what you have learn today to solve the problems below.	**(Lesson 5 resources below)** **MAKING LINKS:** Earlier in the year we learnt about adding together 3 numbers. Today we are going to consolidate that learning by practising this again. **THINK:(support below)** Can you help me with this problem? Look at the vases with flowers. Can you add to find out how many flowers there are in total?  **SEE: (model below)** Look at the model below to see how to solve this problem. **DO:** Use what you have learnt today 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:

THINK: Can you help me with this problem? My friend washed her vegetables and fruit. The vegetables were in a 2 litre bowl of water and the fruit were in a 3 litre bowl of water. How much water did she use altogether?

Our problem is on textbook page 194. Look at it now.

DO: You may draw bar models to help you solve these.

Part 1:
Complete questions 1 and 2 from the textbook page 195.

Check your answers, below.

Part 2:
Now complete pages 163 and 164 of your workbook.

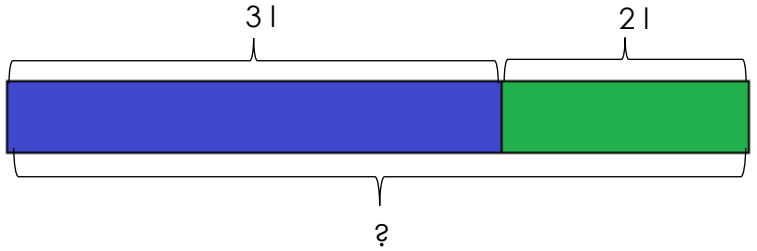
Check your answers, below.

DEEPENING (Optional):
Write your own addition or subtraction word problem involving volume. Get someone in your household to solve them.

SEE: Optional video link.

We can use a bar model to help us solve this problem. We know that the word **altogether** means we need to find the total amount so we can use **addition** to solve this word problem. Blue represents the **fruit bowl** and green represents the **vegetable bowl**.

Bar model:

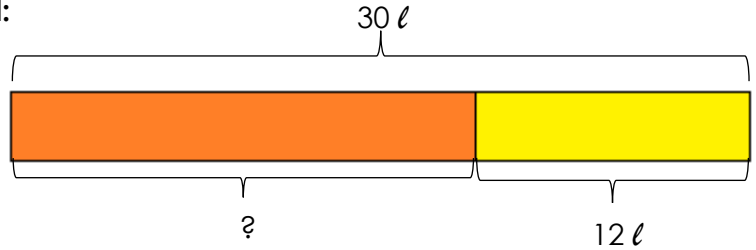


Equation: 3 + 2 = 5

Statement: My friend used 5 ℓ of water altogether.

Here is another example: A car had 30 litres of petrol at the beginning. After being driven for some time, the car had 12 litres of petrol left. How much petrol did the car use?

Bar model:



Equation: 30 – 12 = 18

Statement: The car used 18 ℓ of petrol.

DAY 2 RESOURCES:

THINK: Can you help me with this problem? The red cup can hold 22ml more water than the green cup. If the red cup holds 85ml of water, how much water can the green cup hold?

Our problem is on textbook page 196. Look at it now.

DO: You may draw bar models to help you solve these.

Part 1:
Complete questions a and b from the textbook page 197.

Check your answers, below.

Part 2:
Now complete pages 165-167 of your workbook.

Check your answers, below.

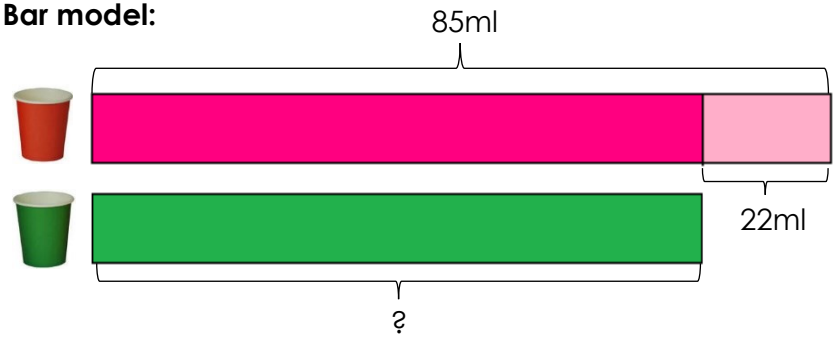
DEEPENING (Optional):
If I have two beakers that both contain a volume of water that is odd, the total volume of water in both beakers must be even.

