Maths Week 6- Addition and Subtraction

Instructions

For each session there is the "Daily 10". This includes a mixture of questions not specific to shape. This will help keep the maths skills you have learnt at the front of your brain Then there is a learning objective with a 'taught' session to complete. At the end of each day there is an optional challenge question. This week is all about addition and subtraction. ☺

Don't forget to share your work with your teacher by email ☺

There is a link to the answers at the end so you can mark you work if you want to ☺

There are some interactive resources to help you ☺

This button is on each page and will bring you back to this slide.

Click for lessons

Lesson 1
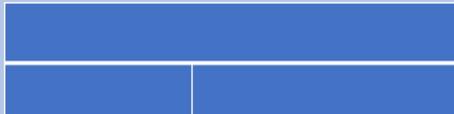
Lesson 2

Lesson 3

Lesson 4

Lesson 5

Lesson 1

Comparing lengths

Session 1- Daily 10 (Mixed fluency/ problem solving/ reasoning) You can use the videos on the CVPS website to help you if you are stuck
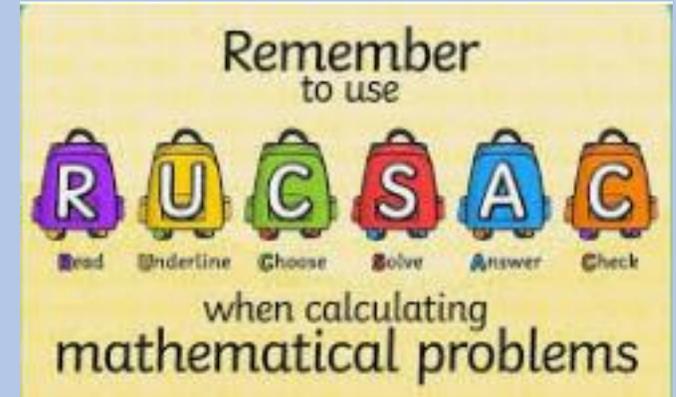
1. $37 - \_\_\_\_ = 17$

2. $\_\_\_\_ = 12 \div 6$

3. $20 + 30 + 50 = \_\_\_$

4. Maya has 30 marbles. He shares them with herself and her 2 friends. How many marbles does each person get?

5. $15 + \_\_\_ = 45$

6. _____ = 16 + 4 + 10

7. Complete the pattern: 137, 127, ___, 107, 97, ___, ____, 67, __7, ___

8. 45 + 36=

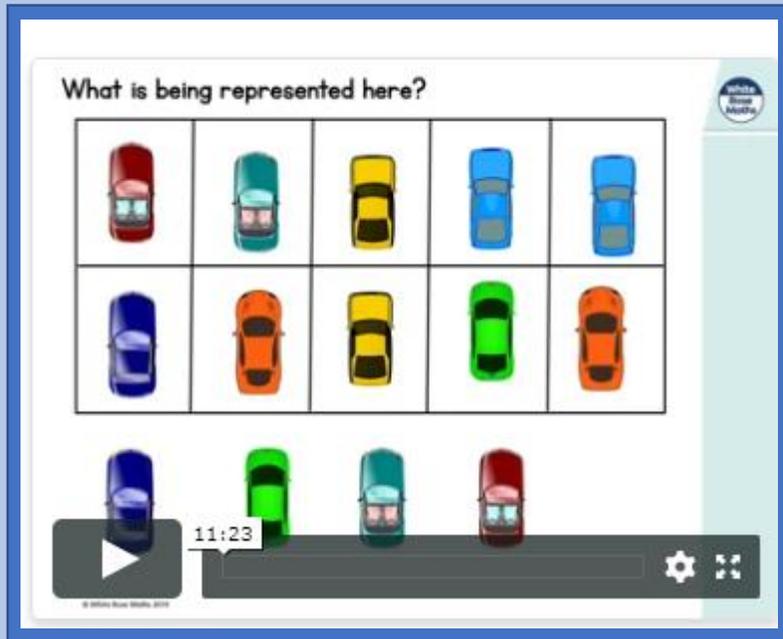9. _____= 10 ÷ 1

10. Circle the correct answer
10mm = 1cm   1mm= 100cm   1mm= 1cm

Fact families addition and subtraction number bonds to 20

Remember to pause the video to complete the tasks

What is being represented here?

How to find the video

This week we are following Summer Term- week 3. Once you have clicked on the link. Please scroll to the bottom of the page and click on

Summer Term – Week 3 (w/c 4th May)

Summer Term – Week 2 (w/c 27th April)   +

Summer Term – Week 1 (w/c 20 April)   +

Week 2   +
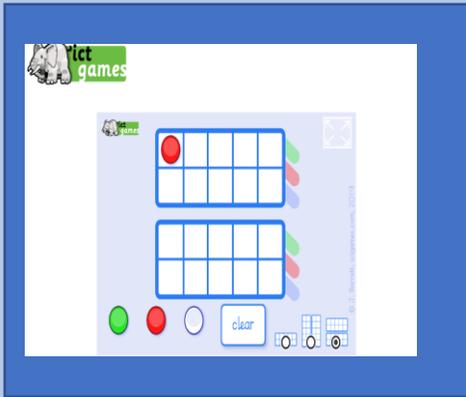
Week 1   +

https://whiterosemaths.com/homelearning/year-2/

Summer Term – Week 3 (w/c 4th May)   −

1 What calculations are represented?

The first one has been done for you.

a)

$15 + 5 = 20$

b)

☐ + ☐ = ☐

c)

☐ + ☐ = ☐

d) How many other number bonds to 20 can you make using counters and ten frames?

