KeeP-uppI Maths Workout

Year 2 - Pack 4 Answers

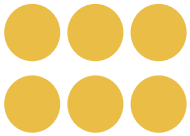
KPIs for Term 2 (Part 2)

Understand how multiplication can be represented
Know that multiplication is commutative and division is not
Understand how division can be represented

Multiplication Workout

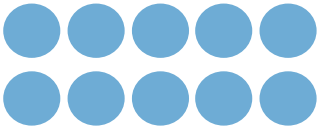
Workout A

Write two multiplication calculations for each array.



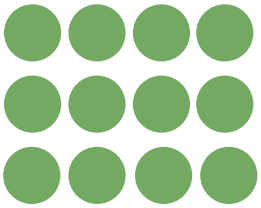
3 × 2 = 6

2 × 3 = 6



5 × 2 = 10

2 × 5 = 10



3 × 4 = 12

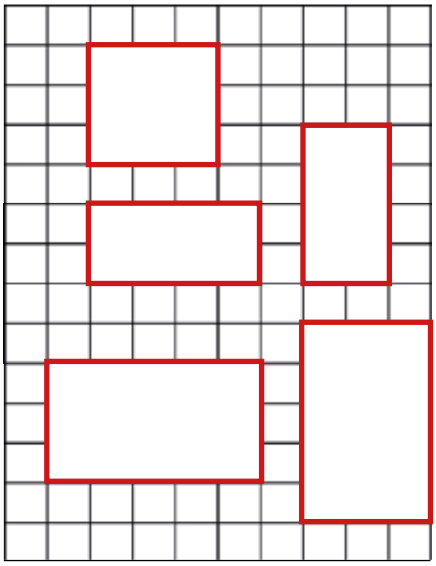
4 × 3 = 12

Draw arrays to show:

3 × 3

2 × 4

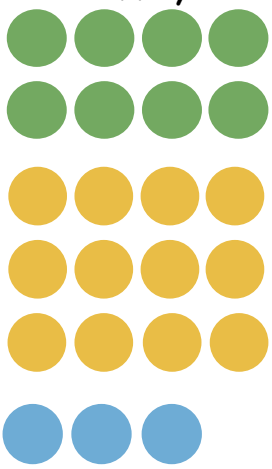
5 × 3



Workout B

Division Workout

Write two division calculations for each array.



8 ÷ 2 = 4

8 ÷ 4 = 2

12 ÷ 3 = 4

12 ÷ 4 = 3

3 ÷ 3 = 1

3 ÷ 1 = 3

Draw bar models to show:

12 divided into groups of 3

3	3	3	3

15 divided into groups of 5

5	5	5

10 divided into groups of 2

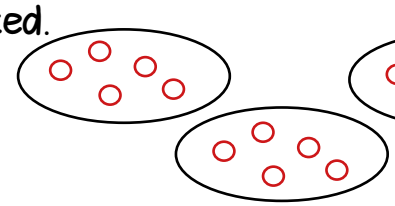
2	2	2	2	2

Multiplication and Division Workout

Workout C

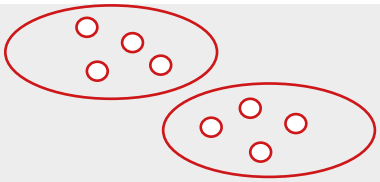
Represent each calculation as repeated addition, equal groups and a bar model. One has been started.

5 × 3 = 5 + 5 + 5



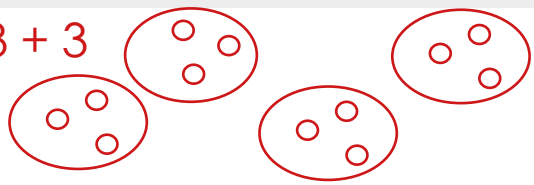
5	5	5

4 × 2 = 4 + 4



4	4

3 × 4 = 3 + 3 + 3 + 3



3	3	3	3

Array Game

Workout D

You need:
Array Grid (on the next page.)
1 - 6 dice

To play:
Take it in turns to roll the dice and add that number of squares to the array on the grid.
If, by adding squares, you create an array, you need to describe the array and say the multiplication calculation it represents.
You score a point if you make an array.

I have thrown 5 so will add 5 squares to the grid.
I have made an array that is 3 rows of 5.
This represents 3 × 5 = 15

To win:
The winner is the first player to score 6 points, or the player with the highest score when the grid is full.

