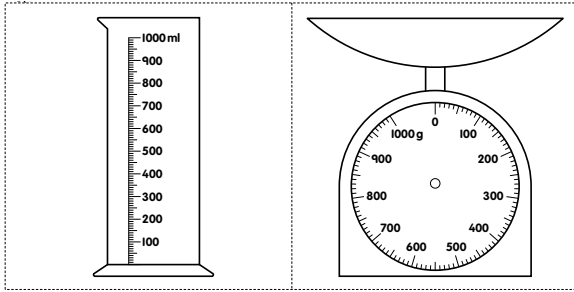


A1 Measuring scales

Half way

Quarter way

Three-quarter way



Talk to each other to decide where the arrows should be placed between 0 and 1000.

Put the arrow cards to the halfway mark, quarter way mark and three quarters way mark.

What do you notice about the half way and quarter points of these measuring scales?

Now draw these in your books and label the marks where you put the arrows.

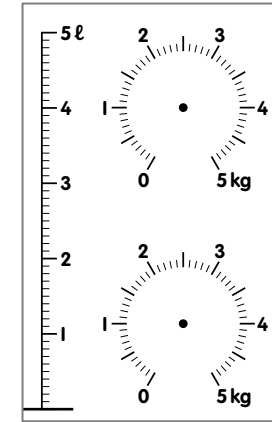
Now put the arrows to show halfway between 0 and 500, 300, 200, ...