_____

_____

2 Complete the fact family.

a) $15 + 2 = 17$

$17 = 15 + 2$

$2 + 15 = $ ☐

☐ $=$ ☐ $+$ ☐

$17 - 15 = $ ☐

☐ $=$ ☐ $-$ ☐

☐ $-$ ☐ $=$ ☐

☐ $=$ ☐ $-$ ☐

b)
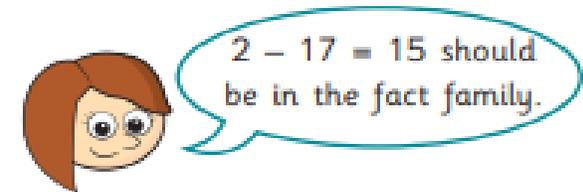
2 – 17 = 15 should be in the fact family.

Explain why Rosie is wrong.

3 Complete the number sentences for the part-whole model.

```
[ ] + [ ] = [ ]

[ ] - [ ] = [ ]

[ ] + [ ] = [ ]

[ ] - [ ] = [ ]
```

Part-whole model: whole = 11, parts = 5 and 6

Are there any other number sentences in this fact family?

Talk about it with a partner.

4 There are 9 boys and 8 girls in a class.

Complete the bar model to represent this.

```
[       ]
[ 9 | 8 ]
```
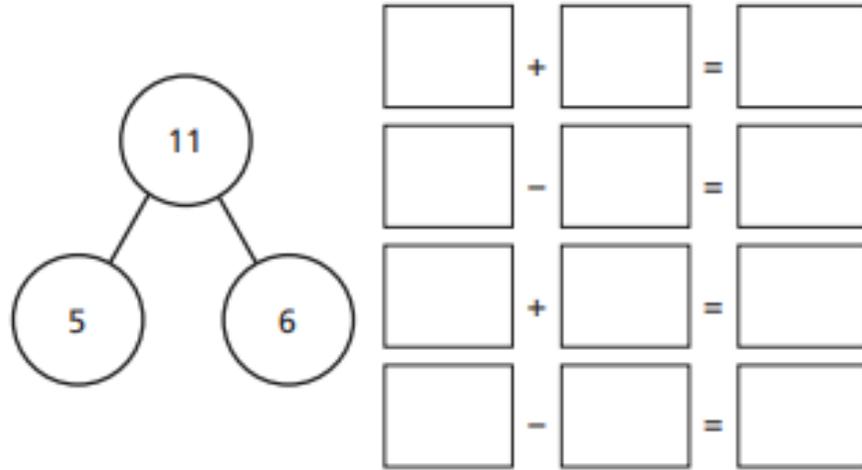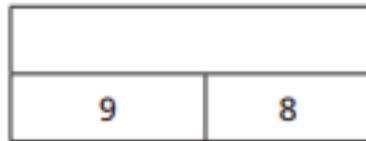
Write the fact family for the bar model.

_____

5 Circle any incorrect calculations.

3 + 7 = 10   10 = 3 + 7

7 + 3 = 10   10 = 7 + 3

10 − 7 = 3   7 − 3 = 10

3 − 10 = 7   7 = 10 − 3

Explain the mistake that has been made.

6 Here are some number cards.

| 5 | 2 | 7 | 13 | 6 |

Choose two number cards and find their total.

```
[ ] + [ ] = [ ]
```

Write the fact family for this calculation.

Compare answers with a partner.
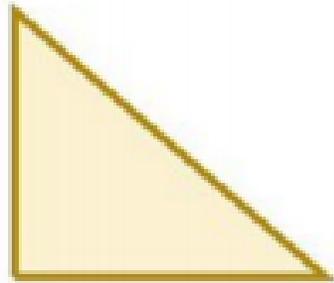
<u>Challenge</u>

This is half of Lee's shape.

What could the whole shape look like?

How many different ways can you find?

Lesson 2

Session 2- Daily 10

1. ___= 9+ 40 + 1

2. ____ = 7 x 3

3. 170 - 50 =___

4. TOP TIP: This question has + and – in. It is a 2 part question.

Aran went to shop with 90p. He bought a lolly for 12p, a pencil for 30p and a rubber for 6p. How much change did he get?

5. 56 - ___ = 44

6. 82- 57=

7. 3/4 of 12 =

Q 8, 9 and 10

What do you notice about the numbers that are circled?
Continue the pattern.

⓪ 1 2 ③ 4 5 ⑥ 7 8 ⑨ 10 11 12 13 14 15 16 17 18

Complete the number sequences.