Prove it and explain your answer.

SEE: Optional video link.

We can use a bar model to solve this problem. We know that the red cup has 85ml of water and it can hold 22ml **more than** the green cup. That means the green cup holds **less** water. We need to **take away** to find the amount of water that the green cup can hold.

Bar model:



Equation: 85 – 22 = 63

$$\begin{array}{r} 85 \\ -22 \\ \hline 63 \end{array}$$

We can use the column method to take away because we have two 2-digit numbers.

Statement: The green cup can hold 63ml of water.

DAY 3 RESOURCES:

THINK: Can you help me with this problem? My friend needed to water his plants. He used 5 buckets of water to water the plants. Each bucket contained 4 litres of water. How much water did he use?

Our problem is on textbook page 198. Look at it now.

DO: You may draw bar models to help you solve these.

Part 1:

Solve this word problem:

My friend has 6 bottles of milk. Each bottle of milk is 2 litres. How much milk does my friend have?

Part 2:

Now complete pages 168 and 169 of your workbook.

Check your answers, below.

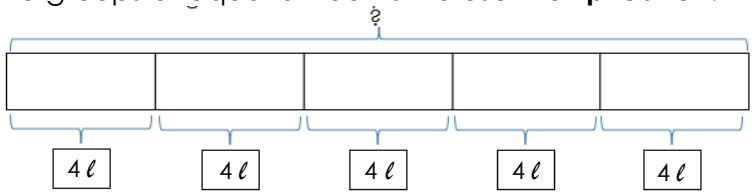
DEEPENING (Optional):

Complete Review 15 on pages 171 and 172.

SEE: Optional video link.

We can use a multiplication equation to solve this problem. We need to use multiplication to solve this problem because we have 5 groups of 4. When we have groups of equal amounts we use **multiplication**.

Bar model:



Equation: 5 x 4 = 20

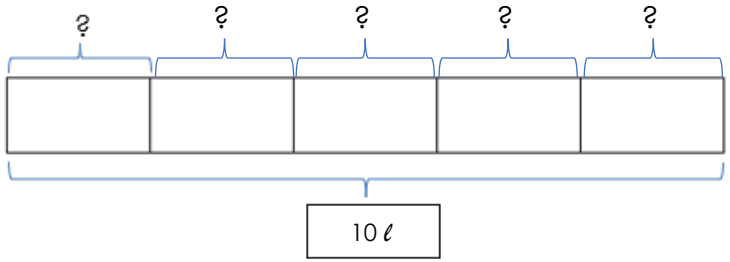
Statement: My friend used 20 ℓ of water.

I am using my 5 times tables to solve this. *5, 10, 15, 20.*

Here is another example:

My friend pours 10 ℓ of apple juice equally into 5 bottles. How many litres of apple juice does each bottle contain? We need to use division to solve this problem because we are sharing out 10 ℓ equally into 5 bottles. When we share out an amount we use **division.**

Bar model:



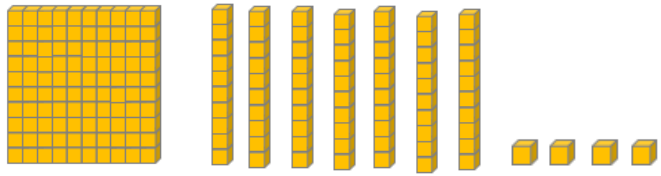
Equation: 10 ÷ 5 = 2

I know that 2 x 5 = 10 so I can use this to help me solve this division problem. I have used the **inverse operation.**

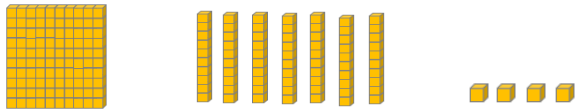
Statement: Each bottle contains 2 ℓ of apple juice.

DAY 4 RESOURCES:

THINK: Can you help me with this problem? There are 174 cubes. What does the digit 1 in 174 stand for? What does the digit 7 in 174 stand for? What does the digit 4 in 174 stand for?