A2 Measuring scales

Half way

Quarter way

Three-quarter way

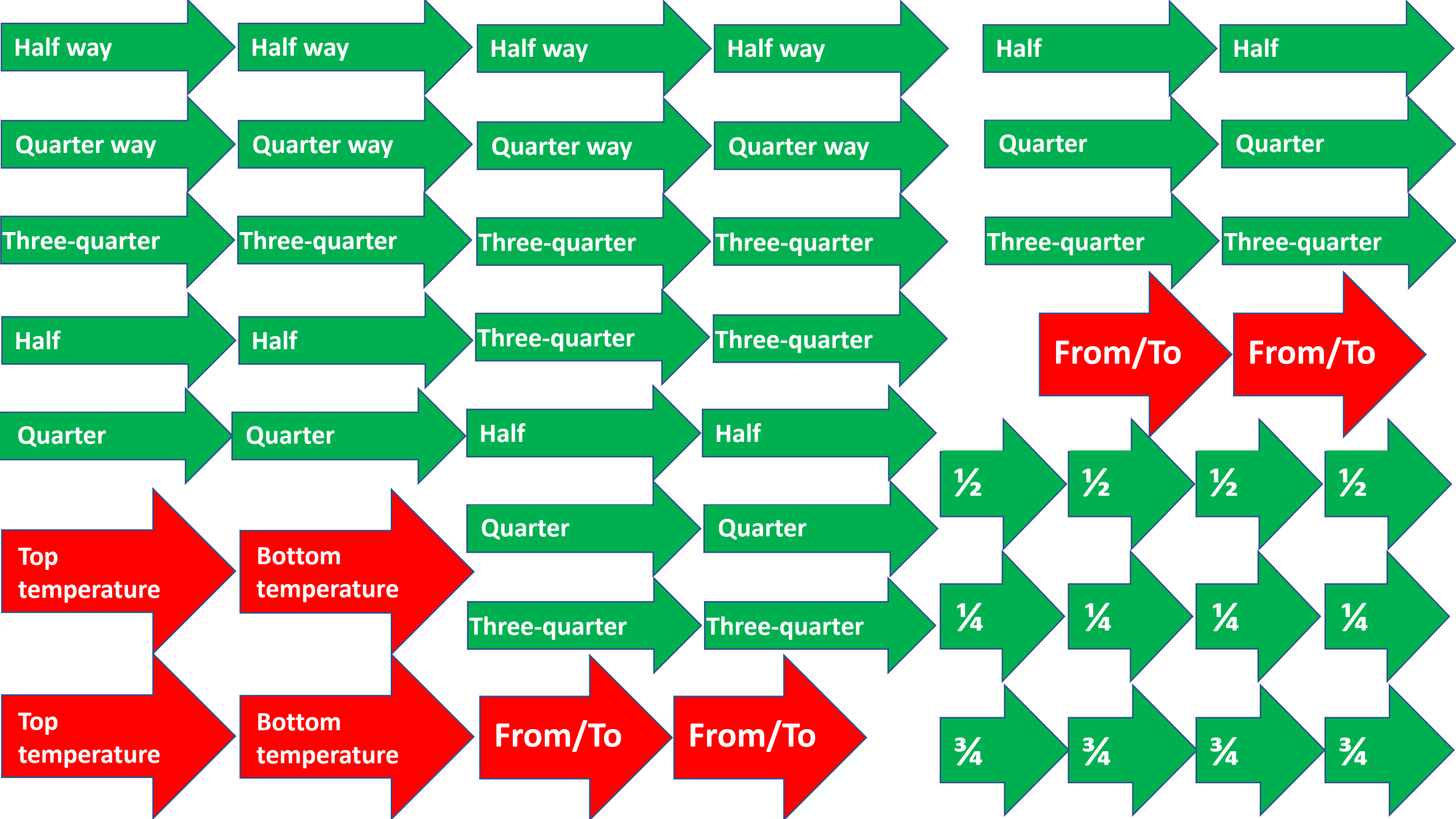


Talk to each other to decide where the arrows should be placed

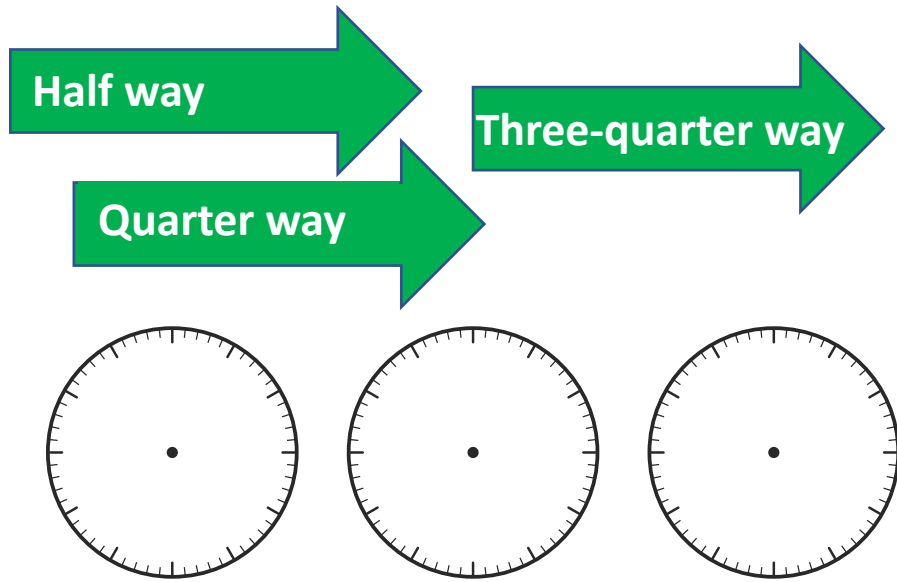
Put the arrow cards to the halfway mark, quarter way mark and three quarters way mark.

What do you notice about the half way and quarter points of these measuring scales?

Now glue these in your books and label the marks where you put the arrows.



A3 Clocks



Copy these clocks into your books. WRITE in the numerals for each clock.

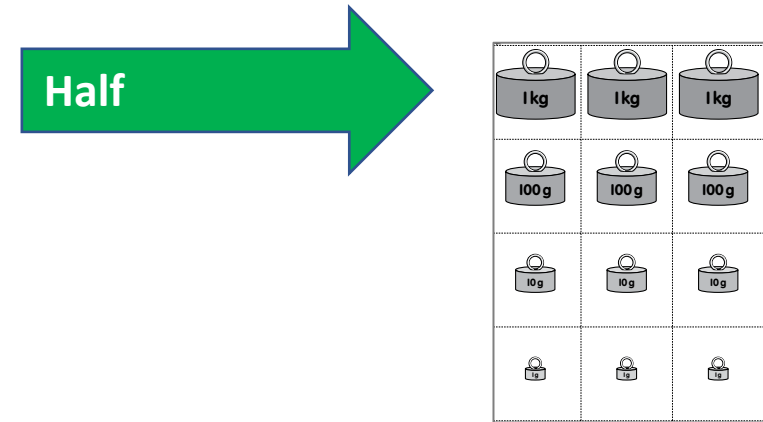
Talk to each other to decide where the arrows should be placed

Put the arrow cards to the halfway mark, quarter way mark and three quarters way mark. Put one arrow on each clock.