15

9

6

0

27

24

18

Amir has 15 stickers. He collects 3 more each day.
Complete the number track to show how many he will have in six days.

15							
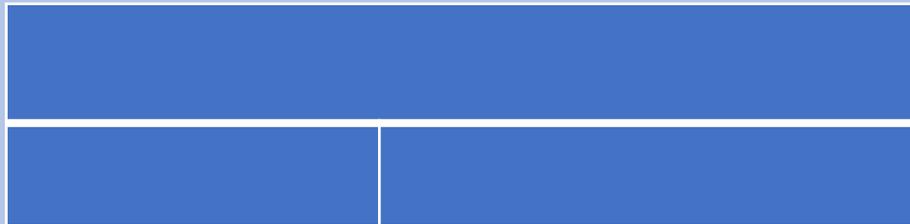
Comparing number sentences

Lesson 2 - Compare number sentences

Drawing a representation

Have a go

☐ + ☐ < ☐ + ☐

11:33

How to find the video
This week we are following Summer Term- week 3. Once you have clicked on the link. Please scroll to the bottom of the page and click on

Summer Term – Week 3 (w/c 4th May)

Summer Term – Week 2 (w/c 27th April)   +

Summer Term – Week 1 (w/c 20 April)   +

Week 2   +
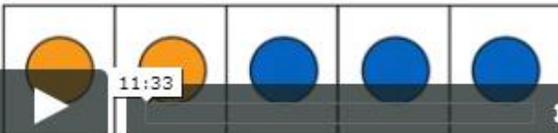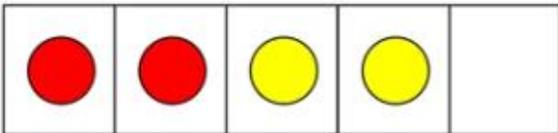
Week 1   +

https://whiterosemaths.com/homelearning/year-2/

Compare number sentences

1 Mo has 4 blue sweets and 3 pink sweets.

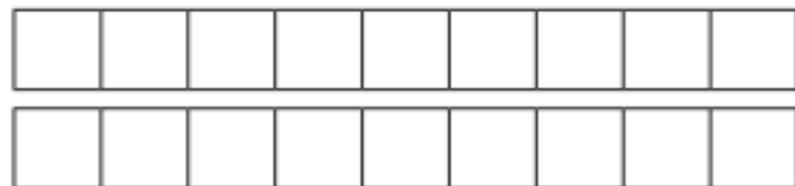Rosie has 4 blue sweets and 5 pink sweets.

Who has more sweets? _____
Explain how you know.

2 Colour the bar models to show that
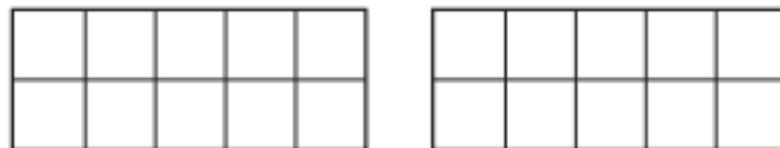$3 + 6 = 8 + 1$

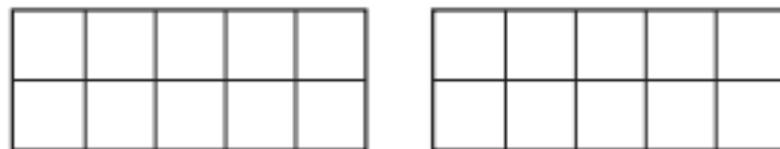Write one more calculation that gives the same answer.

_____

Compare answers with a partner.

3 Draw counters to show $9 + 3$

Draw counters to show $9 + 4$

Write <, > or = to make the statement correct.

$9 + 3 \bigcirc 9 + 4$

4 Write <, > or = to make the statements correct.

a) $3 + 5 \bigcirc 3 + 9$

b) $7 + 2 \bigcirc 4 + 2$

c) $10 + 5 \bigcirc 9 + 6$

5 Cross out counters to show 9 – 3

● ● ● ● ● ● ● ● ●

Cross out counters to show 9 – 4

● ● ● ● ● ● ● ● ●

Write <, > or = to make the statement correct.

9 – 3 ◯ 9 – 4

6 Write <, > or = to make the statements correct.

a) 20 – 5 ◯ 20 – 6

b) 17 – 4 ◯ 13 – 4

c) 11 – 3 ◯ 12 – 4

7 Complete the additions.

a) 4 + 1 = 3 + ☐

b) 14 + 1 = 13 + ☐

c) 9 + 11 = ☐ + 10

d) 10 + 9 = ☐ + 8 = 12 + ☐

8

14: 6, 8

15: ☐, 8

Teddy knows what the missing number is without calculating.
Explain how Teddy knows this.

What is the missing number? ☐

Challenge

Challenge 2

Tim buys a lolly and a chew.

The lolly costs 12p more than the chew.

The total cost of the two items is 82p.

How much does the lolly cost?

