

# Key Instant Recall Facts

## KIRFS





# Key Instant Recall Facts

## Year 1 – Autumn 1

I know number bonds for each number to 6.

By the end of this half term, children should know the following facts. The aim is for them to recall these facts **instantly**.

$0 + 1 = 1$

$0 + 4 = 4$

$0 + 6 = 6$

$1 + 0 = 1$

$1 + 3 = 4$

$1 + 5 = 6$

$2 + 2 = 4$

$2 + 4 = 6$

$0 + 2 = 2$

$3 + 1 = 4$

$3 + 3 = 6$

$1 + 1 = 2$

$4 + 0 = 4$

$4 + 2 = 6$

$2 + 0 = 2$

$5 + 1 = 6$

$0 + 5 = 5$

$6 + 0 = 6$

$0 + 3 = 3$

$1 + 4 = 5$

$1 + 2 = 3$

$2 + 3 = 5$

$2 + 1 = 3$

$3 + 2 = 5$

$3 + 0 = 3$

$4 + 1 = 5$

$5 + 0 = 5$

### Key Vocabulary

What is 3 **add** 2?

What is 2 **plus** 2?

What is 5 **take away** 2?

What is 1 **less than** 2?

They should be able to answer these questions in any order, including missing number questions e.g.  $3 + \underline{\quad} = 5$  or  $4 - \underline{\quad} = 2$ .



# Key Instant Recall Facts

## Year 1 – Autumn 2

I can count forward and backward in steps of 2, 5 and 10.

By the end of this half term, children should know the following facts. The aim is for them to recall these facts **instantly**.

Children should be able to start at zero and then count on

|   |    |    |    |    |    |    |    |    |    |     |
|---|----|----|----|----|----|----|----|----|----|-----|
| 0 | 2  | 4  | 6  | 8  | 10 | 12 | 14 | 16 | 18 | 20  |
| 0 | 5  | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50  |
| 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |

When confident they should try counting backwards steps from any of the numbers above.

### Key Vocabulary

How many tens can you count?

How many 2's do we count to make 10?



# Key Instant Recall Facts

## Year 1 – Spring 1

I know doubles and halves of numbers to 10.

By the end of this half term, children should know the following facts. The aim is for them to recall these facts **instantly**

$0 + 0 = 0$

$\frac{1}{2} \text{ of } 0 = 0$

$1 + 1 = 2$

$\frac{1}{2} \text{ of } 2 = 1$

$2 + 2 = 4$

$\frac{1}{2} \text{ of } 4 = 2$

$3 + 3 = 6$

$\frac{1}{2} \text{ of } 6 = 3$

$4 + 4 = 8$

$\frac{1}{2} \text{ of } 8 = 4$

$5 + 5 = 10$

$\frac{1}{2} \text{ of } 10 = 5$

$6 + 6 = 12$

$7 + 7 = 14$

$8 + 8 = 16$

$9 + 9 = 18$

$10 + 10 = 20$

### Key Vocabulary

What is **double** 9?

What is **half** of 6?



# Key Instant Recall Facts

## Year 1 – Spring 2

I know number bonds to 10.

By the end of this half term, children should know the following facts. The aim is for them to recall these facts **instantly**.

$0 + 10 = 10$

$2 + 8 = 10$

$4 + 6 = 10$

$10 + 0 = 10$

$8 + 2 = 10$

$6 + 4 = 10$

$10 - 10 = 0$

$10 - 8 = 2$

$10 - 6 = 4$

$10 - 0 = 10$

$10 - 2 = 8$

$10 - 4 = 6$

$1 + 9 = 10$

$3 + 7 = 10$

$5 + 5 = 10$

$9 + 1 = 10$

$7 + 3 = 10$

$10 - 5 = 5$

$10 - 9 = 1$

$10 - 7 = 3$

$10 - 1 = 9$

$10 - 3 = 7$

### Key Vocabulary

What is 3 **add** 2?

What is 2 **plus** 2?

What is 5 **take away** 2?

What is 1 **less than** 4?

They should be able to answer these questions in any order, including missing number questions e.g.  $6 + \underline{\quad} = 10$  or  $10 - \underline{\quad} = 3$ .



# Key Instant Recall Facts

## Year 1 – Summer 1

I know days of the week, months of the year and seasons.

By the end of this half term, children should know the following facts. The aim is for them to recall these facts **instantly**.

Children need to know the months of the year in order and also talk about the seasons of the year and the order they happen.

January

February

March

April

May

June

July

August

September

October

November

December

### Key Vocabulary

12 months in one year.

Four seasons.

Spring, Summer, Autumn, Winter



# Key Instant Recall Facts

## Year 1 – Summer 2

I know number bonds for each number to 10.

By the end of this half term, children should know the following facts. The aim is for them to recall these facts **instantly**.

$0 + 7 = 7$

$0 + 8 = 8$

$0 + 9 = 9$

$0 + 10 = 10$

$1 + 6 = 7$

$1 + 7 = 8$

$1 + 8 = 9$

$1 + 9 = 10$

$2 + 5 = 7$

$2 + 6 = 8$

$2 + 7 = 9$

$2 + 8 = 10$

$3 + 4 = 7$

$3 + 5 = 8$

$3 + 6 = 9$

$3 + 7 = 10$

$4 + 3 = 7$

$4 + 4 = 8$

$4 + 5 = 9$

$4 + 6 = 10$

$5 + 2 = 7$

$5 + 3 = 8$

$5 + 4 = 9$

$5 + 5 = 10$

$6 + 1 = 7$

$6 + 2 = 8$

$6 + 3 = 9$

$6 + 4 = 10$

$7 + 0 = 7$

$7 + 1 = 8$

$7 + 2 = 9$

$7 + 3 = 10$

$8 + 0 = 8$

$8 + 1 = 9$

$8 + 2 = 10$

$9 + 0 = 9$

$9 + 1 = 10$

$10 + 0 = 10$

### Key Vocabulary

What do I **add** to 5 to make 10?