What do you notice about the numerals of the the half way and quarter points of these clocks?

What would the half time be between 5 past and 25 to? Figure out other times.

A4 Weights



Talk to each other to decide to create matching weights for half from the cards.

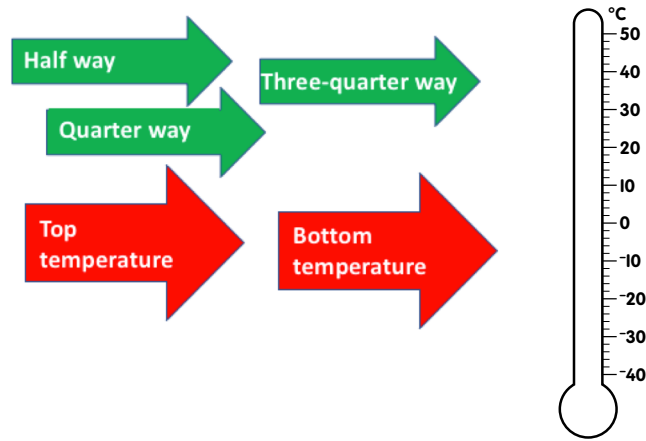
Put the arrow cards to show the half weight,

What do you notice about the half points of these weights?

Now draw these in your books and label the weights where you put the arrows.

Explore how you could show quarter and three quarters weight.

A3 Temperature Range



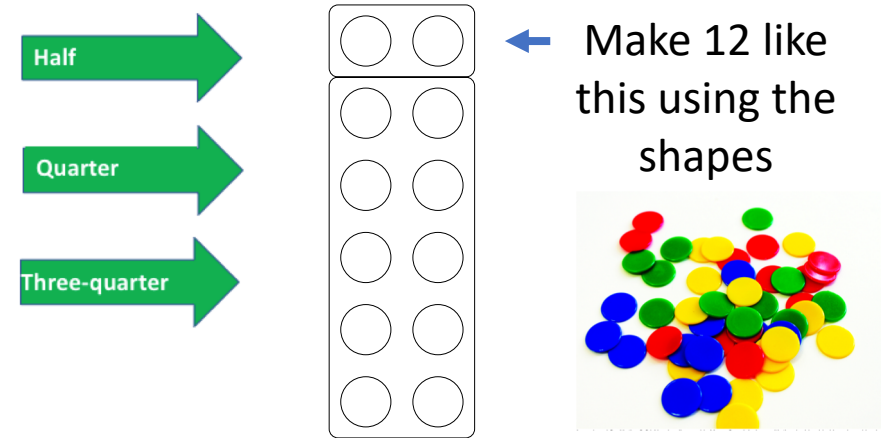
Talk to each other to decide where the arrows should be placed to show the top and bottom temperatures – the red arrows.

Put the green arrow cards to the halfway mark, quarter way mark and three quarters way mark.

What do you notice about the numerals of the the half way and quarter points of the scale?

Now draw these in your books and label the marks where you put the arrows.

A4 Shape Activities



Talk to each other to decide to how to show **half** using the counters. Label with the arrow cards. Now draw this in your book.

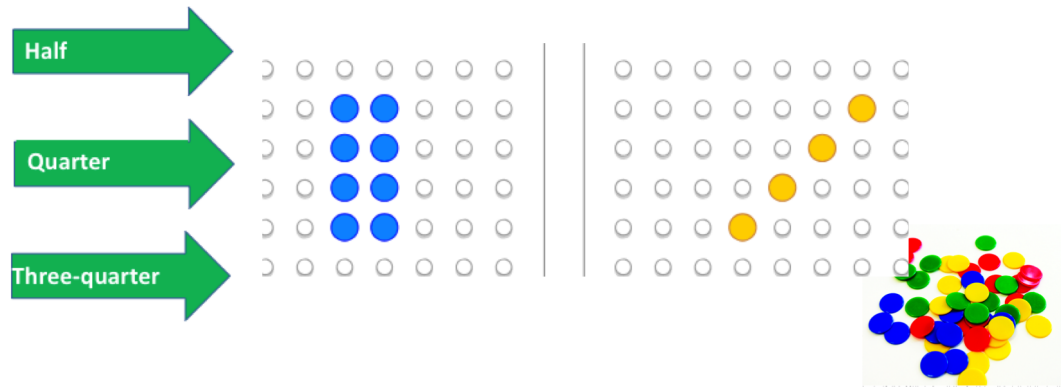
Talk to each other to decide how to show **quarter** using the counters. Label with the arrow cards. Now draw this in your book.