Lesson 3

Daily 10

1. Teddy is counting in 2s and Jack is counting in 3s.

Teddy	2	4	6	8
Jack	3	6	9	12
+				

Teddy says,

If we add our numbers together as we count we can make a new number pattern.

What pattern do they make?

2. What happens if both Teddy and Jack count in 5s and they add them together to make a new pattern?

3. 7 + 3 = 10 - _____   *(Top tip both sides of the = must have the answer)*

4. 5 x 4 = 10 +_____

5. ½ of 50 =

6. TJ thinks that when you add 3 even numbers together, they always equal an odd number. Is this true? Prove it.

7. __= 6 + 7+ 9

8. 68 – 30 – 30 = _____

9. 12 x 2 = ___

10. 20= ____ x 4

Related Facts

Remember to pause the video to complete the tasks
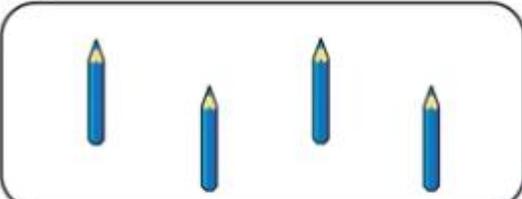
How to find the video

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Summer Term – Week 2 (w/c 27th April)	+
Summer Term – Week 1 (w/c 20 April)	+
Week 2	+
Week 1	+

https://whiterosemaths.com/homelearning/year-2/
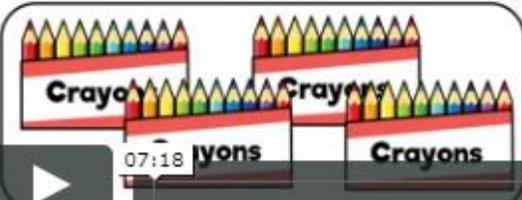
Interactive base 10 deines to help you if you need it
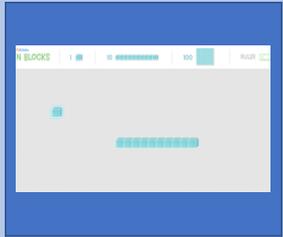

https://www.coolmath4kids.com/manipulatives/base-ten-blocks

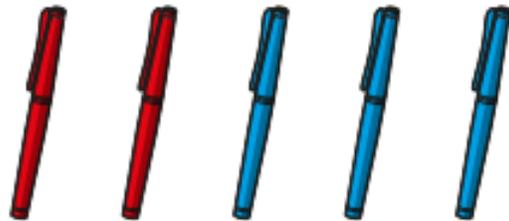1) Use base 10 to show that 3 + 5 = 8 and 30 + 50 = 80

Draw your answer.

What is the same about your models?
What is different?

2) a) Eva has 2 red pens and 3 blue pens.

How many pens does Eva have?

b) Tommy has 20 red pens and 30 blue pens.
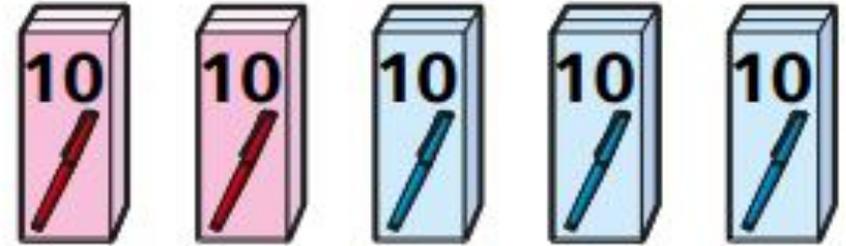
How many pens does Tommy have?

3) Fill in the missing numbers in the related facts.

a) 1 + 2 = 3

10 + 20 =

b) 7 + 2 = 9

70 + 20 =

c) 4 + 6 =

+ 60 = 100

d) $1 + 8 =$ ☐

☐ $+ 10 = 90$

e) $3 + 4 =$ ☐

☐ $+$ ☐ $= 70$

f) $8 +$ ☐ $= 8$

☐ $+ 80 = 80$

4 Complete the part-whole models.
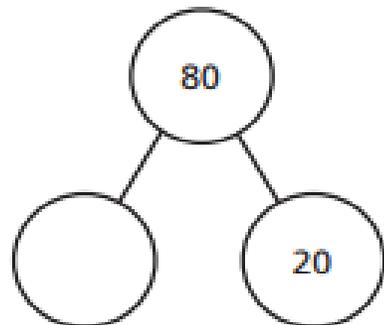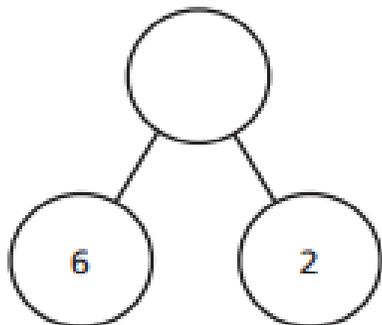
5 Fill in the missing numbers in the related facts.

a) $5 - 3 = 2$

$50 - 30 =$ ☐

b) $7 - 1 = 6$

$70 - 10 =$ ☐

c) $10 - 6 =$ ☐

☐ $- 60 = 40$

6

If $3 + 1 = 4$, then $30 + 10 = 400$ because there are two zeros.

