

## Tens Frame

Ten-Frames are two-by-five rectangular frames into which objects like counters can be placed to show numbers less than or equal to ten.

Ten-frames are used by a teachers to **help children to visualise numbers**. This is a great tool to use when teaching them how to count between 0 and 10 or use different coloured counters to teach them simple additions and numbers to 10.

You can place counters and cubes on a tens frame, to represent a number or addition. But at home, why not use pine cones, pieces of pasta, buttons... anything!



## Place Value Chart

Place value is an important factor in our number system and it means that the position of a digit in a number determines the value.

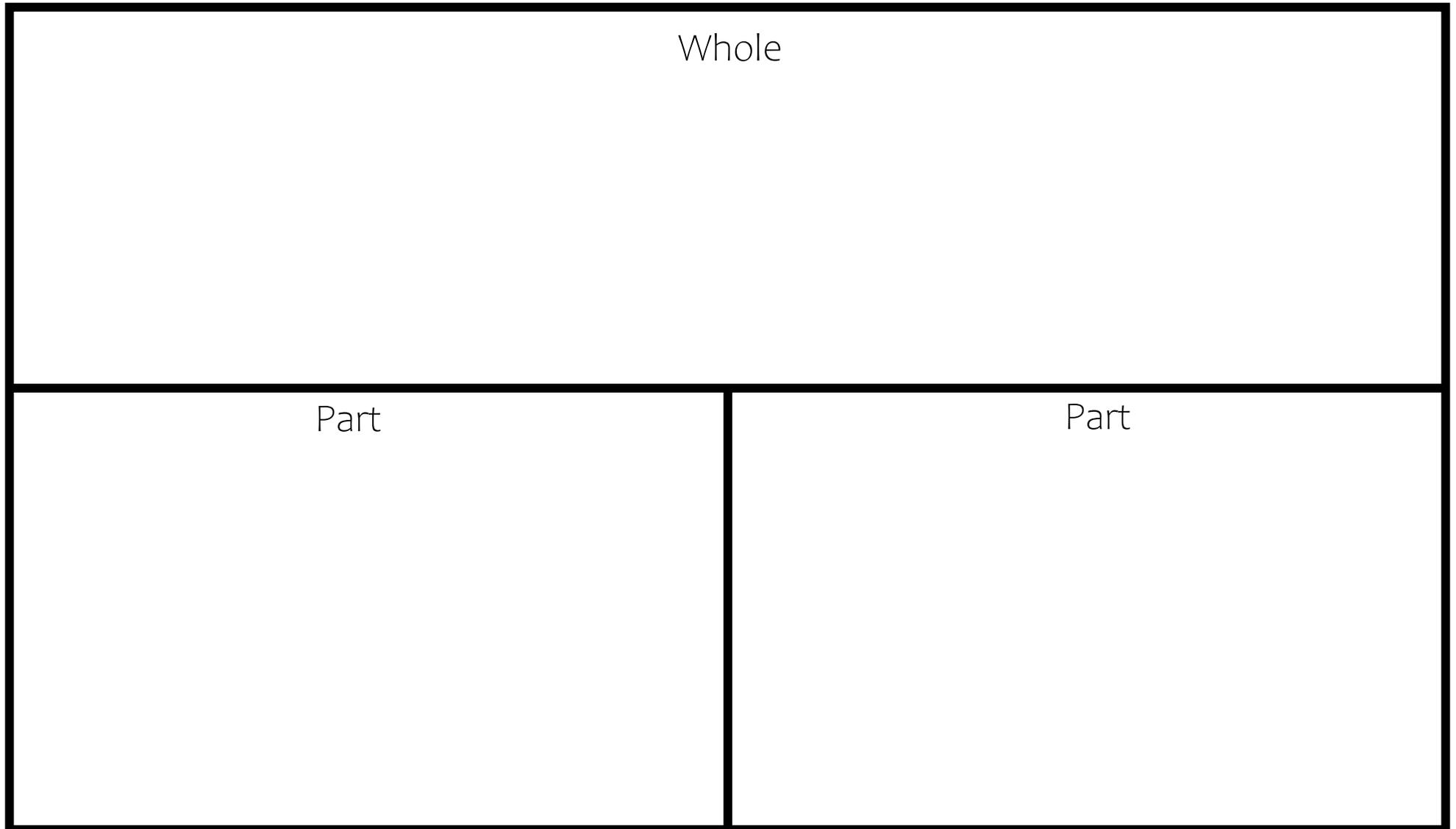
For example, each digit is ten times the value of the digit on the right. It can help with understanding numbers up to 100, counting 'teen' numbers or addition!