Talk to each other to decide how to show **three-quarters** using the counters. Label with the arrow cards. Now draw this in your book.

What do you notice about the relationships of the numbers?

Explore now with other combinations of shapes?

A5 Baseboard activities



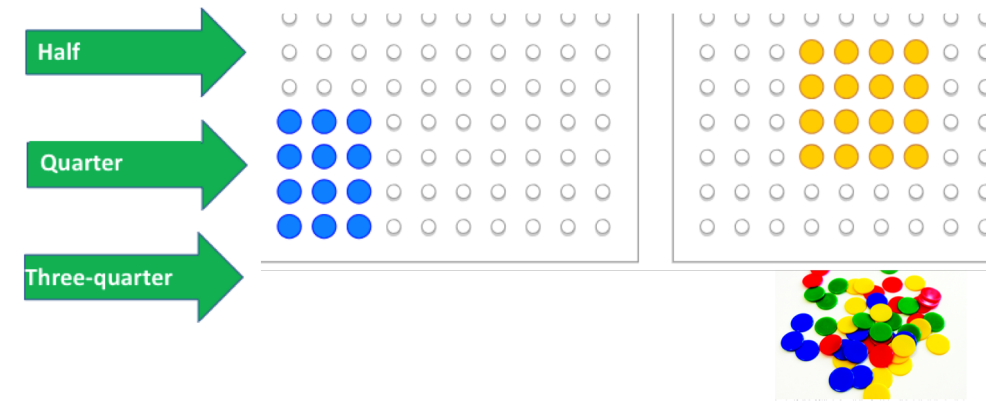
Make the patterns above.

Talk to each other to decide where the arrows should be placed to show half, quarter and three-quarters with your group of counters. Which numbers did you use?

Explore other ways of showing these fractions with different colours of counters on the baseboard. Look out for number patterns!

What do you notice about the number patterns each time making the the half and quarter and three-quarter groups?

A6 Baseboard activities



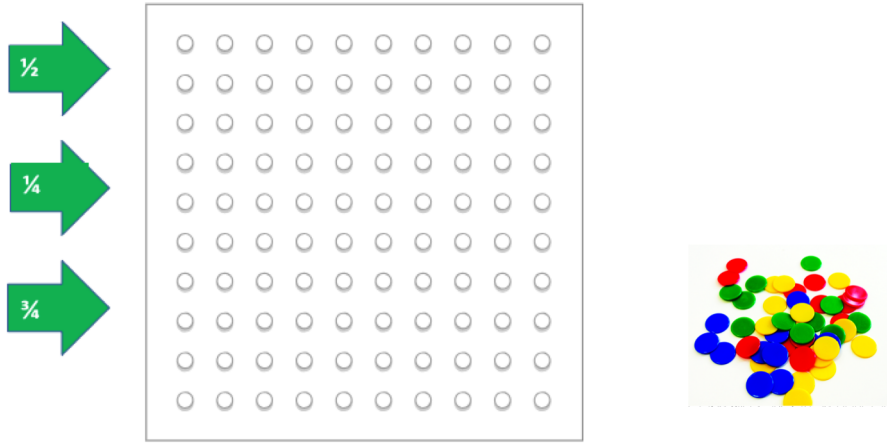
Make the patterns above

Talk to each other to decide where the arrows should be placed to show half, quarter and three-quarters with your group of counters. Which numbers did you use?

Explore other ways of showing these fractions with different colours of counters on the baseboard. Look out for number patterns!

What do you notice about the number patterns each time making the the half and quarter and three-quarter groups?

