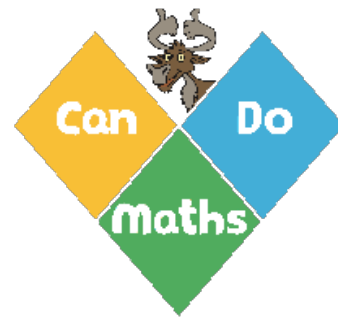




Colin and Coco's Deliberate Practice

Year 4 Unit 9A and 9B

Multiplication and Division





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
Multiply 1-digit numbers by multiples of 10 using place value (6, 7, 9)	1		
Use the distributive law to multiply a two-digit number by a one-digit number (6, 7, 9)		1	
Multiply 2-digit number by a 1-digit number using a formal written method (6, 7, 9)			1
Multiply 1 and 2-digit numbers by 100	2		
Multiply 3-digit number by a 1 digit number using a formal written method (regroup ones)		2	
Multiply 3-digit number by a 1 digit number using a formal written method (regroup tens)	3		
Multiply 3-digit number by a 1 digit number using a formal written method (regroup hundreds)	3		
Multiply 3-digit number by a 1 digit number using a formal written method (multiple regroup)			2
Divide multiples of ten by 10		3	
Divide multiples of a hundred by 100		3	
Use known facts and place value when dividing mentally e.g. $120 \div 6$, $1200 \div 6$, $1320 \div 12$			3
Divide near multiples by 6, 7, 9, 11 and 12 with remainders			4
Divide 3-digit number by a single digit number using partitioning and place value		4	
Use written method to divide a 3-digit number by a single digit number (hundreds = multiple of divisor, tens > divisor) with no remainder	4		
Use written method to divide a 3-digit number by a single digit number (hundreds > divisor, one exchange) with no remainder	5		
Use written method to divide a 3-digit number by a single digit number (hundreds > divisor, two exchanges) with no remainder	5	5	
Use written method to divide a 3-digit number by a single digit number (hundreds < divisor) with no remainder			5



Calculate:

Do It 1

$40 \times 6 = \square$

$60 \times 6 = \square$

$80 \times 6 = \square$

$40 \times 9 = \square$

$70 \times 7 = \square$

$90 \times 7 = \square$

$30 \times 7 = \square$

$90 \times 9 = \square$

$70 \times 9 = \square$

$90 \times 6 = \square$

$80 \times 7 = \square$

$80 \times 9 = \square$

Find the missing digits.

Challenge It 1

Solve each statement in several ways where possible.

$1\square \times 6 = \square 0 + \square \square = 1\square 4$

$\square 5 \times \square = \square \square 0 + \square 5 = \square 1 \square$

Solve them together using the digits 1, 2, 3, 4, 5, 6, 7, 8, and 9 at least once each.



Multiplication Game

Play It 1

You need:

Card Set (print off the cards) for each player

Game Board each

To play:

The players agree a target between 500 and 700

Each player shuffles card sets A and B, places them face down and picks 2 cards from Set A and 1 card from Set B.

Each player places the cards on their Game Board. Both players find the answer to their calculation.

The player with an answer that is equal to, or closest to, the target number wins one point.

Choose a new target and play again.

To win:

The winner is the first player to score 10 points.

Game Board

$$\boxed{A} \boxed{A} \times \boxed{B}$$

Set A

5	6	7	8	9
---	---	---	---	---

Set B

6	7	9
---	---	---



Do It 2

Calculate:

$6 \times 100 = \square$

$7 \times 100 = \square$

$100 \times 9 = \square$

$100 \times 8 = \square$

$63 \times 100 = \square$

$72 \times 100 = \square$

$17 \times 100 = \square$

$71 \times 100 = \square$

$100 \times 67 = \square$

$76 \times 100 = \square$

$100 \times 89 = \square$

$99 \times 100 = \square$

Challenge It 2

Find the missing digits

Solve each calculation in several ways where possible.

$$\begin{array}{r} 316 \\ \times \square \\ \hline \square\square8 \end{array}$$

$$\begin{array}{r} 21\square \\ \times 4 \\ \hline \square\square0 \end{array}$$

$$\begin{array}{r} \square\square3 \\ \times \square \\ \hline 7\square1 \end{array}$$

Solve them together using the digits 0, 1, 2, 3, 4, 5, 6, 7, 8, and 9 once.

Create your own missing digits challenge.



Multiplication Game

Play It 2

You need:

Card Set (print off the cards) for each player

A Game Board each

To play:

The players agree a target between 4000 and 6000

Each player shuffles the card set, places them face down and picks 4 cards.

Each player places the cards on their Game board.

Both players find the answer to their calculation.

The player with an answer that is equal to, or closest to, the target number wins one point.

Choose a new target and play again.

To win:

The winner is the first player to score 10 points.

Game Board

			x	
--	--	--	---	--

Card Set

3	4	5	
6	7	8	9



Calculate:

Do It 3

		2	6	2	
	×			3	

		1	3	1	
	×			7	

		6	2	1	
	×			4	

		7	2	3	
	×			3	

		1	5	1	
	×			6	

		1	9	1	
	×			4	

		9	3	2	
	×			3	

		7	1	2	
	×			4	

Match the calculation to the answer.
Find the missing buddies.

Challenge It 3

4770 ÷ 10		407
7400 ÷ 100		
4070 ÷ 10		477
7700 ÷ 10		740
4700 ÷ 100		74
7400 ÷ 10		77
7700 ÷ 100		707
4700 ÷ 10		704
		470
7040 ÷ 10		404
7070 ÷ 10		47



Known facts Division Game

Play It 3

You need:

0 - 9 dice

To play:

Players take it in turns to roll the dice 4 times to get 4 digits.