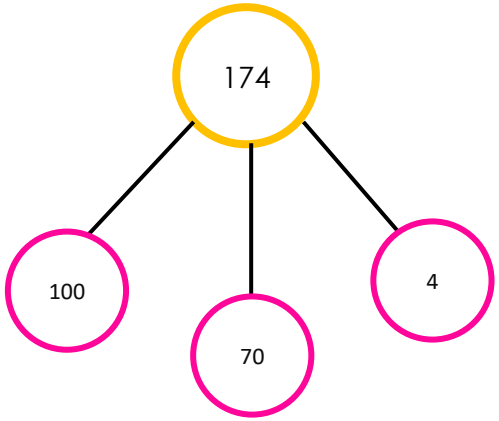
SEE:



hundreds	tens	ones
1	7	4

174 = 1 hundred + 7 tens + 4 ones
174 = 100 + 70 + 4
There are 174 cubes.

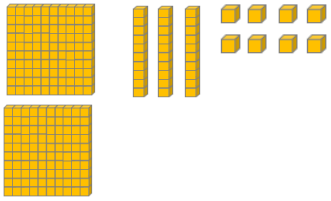
The digit **1** in 174 stands for 100.
The digit **7** in 174 stands for 70.
The digit **4** in 174 stands for 4.



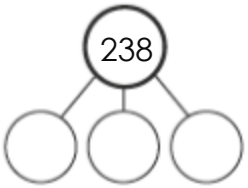
We write 174 as one hundred and seventy-four.

DO: Part 1: Count in hundreds, tens and ones. Fill in the blanks.

1. a.



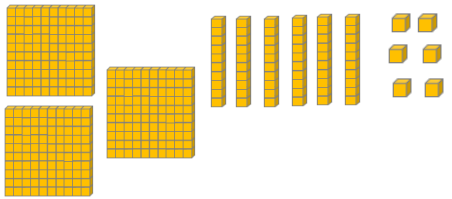
hundreds	tens	ones



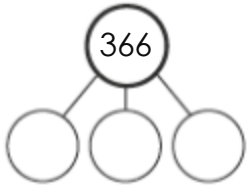
238 = ☐ hundreds ☐ tens ☐ ones

238 = ☐ + ☐ + ☐

b.



hundreds	tens	ones



366 = ☐ hundreds ☐ tens ☐ ones

366 = ☐ + ☐ + ☐

2. Fill in the blanks.
168

The digit ___ is in the tens place.

The digit ___ is in the hundreds place.

The digit ___ stands for 100.

The digit ___ stands for 8.

Consolidation: Complete more of the questions below.

DO: Part 2: Fill in the blanks

1.

a. 382

The digit ___ is in the tens place.

The digit ___ is in the hundreds place.

The digit ___ stands for 300.

The digit ___ stands for 80.

b. 593

The digit ___ is in the ones place.

The digit ___ is in the hundreds place.

The digit ___ stands for 90.

The digit ___ stands for 3.

c. 742

The digit ___ is in the tens place.

The digit ___ is in the hundreds place.

The digit ___ stands for 700.

The digit ___ stands for 40.

d. 895

The digit ___ is in the ones place.

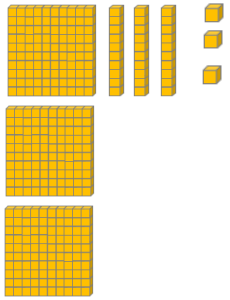
The digit ___ is in the tens place.

The digit ___ stands for 90.

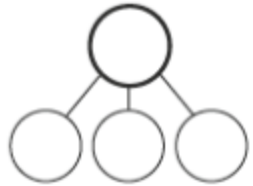
The digit ___ stands for 5.

2. Count in hundreds, tens and ones. Fill in the blanks.

a.



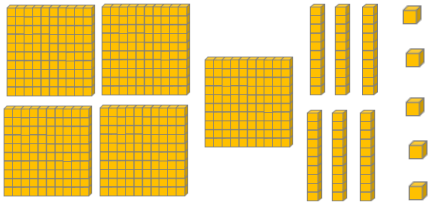
hundreds	tens	ones



☐ = ☐ hundreds ☐ tens ☐ ones

☐ = ☐ + ☐ + ☐

b.



hundreds	tens	ones

☐ = ☐ hundreds ☐ tens ☐ ones

☐ = ☐ + ☐ + ☐

Deepening: Show the number 352 in different ways.
Helpful hint: can you draw it, show it in a place value chart and a number bond diagram?

DAY 5 RESOURCES:

THINK: Can you help me with this problem? Look at the vases with flowers. Can you add to find out how many flowers there are in total?