A7 Baseboard activities



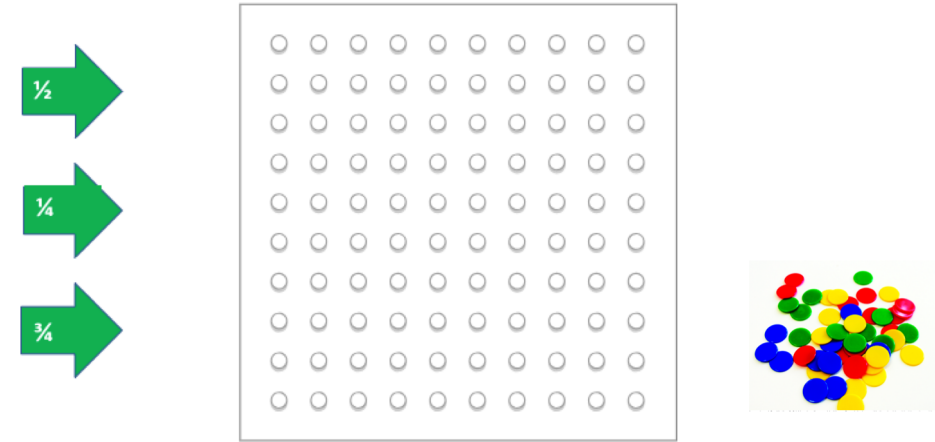
Use the counters to make an array of 36.

Talk to each other to decide where the arrows should be placed to show $\frac{1}{2}$, $\frac{1}{4}$ and $\frac{3}{4}$ with your group of counters. Which numbers did you use?

Explore other ways of showing these fractions with different colours of counters on the baseboard. Look out for number patterns!

What do you notice about the number patterns each time making the $\frac{1}{2}$, $\frac{1}{4}$ and $\frac{3}{4}$ groups?

A8 Baseboard activities



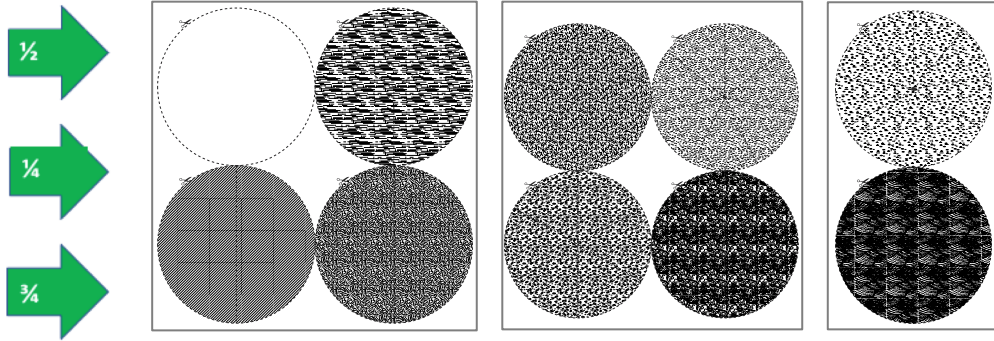
Use the counters to make an array of 24.

Talk to each other to decide where the arrows should be placed to show $\frac{1}{2}$, $\frac{1}{4}$ and $\frac{3}{4}$ with your group of counters. Which numbers did you use?

Explore other ways of showing these fractions with different colours of counters on the baseboard. Look out for number patterns!

What do you notice about the number patterns each time making the $\frac{1}{2}$, $\frac{1}{4}$ and $\frac{3}{4}$ groups?

A9 Paper shape activities



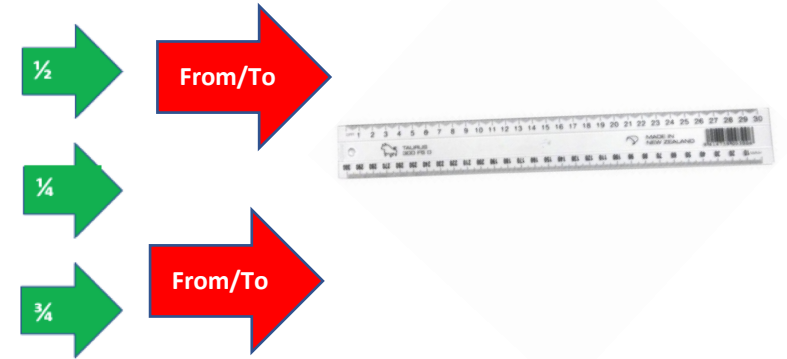
Talk to each other to decide which shapes to fold to show $\frac{1}{2}$, $\frac{1}{4}$ and $\frac{3}{4}$ with these paper shapes.

