Year 6 Autumn Term 1

KIRF: I can derive multiplication and division facts using multiples of 10 and decimal numbers.

This half term, the children will be learning to use known facts to derive other facts.

Some example questions:

8 × 9 = ☐

72 ÷ 9 = ☐

720 ÷ 9 = ☐

720 ÷ 8 = ☐

5 × 7 = ☐

12 × 5 = ☐

50 × 7 = ☐

600 ÷ 12 = ☐

6,000 ÷ ☐ = 12

500 × 7 = ☐

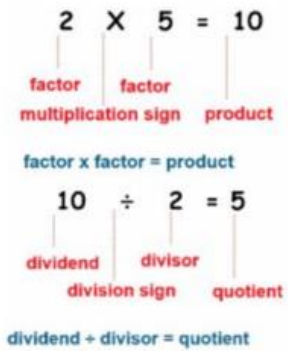
300 ÷ 12 = ☐

Key Questions:

The children should also know the corresponding division facts.
e.g. 144 ÷ 12 = 12 72 ÷ 9= 8
and derived facts (multiples of 10 and decimals)
e.g. 50 x 9 = 450 24 ÷ 0.6 = 40

What are the factors of …?
What are the multiples of …?
What is the product of … and …?

Key Vocabulary:

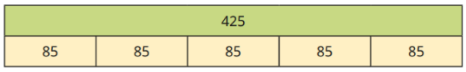


What can this look like?

Concrete Pictorial Abstract

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

The bar model shows 85 × 5 = 425



85x 5= 425
85 x 6 =?

40x 30= 120
30 x? = 1200
0.3x? = 12

Activity ideas:

The secret to success is practising little and often. Use time wisely. Can you practise these KIRFs while walking to school or during a car journey? You don't need to practise them all at once: perhaps you could have a fact of the day.

Buy one get three free! If your child knows one fact (e.g. 3 x 14 = 12), can they tell you the other three facts in the same fact family (e.g. 4 x 3 = 12, 12 ÷ 3 = 4, 12 ÷ 4 = 3)? Then ask for additional facts using multiples of 10 and decimals e.g. 40 x 3 = 120, 120 ÷ 30 = 4, 0.4 x 3 = 1.2, 1.2 ÷ 0.3 = 4

Create a board game or a treasure hunt related to your weakest times table (include x and ÷)

Make some flashcards and ask a family member to test you!

Websites

TTrockstars Children have their own usernames and passwords

MyMaths Children will be set weekly home learning.

Hit the Button Practise the times tables.

MathsFrame Practise those facts in a fun way.