What is 10 **take away** 6?

What is 3 **less than** 10?

**How many more** than 2 is 10?

They should be able to answer these questions in any order, including missing number questions e.g.  $1 + \underline{\quad} = 10$  or  $9 - \underline{\quad} = 8$ .



# Key Instant Recall Facts

## Year 2 – Autumn 1

I know number bonds to 20.

By the end of this half term, children should know the following facts. The aim is for them to recall these facts **instantly**.

|                |               |                |               |
|----------------|---------------|----------------|---------------|
| $0 + 20 = 20$  | $20 + 0 = 20$ | $20 - 0 = 20$  | $20 - 20 = 0$ |
| $1 + 19 = 20$  | $19 + 1 = 20$ | $20 - 1 = 19$  | $20 - 19 = 1$ |
| $2 + 18 = 20$  | $18 + 2 = 20$ | $20 - 2 = 18$  | $20 - 18 = 2$ |
| $3 + 17 = 20$  | $17 + 3 = 20$ | $20 - 3 = 17$  | $20 - 17 = 3$ |
| $4 + 16 = 20$  | $16 + 4 = 20$ | $20 - 4 = 16$  | $20 - 16 = 4$ |
| $5 + 15 = 20$  | $15 + 5 = 20$ | $20 - 5 = 15$  | $20 - 15 = 5$ |
| $6 + 14 = 20$  | $14 + 6 = 20$ | $20 - 6 = 14$  | $20 - 14 = 6$ |
| $7 + 13 = 20$  | $13 + 7 = 20$ | $20 - 7 = 13$  | $20 - 13 = 7$ |
| $8 + 12 = 20$  | $12 + 8 = 20$ | $20 - 8 = 12$  | $20 - 12 = 8$ |
| $9 + 11 = 20$  | $11 + 9 = 20$ | $20 - 9 = 11$  | $20 - 12 = 9$ |
| $10 + 10 = 20$ |               | $20 - 10 = 10$ |               |

### Key Vocabulary

What do I **add** to 5 to make 20?

What is 20 **take away** 6?

What is 3 **less than** 20?

**How many more** than 16 is 20?

They should be able to answer these questions in any order, including missing number questions e.g.  $19 + \underline{\quad} = 20$  or  $20 - \underline{\quad} = 8$ .





# Key Instant Recall Facts

## Year 2 – Autumn 2

I know the multiplication and division facts for the 2 times table

By the end of this half term, children should know the following facts. The aim is for them to recall these facts **instantly**.

$2 \times 1 = 2$

$2 \div 2 = 1$

$2 \times 2 = 4$

$4 \div 2 = 2$

$2 \times 3 = 6$

$6 \div 2 = 3$

$2 \times 4 = 8$

$8 \div 2 = 4$

$2 \times 5 = 10$

$10 \div 2 = 5$

$2 \times 6 = 12$

$12 \div 2 = 6$

$2 \times 7 = 14$

$14 \div 2 = 7$

$2 \times 8 = 16$

$16 \div 2 = 8$

$2 \times 9 = 18$

$18 \div 2 = 9$

$2 \times 10 = 20$

$20 \div 2 = 10$

$2 \times 11 = 22$

$22 \div 2 = 11$

$2 \times 12 = 24$

$24 \div 2 = 12$

### Key Vocabulary

What is 2 **multiplied by** 7?

What is 2 **times** 9?

What is 12 **divided by** 2?

They should be able to answer these questions in any order, including missing number questions e.g.  $2 \times \underline{\quad} = 8$  or  $\underline{\quad} \div 2 = 6$



# Key Instant Recall Facts

## Year 2 – Spring 1

I know doubles and halves of numbers to 20.

By the end of this half term, children should know the following facts. The aim is for them to recall these facts **instantly**.

|                |                          |                |
|----------------|--------------------------|----------------|
| $0 + 0 = 0$    | $\frac{1}{2}$ of 0 = 0   | $11 + 11 = 22$ |
| $1 + 1 = 2$    | $\frac{1}{2}$ of 2 = 1   | $12 + 12 = 24$ |
| $2 + 2 = 4$    | $\frac{1}{2}$ of 4 = 2   | $13 + 13 = 26$ |
| $3 + 3 = 6$    | $\frac{1}{2}$ of 6 = 3   | $14 + 14 = 28$ |
| $4 + 4 = 8$    | $\frac{1}{2}$ of 8 = 4   | $15 + 15 = 30$ |
| $5 + 5 = 10$   | $\frac{1}{2}$ of 10 = 5  | $16 + 16 = 32$ |
| $6 + 6 = 12$   | $\frac{1}{2}$ of 12 = 6  | $17 + 17 = 34$ |
| $7 + 7 = 14$   | $\frac{1}{2}$ of 14 = 7  | $18 + 18 = 36$ |
| $8 + 8 = 16$   | $\frac{1}{2}$ of 16 = 8  | $19 + 19 = 38$ |
| $9 + 9 = 18$   | $\frac{1}{2}$ of 18 = 9  | $20 + 20 = 40$ |
| $10 + 10 = 20$ | $\frac{1}{2}$ of 20 = 10 |                |

### Key Vocabulary

What is **double** 9?