Do you agree with Dexter? _____

Explain your answer.

_____

_____

This way to answers

Challenge

Challenge 3

Stickers come in packs of 5.

Max buys 12 packs.
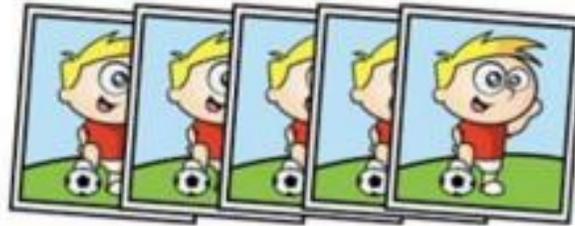
He gave his three friends some stickers.

They each receive the same number.

He has 27 stickers left.

How many stickers did Max give each of his friends?

Lesson 4

Daily 10

1. What is the difference between 36 and 45? (How many numbers in between?)

2. 28- 27 = __

3. My shape has 12 edges and 8 vertices and 12 faces. *What shapes could it be?* _____

4. What fraction is equal to 1 whole? *Can you think of more than one?* ___

5.

Count the money.

6. 12 ÷ 1 = _____

7. What do all of these numbers have in common?(What is the same about them?)

12   24   36

8. 14 + 3 = _____ + 11

9. _____ = 17 - 3

10.

Use <, > or = to compare the money.

Adding and subtracting ones

How to find the video

This week we are following Summer Term- week 3. Once you have clicked on the link. Please scroll to the bottom of the page and click on

Lesson 4 - Add and subtract ones

Ron baked 37 cupcakes. He gives 4 to his family.
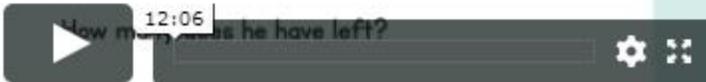
How many does he have left?

12:06

Summer Term – Week 3 (w/c 4th May)	
Summer Term – Week 2 (w/c 27th April)	+
Summer Term – Week 1 (w/c 20 April)	+
Week 2	+
Week 1	+

https://whiterosemaths.com/homelearning/year-2/

Add and subtract 1s

1 a) Jack has 6 cookies.

Annie gives him one more cookie.

How many cookies does he have now?

Jack has ☐ cookies now.

b) Amir has 4 cookies.

He eats one of his cookies.

How many cookies does he have now?

Amir has ☐ cookies now.

2 Complete the number tracks.

a)

21		23					

b)

47		45					

c)

				5				10
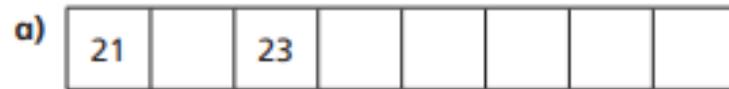
3 a) Filip has made a number using base 10
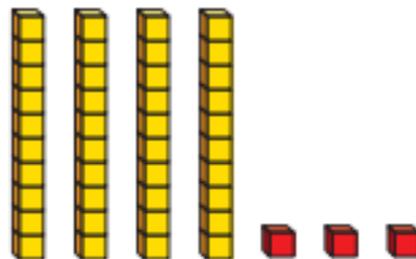
What number has Filip made? ☐

b) Rosie also makes a number using base 10

Rosie's number is one more than Filip's number.

What is Rosie's number? ☐

c) Ron's number is 2 more than Filip's number.

What is Ron's number? [ ]

d) Dora's number is 1 less than Filip's number.

What is Dora's number? [ ]

4 Complete the calculations.

a) $14 + 1 =$ [ ]

b) $22 + 1 =$ [ ]

c) $54 + 1 =$ [ ]

d) [ ] $= 1 + 61$

e) $19 - 1 =$ [ ]

f) $33 +$ [ ] $= 34$

g) $18 = 19 -$ [ ]

h) [ ] $= 89 - 1$

5 Complete the calculations.

a) $14 + 2 =$ [ ]

b) $22 + 3 =$ [ ]

c) $54 + 4 =$ [ ]

d) [ ] $= 5 + 61$

e) $19 - 2 =$ [ ]

f) $33 +$ [ ] $= 35$

g) $12 = 19 -$ [ ]

h) [ ] $= 89 - 3$

6 Are the number sentences true or false?

a) $17 + 1 = 1 + 17$ _____

b) $17 - 1 = 1 - 17$ _____

Talk about your answers with a partner.

Challenge

Challenge 6

Here is a 3 x 3 grid with some shapes in.

Each shape represents a number.

The sum of each row is shown at the right of the table.

Find the value of each of the shapes.

Lesson 5

Daily 10

1. 3/5 of 20 = ___

2. 75 – 38 = ___

3. ¼ of _____ = 5   (This is a tricky one: Use the 5 timestable for this, look at the numbers in the question)

4. ___= 18 ÷ 3

5. 60 + ____ = 120

6 ◆ Count the money.

