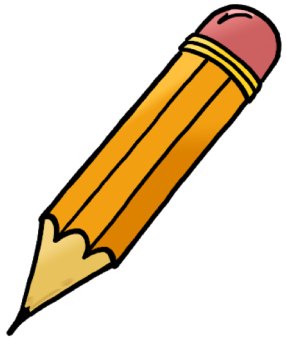
Year 6

Monday 22nd June 2020

Maths

LO: To solve 2 step equations



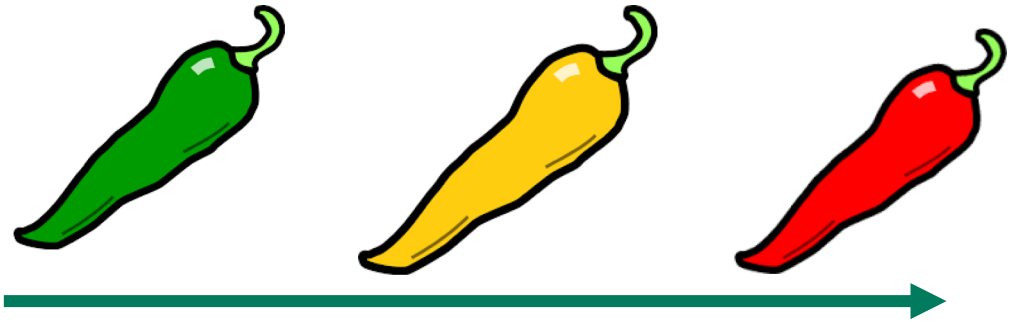
The video of this lesson is available here – Summer Term – Week 8 - lesson 1

This link works on the printable version and is available above the PowerPoint.

You will need to watch this video to learn the skills you need in this lesson.

The independent work continues on the next two slides. There are 7 questions and 1 extension.

(Espanol - siete preguntas y una extensión)

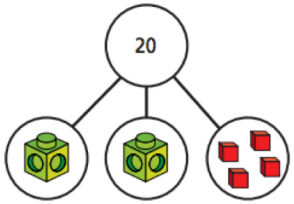


The chili suggests a good starting point.

If you have time you can complete all the independent work!

Solve two-step equations

1 Here is a part-whole model.

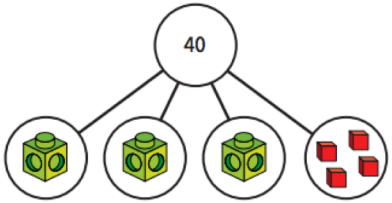


a) Write an equation for the part-whole model.

b) Solve the equation to work out the value of 

 = ☐

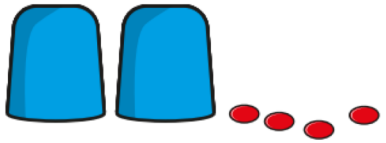
2 If each multilink cube represents x, form and solve an equation to find the value x.



x = ☐

3 There is the same number of counters under each cup.

There are 16 counters in total.



a) Use y to represent the number of counters under each cup.

Write an equation in terms of y.

b) Solve the equation to find the value of y.

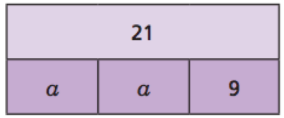
y = ☐

c) How many counters are under each cup? ☐

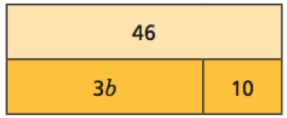
4 Write an algebraic equation to represent each bar model.

Find the values of a and b.

a)



b)



a = ☐ b = ☐

5 Solve the equations.

a) $5x + 1 = 31$

$x =$ ☐

b) $3x - 3 = 9$

$x =$ ☐

c) $4p - 11 = 3$

$p =$ ☐

d) $9 = 2y + 8$

$y =$ ☐

e) $10g - 2 = 46$

$g =$ ☐

f) $4 + 3y = 28$

$y =$ ☐

6 Dani thinks of a number.

She doubles it and adds 3

She gets the answer 15

a) Write an equation to represent Dani's problem.

b) Solve the equation to find her number.

☐

7 Alex is y years old.

Her friend Brett is 3 years older.

The total of their ages is 25

How old are Alex and Brett?

