



# Colin and Coco's Deliberate Practice

Year 2 Unit 6

Multiplication and Division **Answers**





# Contents

This pack of deliberate practice is designed to be used flexibly to secure the manageable steps of this unit.

The table below indicates which activities are linked to which manageable steps.

|                                                                                | Do It | Challenge It | Play It |
|--------------------------------------------------------------------------------|-------|--------------|---------|
| Count in steps of 3 from zero                                                  |       |              | 1       |
| Show and use the connection between multiplication and repeated addition       | 1     | 2            |         |
| Create multiplication statements to describe and solve equal grouping problems | 1     | 1            |         |
| Use arrays to solve multiplication problems                                    | 2     | 2            | 2       |
| Show and use the commutativity of multiplication                               | 2     |              | 2       |
| Create division statements to describe and solve grouping problems             | 3     | 3            |         |
| Create division statements to describe sharing and solve problems              | 3     | 3            | 3       |
| Show that division is not commutative                                          |       | 3            |         |



Do It 1

Complete the statements:

$$4 + 4 + 4 = \boxed{4} \times \boxed{3}$$

$$\begin{array}{c} \triangle \triangle \triangle \\ \triangle \triangle \triangle \end{array} \begin{array}{c} \triangle \triangle \triangle \\ \triangle \triangle \triangle \end{array} \begin{array}{c} \triangle \triangle \triangle \\ \triangle \triangle \triangle \end{array} \begin{array}{c} \triangle \triangle \triangle \\ \triangle \triangle \triangle \end{array} = \boxed{3} \times \boxed{4}$$

$$5 + 5 = \boxed{5} \times \boxed{2}$$

$$\begin{array}{c} \blacksquare \blacksquare \blacksquare \\ \blacksquare \blacksquare \blacksquare \end{array} \begin{array}{c} \blacksquare \blacksquare \blacksquare \\ \blacksquare \blacksquare \blacksquare \end{array} = \boxed{4} \times \boxed{2}$$

$$2 + 2 + 2 + 2 = \boxed{2} \times \boxed{4}$$

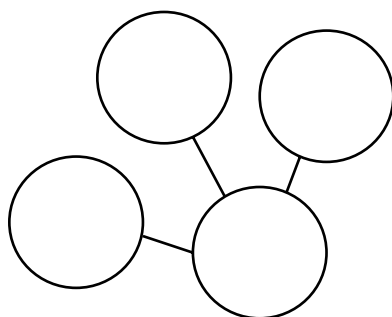
$$\begin{array}{c} \bullet \bullet \\ \bullet \bullet \end{array} \begin{array}{c} \bullet \bullet \\ \bullet \bullet \end{array} \begin{array}{c} \bullet \bullet \\ \bullet \bullet \end{array} \begin{array}{c} \bullet \bullet \\ \bullet \bullet \end{array} = \boxed{2} \times \boxed{3}$$

$$3 + 3 + 3 = \boxed{3} \times \boxed{3}$$

$$\begin{array}{c} \blacksquare \blacksquare \blacksquare \\ \blacksquare \blacksquare \blacksquare \end{array} \begin{array}{c} \blacksquare \blacksquare \blacksquare \\ \blacksquare \blacksquare \blacksquare \end{array} \begin{array}{c} \blacksquare \blacksquare \blacksquare \\ \blacksquare \blacksquare \blacksquare \end{array} \begin{array}{c} \blacksquare \blacksquare \blacksquare \\ \blacksquare \blacksquare \blacksquare \end{array} \begin{array}{c} \blacksquare \blacksquare \blacksquare \\ \blacksquare \blacksquare \blacksquare \end{array} = \boxed{4} \times \boxed{5}$$

Complete the picture and calculation in several different ways.

Challenge It 1



$$\boxed{\phantom{0}} \times \boxed{\phantom{0}} = \boxed{\phantom{0}}$$

Complete the calculation and draw a picture to represent it in several different ways.

$$\boxed{\phantom{0}} \times \boxed{2} = \boxed{\phantom{0}}$$



## Count in 3s Game

Play It 1

You need:

1 - 100 Board

0 - 9 dice

To play:

Players take it in turns to throw the dice and make that number of jumps of three, counting aloud.

The number they end on is their score.

Example:

Player 1: Throws 6

Counts 3, 6, 9, 12, 15, 18 using the 1 - 100 board.

Scores 18

To win:

The winner is the first player to score more than 90



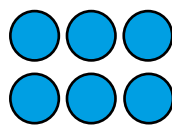
Draw an array to represent

2 groups of 5       $2 \times 3$

3 groups of 2       $4 \times 2$

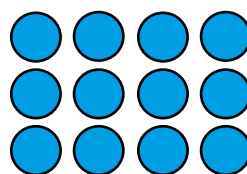
4 groups of 3       $3 \times 5$

Describe the array in 2 different ways



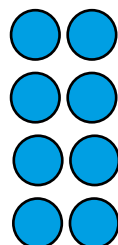
$$\boxed{3} \times \boxed{2} = \boxed{6}$$

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



$$\boxed{4} \times \boxed{3} = \boxed{12}$$

$$\boxed{3} \times \boxed{4} = \boxed{12}$$



$$\boxed{4} \times \boxed{2} = \boxed{8}$$

$$\boxed{2} \times \boxed{4} = \boxed{8}$$

Do It 2

Challenge It 2

Arrange 24 counters in an array.

Describe the array with an addition and multiplication statement.

Find more ways of arranging 24 counters in arrays.

Each time, write an addition and a multiplication statement.



# Array Game

Play It 2

You need:

Two 1 - 6 Dice

Squared Grid each

To play:

Players take it in turns to roll the dice to generate two numbers.