🪙🪙🪙🪙🪙🪙 = £____

£____ = [£20] [£20] [£20] [£20] [£20]

[£5] [£5] [£5] = £____

£____ = [£20] [£20] [£20] [£20]

7 ◆ Complete the bar models.

[£5] [£5] [£5] [£5]
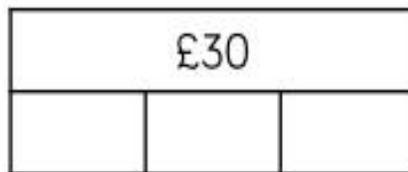
£30		

True or False?

I start at 0 and count in 3s
I say the number 14

Explain your answer.

8. **What's my number?**
It is bigger than 10, but smaller than 20.
It is an odd number
It is in the 3 times table.
When I add the two digits together the answer is 6.

9. 10 = 2 X ____

Investigations!

This weeks investigations

This weeks investigations involve less writing and more discussion so if you can work through these with an adult then it will be easier ☺

There are two to choose from or, if you like a challenge, you can do both!
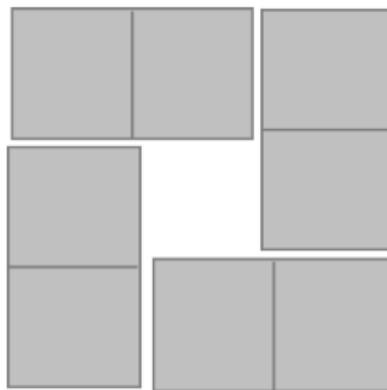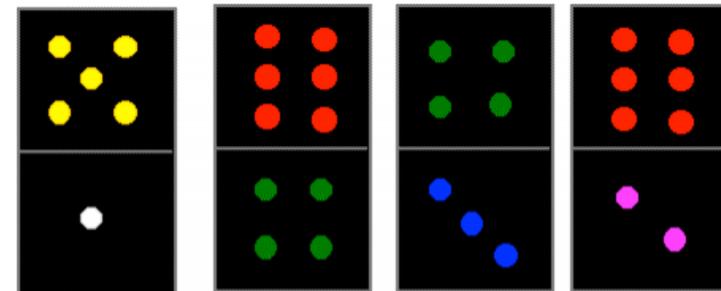
Investigation 1

-

4 DOM

Use the four dominoes to make a square 'window' that has the same number of dots on each side.

(The dominoes do not need to match where they touch.)

Investigation 2

Birthday Cakes

Age 5 to 7 ★★

When Jack was one year old his mother bought a packet of 24 candles for his birthday cake.

That year she put 1 candle on Jack's cake. When he was two he had 2 candles and when he was three he had 3 candles, and so on.

One day Jack's little sister Kate was born. She had 1 candle on her first birthday cake, 2 candles on her second birthday cake, and so on.

The candles were finished on one of Jack's birthdays with just enough left.

How old was Jack when Kate was born? And how old was each of them when the candles finally ran out?

Find the investigation notes here ☺

https://nrich.maths.org/246/note

If you enjoyed this problem, you may want to listen to this audio book 'Horrid Henry's Birthday Party'.

https://www.youtube.com/watch?v=UbxODbDUlpY

You've completed this week's Maths!
Well done!

Lesson 1 Answers

Fact families – addition and subtraction bonds to 20

White Rose Maths

1. What calculations are represented?
   The first one has been done for you.

   a) $15 + 5 = 20$

   b) $\boxed{12} + \boxed{8} = \boxed{20}$

   c) $\boxed{7} + \boxed{13} = \boxed{20}$

   d) How many other number bonds to 20 can you make using counters and ten frames?

   Various answers.

2. Complete the fact family.

   a) $15 + 2 = 17$

   $17 = 15 + 2$

   $2 + 15 = \boxed{17}$

   $\boxed{17} = \boxed{2} + \boxed{15}$

   $17 - 15 = \boxed{2}$

   $\boxed{2} = \boxed{17} - \boxed{15}$

   $\boxed{17} - \boxed{2} = \boxed{15}$

   $\boxed{15} = \boxed{17} - \boxed{2}$

   b)

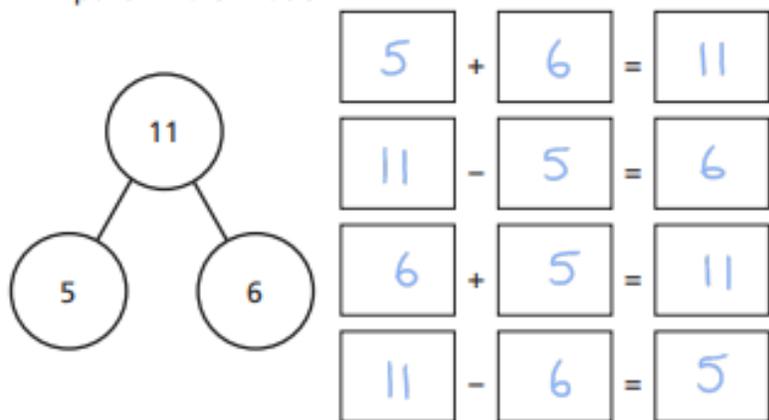   *2 – 17 = 15 should be in the fact family.*

   Explain why Rosie is wrong.