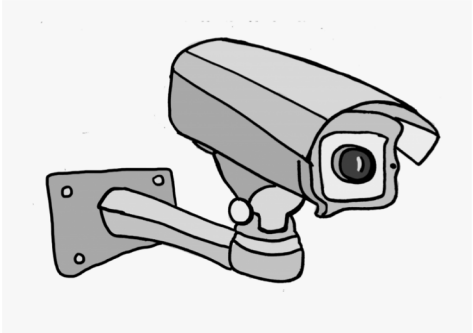
Alex is ☐ Brett is ☐

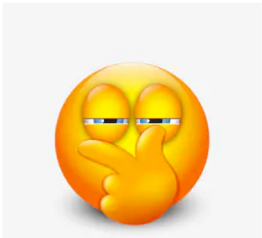
Ext:

a) Work out the cost of one banana and one orange.

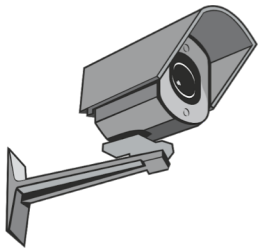
One banana costs ☐ One orange costs ☐

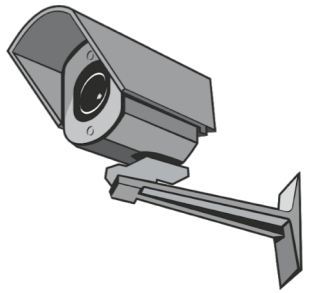
b) Compare methods with a partner.





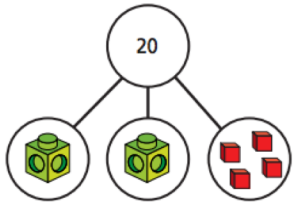
The next two slides contain the answers should you wish to check you work and reflect on what you understand.





Solve two-step equations

1 Here is a part-whole model.



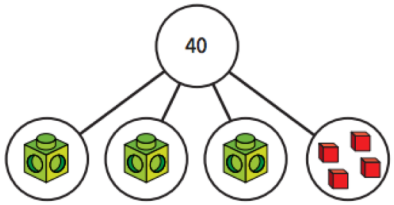
a) Write an equation for the part-whole model.

$2a + 4 = 20$

b) Solve the equation to work out the value of 

 = 8

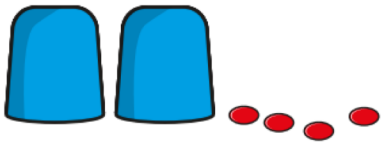
2 If each multilink cube represents x, form and solve an equation to find the value x.



$x = 12$

3 There is the same number of counters under each cup.

There are 16 counters in total.



a) Use y to represent the number of counters under each cup.

Write an equation in terms of y.

$2y + 4 = 16$

b) Solve the equation to find the value of y.

$y = 6$

c) How many counters are under each cup? 6

4 Write an algebraic equation to represent each bar model.

Find the values of a and b.

a)

21		
a	a	9

b)

46	
$3b$	10

$a = 6$

$b = 12$

5 Solve the equations.

a) $5x + 1 = 31$

$x =$ 6

b) $3x - 3 = 9$

$x =$ 4

c) $4p - 11 = 3$

$p =$ 3·5

d) $9 = 2y + 8$

$y =$ 0·5

e) $10g - 2 = 46$

$g =$ 4·8

f) $4 + 3y = 28$

$y =$ 8

6 Dani thinks of a number.

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She gets the answer 15

a) Write an equation to represent Dani's problem.

$2x + 3 = 15$

b) Solve the equation to find her number.

6

7 Alex is y years old.

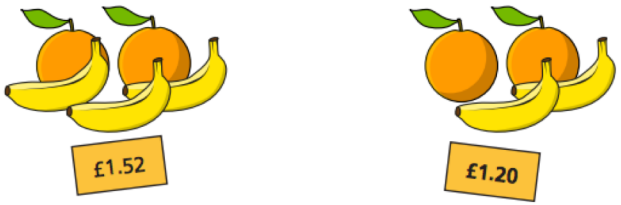
Her friend Brett is 3 years older.

The total of their ages is 25

How old are Alex and Brett?

Alex is 11 Brett is 14

Ext:



a) Work out the cost of one banana and one orange.

One banana costs 32p One orange costs 28p

b) Compare methods with a partner.