

## Key Instant Recall Facts (KIRFs)

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**.

$60+40=100$

$37+63=100$

$40+60=100$

$63+37=100$

$100-40=60$

$100-63=37$

$100-60=40$

$100-37=63$

$75+25=100$

$48+52=100$

$25+75=100$

$52+48=100$

$100-25=75$

$100-52=48$

$100-75=25$

$100-48=52$

### Key Vocabulary

What do I **add** to 5 to make 100?

What is 100 **take away** 36?

What is 13 **less than** 100?

**How many more** than 28 is 100?

What is the **difference** between 39 and 100?

This list includes **some** of the facts that children should know. They should know the fact families for all bonds to 100 including missing number questions such as:

$49+ \_ = 100$  or  $100- \_ = 72$

### Top Tips:

The secret to success is practising little and often. Use your time wisely. Can you practise these KIRFs whilst 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.' If you would like more ideas, please see your child's class teacher.

Buy one get three free: If your child knows one fact (eg.  $28+72=100$ ), can they tell you the other three facts in that family?

Use number bonds to 10: Do bonds to 10 help you to work out bonds to 100? Are there any connections?

## Key Instant Recall Facts (KIRFs)

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 3 **multiplied by** 6?

What is 6 **times** 7?

What is 24 **divided by** 6?

Children should be able to answer questions in any order, including missing number questions. Eg.  $6 \times \_ = 54$  or  $\_ \div 6 = 11$

### Top Tips:

The secret to success is practising little and often. Use your time wisely. Can you practise these KIRFs whilst 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.' If you would like more ideas, please see your child's class teacher.

Songs and chants: There are many songs / chants to help children to learn these facts. Many are available online.

Buy one get three free: If your child knows one fact (eg.  $6 \times 5 = 30$ ), can they tell you the other three facts in that family?

Warning: When creating fact families, children sometimes get confused by the order of the numbers in a division number sentence. It is tempting to say that the largest number goes first but this can lead to problems later. A fact family for multiplication tables should always have four facts. See above.

## Key Instant Recall Facts (KIRFs)

Year 4: Spring 1

***I know the multiplication and division facts for the 9 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**.

$9 \times 1 = 9$	$1 \times 9 = 9$	$9 \div 9 = 1$	$9 \div 1 = 9$
$9 \times 2 = 18$	$2 \times 9 = 18$	$18 \div 9 = 2$	$18 \div 2 = 9$
$9 \times 3 = 27$	$3 \times 9 = 27$	$27 \div 9 = 3$	$27 \div 3 = 9$
$9 \times 4 = 36$	$4 \times 9 = 36$	$36 \div 9 = 4$	$36 \div 4 = 9$
$9 \times 5 = 45$	$5 \times 9 = 45$	$45 \div 9 = 5$	$45 \div 5 = 9$
$9 \times 6 = 54$	$6 \times 9 = 54$	$54 \div 9 = 6$	$54 \div 6 = 9$
$9 \times 7 = 63$	$7 \times 9 = 63$	$63 \div 9 = 7$	$63 \div 7 = 9$
$9 \times 8 = 72$	$8 \times 9 = 72$	$72 \div 9 = 8$	$72 \div 8 = 9$
$9 \times 9 = 81$	$9 \times 9 = 81$	$81 \div 9 = 9$	$81 \div 9 = 9$
$9 \times 10 = 90$	$10 \times 9 = 90$	$90 \div 9 = 10$	$90 \div 10 = 9$
$9 \times 11 = 99$	$11 \times 9 = 99$	$99 \div 9 = 11$	$99 \div 11 = 9$
$9 \times 12 = 108$	$12 \times 9 = 108$	$108 \div 9 = 12$	$108 \div 12 = 9$

### Key Vocabulary

What is 4 **multiplied by** 9?

What is 9 **times** 6?

What is 36 **divided by** 9?

Children should be able to answer questions in any order, including missing number questions. Eg.  $9 \times \underline{\quad} = 27$  or  $\underline{\quad} \div 9 = 12$

### Top Tips:

The secret to success is practising little and often. Use your time wisely. Can you practise these KIRFs whilst 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.' If you would like more ideas, please see your child's class teacher.

Look for patterns: These times tables are full of patterns, how many can your child spot?

Use your 10x table: Multiply by 10 and then subtract the original number (eg.  $7 \times 10 = 70 - 7 = 63$ ). What do you notice?

What do you already know? Your child should already know 2,3,4,5,6,8 and 10x tables. There will be facts in these tables to help with 9x. Does practising these help?

## Key Instant Recall Facts (KIRFs)

Year 4: Spring 2

***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**.

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

### Key Vocabulary

What is 4 **multiplied by** 7?

What is 7 **times** 6?

What is 63 **divided by** 9?

### Top Tips:

The secret to success is practising little and often. Use your time wisely. Can you practise these KIRFs whilst 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.' If you would like more ideas, please see your child's class teacher.

Look for patterns: These times tables are full of patterns, how many can your child spot?

What do you already know? Your child should already know 2,3,4,5,6,8, 9 and 10x tables. There will be facts in these tables to help with 7x. Does practising these help?

