Year 3 Maths – week beginning 6.7.2020					
Theme	**Formal methods for calculation (Lesson 1 of 6) CONSOLIDATION LESSON Addition**	**Formal methods for calculation (Lesson 2 of 6) CONSOLIDATION LESSON Subtraction**	**Formal methods for calculation (Lesson 3 of 6) CONSOLIDATION LESSON Multiplication**	**Formal methods for calculation (Lesson 4 of 6) CONSOLIDATION LESSON Multiplication**	**Formal methods for calculation (Lesson 5 of 6) CONSOLIDATION LESSON Division**
Factual fluency (to aid fluency)	Addition practice (10 questions)	Subtraction practice (10 questions)	Times tables practice (10 questions)	Times tables practice (10 questions)	Division facts practice (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:** Earlier in the year, you learnt to use the column method to add three-digit numbers. Today you are going to practise this. **THINK: (support below)** Sarah used the digits 2, 3, 4, 7, 8 and 9 to make 2 three-digit numbers. She made 469 and 257. What is the sum of the two numbers? *If you have online parent access, this lesson is based on textbook 3A, chapter 2, lesson 10.* **SEE: (model below)** Watch the lesson video here **DO:** Use what you have learnt today to solve: Part 1: Use the digits 2, 3, 4, 7, 8 and 9 to make five other addition equations and find the total. The numbers you make must have 3-digits. The sum must be less than 1000. Check your answers before moving onto: Part 2: Solve the calculations below using the column method.	**(Lesson 2 resources below)** **MAKING LINKS:** Earlier in the year, you learnt to use the column method to subtract three-digit numbers. Today you are going to practice this. **THINK: (support below)** In a school, there are 500 pupils. 225 of them are boys. How many girls are there? *If you have online parent access, this lesson is based on textbook 3A, chapter 2, lesson 19.* **SEE: (model below)** Watch the lesson video here **DO:** Use what you have learnt today to solve: Part 1: Use the digits 2, 3, 4, 7, 8 and 9 to make five subtraction equations. The numbers you make must have 3-digits. Remember, you always start with the whole number, so the greatest number you make will go first in the calculation. Find the answer. Check your answers before moving onto: Part 2: Solve the calculations below using the column method. For some extra support with subtraction, watch the year 3 subtraction video here.	**(Lesson 3 resources below)** **MAKING LINKS:** Earlier in the year, you learnt to use the formal written method for multiplication. Today you are going to practise this. **THINK: (support below)** There are 42 sweets in a packet. How many sweets are there in 2 packets? *If you have online parent access, this lesson is based on textbook 3A, chapter 4, lesson 3.* **SEE: (model below)** Watch the lesson video here **DO:** Use what you have learnt today to solve: Part 1: Use the formal written method frames to find the product of the numbers below. Check your answers before moving onto: Part 2: Solve the calculations below using the formal written method for multiplication.	**(Lesson 4 resources below)** **MAKING LINKS:** Yesterday you consolidated the formal written method for multiplication. Today you are going to practise multiplying with regrouping. **THINK: (support below)** One pack has 13 stickers. How many stickers are there in 4 packs? *If you have online parent access, this lesson is based on textbook 3A, chapter 4, lesson 4.* **SEE: (model below)** Watch the lesson video here **DO:** Use what you have learnt today to solve: Part 1: Use the formal written method frames to find the product of the numbers below. Check your answers before moving onto: Part 2: Solve the calculations below using the formal written method for multiplication.	**(Lesson 5 resources below)** **MAKING LINKS:** Earlier in the year, you learnt to use a written method for division. Today you are going to practise this. **THINK: (support below)** Sam and Charles share 46 strawberries equally among themselves. How many strawberries will each person get? *If you have online parent access, this lesson is based on textbook 3A, chapter 4, lesson 6.* **SEE: (model below)** Watch the lesson video here **DO:** Use what you have learnt today to solve: Part 1: Use the written method frame to solve the calculations below. Check your answers before moving onto: Part 2: Solve the calculations below using the written method you have practised.
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

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DAY 1 RESOURCES:

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THINK: *If you have online parent access, this lesson is based on textbook 3A, chapter 2, lesson 10.*

Sarah used the digits 2, 3, 4, 7, 8 and 9 to make 2 three-digit numbers.
She made 469 and 257.
What is the sum of the two numbers?

DO:

Part 1:

Use the digits 1, 2, 3, 4, 5, 6, 7, 8 and 9 to make five other addition equations and find the total.
The numbers you make must have 3-digits.
The sum must be less than 1000.

Part 2:

Solve these calculations using the column method.

1. 134 + 255
2. 304 + 425
3. 700 + 142
4. 724 + 124
5. 851 + 23
6. 128 + 143
7. 524 + 194
8. 657 + 264
9. 283 + 368
10. 817 + 249

You can use the colour-coded support frame for the column method on the next page to help you.