3 Complete the number sentences for the part-whole model.

$$5 + 6 = 11$$

$$11 - 5 = 6$$

$$6 + 5 = 11$$

$$11 - 6 = 5$$

Are there any other number sentences in this fact family?

Talk about it with a partner.

4 There are 9 boys and 8 girls in a class.

Complete the bar model to represent this.

17	
9	8
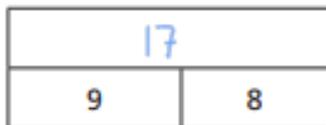
Write the fact family for the bar model.

$9 + 8 = 17$ $8 + 9 = 17$ $17 - 8 = 9$ $17 - 9 = 8$

$17 = 9 + 8$ $17 = 8 + 9$ $9 = 17 - 8$ $8 = 17 - 9$

5 Circle any incorrect calculations.

$3 + 7 = 10$ $10 = 3 + 7$

$7 + 3 = 10$ $10 = 7 + 3$

$10 - 7 = 3$ $(7 - 3 = 10)$

$(3 - 10 = 7)$ $7 = 10 - 3$

Explain the mistake that has been made.

6 Here are some number cards.

| 5 | 2 | 7 | 13 | 6 |

Choose two number cards and find their total.

Eg. $7 + 6 = 13$

Write the fact family for this calculation.

Compare answers with a partner.

Compare number sentences

1 Mo has 4 blue sweets and 3 pink sweets.

Rosie has 4 blue sweets and 5 pink sweets.

Who has more sweets? _Rosie_

Explain how you know.

2 Colour the bar models to show that
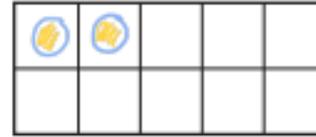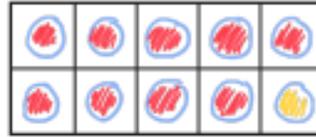3 + 6 = 8 + 1

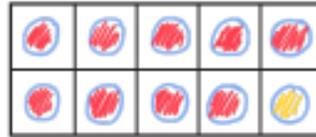Write one more calculation that gives the same answer.

_E.g. 2 + 7_

Compare answers with a partner.

3 Draw counters to show 9 + 3

Draw counters to show 9 + 4

Write <, > or = to make the statement correct.

9 + 3 $\boxed{<}$ 9 + 4

4 Write <, > or = to make the statements correct.

a) 3 + 5 $\boxed{<}$ 3 + 9

b) 7 + 2 $\boxed{>}$ 4 + 2

c) 10 + 5 $\boxed{=}$ 9 + 6

Q's 5-8

5 Cross out counters to show 9 – 3

●●●●●●⊘⊘⊘

Cross out counters to show 9 – 4

●●●●●⊘⊘⊘⊘

Write <, > or = to make the statement correct.

9 – 3 (>) 9 – 4

6 Write <, > or = to make the statements correct.

a) 20 – 5 (>) 20 – 6

b) 17 – 4 (>) 13 – 4

c) 11 – 3 (=) 12 – 4

7 Complete the additions.

a) 4 + 1 = 3 + [2]

b) 14 + 1 = 13 + [2]

c) 9 + 11 = [10] + 10

d) 10 + 9 = [11] + 8 = 12 + [7]

8
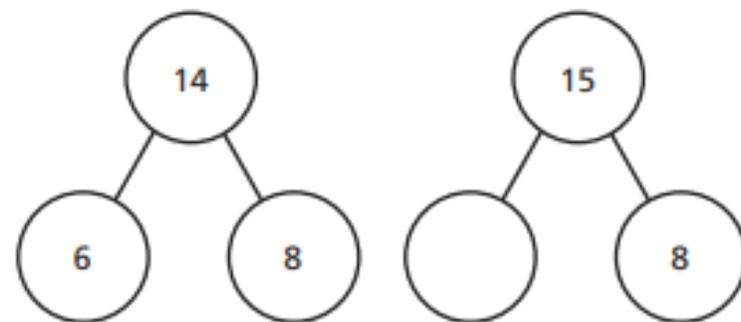
```
        14                    15
       /  \                  /  \
      6    8              ( )    8
```

Teddy knows what the missing number is without calculating.