What is **half** of 14?



# Key Instant Recall Facts

## Year 2 – Spring 2

I know the multiplication and division facts for the 10 times table

By the end of this half term, children should know the following facts. The aim is for them to recall these facts **instantly**.

$10 \times 1 = 10$

$10 \div 10 = 1$

$10 \times 2 = 20$

$20 \div 10 = 2$

$10 \times 3 = 30$

$30 \div 10 = 3$

$10 \times 4 = 40$

$40 \div 10 = 4$

$10 \times 5 = 50$

$50 \div 10 = 5$

$10 \times 6 = 60$

$60 \div 10 = 6$

$10 \times 7 = 70$

$70 \div 10 = 7$

$10 \times 8 = 80$

$80 \div 10 = 8$

$10 \times 9 = 90$

$90 \div 10 = 9$

$10 \times 10 = 100$

$100 \div 10 = 10$

$10 \times 11 = 110$

$110 \div 10 = 11$

$10 \times 12 = 120$

$120 \div 10 = 12$

### Key Vocabulary

What is 10 **multiplied by** 3?

What is 10 **times** 9?

What is 70 **divided by** 10?

They should be able to answer these questions in any order, including missing number questions e.g.  $10 \times \underline{\quad} = 80$  or  $\underline{\quad} \div 10 = 6$



# Key Instant Recall Facts

## Year 2 – Summer 1

I know addition and subtraction facts for multiples of 10 and 100.

By the end of this half term, children should know the following facts. The aim is for them to recall these facts **instantly**.

Some examples;

$$30 + 20 = 50$$

$$20 + 30 = 50$$

$$50 - 30 = 20$$

$$50 - 20 = 30$$

$$60 + 40 = 100$$

$$40 + 60 = 100$$

$$100 - 40 = 60$$

$$100 - 60 = 40$$

### Key Vocabulary

What do I **add** to 60 to make 100?

What is 100 **take away** 60?

What is 20 **less than** 50?

**How many more** than 60 is 100?

What is the **difference** between 50 and 30?



# Key Instant Recall Facts

## Year 2 – Summer 2

I know the multiplication and division facts for the 5 times table

By the end of this half term, children should know the following facts. The aim is for them to recall these facts **instantly**.

$5 \times 1 = 5$

$5 \div 5 = 1$

$5 \times 2 = 10$

$10 \div 5 = 2$

$5 \times 3 = 15$

$15 \div 5 = 3$

$5 \times 4 = 20$

$20 \div 5 = 4$

$5 \times 5 = 25$

$25 \div 5 = 5$

$5 \times 6 = 30$

$30 \div 5 = 6$

$5 \times 7 = 35$

$35 \div 5 = 7$

$5 \times 8 = 40$

$40 \div 5 = 8$

$5 \times 9 = 45$

$45 \div 5 = 9$

$5 \times 10 = 50$

$50 \div 5 = 10$

$5 \times 11 = 55$

$55 \div 5 = 11$

$5 \times 12 = 60$

$60 \div 5 = 12$

### Key Vocabulary

What is 5 **multiplied by** 7?

What is 5 **times** 9?

What is 60 **divided by** 5?

They should be able to answer these questions in any order, including missing number questions e.g.  $5 \times \underline{\quad} = 40$  or  $\underline{\quad} \div 5 = 9$



# Key Instant Recall Facts

## Year 3 – Autumn 1

I know number bonds for all numbers to 20.

By the end of this half term, children should know the following facts. The aim is for them to recall these facts **instantly**.

$2 + 9 = 11$

$5 + 9 = 14$

Example of a fact family

$3 + 8 = 11$

$6 + 8 = 14$

$6 + 9 = 15$

$4 + 7 = 11$

$7 + 7 = 17$

$9 + 6 = 15$

$5 + 6 = 11$

$6 + 9 = 15$

$15 - 9 = 6$

$3 + 9 = 12$

$7 + 8 = 15$

$15 - 6 = 9$

$4 + 8 = 12$

$7 + 9 = 15$

Example of other facts

$5 + 7 = 12$

$8 + 8 = 16$

$4 + 5 = 9$

$6 + 6 = 12$

$8 + 9 = 17$

$13 + 5 = 18$

$4 + 9 = 13$

$9 + 9 = 18$

$19 - 7 = 12$

$5 + 8 = 13$

$10 - 6 = 4$

$6 + 7 = 13$

### Key Vocabulary

What do I **add** to 5 to make 19?

What is 17 **take away** 6?

What is 13 **less than** 15?

**How many more** than 8 is 11?

What is the **difference** between 9 and 13?

This list includes the most challenging facts but children will need to learn **all** number bonds for each number to 20 (e.g.  $15 + 2 = 17$ ).



# Key Instant Recall Facts

## Year 3 – Autumn 2

I know the multiplication and division facts for the 3 times table

By the end of this half term, children should know the following facts. The aim is for them to recall these facts **instantly**.

