

Year 3**Mental Strategies**

Children should continue to count regularly, on and back, now including multiples of 4, 8, 50, and 100, and steps of 1/10.

The number line should continue to be used as an important image to support thinking, and the use of informal jottings and drawings to solve problems should be encouraged.

Children should practise times table facts

$$3 \times 1 =$$

$$3 \times 2 =$$

$$3 \times 3 =$$

Vocabulary

partition

grid method

inverse

Generalisations

Connecting x2, x4 and x8 through multiplication facts

Comparing times tables with the same times tables which is ten times bigger. If $4 \times 3 = 12$, then we know $4 \times 30 = 120$. Use place value counters to demonstrate this.

When they know multiplication facts up to x12, do they know what x13 is? (i.e. can they use 4×12 to work out 4×13 and 4×14 and beyond?)

Some Key Questions

What do you notice?

What's the same? What's different?

Can you convince me?

How do you know?

Year 4**Mental Strategies**

Children should continue to count regularly, on and back, now including multiples of 6, 7, 9, 25 and 1000, and steps of 1/100.

Become fluent and confident to recall all tables to $\times 12$

Use the context of a week and a calendar to support the 7 times table (e.g. how many days in 5 weeks?)

Use of finger strategy for 9 times table.

Multiply 3 numbers together

The number line should continue to be used as an important image to support thinking, and the use of informal jottings should be encouraged.

They should be encouraged to choose from a range of strategies:

- Partitioning using $\times 10$, $\times 20$ etc
- Doubling to solve $\times 2$, $\times 4$, $\times 8$
- Recall of times tables
- Use of commutativity of multiplication

Vocabulary

Factor

Generalisations

Children given the opportunity to investigate numbers multiplied by 1 and 0.

When they know multiplication facts up to x12, do they know what x13 is? (i.e. can they use 4×12 to work out 4×13 and 4×14 and beyond?)

Some Key Questions

What do you notice?

What's the same? What's different?

Can you convince me?

How do you know?