Uplands Manor Primary School

Key Instant Recall Facts (KIRFs)

Year 2





Uplands Manor Primary School Key Instant Recall Facts Year 2 – Autumn 1

Targets:

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.

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

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 - 11 = 9
10 + 10 = 20		20 - 10 = 10	

Top Tips

Use what you already know – Use number bonds to 10 (e.g. 7 + 3 = 10) to work out related number bonds to 20 (e.g. 17 + 3 = 20).

Use practical resources – Make collections of 20 objects. Ask questions such as, "How many more conkers would I need to make 20?"

Play games – You can play number bond pairs online at <u>www.conkermaths.com</u> and then see how many questions you can answer in just one minute.

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?



Uplands Manor Primary School Key Instant Recall Facts Year 2 – Autumn 2

Targets:

I can add and subtract, bridging ten by making ten and then some.

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

Bridging the 10 using number bonds

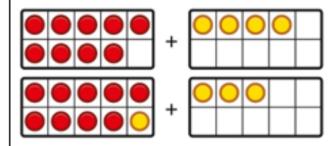
Children use a bead string to complete a 10 and understand how this relates to the addition.



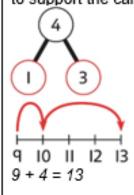
7 add 3 makes 10. So, 7 add 5 is 10 and 2 more.

Bridging the 10 using number bonds Children use counters to complete a ten

frame and understand how they can add using knowledge of number bonds to 10.



Bridging the 10 using number bonds Use a part-whole model and a number line to support the calculation.



These are the facts that need to be learnt until they are instantly recalled:

$$3 + 8 = 11$$
 $8 + 3 = 11$
 $4 + 7 = 11$ $7 + 4 = 11$
 $4 + 8 = 12$ $8 + 4 = 12$
 $5 + 7 = 12$ $7 + 5 = 12$
 $5 + 8 = 13$ $8 + 5 = 13$
 $6 + 8 = 14$ $6 + 8 = 13$

Top Tips

The secret to success is practising little and often. Use time wisely.

Encourage your child to make links to their number bonds to 10.

Key Vocabulary

Make ten and add the rest.

Bridging

Add

Subtract



Uplands Manor Primary School Key Instant Recall Facts Year 2 - Spring 1

Targets:

I can add by using compensation.

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

This half term, children will learn to add 9 or 8 by using compensation. This method requires children to add 10 and then subtract 1 or 2.

For example:

$$7 + 9$$
 is the same as $7 + 10 - 1$ and

$$7 + 8$$
 is the same as $7 + 10 - 2$

Facts to be learnt using this method:

$$3 + 9 = 12$$
 $9 + 3 = 12$

$$4 + 9 = 13$$
 $9 + 4 = 13$

$$5 + 9 = 14$$
 $9 + 5 = 14$

$$6 + 9 = 15$$
 $9 + 6 = 15$

$$7 + 9 = 16$$
 $9 + 7 = 16$

Top Tips

The secret to success is practising little and often. Use time wisely.

Encourage your child to add 10 first and then adjust the answer by subtracting 1 or 2. See how many questions your child can answer in a set amount of time.

Children should also explore the subtraction calculations that link to these additions.

$$12 - 9 = 3$$

$$12 - 9 = 3$$
 $14 - 9 = 5$ $16 - 9 = 7$

$$16 - 9 = 3$$

$$12 - 3 = 9$$

$$14 - 5 = 9$$

$$16 - 7 = 9$$

$$13 - 9 = 4$$

$$13 - 9 = 4$$
 $15 - 9 = 6$ $17 - 9 = 8$

$$13 - 4 = 9$$

$$15 - 6 = 9$$

$$17 - 8 = 9$$

Key Vocabulary

Compensation

Round

Adjust



Uplands Manor Primary School Key Instant Recall Facts Year 2 – Spring 2

Targets:

I know near doubles to 10.

Facts that need to be learnt:

$$5 + 6 = 11$$

$$6 + 5 = 11$$

$$6 + 7 = 13$$

$$7 + 6 = 13$$

$$7 + 8 = 15$$

$$8 + 7 = 15$$

$$8 + 9 = 17$$

$$9 + 8 = 17$$

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 begin by recapping their doubles to 10. Then make links to the doubles they already know. E.g. if I know that double 7 is 14, then 7 + 8 must be 15 as it is one more.

Top Tips

The secret to success is practising little and often. Use time wisely.

Use what you already know – encourage your child to find the connection between the doubles and near doubles.

