

# Key Instant Recall Facts – Yr 1 to 6

## KIRFs



St Anne's Catholic Primary School  
Christ at the heart of all we do

The KIRFs for each year group are aligned to the 2014 National Curriculum and the White Rose Maths Scheme of Work which is in place throughout St Anne's school.

Mental recall of number facts is vital to successful progress in number; these skills are fostered once understanding of new concepts has been achieved, often through work with concrete apparatus and pictorial representations.

KIRFs are taught at the start of each daily maths session.

You can support your child at home by helping them to develop mental recall and manipulation of number facts as outlined on the following pages. These KIRFs build upon prior knowledge, understanding and recall. If your child is finding work at the prescribed level challenging, it is a good idea to spend some time with preceding KIRFs. Your child's class teacher will be happy to help.



# 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?

This list includes some examples of facts that children should know. They should be able to answer questions including missing number questions e.g.  $49 + \bigcirc = 100$  or  $100 - \bigcirc = 72$ .

Tips to support learning:

- Repetition of these facts is key – little and often is best.
- Look for, and use, patterns in number.

$$6 + 4 = 10 \text{ so } 60 + 40 = 100$$

$$50 + 50 = 100 \text{ so } 49 + 50 = 99$$

Discuss how different patterns and strategies can be used.



# Key Instant Recall Facts – Year 4, Autumn 2

## 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.  $6 \times \bigcirc = 72$  or  $\bigcirc \div 6 = 7$ .

Tips to support learning:

- Repetition of these facts is key – little and often is best.
- Use the three times tables – double it!
- Learn one fact and derive three more from it:  
I know:  $6 \times 3 = 18$   
so  $3 \times 6 = 18$   
and  $18 \div 3 = 6$  and  $18 \div 6 = 3$



# Key Instant Recall Facts – Year 4, Spring 1

## 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 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.  $9 \times \bigcirc = 54$  or  $\bigcirc \div 9 = 11$ .

Tips to support learning:

- Repetition of these facts is key – little and often is best.
- What do you already know? There are lots of facts that have been learnt previously
- Learn one fact and derive three more from it:  
I know:  $9 \times 3 = 27$   
so  $3 \times 9 = 27$   
and  $27 \div 3 = 9$  and  $27 \div 9 = 3$



# Key Instant Recall Facts – Year 4, Spring 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**?

Tips to support learning:

- Repetition of these facts is key – little and often is best.
- Make cards with pairs of equivalent fractions and decimals. Use these to play snap or a memory game.



# Key Instant Recall Facts – Year 4, Summer 1

## I know the multiplication and division facts for the 7 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.

|                    |                    |                  |                  |
|--------------------|--------------------|------------------|------------------|
| $7 \times 1 = 7$   | $1 \times 7 = 7$   | $7 \div 7 = 1$   | $7 \div 1 = 7$   |
| $7 \times 2 = 14$  | $2 \times 7 = 14$  | $14 \div 7 = 2$  | $14 \div 2 = 7$  |
| $7 \times 3 = 21$  | $3 \times 7 = 21$  | $21 \div 7 = 3$  | $21 \div 3 = 7$  |
| $7 \times 4 = 28$  | $4 \times 7 = 28$  | $28 \div 7 = 4$  | $28 \div 4 = 7$  |
| $7 \times 5 = 35$  | $5 \times 7 = 35$  | $35 \div 7 = 5$  | $35 \div 5 = 7$  |
| $7 \times 6 = 42$  | $6 \times 7 = 42$  | $42 \div 7 = 6$  | $42 \div 6 = 7$  |
| $7 \times 7 = 49$  | $7 \times 7 = 49$  | $49 \div 7 = 7$  | $49 \div 7 = 7$  |
| $7 \times 8 = 56$  | $8 \times 7 = 56$  | $56 \div 7 = 8$  | $56 \div 8 = 7$  |
| $7 \times 9 = 63$  | $9 \times 7 = 63$  | $63 \div 7 = 9$  | $63 \div 9 = 7$  |
| $7 \times 10 = 70$ | $10 \times 7 = 70$ | $70 \div 7 = 10$ | $70 \div 10 = 7$ |
| $7 \times 11 = 77$ | $11 \times 7 = 77$ | $77 \div 7 = 11$ | $77 \div 11 = 7$ |
| $7 \times 12 = 84$ | $12 \times 7 = 84$ | $84 \div 7 = 12$ | $84 \div 12 = 7$ |

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

### Key Vocabulary

What is 7 multiplied by 6?

What is 7 times 8?

What is 84 divided by 7?

Tips to support learning:

Repetition of these facts is key – little and often is best.

What do you already know? There are lots of facts that have been learnt previously. Which facts are easiest to remember?

Learn one fact and derive three more from it: I know:  $9 \times 7 = 63$   
so  $7 \times 9 = 63$   
and  $63 \div 7 = 9$  and  $63 \div 9 = 7$



# Key Instant Recall Facts – Year 4, Summer 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.

|                      |                        |                     |
|----------------------|------------------------|---------------------|
| $7 \times 10 = 70$   | $30 \times 10 = 300$   | $0.8 \times 10 = 8$ |
| $10 \times 7 = 70$   | $10 \times 30 = 300$   | $10 \times 0.8 = 8$ |
| $70 \div 7 = 10$     | $300 \div 30 = 10$     | $8 \div 0.8 = 10$   |
| $70 \div 10 = 7$     | $300 \div 10 = 30$     | $8 \div 10 = 0.8$   |
| $6 \times 100 = 600$ | $40 \times 100 = 4000$ | $0.2 \times 10 = 2$ |
| $100 \times 6 = 600$ | $100 \times 40 = 4000$ | $10 \times 0.2 = 2$ |
| $600 \div 6 = 100$   | $4000 \div 40 = 100$   | $2 \div 0.2 = 10$   |
| $600 \div 100 = 6$   | $4000 \div 100 = 40$   | $2 \div 10 = 0.2$   |

### Key Vocabulary

What is 5 multiplied by 10?

What is 10 times 0.9?

What is 700 divided by 70?

hundreds, tens, units

tenths, hundredths

Tips to support learning:

- Repetition of these facts is key – little and often is best. Maybe you could focus on a fact family a day / week.

These are just examples of the facts for this term. Children should be able to answer these questions in any order, including missing number questions e.g.  $10 \times \bigcirc = 5$  or  $\bigcirc \div 10 = 60$ .

# Year 4 Additional Challenge!

I can convert analogue times to the 24 hour clock.

Children need to know that there are 24 hours in the digital time scale. Converting 1am and 1pm to 01.00 and 13.00 respectively.

What would 6 o'clock in the morning and evening look like on the digital clock?

What time on the analogue clock is 18.45?

I can read and understand Roman Numerals to 100.

|   |     |    |      |    |     |     |      |
|---|-----|----|------|----|-----|-----|------|
| 1 | I   | 6  | VI   | 20 | XX  | 70  | LXX  |
| 2 | II  | 7  | VII  | 30 | XXX | 80  | LXXX |
| 3 | III | 8  | VIII | 40 | XL  | 90  | XC   |
| 4 | IV  | 9  | IX   | 50 | L   | 100 | C    |
| 5 | V   | 10 | X    | 60 | LX  |     |      |