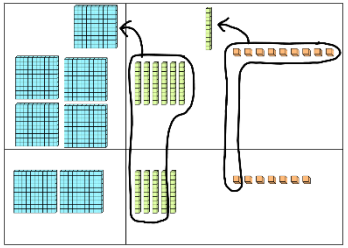
SEE:

Watch the lesson video here.

Sarah used the column method to find the sum of the two numbers.

When adding, we always add the **ones** first in case we need to rename. 9 + 7 = 16 but we can't have 16 ones in the ones place, so we **rename 10 ones for 1 ten**. There are 6 ones left. Next we can add the **tens**. 6 tens + 5 tens = 11 tens, but I also need to add the renamed ten from the ones place. 11 tens + 1 ten = 12 tens. We can't have 12 tens in the tens place, so I **rename 10 tens as 1 hundred**. There are 2 tens left. Finally I can add the **hundreds**. 4 hundreds + 2 hundreds = 6 hundreds. Then I need to add the renamed hundred. 6 hundreds + 1 hundred = 7 hundreds.
So the sum of 469 and 257 is 726.

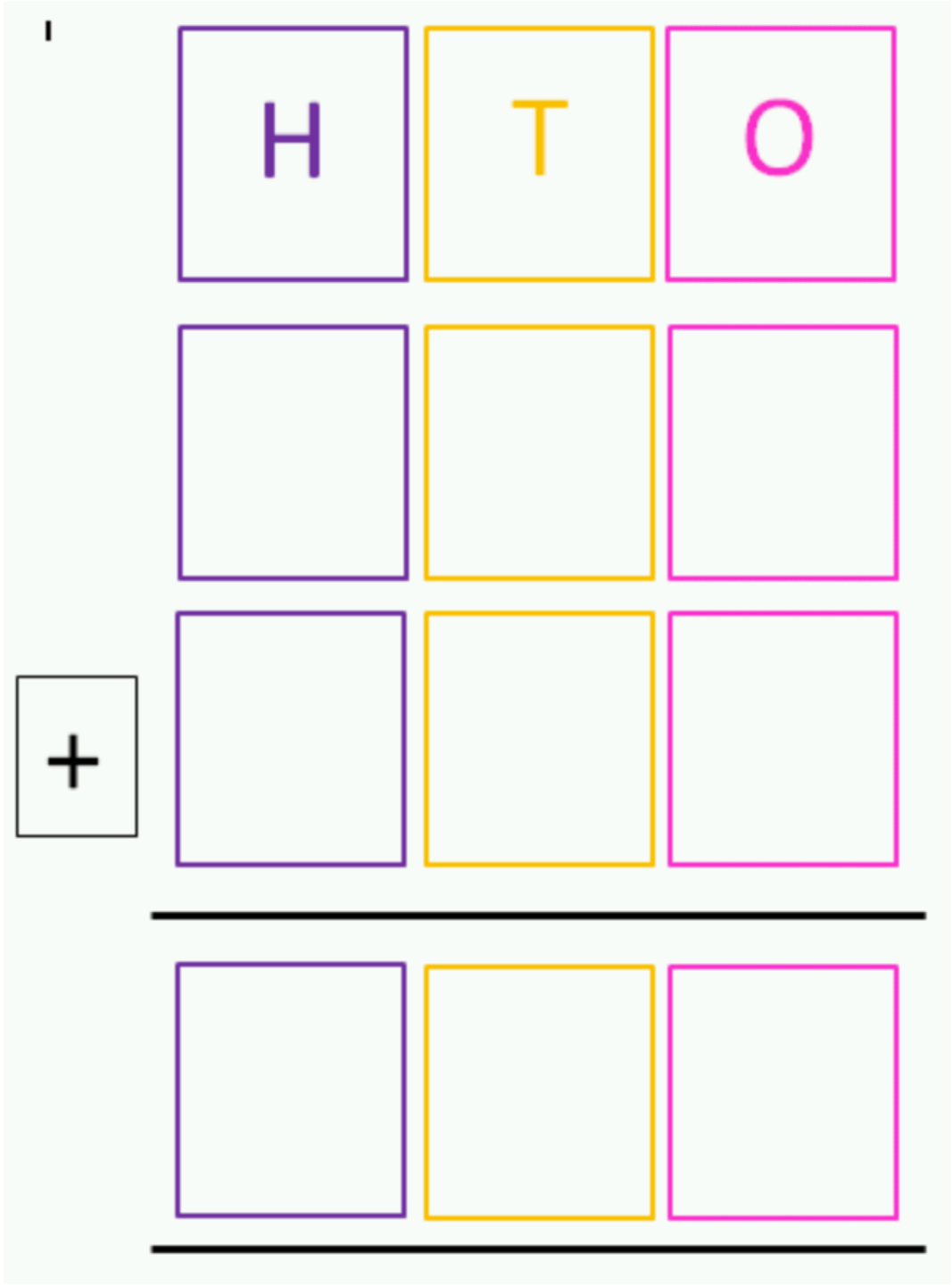
	H	T	O
	1	1	
	4	6	9
+	2	5	7
	7	**2**	**6**



You can also draw Dienes to help you to add.