Fold the shapes. Look out for number patterns!

What do you notice about the number patterns each time making the $\frac{1}{2}$, $\frac{1}{4}$ and $\frac{3}{4}$ folds?

Which shapes created other unexpected fractions? Any ideas why?

A10 Ruler activities



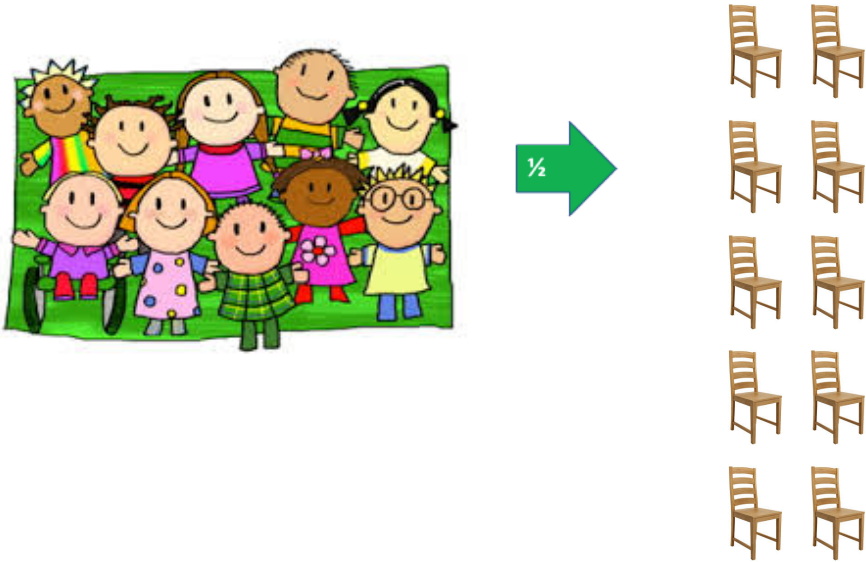
Use the range from numbers 0 – 12.

Talk to each other to decide where the arrows should be placed to show $\frac{1}{2}$, $\frac{1}{4}$ and $\frac{3}{4}$ with your ruler. Which numbers did you use?

Explore other ways of showing these fractions with different lengths on the ruler. Look out for number patterns! Try 0 -24, 4 – 20, 5 – 25, 8 – 24...

What do you notice about the number patterns each time making the $\frac{1}{2}$, $\frac{1}{4}$ and $\frac{3}{4}$ groups?

A11 Life problems to solve



Ten children come to Breakfast Club in the mornings.

Today, only half the number have turned up. How many chairs should we put out?

Ten chairs were put out for a game. Only five children sat down.
What fraction was standing?

Now make up your own story or problem.

A12 Life problems to solve



Ten people went out for a picnic lunch. Half brought sandwiches and the other half brought apples. Show what this looks like with shapes, rods or counters