SEE:

We need to add together the amount of flowers in each vase. We are adding together 3, 11 and 7.

3 11 7

7 and 3 make 10

We can use two different methods:

Method 1: Make 10.

7 + 3 + 11 = **10** + 11

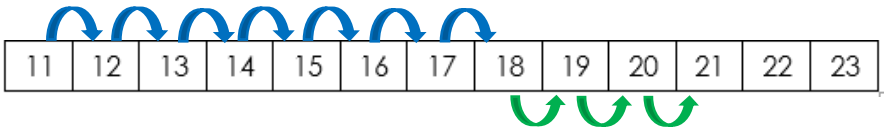
= 21

10
+11
21

I can use column method to add two 2-digit numbers.

Method 2: Add by counting on. Start with your highest number.

11 + **7** + **3** = 21



DO: Part 1: Add these numbers together using your preferred method.

1. 5 + 9 + 8 = ___
2. 8 + 7 + 6 = ___
3. 16 + 5 + 9 = ___
4. 5 + 12 + 3 = ___
5. 18 + 3 + 5 = ___
6. 28 + 9 + 5 = ___
7. 9 + 10 + 13 = ___
8. 31 + 22 + 3 = ___
9. 7 + 45 + 23 = ___
10. 37 + 32 + 4 = ___

Part 2: Make 10 and add.

1. 3 + 9 + 7 = ___ + ___

   = ___

2. 4 + 2 + 8 = ___ + ___

   = ___

3. 5 + 7 + 5 = ___+ ___

   = ___

Deepening: See below

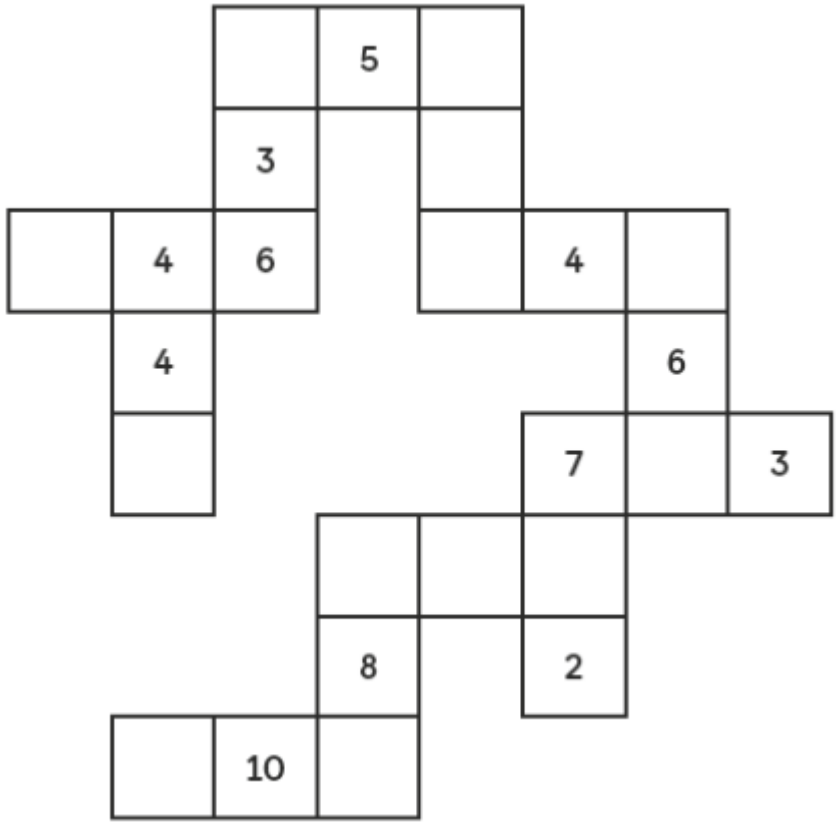
DAY 5 RESOURCES:

DEEPENING:

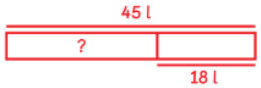
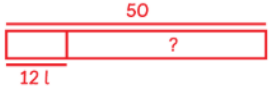
Complete the puzzle below.

Rules:

1) Fill in the boxes with only numbers from 1 to 10.
2) The numbers across or down must add up to 12.
3) The combination of 3 numbers across or down can be repeated.