Note: Remember that an array must have an equal number of squares in every row.

Array Grid

Missing Number Workout

Workout E

Put digits in the empty boxes so that the calculations are correct.

Complete them in several different ways, if possible.

Possible solution

$$\boxed{4} \times 3 = \boxed{1}2$$

$$1\boxed{5} \div 5 = \boxed{3}$$

$$\boxed{6} \div 3 = \boxed{2}$$

$$\boxed{2} + \boxed{2} + \boxed{2} + \boxed{2} + \boxed{2} = 1\boxed{0}$$

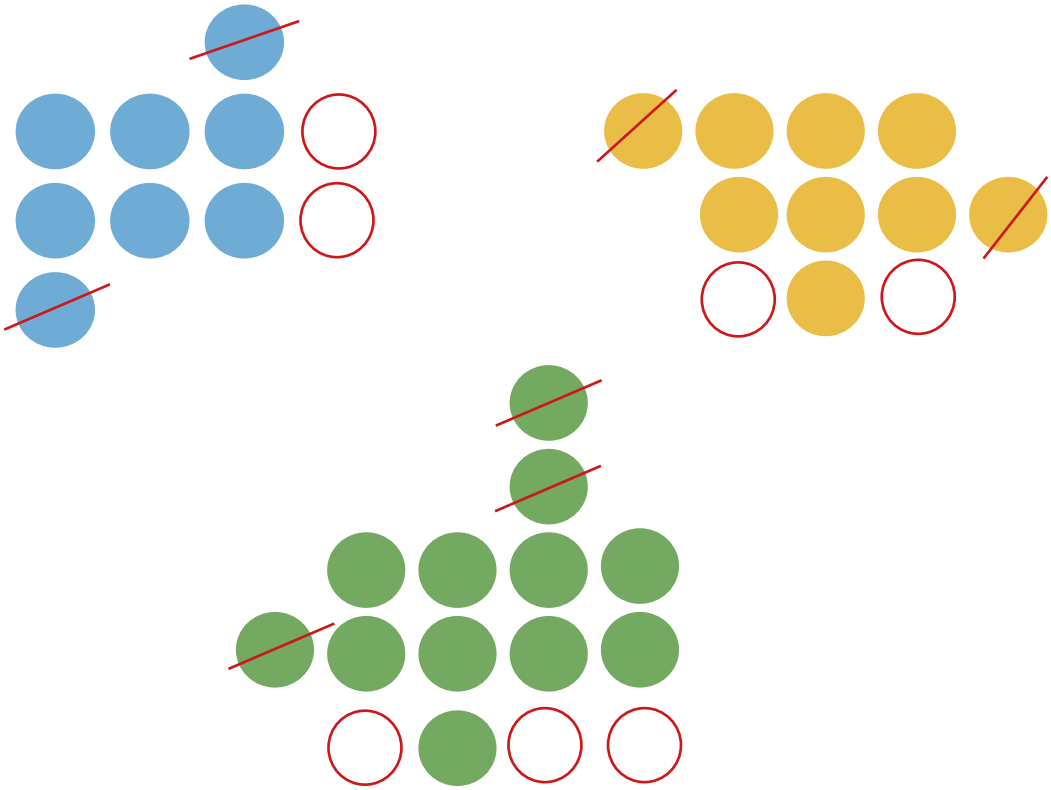
Which ones can only be completed in one way?
Are there any boxes that could have three different digits in them?

Now complete it using the digits 0, 1, 2, 3, 4, 5 and 6 at least once each.
Draw an array or a bar model for each calculation.

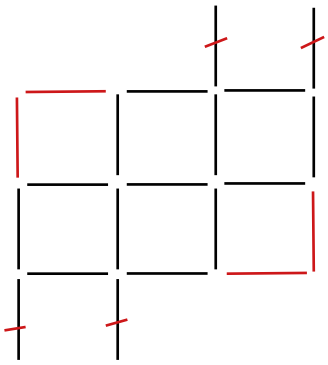
Array Challenge

Workout F

Move counters to create an array.
What is the smallest number of counters you can move each time?



Move sticks to make an array of squares.



This array uses 17 sticks. Make an array that uses 12 sticks.

2 by 2 array

Word Problem Workout

Workout G

Represent each problem as an array, equal groups or a bar model then solve it.

