

Years 3 and 4 Reasoning

Next door numbers

Take ten cards numbered 0 to 9.



Arrange the cards like this.



Do it so that no two consecutive numbers are next to each other, horizontally, vertically or diagonally.

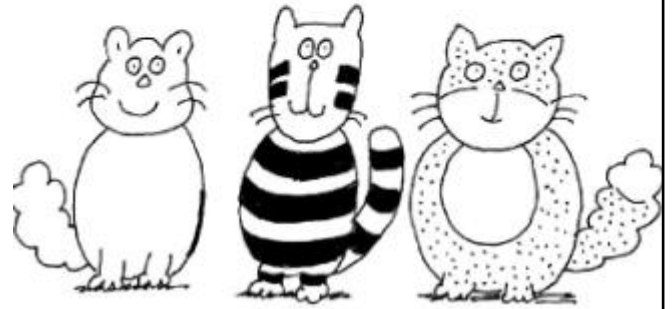
There are lots of ways to do it.
How many ways can you find?

Kieron's cats

Kieron has three cats.
Each is a different weight.

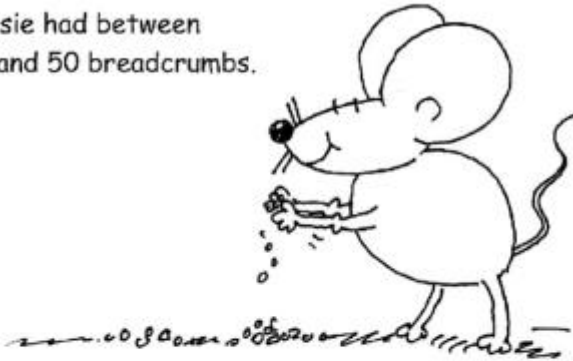
The first and second weigh 7 kg altogether.
The second and third weigh 8 kg altogether.
The first and third weigh 11 kg altogether.

What is the weight of each cat?



Maisie the mouse

Maisie had between
30 and 50 breadcrumbs.



She counted the breadcrumbs in fours.
There were 2 left over.

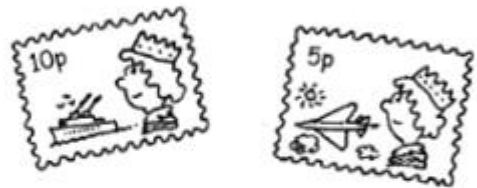
She counted them in fives.
There was 1 left over.

How many breadcrumbs did Maisie have?

Stamps

Tilly's parcel cost 55p to post.

She stuck on eight stamps.
Each stamp was either 10p or 5p.



How many of each stamp did Tilly stick on her parcel?

Make up your own puzzle like this.
Ask a friend to do it.