



# Keep-uppI Maths Workout



Year 3 - Pack 4

Answers



KPIs for Term 4

Multiply 2-digit by 1-digit numbers mentally

Divide 2-digit by 1-digit numbers mentally

Multiply 2-digit by 1-digit numbers using a formal written method



## Multiplication Workout

Use a mental method, maybe with jottings, to solve these.

$68 = 4 \times 17$

$64 = 4 \times 16$

$14 \times 3 = 42$

$4 \times 20 = 80$

$75 = 15 \times 5$

$60 = 15 \times 4$

$3 \times 17 = 51$

$2 \times 30 = 60$

$48 = 3 \times 16$

$54 = 3 \times 18$

$8 \times 16 = 128$

$80 \times 5 = 400$

$144 = 18 \times 8$

$136 = 17 \times 8$

$4 \times 14 = 56$

$40 \times 3 = 120$

## Division Workout

Use a mental method, maybe with jottings, to solve these.

$7r1 = 22 \div 3$

$5r1 = 21 \div 4$

$240 \div 3 = 80$

$14 = 42 \div 3$

$12r1 = 37 \div 3$

$9r2 = 38 \div 4$

$440 \div 4 = 110$

$14 = 56 \div 4$

$6r2 = 20 \div 3$

$6r1 = 49 \div 8$

$400 \div 8 = 50$

$12 = 96 \div 8$

$2r1 = 17 \div 8$

$7r3 = 59 \div 8$

$640 \div 8 = 80$

$19 = 57 \div 3$

## Multiplication Workout

$$\begin{array}{r} 27 \\ \times 3 \\ \hline 81 \end{array}$$

$$\begin{array}{r} 38 \\ \times 3 \\ \hline 114 \end{array}$$

$$\begin{array}{r} 46 \\ \times 3 \\ \hline 138 \end{array}$$

$$\begin{array}{r} 57 \\ \times 3 \\ \hline 171 \end{array}$$

$$\begin{array}{r} 17 \\ \times 8 \\ \hline 136 \end{array}$$

$$\begin{array}{r} 24 \\ \times 8 \\ \hline 192 \end{array}$$

$$\begin{array}{r} 28 \\ \times 8 \\ \hline 224 \end{array}$$

$$\begin{array}{r} 34 \\ \times 8 \\ \hline 272 \end{array}$$

$$\begin{array}{r} 16 \\ \times 4 \\ \hline 64 \end{array}$$

$$\begin{array}{r} 27 \\ \times 4 \\ \hline 108 \end{array}$$

$$\begin{array}{r} 38 \\ \times 4 \\ \hline 152 \end{array}$$

$$\begin{array}{r} 63 \\ \times 4 \\ \hline 252 \end{array}$$



# Multiplying and Dividing Game

Workout D

You need:

Multiplying and Dividing Game templates (see below for Game 1 and Game 2)

Card Set A (print off the cards) for each player.

Card Set B (print off the cards) for each player.

To play:

Pick Game Template 1 or Game Template 2

Each player shuffles Card Set A, places them face down and picks two cards to create a 2-digit number on the template.

Each player shuffles Card Set B, places them face down and picks a card. It is placed on the Game Template to make a calculation.

Both players find the answer to their calculation using an efficient method. Convince your opponent that your answer is correct.

To win:

The player who calculates the highest total wins a point.

The first player to get 10 points wins the Game.

## Game 1

$$\begin{array}{|c|} \hline A \\ \hline \end{array} \begin{array}{|c|} \hline A \\ \hline \end{array} \times \begin{array}{|c|} \hline B \\ \hline \end{array}$$

## Game 2

$$\begin{array}{|c|} \hline A \\ \hline \end{array} \begin{array}{|c|} \hline A \\ \hline \end{array} \div \begin{array}{|c|} \hline B \\ \hline \end{array}$$



## Multiplying and Dividing Cards

### Set A

0

1

2

3

4

5

6

7

8

9

### Set B

3

4

5

8



# Missing Number Workout

Workout E

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

Complete them in several different ways.

Possible solution

$$\begin{array}{r} 3 \square 7 \\ \times \quad \square 8 \\ \hline 2 \square 9 \square 6 \\ \hline \square 5 \end{array}$$

$$\square 2 \square 0 \div 3 = \square 6 \text{ r } 2$$

$$\square 4 \square 0 \times \square 3 = \square 1 \square 20$$

Coco thinks it is possible to put a 2 in any of the boxes, if she then adjusts the other digits accordingly. Do you agree?

Are there any boxes that could have any of the digits in them?

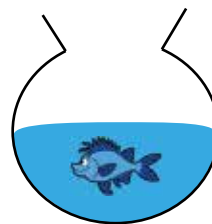
Now complete it using the digits 0, 1, 2, 3, 4, 5, 6, 7, 8, and 9 once each.



# Goldfish Challenge

Workout F

KeePuppI and Coco have been putting goldfish in bowls.  
They have fewer than 60 goldfish.



When KeePuppI puts 4 goldfish in each bowl there are 2 goldfish left over.

When Coco puts the same number of goldfish into bowls, with 3 in each bowl, there is one left over.



Investigate possible numbers of goldfish that they could have.

Find all the possible numbers of goldfish up to 60

10, 22, 34, 46, 58...



Colin joins in with the same goldfish!  
Colin puts 8 goldfish in each bowl and there are 2 left over.

Now how many goldfish could they have?

10, 34, 58



# Word Problem Workout

Workout G

1. Fish and chips costs £8

A group of 16 walkers all have fish and chips.

What is the total cost?

£128

2. There is a bag of 90 marbles.

Coco tries to share them equally between 4 bags.

How many does she have left over?

2  
(90 ÷ 4 = 22 r 2)

3. There are 68 legs in a cow barn.

How many cows are there?

17

4. Colin plants some bulbs in equal rows. He has a bag of 150 bulbs.

He plants 18 rows with 8 bulbs in each row.

How many bulbs are left in the bag?

6

5. Coco is playing darts. She starts from 301

She scores treble 18, treble 14 and treble 17

How much does she have left to score?

154

6. At a show, chairs are set out in equal rows, on two sides of the hall.

There are 8 rows of 30 chairs on each side of the hall.

How many chairs are set out in total?

480

Create your own problems multiplying and dividing.



## Matching Workout

Match the calculation to the answer.  
In your head? With jottings? Written method?  
Fill in the missing buddies.

Possible solution

$36 \times 4$	$270$
$27 \times 3$	$120$
$28 \times 8$	$144$
$30 \times 4$	$320$
$80 \times 4$	$81$
$3 \times 90$	$152$
$17 \times 3$	$224$
$19 \times 8$	$72$
$4 \times 18$	$51$

Match the calculation to the correct remainder.

Fill in the missing buddies.

Possible solution

$33 \div 8$	remainder 1	$21 \div 4$
$44 \div 5$	remainder 4	$22 \div 3$
$66 \div 8$	remainder 3	$26 \div 3$
$63 \div 5$	remainder 2	$32 \div 5$
$100 \div 8$	remainder 2	$39 \div 4$

Create your own Matching Workout.