$3 \times 1 = 3$

$1 \times 3 = 3$

$3 \div 3 = 1$

$3 \div 1 = 3$

$3 \times 2 = 6$

$2 \times 3 = 6$

$6 \div 3 = 2$

$6 \div 2 = 3$

$3 \times 3 = 9$

$3 \times 3 = 9$

$9 \div 3 = 3$

$9 \div 3 = 3$

$3 \times 4 = 12$

$4 \times 3 = 12$

$12 \div 3 = 4$

$12 \div 4 = 3$

$3 \times 5 = 15$

$5 \times 3 = 15$

$15 \div 3 = 5$

$15 \div 5 = 3$

$3 \times 6 = 18$

$6 \times 3 = 18$

$18 \div 3 = 6$

$18 \div 6 = 3$

$3 \times 7 = 21$

$7 \times 3 = 21$

$21 \div 3 = 7$

$21 \div 7 = 3$

$3 \times 8 = 24$

$8 \times 3 = 24$

$24 \div 3 = 8$

$24 \div 8 = 3$

$3 \times 9 = 27$

$9 \times 3 = 27$

$27 \div 3 = 9$

$27 \div 9 = 3$

$3 \times 10 = 30$

$10 \times 3 = 30$

$30 \div 3 = 10$

$30 \div 10 = 3$

$3 \times 11 = 33$

$11 \times 3 = 33$

$33 \div 3 = 11$

$33 \div 11 = 3$

$3 \times 12 = 36$

$12 \times 3 = 36$

$36 \div 3 = 12$

$36 \div 12 = 3$

### Key Vocabulary

What is 3 **multiplied by** 8?

What is 8 **times** 3?

What is 24 **divided by** 3?

They should be able to answer these questions in any order, including missing number questions e.g.  $3 \times \underline{\quad} = 18$  or  $\underline{\quad} \div 3 = 11$ .



# Key Instant Recall Facts

## Year 3 – Spring 1

I can recall facts about duration of time.

By the end of this half term, children should know the following facts. The aim is for them to recall these facts **instantly**.

|                                    |                                      |       |           |    |
|------------------------------------|--------------------------------------|-------|-----------|----|
| There are 60 seconds in a minute.  | <u>Number of days in each month.</u> |       |           |    |
| There are 60 minutes in an hour.   | January                              | 31    | July      | 31 |
| There are 24 hours in a day.       | February                             | 28/29 | August    | 31 |
| There are 7 days in a week.        | March                                | 31    | September | 30 |
| There are 12 months in a year.     | April                                | 30    | October   | 31 |
| There are 365 days in a year.      | May                                  | 31    | November  | 30 |
| There are 366 days in a leap year. | June                                 | 30    | December  | 31 |

Children also need to know the order of the months in a year. They should be able to apply these facts to answer questions, such as:

- What day comes after 30<sup>th</sup> April?
- What day comes before 1<sup>st</sup> February?





# Key Instant Recall Facts

## Year 3 – Spring 2

I know the multiplication and division facts for the 4 times table

By the end of this half term, children should know the following facts. The aim is for them to recall these facts **instantly**.

$4 \times 1 = 4$

$1 \times 4 = 4$

$4 \div 4 = 1$

$4 \div 1 = 4$

$4 \times 2 = 8$

$2 \times 4 = 8$

$8 \div 4 = 2$

$8 \div 2 = 4$

$4 \times 3 = 12$

$3 \times 4 = 12$

$12 \div 4 = 3$

$12 \div 3 = 4$

$4 \times 4 = 16$

$4 \times 4 = 16$

$16 \div 4 = 4$

$16 \div 4 = 4$

$4 \times 5 = 20$

$5 \times 4 = 20$

$20 \div 4 = 5$

$20 \div 5 = 4$

$4 \times 6 = 24$

$6 \times 4 = 24$

$24 \div 4 = 6$

$24 \div 6 = 4$

$4 \times 7 = 28$

$7 \times 4 = 28$

$28 \div 4 = 7$

$28 \div 7 = 4$

$4 \times 8 = 32$

$8 \times 4 = 32$

$32 \div 4 = 8$

$32 \div 8 = 4$

$4 \times 9 = 36$

$9 \times 4 = 36$

$36 \div 4 = 9$

$36 \div 9 = 4$

$4 \times 10 = 40$

$10 \times 4 = 40$

$40 \div 4 = 10$

$40 \div 10 = 4$

$4 \times 11 = 44$

$11 \times 4 = 44$

$44 \div 4 = 11$

$44 \div 11 = 4$

$4 \times 12 = 48$

$12 \times 4 = 48$

$48 \div 4 = 12$

$48 \div 12 = 4$

### Key Vocabulary

What is 4 **multiplied by** 6?

What is 8 **times** 4?

What is 24 **divided by** 4?

They should be able to answer these questions in any order, including missing number questions e.g.  $4 \times \underline{\quad} = 16$  or  $\underline{\quad} \div 4 = 7$ .



# Key Instant Recall Facts

## Year 3 – Summer 1

I can count in 50s.

By the end of this half term, children should know the following facts. The aim is for them to recall these facts **instantly**.

Children need to be able to count in 50s.

$1 \times 50 = 50$

$50 \div 50 = 1$

$2 \times 50 = 100$

$100 \div 50 = 2$

$3 \times 50 = 150$

$150 \div 50 = 3$

$4 \times 50 = 200$

$200 \div 50 = 4$

$5 \times 50 = 250$

$250 \div 50 = 5$

$6 \times 50 = 300$

$300 \div 50 = 6$

$7 \times 50 = 350$

$350 \div 50 = 7$

$8 \times 50 = 400$

$400 \div 50 = 8$

$9 \times 50 = 450$

$450 \div 50 = 9$

$10 \times 50 = 500$

$500 \div 50 = 10$

### Key Vocabulary

**How many** 50s make 300?

**Multiply** 50 by 6?

What are 4 **lots of** 50?