Explain how Teddy knows this.
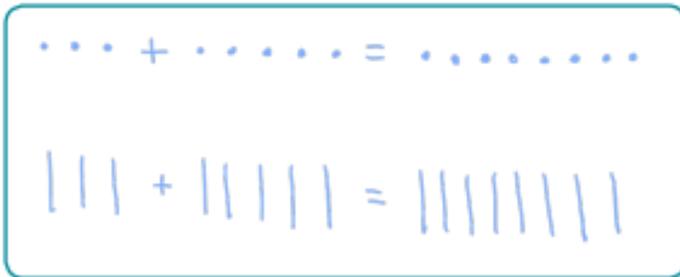
What is the missing number? [7]

Lesson 3 Answers

Related facts

1 Use base 10 to show that 3 + 5 = 8 and 30 + 50 = 80

Draw your answer.

$$\cdots + \cdots = \cdots$$

$$||| + ||||| = ||||||||$$

What is the same about your models?
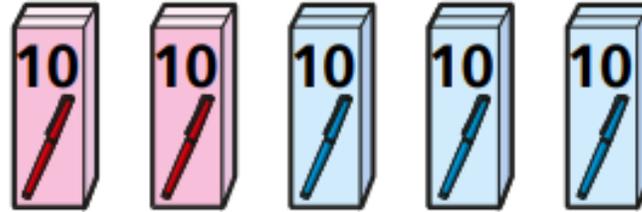What is different?

2 a) Eva has 2 red pens and 3 blue pens.

How many pens does Eva have? 5

b) Tommy has 20 red pens and 30 blue pens.

10 10 10 10 10

How many pens does Tommy have? 50

3 Fill in the missing numbers in the related facts.

a) 1 + 2 = 3

10 + 20 = 30

b) 7 + 2 = 9

70 + 20 = 90

c) 4 + 6 = 10

40 + 60 = 100

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Q 4-6

d) $1 + 8 = \boxed{9}$
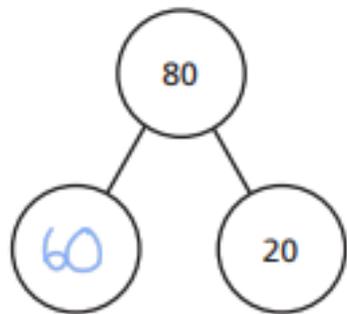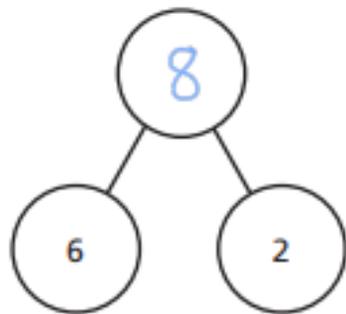
$\boxed{80} + 10 = 90$

e) $3 + 4 = \boxed{7}$

$\boxed{30} + \boxed{40} = 70$

f) $8 + \boxed{0} = 8$

$\boxed{0} + 80 = 80$

---

4 Complete the part-whole models.

8 → 6, 2

80 → 60, 20

---

5 Fill in the missing numbers in the related facts.

a) $5 - 3 = 2$

$50 - 30 = \boxed{20}$

b) $7 - 1 = 6$

$70 - 10 = \boxed{60}$

c) $10 - 6 = \boxed{4}$

$\boxed{100} - 60 = 40$

6

> If $3 + 1 = 4$, then $30 + 10 = 400$ because there are two zeros.

Do you agree with Dexter? __No__

Explain your answer.

30 + 10 = 40 not 400

Base 10: ||| + | = ||||

Lesson 4 answers

Add and subtract 1s

1 a) Jack has 6 cookies.

Annie gives him one more cookie.
How many cookies does he have now?

Jack has **7** cookies now.

b) Amir has 4 cookies.

He eats one of his cookies.
How many cookies does he have now?

Amir has **3** cookies now.

2 Complete the number tracks.

a)

21	22	23	24	25	26	27	28

b)

47	46	45	44	43	42	41	40

c)

1	2	3	4	5	6	7	8	9	10

3 a) Filip has made a number using base 10
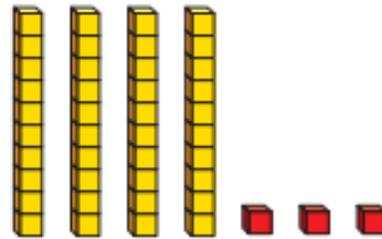
What number has Filip made? **43**

b) Rosie also makes a number using base 10
Rosie's number is one more than Filip's number.

What is Rosie's number? **44**

Q 4-6

c) Ron's number is 2 more than Filip's number.

What is Ron's number? **45**

d) Dora's number is 1 less than Filip's number.

What is Dora's number? **42**

4 Complete the calculations.

a) $14 + 1 =$ **15**

e) $19 - 1 =$ **18**

b) $22 + 1 =$ **23**

f) $33 +$ **1** $= 34$

c) $54 + 1 =$ **55**

g) $18 = 19 -$ **1**

d) **62** $= 1 + 61$

h) **88** $= 89 - 1$

5 Complete the calculations.

a) $14 + 2 =$ **16**

e) $19 - 2 =$ **17**

b) $22 + 3 =$ **25**

f) $33 +$ **2** $= 35$

c) $54 + 4 =$ **58**

g) $12 = 19 -$ **7**

d) **66** $= 5 + 61$

h) **86** $= 89 - 3$

6 Are the number sentences true or false?

a) $17 + 1 = 1 + 17$ ___True___

b) $17 - 1 = 1 - 17$ ___False___

Talk about your answers with a partner.