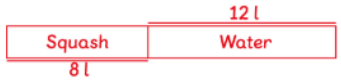


ANSWERS – part 1:

Day 1:	Day 2:	Day 3:	Day 4:	Day 5:
1.  Equation: 45 – 18 = 27 Statement: There is 27 l of water left in the tank. 2.  Equation: 50 – 12 = 38 Statement: It would take 38 l of petrol to fill the tank.	a. 34 l b. 59 l	2. 6 l ÷ 2 = 12 l Your friend has 12 l of milk altogether.	1. a. 238 = 2 hundreds 3 tens 8 ones **(same in the table)** 238 = 200 + 30 + 8 **(same in the number bond diagram)** b. 366 = 3 hundreds 6 tens 6 ones **(same in the table)** 366 = 300 + 60 + 6 **(same in the number bond diagram)** 2. 168 The digit 6 is in the tens place. The digit 1 is in the hundreds place. The digit 1 stands for 100. The digit 8 stands for 8.	1. 22 2. 21 3. 30 4. 20 5. 26 6. 42 7. 32 8. 56 9. 75 10. 73

ANSWERS – part 2 and deepening:

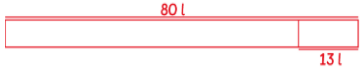
Day 1:

1. 

12 + 8 = 20
Hannah made 20 l of drink.

2. 

36 – 19 = 17
17 l of water is left in the tank.

3. 

80 – 13 = 67
67 l of petrol is left in the tank.

4. 

61 – 15 = 46

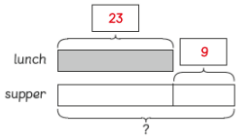
The volume of the tank of 46 l.

Deepening: Share your addition or subtraction word problem with your teacher.

Day 2:

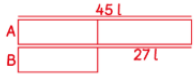
1. a. 23 l + 9 l = 32 l

   b. 32 l + 23 l = 55 l



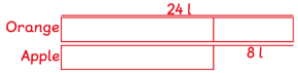
2. a. 45 l – 27 l = 18 l

   b. 18 l + 45 l = 63 l



3. a. 24 l – 8 l = 16 l

   b. 16 l + 24 l = 40 l



Deepening: This statement is correct. If you add an odd number to another odd number, the answer is always even.

For example:
1 + 1 = 2
3 + 3 = 6
5 + 5 = 10
7 + 7 = 14
9 + 9 = 18
11 + 11 = 22
13 + 13 = 26

Day 3:

1. 2 l x 7 = 14 l
Lulu buys 14 l of milk.

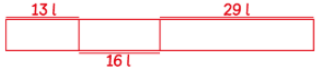
2. 27 l ÷ 3 = 9 l
There are 9 l of water in each container.

3. 20 l x 5 = 100 l
Over 5 days he puts 100 l in his taxi.

4. 18 l ÷ 3 l = 6
There are 6 bottles.

Deepening: Review 15

1. a. 3 l
   b. 30 l
   c. 70 ml

2. 

13 l + 16 l + 29 l = 58 l
Amira makes 58 l of lemonade.

3. 3 l x 8 l = 24 l
Ravi's Mother brought 24 l of cooking oil.

4. 16 l ÷ 2 = 8 l

8 l is in each container.

Day 4:

1. a. 382
   The digit 8 is in the tens place.
   The digit 3 is in the hundreds place.
   The digit 3 stands for 300.
   The digit 8 stands for 80.

   b. 593
   The digit 3 is in the ones place.
   The digit 5 is in the hundreds place.
   The digit 9 stands for 90.
   The digit 3 stands for 3.

   c. 742
   The digit 4 is in the tens place
   The digit 7 is in the hundreds place.
   The digit 7 stands for 700.
   The digit 4 stands for 40.

   d. 895
   The digit 5 is in the ones place.
   The digit 9 is in the tens place.
   The digit 9 stands for 90.
   The digit 5 stands for 5.

2. a. 333 = 3 hundreds 3 tens 3 ones **(same in the table)**
   333 = 300 + 30 + 3 **(same in the number bond diagram)**

   b. 566 = 5 hundreds 6 tens 5 ones **(same in the table)**
   566 = 500 + 60 + 5 **(same in the number bond diagram)**

Deepening: Share your answers with your teacher.

Day 5:

1. 10 + 9 = 19
2. 10 + 4 = 14
3. 10 + 7 = 17

Deepening: