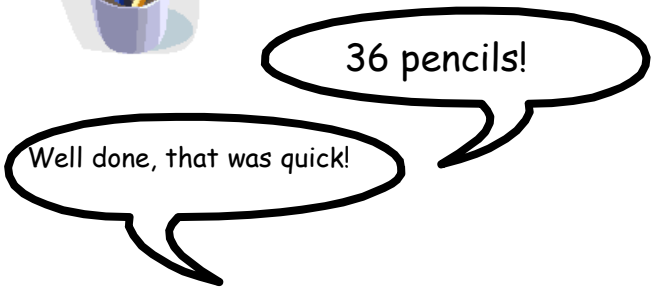
Key Instant Recall Facts

Year 3, 4, 5 and 6:
Spring Term 2

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 doubles and halves of: **All whole numbers to 20** **All multiples of 10 to 500** **All multiples of 100 to 5000**	Know doubles and halves of: All whole numbers to 50 All multiples of 5 to 1000 All multiples of 50 to 5000	Know doubles and halves of: All whole numbers to 100 All multiples of 10 to 1000 All multiples of 100 to 10,000	**Know the doubles and halves of all multiples of 10 to 10000**	**Know the doubles and halves of all multiples of 1000 to 100000**

If there are 18 pencils in a pack, how many pencils will there be in 2 packs?

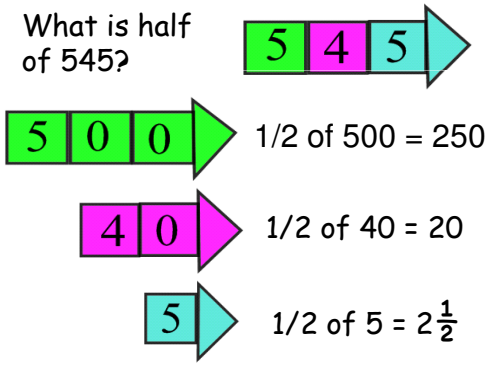


Doubles:
25 → 50, so
250 → 500
37 → 74, so
370 → 740

Halves:
70 → 35, so
700 → 350
43 → 21.5, so
430 → 215

Example of doubles and halves of multiples of 5 to 1000:

What is half of 545?



So half of 545 must be 272½ or 272.5

Helpful hints for parents

Year 3, 4, 5 and 6:
Spring 2

- When children are confident with doubles ask them to find the corresponding halves
- Practise halving at least as often as doubling. This will help children with subtraction at a later date
- Children will often find numbers such as 35 harder to halve, so practise halving these numbers more often, encourage your child to give the answer using a fraction (17 $\frac{1}{2}$) and/or a decimal (17.5)

Key vocabulary

Double near double twice 2 lots of 2 times half halved divided by 2 shared between 2 group in pairs

Make it real!

In a sponsored swim, Paul swam 75 lengths of the pool, his sister swam twice as far. How many lengths did she swim?

150 lengths
Can you tell me why?
Because double 75 is 150.

If two children have £27 to share equally between them, how much do they have each?

£13.50 each!
How do you know?
Because half of £20 is £10 and half of £7 is £3.50 which is £13.50 altogether!

Jenny walks 1250 metres to school each day, she meets Kate half way; how far does Kate walk?

625 metres!
Tell me how you worked it out.
Well, I know that half of 1200 metres is 600 metres
and half of 50 metres is 25 metres.

Encourage children to partition the numbers when doubling and halving 2- or 3-digit numbers e.g. 1/2 of 240 is 1/2 of 200 and then 1/2 of 40

Make it fun!

Call out!
Play number ping pong!
Start of saying 'ping', child replies with 'pong'.
Repeat and then convert to numbers i.e. say '12' and they reply '24' (doubles to 20) Or say, '36' and they say '18'

Playing cards:
Pick 3 cards, the first one to represent the thousands, the second one to represent the hundreds and the third one to represent the tens, so that your number is always a multiple of 10. How quickly can you double AND halve this number?
E.g. Cards show 8150

Playing darts
Use a magnetic dartboard. Create a game involving doubling and halving. To extend, change the numbers to multiples of 10 e.g. 13 becomes 130

Top Trump Cards:
Pick a Top Trump card. Choose any category and see how quickly you can halve AND double this number.

Challenge;
Choose any even 4 digit number, halve it:
if the answer is even halve again, if it's odd add 1 then halve again. How far can you go?

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