## Key Instant Recall Facts (KIRFs)

Year 4: Summer 1

***I know the multiplication and division facts for the 11 and 12 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**.

$11 \times 1 = 11$	$1 \times 11 = 11$	$11 \div 11 = 1$	$11 \div 1 = 11$
$11 \times 2 = 22$	$2 \times 11 = 22$	$22 \div 11 = 2$	$22 \div 2 = 11$
$11 \times 3 = 33$	$3 \times 11 = 33$	$33 \div 11 = 3$	$33 \div 3 = 11$
$11 \times 4 = 44$	$4 \times 11 = 44$	$44 \div 11 = 4$	$44 \div 4 = 11$
$11 \times 5 = 55$	$5 \times 11 = 55$	$55 \div 11 = 5$	$55 \div 5 = 11$
$11 \times 6 = 66$	$6 \times 11 = 66$	$66 \div 11 = 6$	$66 \div 6 = 11$
$11 \times 7 = 77$	$7 \times 11 = 77$	$77 \div 11 = 7$	$77 \div 7 = 11$
$11 \times 8 = 88$	$8 \times 11 = 88$	$88 \div 11 = 8$	$88 \div 8 = 11$
$11 \times 9 = 99$	$9 \times 11 = 99$	$99 \div 11 = 9$	$99 \div 9 = 11$
$11 \times 10 = 110$	$10 \times 11 = 110$	$110 \div 11 = 10$	$110 \div 10 = 11$
$11 \times 11 = 121$	$11 \times 11 = 121$	$121 \div 11 = 11$	$121 \div 11 = 11$
$11 \times 12 = 132$	$12 \times 11 = 132$	$132 \div 11 = 12$	$132 \div 12 = 11$

$12 \times 1 = 12$	$1 \times 12 = 12$	$12 \div 12 = 1$	$12 \div 1 = 12$
$12 \times 2 = 24$	$2 \times 12 = 24$	$24 \div 12 = 2$	$24 \div 2 = 12$
$12 \times 3 = 36$	$3 \times 12 = 36$	$36 \div 12 = 3$	$36 \div 3 = 12$
$12 \times 4 = 48$	$4 \times 12 = 48$	$48 \div 12 = 4$	$48 \div 4 = 12$
$12 \times 5 = 60$	$5 \times 12 = 60$	$60 \div 12 = 5$	$60 \div 5 = 12$
$12 \times 6 = 72$	$6 \times 12 = 72$	$72 \div 12 = 6$	$72 \div 6 = 12$
$12 \times 7 = 84$	$7 \times 12 = 84$	$84 \div 12 = 7$	$84 \div 7 = 12$
$12 \times 8 = 96$	$8 \times 12 = 96$	$96 \div 12 = 8$	$96 \div 8 = 12$
$12 \times 9 = 108$	$9 \times 12 = 108$	$108 \div 12 = 9$	$108 \div 9 = 12$
$12 \times 10 = 120$	$10 \times 12 = 120$	$120 \div 12 = 10$	$120 \div 10 = 12$
$12 \times 11 = 132$	$11 \times 12 = 132$	$132 \div 12 = 11$	$132 \div 11 = 12$
$12 \times 12 = 144$	$12 \times 12 = 144$	$144 \div 12 = 12$	$144 \div 12 = 12$

### **Top tips:**

The secret to success is practising little and often. Use your time wisely. Can you practise these KIRFs whilst 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.' If you would like more ideas, please see your child's class teacher.

Look for patterns: These times tables are full of patterns, how many can your child spot?

What do you already know? Your child should already know 2,3,4,5,6,8, 9 and 10x tables. There will be facts in these tables to help with 7x. Does practising these help?

## Key Instant Recall Facts (KIRFs)

Year 4: Summer 2

*I can multiply and divide 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**.

$7 \times 10 = 70$

$10 \times 7 = 70$

$70 \div 10 = 7$

$70 \div 7 = 10$

$6 \times 100 = 600$

$100 \times 6 = 600$

$600 \div 6 = 100$

$600 \div 100 = 6$

$30 \times 10 = 300$

$10 \times 30 = 300$

$300 \div 10 = 30$

$300 \div 30 = 10$

$40 \times 100 = 4000$

$100 \times 40 = 4000$

$4000 \div 100 = 40$

$4000 \div 40 = 100$

$0.8 \times 10 = 8$

$10 \times 0.8 = 8$

$8 \div 10 = 0.8$

$8 \div 0.8 = 10$

$0.2 \times 10 = 2$

$10 \times 0.2 = 2$

$2 \div 10 = 0.2$

$2 \div 0.2 = 10$

### Key Vocabulary

What is 8 **multiplied by** 100?

What is 0.7 **times** 10?

What is 3000 **divided by** 100?

Children should be able to answer questions in any order, including missing number questions. Eg.  $40 \times \underline{\quad} = 400$  or  $\underline{\quad} \div 10 = 0.9$

### Top Tips:

The secret to success is practising little and often. Use your time wisely. Can you practise these KIRFs whilst 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.' If you would like more ideas, please see your child's class teacher.

Connections: Are there any connections between what you have learned in your times tables work and these type of questions?