They should be able to answer these questions in any order, including missing number questions e.g.  $50 \times \underline{\quad} = 150$  or  $\underline{\quad} \div 50 = 7$ .



# Key Instant Recall Facts

## Year 3 – Summer 2

I know the multiplication and division facts for the 8 times table

By the end of this half term, children should know the following facts. The aim is for them to recall these facts **instantly**.

|                    |                    |                  |                  |
|--------------------|--------------------|------------------|------------------|
| $8 \times 1 = 8$   | $1 \times 8 = 8$   | $8 \div 8 = 1$   | $8 \div 1 = 8$   |
| $8 \times 2 = 16$  | $2 \times 8 = 16$  | $16 \div 8 = 2$  | $16 \div 2 = 8$  |
| $8 \times 3 = 24$  | $3 \times 8 = 24$  | $24 \div 8 = 3$  | $24 \div 3 = 8$  |
| $8 \times 4 = 32$  | $4 \times 8 = 32$  | $32 \div 8 = 4$  | $32 \div 4 = 8$  |
| $8 \times 5 = 40$  | $5 \times 8 = 40$  | $40 \div 8 = 5$  | $40 \div 5 = 8$  |
| $8 \times 6 = 48$  | $6 \times 8 = 48$  | $48 \div 8 = 6$  | $48 \div 6 = 8$  |
| $8 \times 7 = 56$  | $7 \times 8 = 56$  | $56 \div 8 = 7$  | $56 \div 7 = 8$  |
| $8 \times 8 = 64$  | $8 \times 8 = 64$  | $64 \div 8 = 8$  | $64 \div 8 = 8$  |
| $8 \times 9 = 72$  | $9 \times 8 = 72$  | $72 \div 8 = 9$  | $72 \div 9 = 8$  |
| $8 \times 10 = 80$ | $10 \times 8 = 80$ | $80 \div 8 = 10$ | $80 \div 10 = 8$ |
| $8 \times 11 = 88$ | $11 \times 8 = 88$ | $88 \div 8 = 11$ | $88 \div 11 = 8$ |
| $8 \times 12 = 96$ | $12 \times 8 = 96$ | $96 \div 8 = 12$ | $96 \div 12 = 8$ |

### Key Vocabulary

What is 8 **multiplied by** 6?

What is 8 **times** 8?

What is 24 **divided by** 8?

They should be able to answer these questions in any order, including missing number questions e.g.  $8 \times \underline{\quad} = 16$  or  $\underline{\quad} \div 8 = 7$ .



# Key Instant Recall Facts

## Year 4 – Autumn 1

I know number bonds to 100.

By the end of this half term, children should know the following facts. The aim is for them to recall these facts **instantly**.

Some examples:

$60 + 40 = 100$

$37 + 63 = 100$

$40 + 60 = 100$

$63 + 37 = 100$

$100 - 40 = 60$

$100 - 63 = 37$

$100 - 60 = 40$

$100 - 37 = 63$

$75 + 25 = 100$

$48 + 52 = 100$

$25 + 75 = 100$

$52 + 48 = 100$

$100 - 25 = 75$

$100 - 52 = 48$

$100 - 75 = 25$

$100 - 48 = 52$

### Key Vocabulary

What do I **add** to 65 to make 100?

What is 100 **take away** 6?

What is 13 **less than** 100?

**How many more** than 98 is 100?

What is the **difference** between 89 and 100?

They should be able to answer these questions in any order, including missing number questions e.g.  $49 + \underline{\quad} = 100$  or  $100 - \underline{\quad} = 72$ .



# Key Instant Recall Facts

## Year 4 – Autumn 2

I can multiply and divide single-digit numbers by 10 and 100.

By the end of this half term, children should know the following facts. The aim is for them to recall these facts **instantly**.

$7 \times 10 = 70$

$30 \times 10 = 300$

$0.8 \times 10 = 8$

$10 \times 7 = 70$

$10 \times 30 = 300$

$10 \times 0.8 = 8$

$70 \div 10 = 7$

$300 \div 10 = 30$

$8 \div 10 = 0.8$

$70 \div 7 = 10$

$300 \div 30 = 10$

$8 \div 0.8 = 10$

$6 \times 100 = 600$

$40 \times 100 = 4000$

$0.2 \times 10 = 2$

$100 \times 6 = 600$

$100 \times 40 = 4000$

$10 \times 0.2 = 2$

$600 \div 100 = 6$

$4000 \div 100 = 40$

$2 \div 10 = 0.2$

$600 \div 6 = 100$

$4000 \div 40 = 100$

$2 \div 0.2 = 10$

### Key Vocabulary

What is 5 **multiplied by** 10?

What is 10 **times** 0.9?

What is 700 **divided by** 70?

hundreds, tens, ones, tenths, hundredths

They should be able to answer these questions in any order, including missing number questions e.g.  $10 \times \underline{\quad} = 5$  or  $\underline{\quad} \div 10 = 60$ .



# Key Instant Recall Facts

## Year 4 – Spring 1

I know the multiplication and division facts for the 6 times table.

By the end of this half term, children should know the following facts. The aim is for them to recall these facts **instantly**.