They choose three of their digits to put into their Game Board so they can use a known fact and place value to calculate the answer.

They score their answer.

Example:

Player 1: throws 2, 0, 7 and 5

makes $200 \div 5$

calculates if I know $20 \div 5 = 4$ then $200 \div 5 = 40$

scores 40

If it's impossible to create a calculation, the next player has a go.

To win:

The winner is the first player to score 400

Game Board

		0	÷	
--	--	---	---	--



Calculate:

Do It 4

3	6	4	8

4	8	5	6

6	6	8	4

3	9	8	7

5	5	9	0

7	7	9	1

Match the calculation to the answer.
Find the missing buddies.

Challenge It 4

175 ÷ 5		204
369 ÷ 3		104
816 ÷ 4		35
520 ÷ 5		
645 ÷ 3		123
574 ÷ 7		107
642 ÷ 6		109
390 ÷ 3		142
920 ÷ 4		130
÷ 5		230
981 ÷ 9		



Remainders Game

You need:

Two 0 -9 dice

To play:

Each player throws the two dice to create a 2-digit number.

They decide if they would like to divide the 2-digit number by 6, 7, 9, 11 or 12.

They divide the 2-digit by their chosen number and calculate the quotient and the remainder.

The player with the largest remainder wins the round and scores their remainder.

Example:

Player 1: Throws 7 and 1

If they create 17 and divide by 9 they calculate $17 \div 9 = 1 \text{ r } 8$

They would score 8

OR

If they create 71 and divide by 12 they calculate $71 \div 12 = 5 \text{ r } 11$

They would score 11

To win:

The winner is the first player to score 40 points.



Do It 5

Calculate:

$$\begin{array}{r} 3 \overline{) 525} \\ \hline \end{array}$$

$$\begin{array}{r} 5 \overline{) 805} \\ \hline \end{array}$$

$$\begin{array}{r} 3 \overline{) 438} \\ \hline \end{array}$$

$$\begin{array}{r} 5 \overline{) 835} \\ \hline \end{array}$$

$$\begin{array}{r} 4 \overline{) 964} \\ \hline \end{array}$$

$$\begin{array}{r} 3 \overline{) 876} \\ \hline \end{array}$$

$$\begin{array}{r} 6 \overline{) 810} \\ \hline \end{array}$$

$$\begin{array}{r} 7 \overline{) 952} \\ \hline \end{array}$$

Challenge It 5

Find the missing digits.
Solve each calculation in several ways where possible.

$$\begin{array}{r} 1 \square 8 \\ 3 \overline{) \square 3 \square} \\ \hline \end{array}$$

$$\begin{array}{r} 19\square \\ 5 \overline{) \square 6 \square} \\ \hline \end{array}$$

$$\begin{array}{r} \square 5 \square \\ 4 \overline{) \square \square 2} \\ \hline \end{array}$$

Solve them altogether using the digits 0, 1, 2, 3, 4, 5, 6, 7, 8, and 9 once.



Hundreds < Divisor Game

You need:

Card Sets A, B and C (print off the cards) for each player.

Game Board

To play:

Each player shuffles their card set A, places them face down and picks 1 card.

Each player places the card on their Game Board.

Each player shuffles their card set B, places them face down and picks 1 card.

Each player places the card on their Game Board.

Both players look at card Set C and try to choose 2 cards to complete a 3-digit number that can be divided by the number with no remainder.

Both players now try to find the answer to their calculation.

The player with the highest quotient wins a point.

To win:

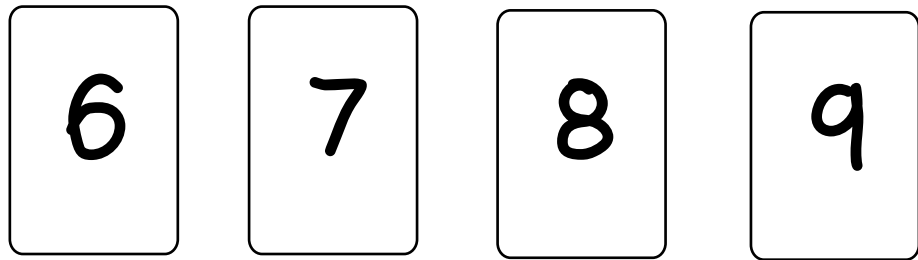
The winner is the first player to score 10 points.

Game Board

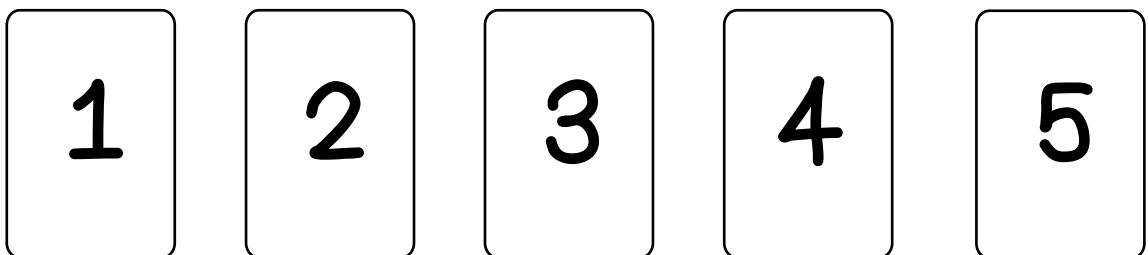
$$\boxed{B} \boxed{C} \boxed{C} \div \boxed{A}$$



Card Set A



Card Set B



Card Set C