	H	T	O
	4	1	2
+	2	5	7
	6	**6**	**9**

When I found the sum of 412 and 257, I didn't need to rename. 2 ones + 7 ones = 9 ones. This is less than 10 so I don't need to rename. 1 ten + 5 tens = 6 tens. This is less than 10 so I don't need to rename. 4 hundreds + 2 hundreds = 6 hundreds. This is less than 10 so I don't need to rename.



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DAY 2 RESOURCES:

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THINK: *If you have online parent access, this lesson is based on textbook 3A, chapter 2, lesson 19.*

In a school, there are 500 pupils. 225 of them are boys. How many girls are there?

DO:

For some extra support with subtraction, watch the year 3 subtraction video here.

Part 1:

Use the digits 1, 2, 3, 4, 5, 6, 7, 8 and 9 to make five subtraction equations.
The numbers you make must have 3-digits.
Remember, you always start with the whole number when subtracting, so the greatest number you make will go first in the calculation.

Part 2:

Solve these calculations using the column method.

1. 462 – 131
2. 265 – 140
3. 742 – 400
4. 541 – 521
5. 174 – 32
6. 382 – 145
7. 614 – 251
8. 341 – 165
9. 874 – 596
10. 600 – 372

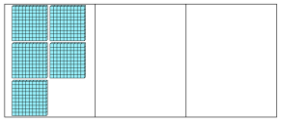
You can use the colour-coded support frame for the column method on the next page to help you.

SEE: Watch the lesson video here.

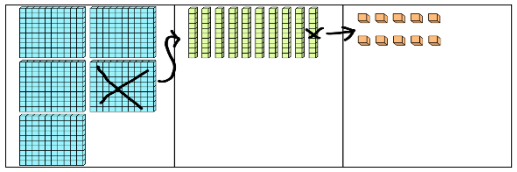
When we subtract, we always start with the whole number (500) and take away the part we know (225).

First, we look at the **ones** place. We don't have enough ones to subtract 5, so we need to rename. There aren't any tens to rename, so we can **rename a hundred as 10 tens**. We would have 4 hundreds left. We can then **rename a ten for 10 ones**. We would have 9 tens left.
Now I can subtract the **ones**. 10 ones – 5 ones = 5 ones.
Next, we look at the **tens** place. 9 tens – 2 tens = 7 tens.
Finally, we look at the **hundreds** place.
4 hundreds – 2 hundreds = 2 hundreds.
There are 275 girls in the school.