$6 \times 1 = 6$

$1 \times 6 = 6$

$6 \div 6 = 1$

$6 \div 1 = 6$

$6 \times 2 = 12$

$2 \times 6 = 12$

$12 \div 6 = 2$

$12 \div 2 = 6$

$6 \times 3 = 18$

$3 \times 6 = 18$

$18 \div 6 = 3$

$18 \div 3 = 6$

$6 \times 4 = 24$

$4 \times 6 = 24$

$24 \div 6 = 4$

$24 \div 4 = 6$

$6 \times 5 = 30$

$5 \times 6 = 30$

$30 \div 6 = 5$

$30 \div 5 = 6$

$6 \times 6 = 36$

$6 \times 6 = 36$

$36 \div 6 = 6$

$36 \div 6 = 6$

$6 \times 7 = 42$

$7 \times 6 = 42$

$42 \div 6 = 7$

$42 \div 7 = 6$

$6 \times 8 = 48$

$8 \times 6 = 48$

$48 \div 6 = 8$

$48 \div 8 = 6$

$6 \times 9 = 54$

$9 \times 6 = 54$

$54 \div 6 = 9$

$54 \div 9 = 6$

$6 \times 10 = 60$

$10 \times 6 = 60$

$60 \div 6 = 10$

$60 \div 10 = 6$

$6 \times 11 = 66$

$11 \times 6 = 66$

$66 \div 6 = 11$

$66 \div 11 = 6$

$6 \times 12 = 72$

$12 \times 6 = 72$

$72 \div 6 = 12$

$72 \div 12 = 6$

### Key Vocabulary

What is 8 **multiplied by** 6?

What is 6 **times** 8?

What is 24 **divided by** 6?

They should be able to answer these questions in any order, including missing number questions e.g.  $6 \times \underline{\quad} = 72$  or  $\underline{\quad} \div 6 = 7$ .



# Key Instant Recall Facts

## Year 4 – Spring 2

I know the multiplication and division facts for the 9 and 11 times tables.

By the end of this half term, children should know the following facts. The aim is for them to recall these facts **instantly**.

|                     |                   |                      |                    |
|---------------------|-------------------|----------------------|--------------------|
| $9 \times 1 = 9$    | $9 \div 9 = 1$    | $11 \times 1 = 11$   | $11 \div 11 = 1$   |
| $9 \times 2 = 18$   | $18 \div 9 = 2$   | $11 \times 2 = 22$   | $22 \div 11 = 2$   |
| $9 \times 3 = 27$   | $27 \div 9 = 3$   | $11 \times 3 = 33$   | $33 \div 11 = 3$   |
| $9 \times 4 = 36$   | $36 \div 9 = 4$   | $11 \times 4 = 44$   | $44 \div 11 = 4$   |
| $9 \times 5 = 45$   | $45 \div 9 = 5$   | $11 \times 5 = 55$   | $55 \div 11 = 5$   |
| $9 \times 6 = 54$   | $54 \div 9 = 6$   | $11 \times 6 = 66$   | $66 \div 11 = 6$   |
| $9 \times 7 = 63$   | $63 \div 9 = 7$   | $11 \times 7 = 77$   | $77 \div 11 = 7$   |
| $9 \times 8 = 72$   | $72 \div 9 = 8$   | $11 \times 8 = 88$   | $88 \div 11 = 8$   |
| $9 \times 9 = 81$   | $81 \div 9 = 9$   | $11 \times 9 = 99$   | $99 \div 11 = 9$   |
| $9 \times 10 = 90$  | $90 \div 9 = 10$  | $11 \times 10 = 110$ | $110 \div 11 = 10$ |
| $9 \times 11 = 99$  | $99 \div 9 = 11$  | $11 \times 11 = 121$ | $121 \div 11 = 11$ |
| $9 \times 12 = 108$ | $108 \div 9 = 12$ | $11 \times 12 = 132$ | $132 \div 11 = 12$ |

### Key Vocabulary

What is 8 **multiplied by** 9?

What is 11 **times** 8?

What is 81 **divided by** 9?

They should be able to answer these questions in any order, including missing number questions e.g.  $9 \times \underline{\quad} = 54$  or  $\underline{\quad} \div 9 = 11$ .



# Key Instant Recall Facts

## Year 4 – Summer 1

I can recognise decimal equivalents of fractions.

By the end of this half term, children should know the following facts. The aim is for them to recall these facts **instantly**.

$7 \times 1 = 7$

$1 \times 7 = 7$

$7 \div 7 = 1$

$7 \div 1 = 7$

$7 \times 2 = 14$

$2 \times 7 = 14$

$14 \div 7 = 2$

$14 \div 2 = 7$

$7 \times 3 = 21$

$3 \times 7 = 21$

$21 \div 7 = 3$

$21 \div 3 = 7$

$7 \times 4 = 28$

$4 \times 7 = 28$

$28 \div 7 = 4$

$28 \div 4 = 7$

$7 \times 5 = 35$

$5 \times 7 = 35$

$35 \div 7 = 5$

$35 \div 5 = 7$

$7 \times 6 = 42$

$6 \times 7 = 42$

$42 \div 7 = 6$

$42 \div 6 = 7$

$7 \times 7 = 49$

$7 \times 7 = 49$

$49 \div 7 = 7$

$49 \div 7 = 7$

$7 \times 8 = 56$

$8 \times 7 = 56$

$56 \div 7 = 8$

$56 \div 8 = 7$

$7 \times 9 = 63$

$9 \times 7 = 63$

$63 \div 7 = 9$

$63 \div 9 = 7$

$7 \times 10 = 70$

$10 \times 7 = 70$

$70 \div 7 = 10$

$70 \div 10 = 7$

$7 \times 11 = 77$

$11 \times 7 = 77$

$77 \div 7 = 11$

$77 \div 11 = 7$

$7 \times 12 = 84$

$12 \times 7 = 84$

$84 \div 7 = 12$

$84 \div 12 = 7$

### Key Vocabulary

What is 7 **multiplied by** 6?

