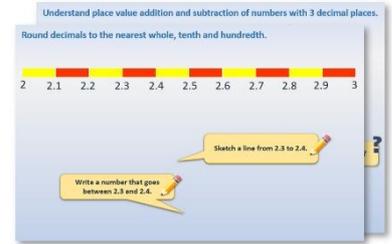


Year 4: Week 6, Day 1

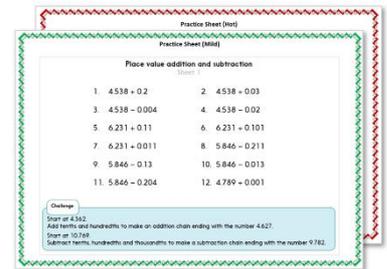
The 7 times table

Each day covers one maths topic. It should take you about 1 hour or just a little more.

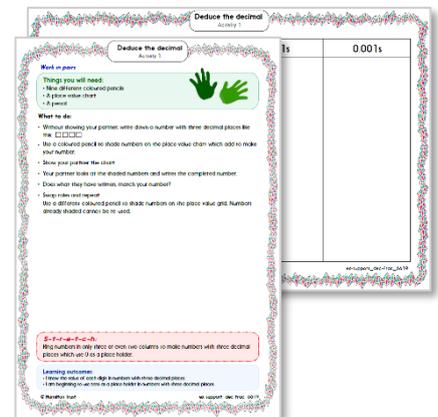
1. Start by reading through the **Learning Reminders**. They come from our *PowerPoint* slides.



2. Tackle the questions on the **Practice Sheet**. There might be a choice of either **Mild** (easier) or **Hot** (harder)! Check the answers.



3. Finding it tricky? That's OK... have a go with a grown-up at **A Bit Stuck?**



4. Think you've cracked it? Whizzed through the Practice Sheets? Have a go at the **Investigation**...

Learning Reminders

Begin to know multiplication and division facts for the 7 times table.

Let's count in 7s on the counting stick.



How many 7s are in 28?

How many 7s are in 56?

How many 7s are in 77?

Learning Reminders

Begin to know multiplication and division facts for the 7 times table.

What pattern do the multiples of 7 make on the 1-100 grid?

What happens when 7 is added to any number on the grid...?

The pattern for the 7 times tables isn't as helpful as for other tables, but our activities will help us remember them!

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Practice Sheet Mild

7 times table

Use this grid to complete the calculations using the 7 times table.

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

$7 \times 4 = \square$

$42 = 7 \times \square$

$\square \times 7 = 21$

$63 \div 7 = \square$

$8 \times 7 = \square$

$7 \div \square = 7$

$\square \div 7 = 6$

$7 \times \square = 14$

$\square = 7 \times 11$

$\square \div 7 = 10$

$\square \times 7 = 49$

$84 = \square \times 7$

Practice Sheet Hot

7 times table

Write the multiples of 7 on this grid.

Use it to complete the calculations using the 7 times table.

1	2	3	4	5	6		8	9	10	11	12
2	4	6	8	10	12		16	18	20	22	24
3	6	9	12	15	18		24	27	30	33	36
4	8	12	16	20	24		32	36	40	44	48
5	10	15	20	25	30		40	45	50	55	60
6	12	18	24	30	36		48	54	60	66	72
8	16	24	32	40	48		64	72	80	88	96
9	18	27	36	45	54		72	81	90	99	108
10	20	30	40	50	60		80	90	100	110	120
11	22	33	44	55	66		88	99	110	121	132
12	24	36	48	60	72		96	108	120	132	144

$7 \times 4 = \square$

$42 = 7 \times \square$

$\square \div 7 = 8$

$7 \times 12 = \square$

$\square \times 7 = 77$

$7 \times \square = 21$

$9 = \square \div 7$

$\square \times 7 = 49$

$\square \div 7 = 1$

Challenge

Shade the multiples of 7 on the right hand grid. Look at the pattern and describe it.