H	T	O
~~4~~ 3	~~9~~ 8	~~10~~ 10
~~5~~	~~0~~	~~0~~
- 2	2	5
2	7	5

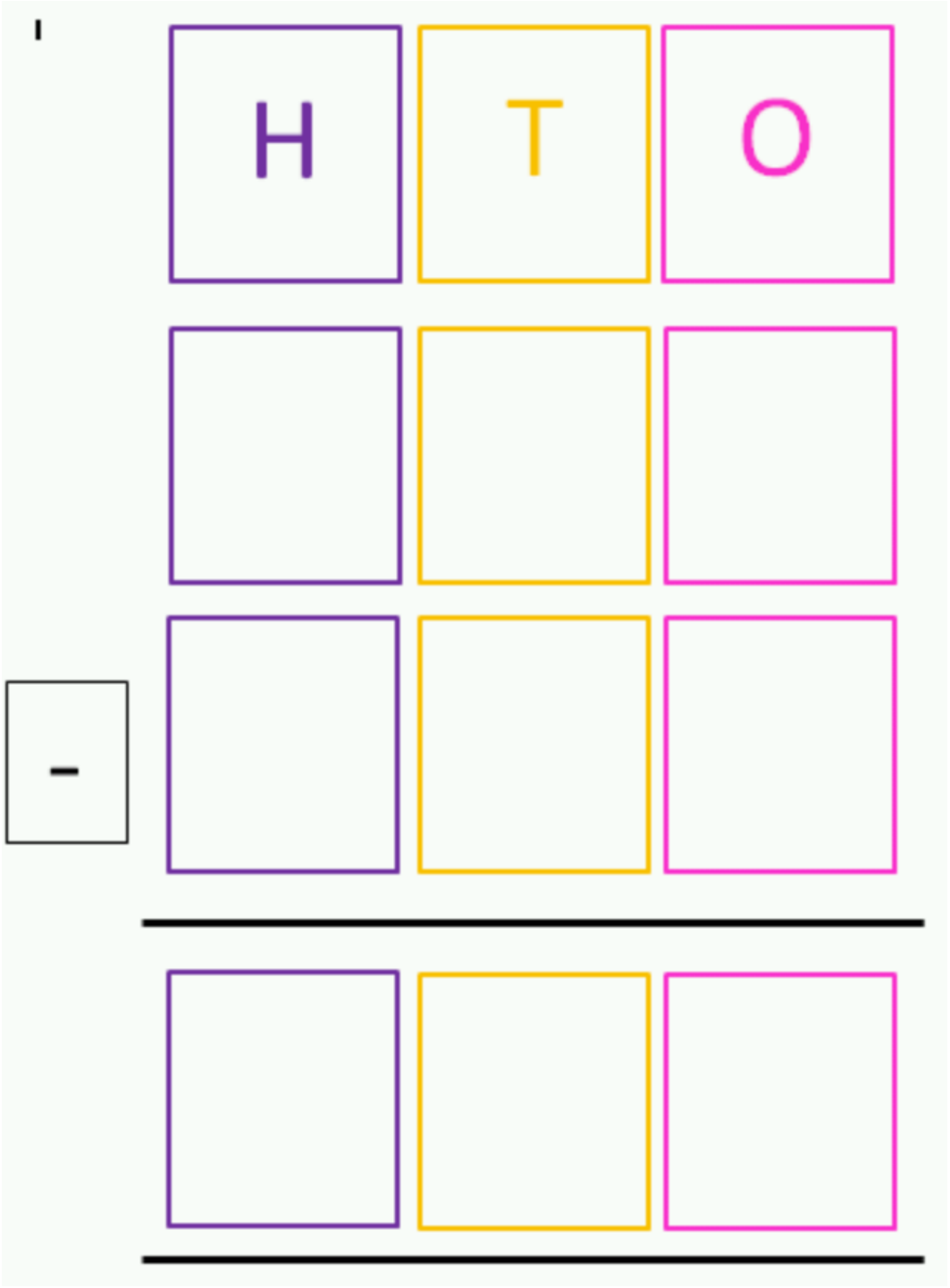


You can also draw Dienes to help you to subtract.
Remember to show the renaming by crossing out one hundred and renaming it as 10 tens.



In this example, when I look at the **ones** place, I have enough ones to subtract 7 so I don't need to rename. 9 – 7 = 2.
When I look at the **tens**, I don't have enough tens to take away 5 tens, so I need to **rename one hundred for 10 tens.** I will then have 3 hundreds left. I will have 14 tens because 10 tens + 4 tens = 14 tens.
Now I can subtract t tens. 14 tens – 5 tens = 9 tens.
Finally, I can subtract the **hundreds.** 3 hundreds – 2 hundreds = 1 hundred.

H	T	O
3 ~~4~~	1~~4~~	9
- 2	5	7
1	9	2



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DAY 3 RESOURCES:

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THINK: *If you have online parent access, this lesson is based on textbook 3A, chapter 4, lesson 3.*

There are 42 sweets in a packet.

How many sweets are there in 2 packets?

DO:

Part 1:

Solve these calculations.

a)

	T	O
	1	3
x		3
+		

b)

	T	O
	3	1
x		3
+		

c)

	T	O
	3	4
x		2
+		

Check your answers below.

Part 2:

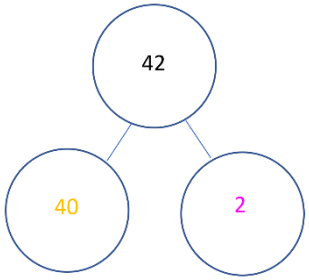
Use the formal written method to solve these calculations.

a) 41 x 2
b) 14 x 2
c) 23 x 3
d) 22 x 4
e) 43 x 2
f) 21 x 4
g) 13 x 3

You can use the colour-coded support frame for the formal written method on the next page to help you.

SEE:

Watch the lesson video here.

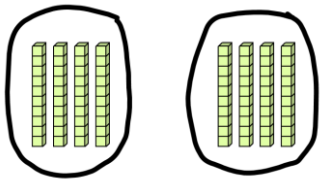


It is important to remember that 42 is **40** and **2**.

First, I need to multiply the **ones**.

2 x 2 = 4

Now, I can multiply the **tens**.