1. Colin has a bunch of 21 roses.
   He puts them into three vases with an equal number in each vase.
   How many are in each vase?

   7

2. Colin has 20 stickers.
   He sticks an equal number of stickers on each of four pages.
   How many stickers are on each page?

   5

3. Coco has 30 crackers.There are five crackers in each pack.
   How many packs are there?

   6

4. Coco arranges 12 counters in an array.
   Colin arranges 12 counters in a different array.
   Coco's array has 1 more row than Colin's array.
   Colin's array has 2 more coliumns than Coco's array. Draw their arrays.

   Coco: 3 rows, 4 columns
   Colin: 2 rows, 6 columns

5. Colin and Coco and KeePuppI share a packet of sweets equally.
   They have 6 sweets each.
   How many sweets were there in the packet in total?

   18

Create your own problems using division and multiplication.

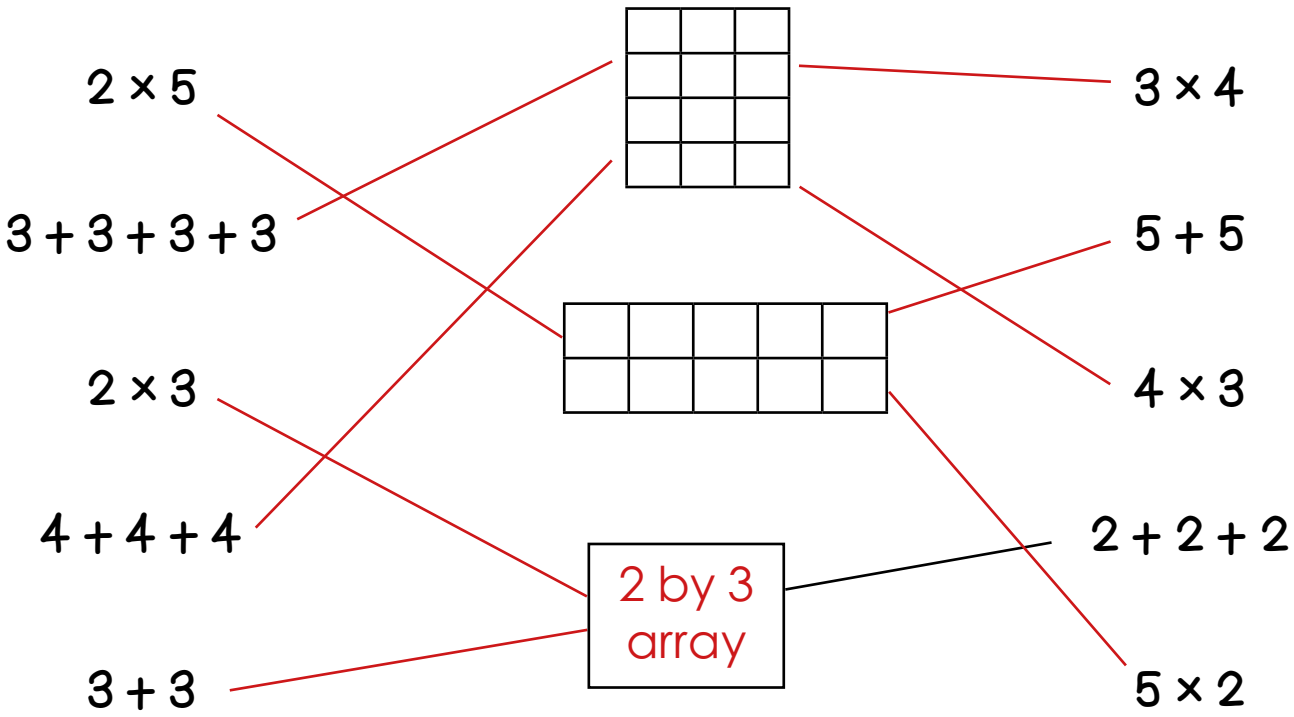
Matching Workout

Workout H

Match questions to correct answers.
Fill in the missing buddies.

20 ÷ 5	16
12 ÷ 4	4
2 × 5	3
4 × 4	10
15 ÷ 3	12
8 ÷ 4	2
4 × 3	6
12 ÷ 2	20
4 × 5	5

Match calculations to the correct array.
Find the missing buddies.



Create your own Matching Workout.