

Division Entry 2

Name: _____

Date: _____

How to Guide

Skills Check

► Can you?

Skill	I can't do this	I feel okay with this	I can do this
Divide numbers in your times tables			
Divide 2 digit numbers by 1 digit numbers			
Show remainders			

When you have finished the booklet, use a different colour to show how you feel now.

Division Introduction

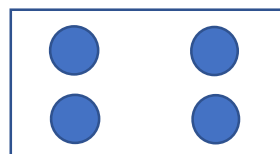
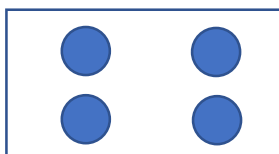
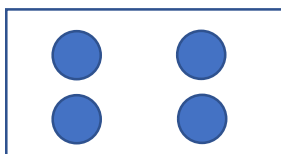
Knowing your times tables well will help you with division. You will need to divide without your calculator on your exam for some questions.

You should complete the guide on multiplication before this guide.

What is Dividing?

Splitting something up into parts

What is 12 divided by 3?



$$12 \text{ divided by } 3 = 4$$

Multiplying and Dividing

If you know your times tables, you can work backwards to divide

Example

$$7 \times 6 = 42$$

$$42 \div 6 = 7 \text{ and } 42 \div 7 = 6$$

You can use a times table grid to help you when you first start dividing.

x	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	55	60
6	6	12	18	24	30	36	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
8	8	16	24	32	40	48	56	64	72	80	88	96
9	9	18	27	36	45	54	63	72	81	90	99	108
10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
12	12	24	36	48	60	72	84	96	108	120	132	144

Example

What is $48 \div 8$? You can work up your 8 times table until you get to 48.

You need 6 lots of 8 to make 48 so $48 \div 8 = 6$

Try it Out

Question 1

a) $60 \div 5 =$

b) $16 \div 2 =$

c) $49 \div 7 =$

d) $72 \div 6 =$

Methods to Divide

Bus Stop Method

Your starting number goes inside the bus stop

$$3 \overline{)63}$$

The second number goes outside the bus stop

You work left to right

$$63 \div 3 =$$

How many times does 3 go into 6?
2 times

$$\begin{array}{r} 2 \\ 3 \overline{)63} \end{array}$$

How many times does 3 go into 3?

1 time

$$63 \div 3 = 21$$

$$\begin{array}{r} 21 \\ 3 \overline{)63} \end{array}$$

Try it Out

Question 2

a) $60 \div 2 =$

b) $63 \div 3 =$

c) $70 \div 7 =$

d) $99 \div 3 =$

e) $50 \div 5 =$

f) $24 \div 2 =$

$$56 \div 2 =$$

How many times does 2 go into 5? 2 whole times because $2 \times 2 = 4$ with 1 left over (1 remainder)

The remainder carries in front of the next number to make 16

How many times does 2 go into 16?

8 times

$$56 \div 2 = 8$$

$$\begin{array}{r} 2 \\ 2 \overline{)56} \end{array}$$

$$\begin{array}{r} 28 \\ 2 \overline{)56} \end{array}$$

$$84 \div 7 =$$

How many times does 7 go into 8? 1 whole time because $1 \times 7 = 7$ with 1 left over (1 remainder)

The remainder carries in front of the next number to make 14

How many times does 7 go into 14?

2 whole times

$$84 \div 7 = 12$$

$$\begin{array}{r} 1 \\ 7 \overline{)84} \end{array}$$

$$\begin{array}{r} 12 \\ 7 \overline{)84} \end{array}$$

Try it Out

Question 3

a) $96 \div 4 =$

b) $72 \div 6 =$

c) $85 \div 5 =$

d) $78 \div 2 =$

e) $36 \div 4 =$

Remainders

If your number does not divide exactly, you have a remainder

What is $57 \div 2 =$

$$\begin{array}{r} 2 \\ 2 \overline{) 57} \\ \underline{28} \\ 28 \text{ r } 1 \\ 2 \overline{) 57} \end{array}$$

When you get to the last step, you write the amount left over after the letter r for remainder

$$2 \times 8 = 16$$

there is 1 left over

What is $66 \div 4 =$

$$\begin{array}{r} 1 \\ 4 \overline{) 66} \\ \underline{4} \\ 16 \\ 4 \overline{) 66} \\ \underline{16} \\ 16 \text{ r } 2 \\ 4 \overline{) 66} \end{array}$$

When you get to the last step, you write the amount left over after the letter r for remainder

$$4 \times 6 = 24$$

there are 2 left over

Try it Out

Question 4

a) $46 \div 3 =$

b) $85 \div 7 =$

c) $27 \div 6 =$

d) $62 \div 3 =$

e) $78 \div 5 =$

Word Problems

These words can suggest you need to use division

split between goes into shared how many can you x

Example

Jess is a sport coach. She puts players into groups of 4. She has 53 players.
How many full groups can she make? **13**

$$4 \overline{) 53} \qquad 4 \overline{) 53} \text{ r}1$$

How many players are left over? **1**

Try it Out

Question 5

a) Majid puts vases in boxes. He has 65 vases. He can fit 5 vases in each box.
How many boxes does he need?

Answer box:

Working out box

b) A farmer is putting eggs into boxes. She puts 6 eggs into each box. She has 57 eggs. How many boxes will she fill?
How many eggs will be left over?

c)) Dorota wants to split £25 between her three grandchildren. How much will they each get? How much will be left over?

d) Pens come in boxes of 8. A teacher needs to buy 90 pens. How many boxes will they need to buy? Will they have any extra pens?

e) David is a chef. The starter special is garlic bread. He puts three pieces of garlic bread on each plate. He has 99 pieces of bread in total. How many plates can he make?