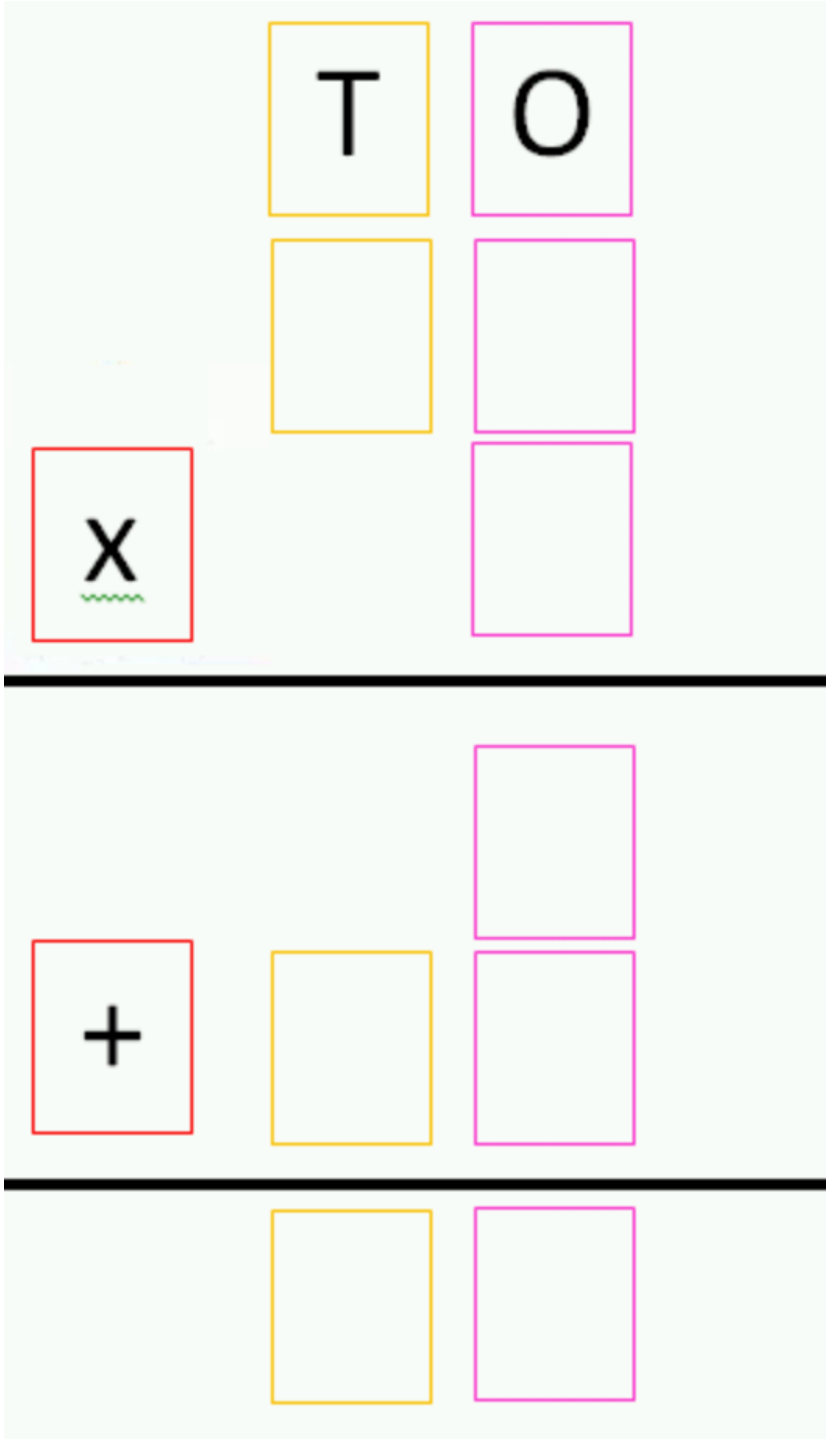
40 x 2 = 80

Finally, I can add the **ones** **and** **tens** together.

80 + 4 = 84

There are 84 sweets in 2 packets.

	T	O
	4	2
x		2
		4
+	8	0
	8	4



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DAY 4 RESOURCES:

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THINK: *If you have online parent access, this lesson is based on textbook 3A, chapter 4, lesson 4.*

One pack has 13 stickers.

How many stickers are there in 4 packs?

DO:

Part 1:

Solve these calculations.

a)

	H	T	O
		1	8
x			3
+			

b)

	H	T	O
		3	4
x			5
+			

c)

	H	T	O
		2	9
x			4
+			

Check your answers below.

Part 2:

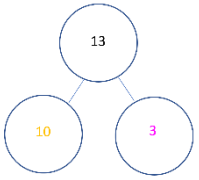
Use the formal written method to solve these calculations.

a) 25 x 4
b) 8 x 16
c) 57 x 2
d) 65 x 2
e) 45 x 3
f) 38 x 4
g) 27 x 8

You can use the colour-coded support frame for the formal written method on the next page to help you.

SEE:

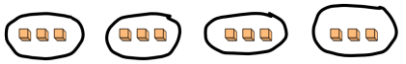
Watch lesson video here.



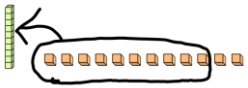
Just like yesterday, we need to remember that 13 is **10** and **3**.

	H	T	O
		1	3
x			4
+			

First, we multiply the **ones**.



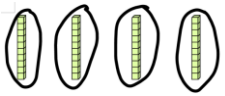
3 x 4 = 12



		1	2
+		4	0
		5	2

We can't have 12 ones in the ones place, so we **rename** **10 ones as 1 ten**. We put this ten in the tens place, and the 2 ones in the ones place.

