Key Instant Recall Facts

This half term your child is working towards achieving knowledge of KIRFs, indicated below.
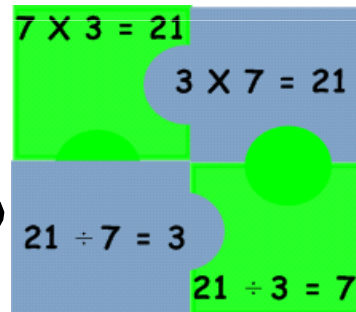The ultimate aim is for your child to be able to recall these facts instantly!

Know all multiplication and division facts for 3x, 6x and 9x table	Know all multiplication and division facts for all tables up to 10 x 10	Know the tests for divisibility for 2,3,5,9 and 10	Know square numbers to 12 x 12	Know the square roots of square numbers to 15 x 15

If you can cut a cake into 6 slices, how many cakes would you need to buy if there were 18 people coming to the party?

3 cakes!

Well done, that was quick!

7 X 3 = 21

3 X 7 = 21

21 ÷ 7 = 3

21 ÷ 3 = 7

Remember,
when you know 1 fact,
you also know 3 more!

RULE: A whole number is divisible by 2 if the last digit is 0, 2, 4 6 or 8.
RULE: A whole number is divisible by 3 if the <u>sum</u> of its digits is divisible by 3
Let's try!
7314 ...yes because 7+3+1+4= 15, which is divisible by 3
RULE: A whole number is divisible by 5 if the last digit is 0 or 5
RULE: A whole number is divisible by 9 if the sum of its digits is divisible by 9
 Let's try ...
437 ... no, because 4 + 3 + 7 = 14 which isn't divisible by 9
738... yes, because 7 + 3 + 8 = 18 which is divisible by 9
RULE: A whole number is divisible by 10 if the last digit is 0

Helpful hints for parents

- *Encourage children to use doubling to link tables such as 2s, 4s, and 8s*
- *Look for patterns in the tables, for example in the 9 times table the digit sum is always 9!*
- *Chanting tables really does help. Make it fun by adding actions too or singing!*
- *Don't forget to chant those division facts too, they are often much harder to recall*

Key vocabulary   *times   multiplied by   lots of   groups of   multiple of   divided by   shared   product divisible by   factor   square number   quotient*

Make it real!

A back yard is 8 metres long and 4 metres wide. What is the total area?

32 metres squared!
How do you know?
Because 4 multiplied by 8 is 32.

A recipe for a cake requires three tablespoons of honey. If I make 6 cakes for a school fete, how many tablespoons will I need?

18 tablespoons!
Why?
The product of 3 and 6 is 18.

We go on holiday in 7 weeks time. How many days are left until we go? How many school days are left?

49 days and 35 school days!
Why?
There are 7 days in a week so 7 times 7 is 49.
We only go to school for 5 days, so five seven's are 35.

Remember to work out a tricky multiplucation use what you already know! So to work out 6 x 8:
"we might know 6 x 4 =24 and then double it to make 48"

Make it fun!

Call out!
Play 'Beat the calculator'. One person works out the answer to a multiplication or division question (similar to those above) with a calculator and one person works them out in their head. Who is the quicker?

Dice?
Roll a dice and generate a two-digit, three-digit or four-digit number. Children discuss whether the number
is divisible by 2, 3, 5, 9 or 10.

Playing cards:
Remove picture cards from the pack. Pick a card and state the multiplication and division fact that the child is working on.
eg Pick the '9' card; so 9 x 7 = 63 and 63 divided by 7 = 9

Dominoes:
To practice the 8 times table, for example, pick a domino and add the dots. The child multiplies the total by 8. The child should also give the associated division fact.

Songs and rhymes
There are lots of CDs available with musical tables. Great fun to sing along to on long car journeys!

Timed Games:
How well are you doing? How many questions can you answer in 2 minutes. Can you beat your own record?