Make flash cards of the facts and practice them little and often. Pictures are a great help!

Key Vocabulary

What is double 9?

What is half of 14?

If I know that double 9 is 18 then I know that 9 and 8 is 17 because it is one less.



Uplands Manor Primary School Key Instant Recall Facts Year 2 – Summer 1

Targets:

- I know the multiplication and division facts for the 2 and 10 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.

They should be able to answer these questions in any order, including missing number questions

e.g.
$$2 \times \bigcirc = 8 \text{ or } \bigcirc \div 2 = 6.$$

Top Tips

The secret to success is practising little and often. Use time wisely.

Songs, Chants and Memory games – You can find multiplication songs and chants online. For those hard-to-remember facts, www.multiplication.com has some strange picture stories to help children remember.

Use what you know – If your child knows that $2 \times 5 = 10$, they can use this fact to work out that $2 \times 6 = 12$.

Test the Parent – Your child can make up their own tricky division questions for you e.g. What is 18 divided by 2?

$2 \times 1 = 2$ $2 \times 2 = 4$ $2 \times 3 = 6$ $2 \times 4 = 8$ $2 \times 5 = 10$ $2 \times 6 = 12$ $2 \times 7 = 14$ $2 \times 8 = 16$ $2 \times 9 = 18$ $2 \times 10 = 20$ $2 \times 11 = 22$ $2 \times 13 = 24$	$2 \div 2 = 1$ $4 \div 2 = 2$ $6 \div 2 = 3$ $8 \div 2 = 4$ $10 \div 2 = 5$ $12 \div 2 = 6$ $14 \div 2 = 7$ $16 \div 2 = 8$ $18 \div 2 = 9$ $20 \div 2 = 10$ $22 \div 2 = 11$ $24 \div 2 = 12$
2 × 11 = 22 2 × 12 = 24	$22 \div 2 = 11$ $24 \div 2 = 12$

10 × 1 = 10			10 ÷ 10 = 1
$10 \times 2 = 20$	10	10	20 ÷ 10 = 2
$10 \times 3 = 30$			30 ÷ 10 = 3
$10 \times 4 = 40$	10	10	$40 \div 10 = 4$
$10 \times 5 = 50$	(35)		50 ÷ 10 = 5
$10 \times 6 = 60$	10	10	$60 \div 10 = 6$
$10 \times 7 = 70$	(35)		70 ÷ 10 = 7
$10 \times 8 = 80$	10	10	80 ÷ 10 = 8
$10 \times 9 = 90$			90 ÷ 10 = 9
$10 \times 10 = 100$	10	10	100 ÷ 10 = 10
$10 \times 11 = 110$	(Constant		110 ÷ 10 = 11

 $10 \times 12 = 120$

Key Vocabulary

What is 2 multiplied by 7?

What is 10 times 9?

What is 12 divided by 2?

What is 110 divided by 10?



Uplands Manor Primary School Key Instant Recall Facts Year 2 – Summer 2

Targets:

I know the multiplication and division facts for the 10 and 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.

They should be able to answer these questions in any order, including missing number questions e.g.

$$5 \times \bigcirc = 40 \text{ or } \bigcirc \div 5 = 9.$$

Top Tips

The secret to success is practising little and often. Use time wisely.

Spot patterns – What patterns can your child spot in the 5 times table? Are there any similarities with the 10 times table?

Test the Parent – Your child can make up their own tricky division questions for you e.g. What is 45 divided by 5? They need to be able to multiply to create these questions.

$5 \times 1 = 5$ $5 \times 2 = 10$ $5 \times 3 = 15$ $5 \times 4 = 20$ $5 \times 5 = 25$ $5 \times 6 = 30$ $5 \times 7 = 35$ $5 \times 8 = 40$ $5 \times 9 = 45$		$5 \div 5 = 1$ $10 \div 5 = 2$ $15 \div 5 = 3$ $20 \div 5 = 4$ $25 \div 5 = 5$ $30 \div 5 = 6$ $35 \div 5 = 7$ $40 \div 5 = 8$ $45 \div 5 = 9$
$5 \times 9 = 45$ $5 \times 10 = 50$ $5 \times 11 = 55$ $5 \times 12 = 60$		$45 \div 5 = 9$ $50 \div 5 = 10$ $55 \div 5 = 11$ $60 \div 5 = 12$

If your child is doing well with these facts – go back to the 2s and 10s as well. Can they answer questions from all three times tables mixed in?

Key Vocabulary

What is 5 multiplied by 7?

What is 5 times 9?

What is 60 divided by 5?