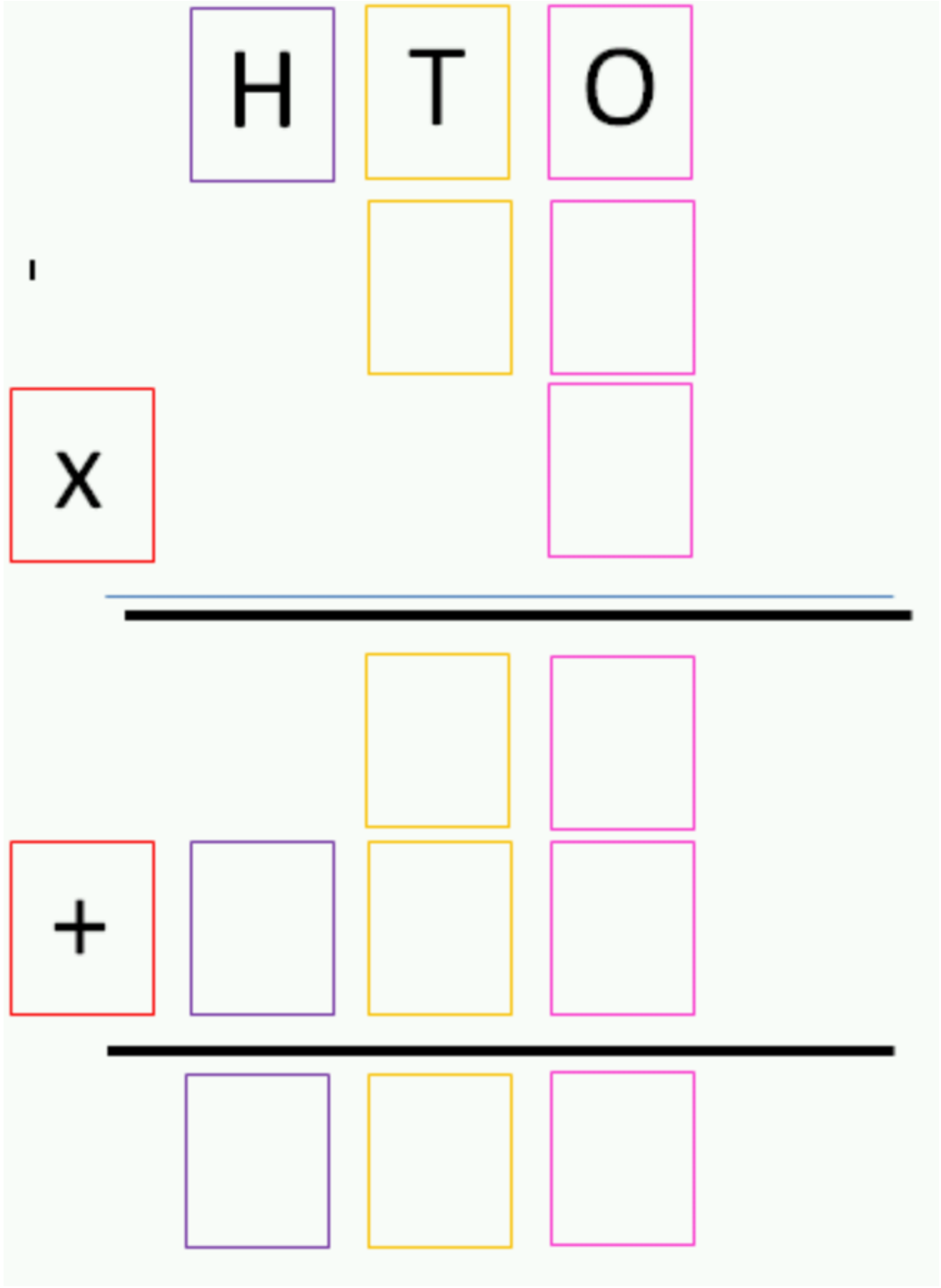
Next, we multiply the **tens**.



10 x 4 = 40

Finally, I can add the **ones** **and** **tens** together: 40 + 12 = 52

There are 52 stickers in 4 packs.



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DAY 5 RESOURCES:

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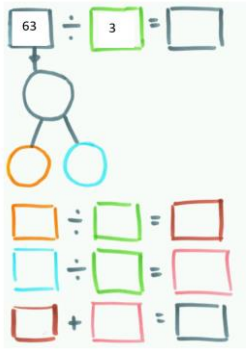
THINK: *If you have online parent access, this lesson is based on textbook 3A, chapter 4, lesson 6.*

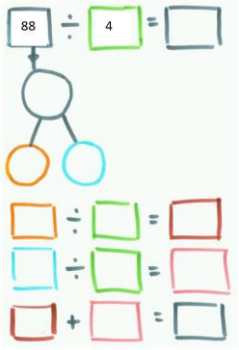
Sam and Charles share 46 strawberries equally among themselves.
How many strawberries will each person get?

