Thursday Maths 14-1-21

LO: I can solve problems involving scaling (Year 3 and 4).

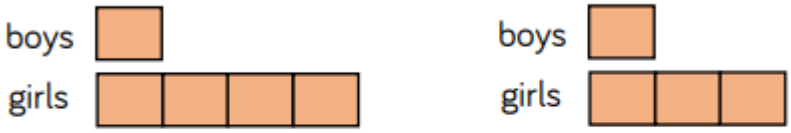
It is important that children are exposed to problems involving scaling from an early age. You should be able to answer questions that use the vocabulary 'times as many', also including terms such as 'doubled' and 'tripled'

Bar models are particularly useful here to help you picture the idea. Examples and non-examples should be used to ensure depth of understanding.

Have a go at these **Varied Fluency Questions** below thinking about how scaling is being shown in each.

1.

In a playground there are 3 times as many girls as boys.



Which bar model represents the number of boys and girls?
Explain your choice.

Why might someone draw the first bar model? What have they misunderstood?

2.

Draw a bar model to represent this situation.

In a car park there are 5 times as many blue cars as red cars.

3.

Eva has these counters 

Amir has 4 times as many counters.
How many counters does Amir have?

What is the value of Amir's counters? How do you know?

4.

There are 35 children at a concert.
3 times as many adults are at the concert.
How many people are at the concert in total?

How many adults are at the concert? How will you work out the total?

Reasoning and Problem-Solving Questions

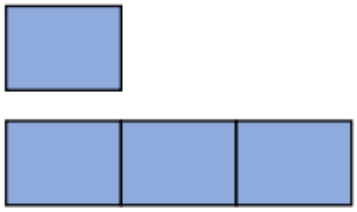
5.

Dora says Mo's tower is 3 times taller than her tower.
Mo says his tower is 12 times taller than Dora's tower.
Who do you agree with?
Explain why?

Dora's tower Mo's tower

6.

In a playground there are 3 times as many girls as boys.
There are 30 girls.
Label and complete the bar model to help you work out how many boys there are in the playground.



7. You might like to use some practical resources to help you work this out – some pink and green counters or pieces of paper would work.

A box contains some counters.
There are twice as many green counters as pink counters.
There are 18 counters in total.
How many pink counters are there?