



Key Instant Recall Facts

Year 2 – Spring 2

Key Vocabulary

What is **double** 9?

What is **half** of 6?

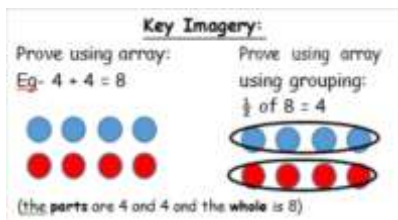
What is the **whole**?

What are the **parts**?

The parts are **equal**.

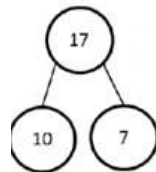
I aspire to know doubles of all numbers to 20 and halves of even numbers to 20.

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 also be aware that the number sentence can be recorded with the equals sign in different places. E.g. $4 + 4 = 8$ and $8 = 4 + 4$.



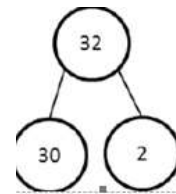
Practical objects can be used to double and halve smaller numbers. However, when using larger numbers, this can be time consuming and can lead to a child miscounting.

| | | |
|----------------|----------------|--------------------------|
| $0 + 0 = 0$ | $11 + 11 = 22$ | $\frac{1}{2}$ of 0 = 0 |
| $1 + 1 = 2$ | $12 + 12 = 24$ | $\frac{1}{2}$ of 2 = 1 |
| $2 + 2 = 4$ | $13 + 13 = 26$ | $\frac{1}{2}$ of 4 = 2 |
| $3 + 3 = 6$ | $14 + 14 = 28$ | $\frac{1}{2}$ of 6 = 3 |
| $4 + 4 = 8$ | $15 + 15 = 30$ | $\frac{1}{2}$ of 8 = 4 |
| $5 + 5 = 10$ | $16 + 16 = 32$ | $\frac{1}{2}$ of 10 = 5 |
| $6 + 6 = 12$ | $17 + 17 = 34$ | $\frac{1}{2}$ of 12 = 6 |
| $7 + 7 = 14$ | $18 + 18 = 36$ | $\frac{1}{2}$ of 14 = 7 |
| $8 + 8 = 16$ | $19 + 19 = 38$ | $\frac{1}{2}$ of 16 = 8 |
| $9 + 9 = 18$ | $20 + 20 = 40$ | $\frac{1}{2}$ of 18 = 9 |
| $10 + 10 = 20$ | | $\frac{1}{2}$ of 20 = 10 |



When we **double** larger numbers such as 17, children need to partition 17 into tens and ones and double each of these. Double 10 is 20 and double 7 is 14.

$20 + 14 = 34$, so double 17 equals 34.



When we **halve** larger numbers such as 32, children should partition the number into manageable chunks which can then be shared equally between 2. 32 could be partitioned as 30 and 2. Half of 30 is 15, half of 2 is 1. $15 + 1 = 16$, so half of 32 equals 16.

Top Tips

The secret to success is practising little and often. Use time wisely. Can you practise these KIRFs while walking to school or during a car journey? You don't need to practise them all at once: perhaps you could have a fact family of the day.

You could try some of these ideas...

- Share out practical objects into two groups in order to find half. Remember to use the term 'equal' to describe the two groups.
- **Ping Pong** – In this game, the parent says, "Ping," and the child replies, "Pong." Then the parent says a number and the child doubles it. For a harder version, the adult can say, "Pong." The child replies, "Ping," and then halves the next number given.
- – Go to <http://www.conkermaths.org/cmweb.nsf/pages/numberkirfs.html> (Doubles tab) and see how many questions you can answer in just 90 seconds.