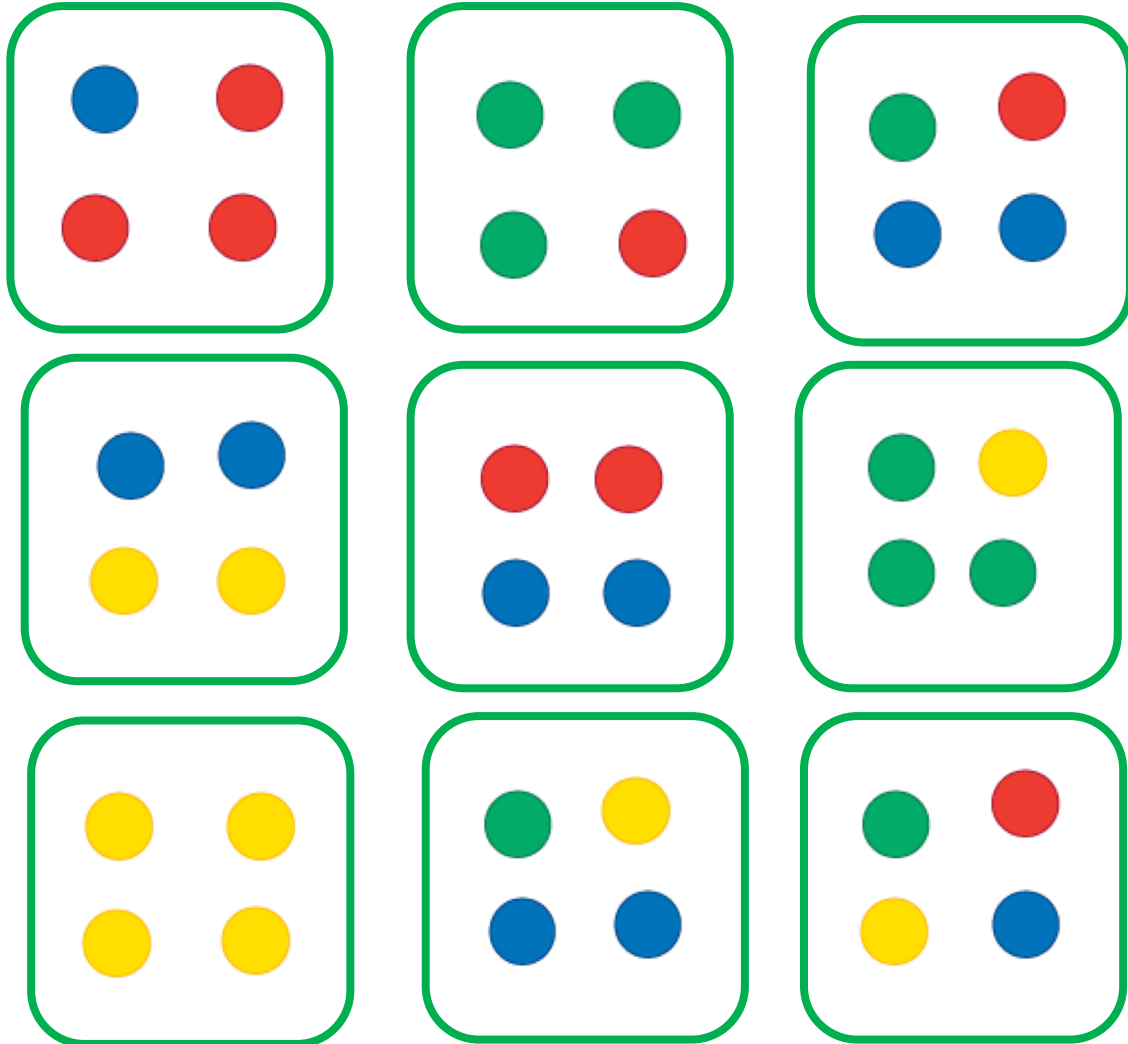
They realised there were not enough pieces for everyone, so they halved the sandwiches and the apples.
What have they now?

They cut the sandwiches again and the apples again, what will the fraction of each apple be? How many pieces do they have?
Will the pieces of apple be the same number as the sandwiches?

They had so much fun playing, that they only ate $\frac{3}{4}$ of the apples. How many were left?

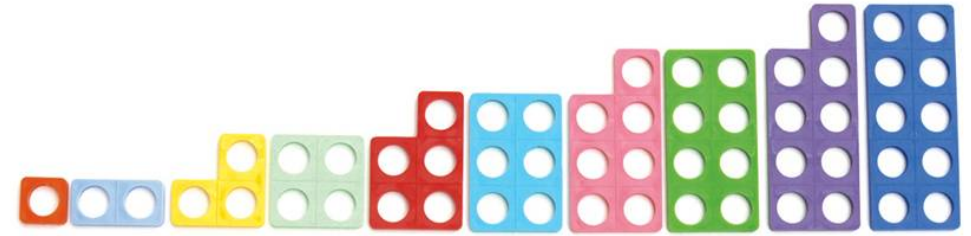
A13 Life problems to solve

Name all the fractions you can see here. What stories can you make up?



A14 Life problems to solve

What can you do with the shapes to find the halves?



Quadruple all the rods to show quarters, halves and three quarters of the whole.



What stories can you make up about this activities?

A15 Life problems to solve

Name all the fractions you can see here. What stories can you make up?



What would half of these look like? Draw them.

What would a quarter of these look like? Draw them.

A16 Life problems to solve

Rotation - half and quarter turns.

Explore with other things too.



Put shapes on the baseboard to create a pathway for a 'robot' to move through making half and quarter turns.