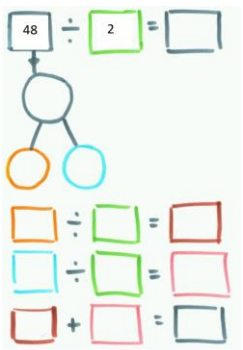
DO:

Part 1:

Solve these calculations.

a) 

b) 

c) 

Check your answers below.

Part 2:

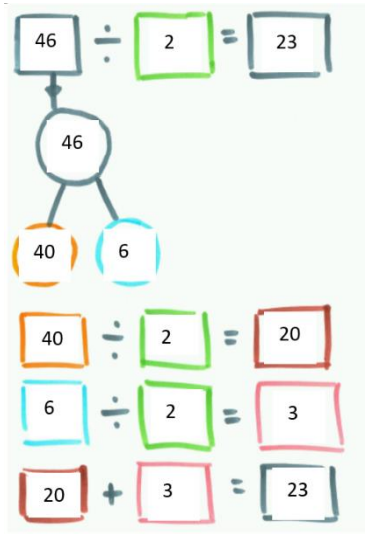
Use the written method to solve these calculations.

a) 86 ÷ 2
b) 96 ÷ 3
c) 84 ÷ 4
d) 88 ÷ 8
e) 88 ÷ 2
f) 69 ÷ 3
g) 66 ÷ 2

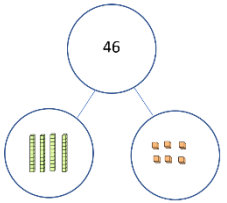
You can use the colour-coded support frame for the written method on the next page to help you.

SEE: Watch the lesson video here.

To share 46 strawberries equally between Sam and Charles, we need to divide 46 by 2. (46 strawberries shared between 2 people).

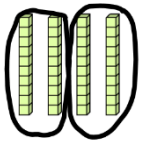


To help us, we can partition 46 into **40** and **6**. This will make it easier for us to divide as we can divide each part separately before adding them back together.

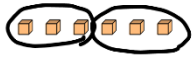


Now I can divide my tens by 2, and my ones by 2.

Let's start with the tens. I can use facts I already know to solve 40 ÷ 2. I know 4 ÷ 2 = 2, so if I make it ten times bigger, 40 ÷ 2 = 20.



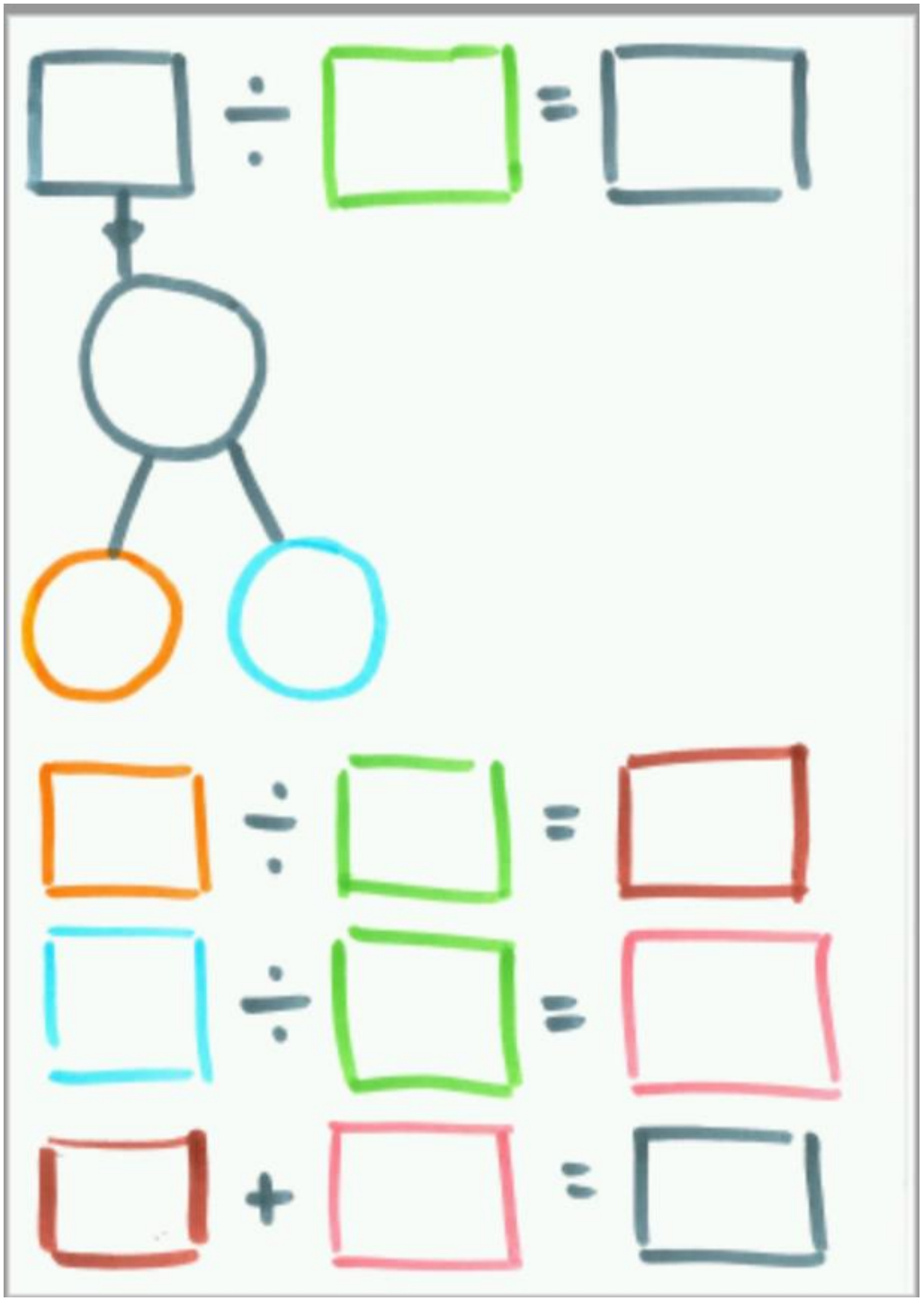
Now let's divide the ones by 2.