This grid has 8 columns. If the grid had 7 columns, what would the pattern be?

If the grid had 9 columns, what would the pattern be?

What if the grid had 6 columns?

1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24
25	26	27	28	29	30	31	32
33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48
49	50	51	52	53	54	55	56
57	58	59	60	61	62	63	64
65	66	67	68	69	70	71	72
73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88
89	90	91	92	93	94	95	96

Practice Sheet Answers

7 times table (mild)

$7 \times 4 = 28$

$42 = 7 \times 6$

$3 \times 7 = 21$

$63 \div 7 = 9$

$8 \times 7 = 56$

$7 \div 1 = 7$

$42 \div 7 = 6$

$7 \times 2 = 14$

$77 = 7 \times 11$

$70 \div 7 = 10$

$7 \times 7 = 49$

$84 = 12 \times 7$

7 times table (hot)

$7 \times 4 = 28$

$42 = 7 \times 6$

$56 \div 7 = 8$

$7 \times 12 = 84$

$11 \times 7 = 77$

$7 \times 3 = 21$

$9 = 63 \div 7$

$7 \times 7 = 49$

$7 \div 7 = 1$

Challenge

The pattern moves back by 1 on each row.

If it had 7 columns it would be straight down.

If it had 9 columns it would drop back by 2 on each row.

If it had 6 columns it would move forward by 1 on each row.

1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24
25	26	27	28	29	30	31	32
33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48
49	50	51	52	53	54	55	56
57	58	59	60	61	62	63	64
65	66	67	68	69	70	71	72
73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88
89	90	91	92	93	94	95	96

A Bit Stuck? Sevens success

Things you will need:
1 to 12 cards



What to do:

Shuffle the set of 1 to 12 cards, then take one.

Count that number of 7s down the middle column of the table (on next page), e.g. If you have the number 4 card, count four 7s: 7, 14, 21, 28.

Complete the multiplication and division calculations - that one is done for you:

$$\boxed{4} \times 7 = 28, 28 \div 7 = \boxed{4}$$

Keep going until you have completed the table!

Turn the table over, shuffle the cards again, then take one.

Multiply the number on it by 7. Can you remember the answer? If not, count on in 7s, then check your answer by looking at the table.

Repeat until you have used all the cards.

Do you know more facts for the 7 times table now, than you did before this activity?

A Bit Stuck?
Sevens success

$\square \times 7 =$	7	$\div 7 = \square$
$\square \times 7 =$	14	$\div 7 = \square$
$\square \times 7 =$	21	$\div 7 = \square$
$\boxed{4} \times 7 =$	28	$\div 7 = \boxed{4}$
$\square \times 7 =$	35	$\div 7 = \square$
$\square \times 7 =$	42	$\div 7 = \square$
$\square \times 7 =$	49	$\div 7 = \square$
$\square \times 7 =$	56	$\div 7 = \square$
$\square \times 7 =$	63	$\div 7 = \square$
$\square \times 7 =$	70	$\div 7 = \square$
$\square \times 7 =$	77	$\div 7 = \square$
$\square \times 7 =$	84	$\div 7 = \square$

1	2	3	4	5
6	7	8	9	10

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11	12	13	14	15
16	17	18	19	20

Investigation Secret Sevens

The 7 times table has been written out here, using a code where each letter a to h stands for a digit.

The table has not been written in order, so 1×7 is NOT first.

Your challenge is to crack the code and discover what digit each letter represents!

$$a \times 7 = eg$$

$$b \times 7 = 7$$

$$c \times 7 = dh$$

$$d \times 7 = ae$$

$$7 \times e = ba$$

$$f \times 7 = hf$$

$$7 \times g = fd$$

$$h \times 7 = eb$$

$$7 \times 7 = ac$$

Extra Challenge

Invent your own letter puzzle similar to this one for the 8x table