What is 7 **times** 8?

What is 84 **divided by** 7?

They should be able to answer these questions in any order, including missing number questions e.g.  $7 \times \underline{\quad} = 28$  or  $\underline{\quad} \div 6 = 7$ .





# Key Instant Recall Facts

## Year 4 – Summer 2

I can recognise decimal equivalents of fractions.

By the end of this half term, children should know the following facts. The aim is for them to recall these facts **instantly**.

$$\frac{1}{2} = 0.5$$

$$\frac{1}{10} = 0.1$$

$$\frac{1}{100} = 0.01$$

$$\frac{1}{4} = 0.25$$

$$\frac{2}{10} = 0.2$$

$$\frac{7}{100} = 0.07$$

$$\frac{3}{4} = 0.75$$

$$\frac{5}{10} = 0.5$$

$$\frac{21}{100} = 0.21$$

$$\frac{6}{10} = 0.6$$

$$\frac{75}{100} = 0.75$$

$$\frac{9}{10} = 0.9$$

$$\frac{99}{100} = 0.99$$

### Key Vocabulary

How many **tenths** is 0.8?

How many **hundredths** is 0.12?

Write 0.75 as a **fraction**.

Write  $\frac{1}{4}$  as a **decimal**.

Children should be able to convert between decimals and fractions for  $\frac{1}{2}$ ,  $\frac{1}{4}$ ,  $\frac{3}{4}$  and any number of tenths and hundredths.



# Key Instant Recall Facts

## Year 5 – Autumn 1

I know decimal number bonds to 1 and 10.

By the end of this half term, children should know the following facts. The aim is for them to recall these facts **instantly**.

Some examples:

$$0.6 + 0.4 = 1$$

$$0.4 + 0.6 = 1$$

$$1 - 0.4 = 0.6$$

$$1 - 0.6 = 0.4$$

$$0.75 + 0.25 = 1$$

$$0.25 + 0.75 = 1$$

$$1 - 0.25 = 0.75$$

$$1 - 0.75 = 0.25$$

$$3.7 + 6.3 = 10$$

$$6.3 + 3.7 = 10$$

$$10 - 6.3 = 3.7$$

$$10 - 3.7 = 6.3$$

$$4.8 + 5.2 = 10$$

$$5.2 + 4.8 = 10$$

$$10 - 5.2 = 4.8$$

$$10 - 4.8 = 5.2$$

### Key Vocabulary

What do I **add** to 0.8 to make 1?

What is 1 **take away** 0.06?

What is 1.3 **less than** 10?

**How many more** than 9.8 is 10?

What is the **difference** between 0.92 and 10?

This list includes some examples of facts that children should know. They should be able to answer questions including missing number questions e.g.  $0.49 + \underline{\quad} = 10$  or  $7.2 + \underline{\quad} = 10$ .



# Key Instant Recall Facts

## Year 5 – Autumn 2

I know the multiplication and division facts for all times tables up to 12 x 12.

By the end of this half term, children should know the following facts. The aim is for them to recall these facts **instantly**.

Children should now know all multiplication and division facts up to 12 x 12.

### Key Vocabulary

What is 12 **multiplied by** 6?

What is 7 **times** 8?

What is 84 **divided by** 7?

They should be able to answer these questions in any order, including missing number questions e.g.  $7 \times \underline{\quad} = 28$  or  $\underline{\quad} \div 6 = 7$ .



# Key Instant Recall Facts

## Year 5 – Spring 1

I can recall metric conversions.

By the end of this half term, children should know the following facts. The aim is for them to recall these facts **instantly**.

1 kilogram = 1000 grams

1 kilometre = 1000 metres

1 metre = 100 centimetres

1 metre = 1000 millimetres

1 centimetre = 10 millimetres

1 litre = 1000 millilitres

They should also be able to apply these facts to answer questions.

e.g. How many metres in  $1\frac{1}{2}$  km?



# Key Instant Recall Facts

## Year 5 – Spring 2

I can identify prime numbers up to 20.

By the end of this half term, children should know the following facts. The aim is for them to recall these facts **instantly**.

*A prime number is a number with no factors other than itself and one.*

*The following numbers are prime numbers:*

*2, 3, 5, 7, 11, 13, 17, 19*

*A composite number is divisible by a number other than 1 or itself.*

*The following numbers are composite numbers:*

*4, 6, 8, 10, 12, 14, 15, 16, 18, 20*

### Key Vocabulary

**Prime number**

**Composite number**

**Factor**

**Muiltple**

Children should be able to explain how they know that a number is composite.

e.g. 15 is composite because it is a multiple of 3 and 5.