6 ÷ 2 = 3 

Finally, I can add the tens and ones together.

20 + 3 = 23

Each person will get 23 strawberries.



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ANSWERS – part 1:

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Day 1

Answers may vary depending on numbers chosen.
Send to your teacher on Seesaw for checking.

Day 2

Answers may vary depending on numbers chosen.
Send to your teacher on Seesaw for checking.

Day 3

a)

	T	O
	1	3
x		3
		9
+	3	0
	3	9

b)

	T	O
	3	1
x		3
		3
+	9	0
	9	3

c)

	T	O
	3	4
x		2
		8
+	6	0
	6	8

Day 4

a)

	H	T	O
		1	8
x			3
		2	4
+		3	0
		5	4

b)

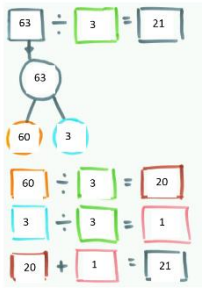
	H	T	O
		3	4
x			5
		2	0
+	1	5	0
	1	7	0

c)

	H	T	O
		2	9
x			4
	1	3	6
+		8	0
	1	1	6

Day 5

a)



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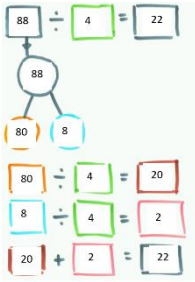

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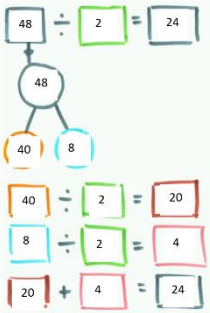

ANSWERS – part 2:

Day 1	Day 2	Day 3	Day 4	Day 5
Q1. 134 + 255 = 389 Q2. 304 + 425 = 729 Q3. 700 + 142 = 842 Q4. 724 + 124 = 848 Q5. 851 + 23 = 874 Q6. 128 + 143 = 271 Q7. 524 + 194 = 718 Q8. 657 + 264 = 921 Q9. 283 + 368 = 651 Q10. 817 + 249 = 1066	Q1. 462 – 131 = 331 Q2. 265 – 140 = 125 Q3. 742 – 400 = 342 Q4. 541 – 521 = 20 Q5. 174 – 32 = 142 Q6. 382 – 145 = 237 Q7. 614 – 251 = 363 Q8. 341 – 165 = 176 Q9. 874 – 596 = 278 Q10. 600 – 372 = 228	Qa) 41 x 2 = 82 Qb) 14 x 2 = 28 Qc) 23 x 3 = 69 Qd) 22 x 4 = 88 Qe) 43 x 2 = 86 Qf) 21 x 4 = 84 Qg) 13 x 3 = 39	Qa) 25 x 4 = 100 Qb) 8 x 16 = 128 Qc) 57 x 2 = 114 Qd) 65 x 2 = 130 Qe) 45 x 3 = 135 Qf) 38 x 4 = 152 Qg) 27 x 8 = 216	Qa) 86 ÷ 2 = 43 Qb) 96 ÷ 3 = 32 Qc) 84 ÷ 4 = 21 Qd) 88 ÷ 8 = 11 Qe) 88 ÷ 2 = 44 Qf) 69 ÷ 3 = 23 Qg) 66 ÷ 2 = 33