K I R F
Key Instant Recall Facts

Year 6 – Medium Term Plan

Focus 1	Focus 2	Focus 3	Focus 4	Focus 5	Focus 6
Doubles of multiples of 10 & 100 & corresponding halves Multiply tenths by single digits & multiples of 10, 100 & 1000	Fractions of amounts & percentages of an amount	Consolidation KIRFs	Consolidation KIRFs	Consolidation KIRFs	Consolidation KIRFs

K.I.R.F
Key **I**nstant **R**ecall **F**acts

Doubles of multiples of 10 & 100 & corresponding halves
Multiply tenths by single digits & multiples of 10, 100 & 1000

Learn these facts off by heart

ONE	TWO	THREE	FOUR	FIVE	SIX
1 x 1 = 1	2 x 1 = 2	3 x 1 = 3	4 x 1 = 4	5 x 1 = 5	6 x 1 = 6
1 x 2 = 2	2 x 2 = 4	3 x 2 = 6	4 x 2 = 8	5 x 2 = 10	6 x 2 = 12
1 x 3 = 3	2 x 3 = 6	3 x 3 = 9	4 x 3 = 12	5 x 3 = 15	6 x 3 = 18
1 x 4 = 4	2 x 4 = 8	3 x 4 = 12	4 x 4 = 16	5 x 4 = 20	6 x 4 = 24
1 x 5 = 5	2 x 5 = 10	3 x 5 = 15	4 x 5 = 20	5 x 5 = 25	6 x 5 = 30
1 x 6 = 6	2 x 6 = 12	3 x 6 = 18	4 x 6 = 24	5 x 6 = 30	6 x 6 = 36
1 x 7 = 7	2 x 7 = 14	3 x 7 = 21	4 x 7 = 28	5 x 7 = 35	6 x 7 = 42
1 x 8 = 8	2 x 8 = 16	3 x 8 = 24	4 x 8 = 32	5 x 8 = 40	6 x 8 = 48
1 x 9 = 9	2 x 9 = 18	3 x 9 = 27	4 x 9 = 36	5 x 9 = 45	6 x 9 = 54
1 x 10 = 10	2 x 10 = 20	3 x 10 = 30	4 x 10 = 40	5 x 10 = 50	6 x 10 = 60
1 x 11 = 11	2 x 11 = 22	3 x 11 = 33	4 x 11 = 44	5 x 11 = 55	6 x 11 = 66
1 x 12 = 12	2 x 12 = 24	3 x 12 = 36	4 x 12 = 48	5 x 12 = 60	6 x 12 = 72

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

What does this look like?

$80 \times 2 = ?$

We can calculate 80 x 2 using the multiplication tables fact 8 x 2 = 16 and place value.

$8 \times 2 = 16$ $80 \times 2 = ?$

$80 \times 2 = 8 \times 10 \times 2$

$80 \times 2 = 16 \times 10$

$80 \times 2 = ?$

$2 \times 3 = 6$ $0.2 \times 3 = 0.6$

The answer to 0.2 x 3 is 10 times smaller than the answer to 2 x 3

What to do at home

Decimal Duel
Goal: Be the first team to reach exactly 100 points.

You need:
1 dice, Decimal cards (0.1 to 1.0), Paper/whiteboard for scoring

How to Play:
In pairs or teams, roll the dice (1–6).
Draw a decimal card.
Multiply the dice number by the decimal (e.g. 5 × 0.6 = 3.0).
Add the product to your score if correct.
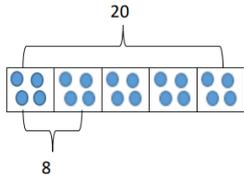First to exactly 100 wins! If you go over, miss a turn.

Key Vocabulary

Decimal: A number that includes a decimal point (e.g. 0.7, 0.1, 0.8).

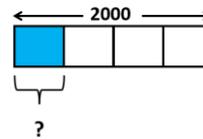Multiplication: A mathematical operation used to find the total of equal groups (e.g. 0.7 × 70).

Place value: The value of each digit in a number based on its position (important when multiplying decimals).
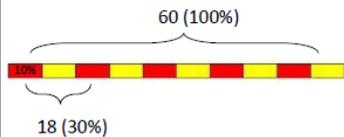
Year 6 – Focus 2

What does this look like?

20

8

60 (100%)

10%

18 (30%)

Concrete Representation

Find $\frac{1}{4}$ of 2000

2000

?

$60\% \text{ of } 80 = 48$

80

8 8 8 8 8 8 8 8 8 8

Pictorial Representation
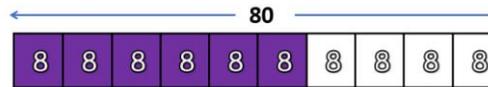
$\frac{1}{4}$ of 200 = 50

$\frac{3}{4}$ of 32 = 24

$\frac{1}{2}$ of 700 = 350

10% of 60 = 6

30% of 60 = 18

Abstract Representation

What to do at home

What is 3/5 of 25?

Can you draw a bar model to represent 2/3 of 60?

Bargain buys: go shopping and look for offers. Can you calculate the price of the item after the discount?

Key Vocabulary

Denominator: The bottom number in a fraction. Shows the number of equal parts in the whole.

Non unit fraction: A fraction where the numerator is not one.

Numerator: The top number in a fraction. Shows how many parts we have.

Unit fraction: A fraction where the numerator is one.

Equivalent: Have the same value.

Percent: Parts per 100. It shows the ratio out of 100.

K I R F

Key **I**nstant **R**ecall **F**acts

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Learn these facts off by heart

What does this look like?

Concrete Representation	Pictorial Representation	Abstract Representation

What to do at home

Key Vocabulary

K I R F
Key **I**nstant **R**ecall **F**acts

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Learn these facts off by heart

What does this look like?

Concrete Representation	Pictorial Representation	Abstract Representation

What to do at home

Key Vocabulary

Year 6 - Focus 5

Learn these facts off by heart

What does this look like?

Concrete Representation	Pictorial Representation	Abstract Representation

What to do at home

Key Vocabulary

K ey **I** nstant **R** ecall **F** acts   **?**

Learn these facts off by heart

What does this look like?

Concrete Representation	Pictorial Representation	Abstract Representation

What to do at home

Key Vocabulary

Year 6 - Focus 6