# Key Instant Recall Facts

## Year 5 – Summer 1

I can recall square numbers up to  $12^2$  and their square roots.

$$1^2 = 1 \times 1 = 1$$

$$\sqrt{1} = 1$$

$$2^2 = 2 \times 2 = 4$$

$$\sqrt{4} = 2$$

$$3^2 = 3 \times 3 = 9$$

$$\sqrt{9} = 3$$

$$4^2 = 4 \times 4 = 16$$

$$\sqrt{16} = 4$$

$$5^2 = 5 \times 5 = 25$$

$$\sqrt{25} = 5$$

$$6^2 = 6 \times 6 = 36$$

$$\sqrt{36} = 6$$

$$7^2 = 7 \times 7 = 49$$

$$\sqrt{49} = 7$$

$$8^2 = 8 \times 8 = 64$$

$$\sqrt{64} = 8$$

$$9^2 = 9 \times 9 = 81$$

$$\sqrt{81} = 9$$

$$10^2 = 10 \times 10 = 100$$

$$\sqrt{100} = 10$$

$$11^2 = 11 \times 11 = 121$$

$$\sqrt{121} = 11$$

$$12^2 = 12 \times 12 = 144$$

$$\sqrt{144} = 12$$

### Key Vocabulary

What is 8 **squared**?

What is 7 **multiplied by itself**?

What is the **squared root** of 144?

Is 81 a **squared number**?

Children should also be able to recognise whether a number below 150 is a squared number or not.



# Key Instant Recall Facts

## Year 5 – Summer 2

I can find factor pairs of a number.

By the end of this half term, children should know the following facts. The aim is for them to recall these facts **instantly**.

Children should now know all multiplication and division facts up to 12 x 12. When given a number in one of these times tables, they should be able to state a factor pair which multiply to make this number. Below are some examples:

$$24 = 4 \times 6$$

$$42 = 6 \times 7$$

$$24 = 8 \times 3$$

$$25 = 5 \times 5$$

$$56 = 7 \times 8$$

$$84 = 7 \times 12$$

$$54 = 9 \times 6$$

$$15 = 5 \times 3$$

### Key Vocabulary

Can you find a **factor** of 28?

Find two numbers whose **product** is 20.

I know that 6 is a factor of 72 because 6 multiplied by 12 equals 72.



# Key Instant Recall Facts

## Year 6 – Autumn 1

I can use x tables facts to multiply and divide decimals.

By the end of this half term, children should know the following facts. The aim is for them to recall these facts **instantly**.

*This is a chance for Year 6 children to consolidate their knowledge of multiplication and division facts, increase their speed of recall and apply skills to decimal calculations.*

### Key Vocabulary

What is 1.2 **multiplied by** 6?

What is 7 **times** 0.8?

What is 8.4 **divided by** 7?

They should be able to answer these questions in order, including missing number questions e.g.  $7 \times \underline{\quad} = 28$  or  $\underline{\quad} \div 6 = 7$ .

Children should apply this knowledge to answer questions including decimals e.g.  $0.7 \times \underline{\quad} = 4.2$  or  $\underline{\quad} \div 60 = 0.7$





# Key Instant Recall Facts

## Year 6 – Autumn 2

I can identify common factors of a pair of numbers.

By the end of this half term, children should know the following facts. The aim is for them to recall these facts **instantly**.

*The factors of a number are all numbers which divide it with no remainders.*

*e.g. the factors of 24 are 1, 2, 3, 4, 6, 8, 12 and 24.*

*The factors of 56 are 1, 2, 4, 7, 8, 14, 28 and 56.*

*The common factors of two numbers are the factors they share.*

*e.g. the common factors of 24 and 56 are 1, 2, 4 and 8.*

*The greatest common factor of 24 and 56 is 8.*

### Key Vocabulary

**Factor**

**Common factor**

**Multiple**

**Greatest common factor**

Children should be able to explain how they know that a number is a common factor.

e.g. 8 is a common factor of 24 and 56 because  $24 = 8 \times 3$  and  $56 = 8 \times 7$ .



# Key Instant Recall Facts

## Year 6 – Spring 1

I can convert between decimals, fractions and percentages.

By the end of this half term, children should know the following facts. The aim is for them to recall these facts **instantly**.

$$\frac{1}{2} = 0.5$$

$$\frac{1}{4} = 0.25$$

$$\frac{3}{4} = 0.75$$

$$\frac{1}{10} = 0.1$$

$$\frac{1}{5} = 0.2$$

$$\frac{3}{5} = 0.6$$

$$\frac{9}{10} = 0.9$$

$$\frac{1}{100} = 0.01$$

$$\frac{7}{100} = 0.07$$

$$\frac{21}{100} = 0.21$$

$$\frac{75}{100} = 0.75$$

$$\frac{99}{100} = 0.99$$

### Key Vocabulary

How many **tenths** is 0.8?

How many **hundredths** is 0.12?

Write 0.75 as a **fraction**?

Write  $\frac{1}{4}$  as a **decimal**?



# Key Instant Recall Facts

## Year 6 – Spring 2

I can identify prime numbers up to 50.

By the end of this half term, children should know the following facts. The aim is for them to recall these facts **instantly**.

*A prime number is a number with no factors other than itself and one.  
The following numbers are prime numbers:*

*2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47*

*A composite number is divisible by a number other than 1 or itself.  
The following numbers are composite numbers:*

*4, 6, 8, 9, 10, 12, 14, 15, 16, 18, 20, 22, 24, 25, 26, 27, 28, 30, 32, 34,  
35, 36, 38, 39, 40, 42, 44, 45, 46, 48, 49, 50*

### Key Vocabulary

**Prime number**

**Composite number**

**Factor**

**Multiple**

Children should be able to explain how they know that a number is composite.

E.g. 39 is composite because it is a multiple of 3 and 13.