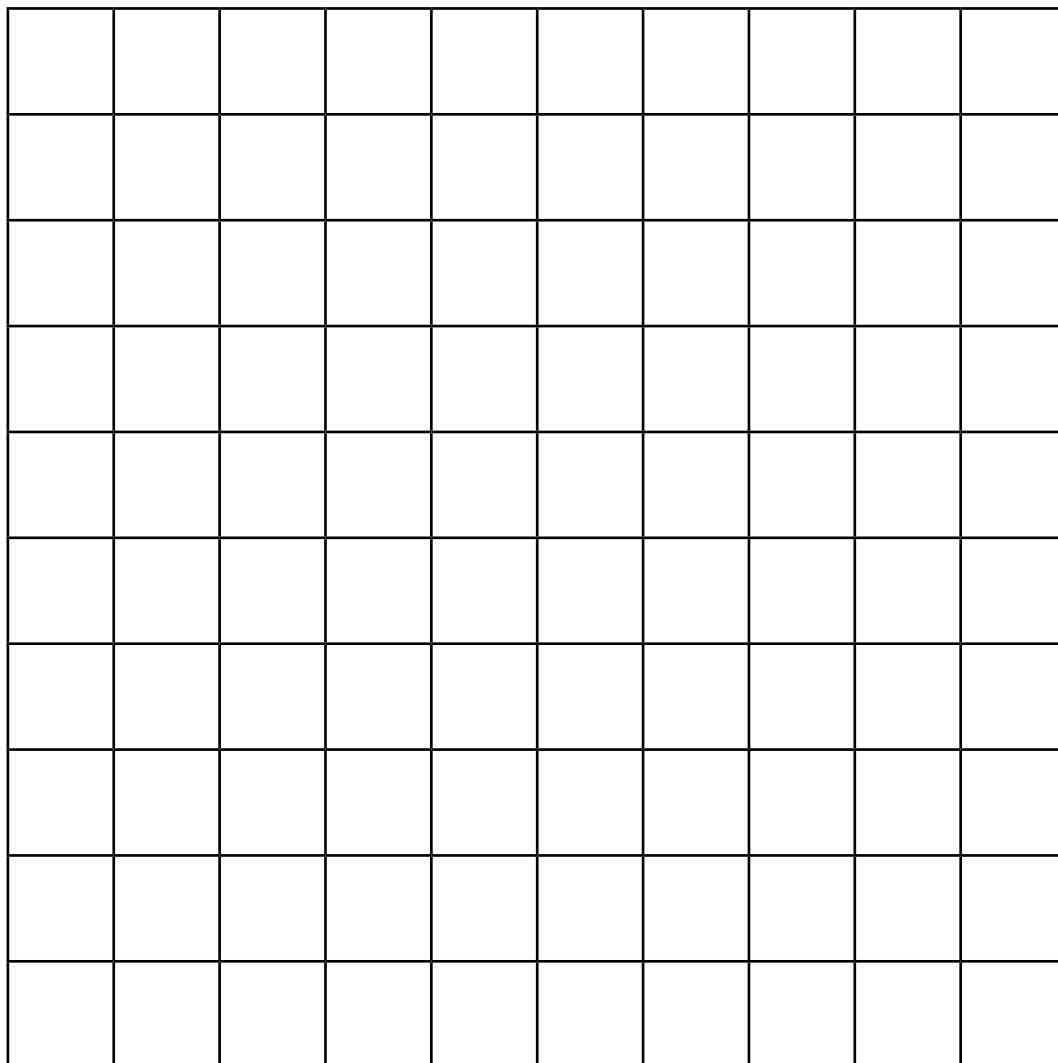
Shade in an array on your grid that represents 'Number 1' x 'Number 2'

Try and complete your grid with arrays.

Play stops after three turns with arrays that cannot be placed.

To win:

The winner is the player with the fewest squares not included in arrays.

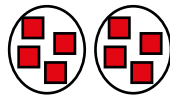




Do It 3

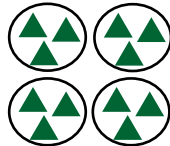
Draw a picture to represent:

6 circles in groups of 2



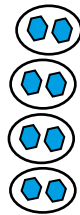
8 shared equally in 2 groups of 4

6 circles shared equally in 3 groups



12 shared equally in 4 groups of 3

8 circles in groups of 4



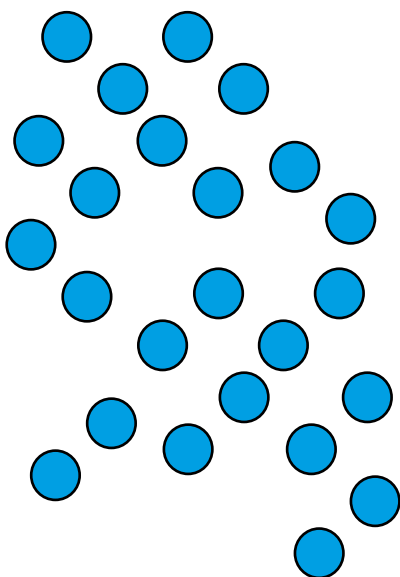
8 shared equally in 4 groups of 2

Arrange 24 counters in equal groups.

Draw your arrangement.

Describe your picture using a division statement.

Challenge It 3



$$\square \div \square = \square$$

Arrange 24 counters in equal groups in several different ways.

Each time, describe the arrangement using a division statement.



## Division Game

Play It 3

You need:

Counters in a bag (up to about 30)

To play:

Take it in turns to grab a handful of counters from the bag.

Arrange the counters into equal groups. There must be more than one counter in each group. There must be more than one group.

Score a point for two equal groups.

Score two points for three equal groups.

Score three points any other number of groups.

Score nothing if you cannot put your counters into equal groups.

To win:

The winner is the first player to score more than 10 points.