Tens	Ones

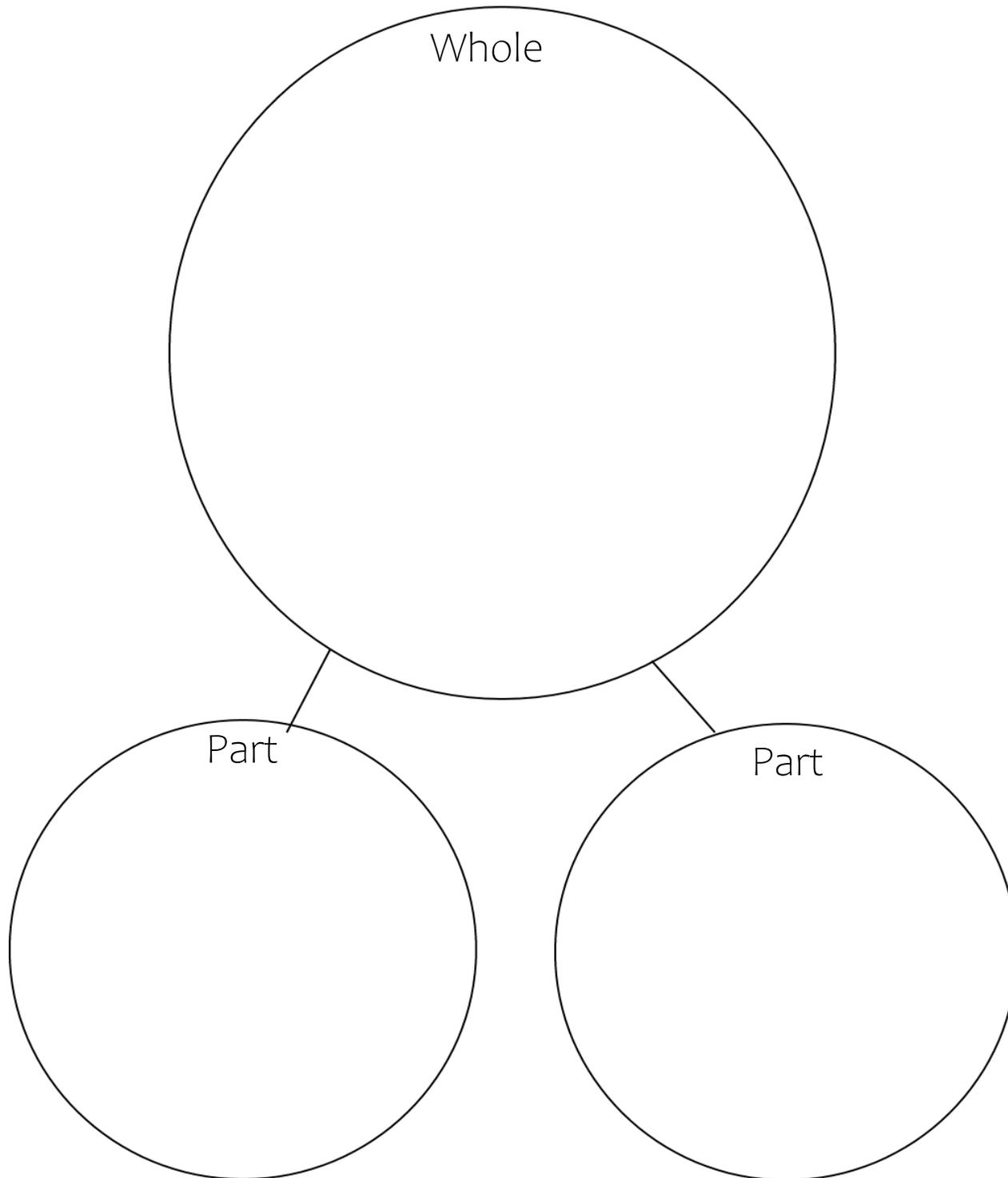
# Bar Model

Bar models are visual representations of problems or ideas that can be used for any of these operations: subtraction, addition, multiplication and division.

Sometimes calculations and word problems are difficult for a child to visualise in their head. Bar models help them to see the maths more clearly.



## Part Part Whole Model



The Part-whole reasoning or model is the concept of how numbers can be split into parts. Children using this model will see the relationship between the whole number and the component parts, this helps learners make the connections between addition and subtraction

When students begin to see the results of part-whole models, it is first used when looking into addition number facts.

They will also use it when wanting to describe addition and subtraction situations. They can interpret and work out the answers to these situations through part-whole models.

For example:

*'10 children are inside the classroom and 13 have gone out to play, how many children are in the class?'*

Here, students will solve this by adding 10 and 13 together.

# Fraction Wall

A fraction wall is a visual representation to help students learn, compare and identify fractions, set out in the form of a wall.

This is a great way to help students begin to understand the basics of fractions.

The first layer of 'bricks' of a fraction wall is one long brick labelled as '1'.

The second layer of 'bricks' is split in half, into two bricks, both labelled '1/2'.

This continues down the fraction wall, each layer being split into the next fraction.

It can help students identify equivalent fractions and common denominators

What fractions are equivalent to  $\frac{3}{4}$ ?

