



Eggs in Baskets



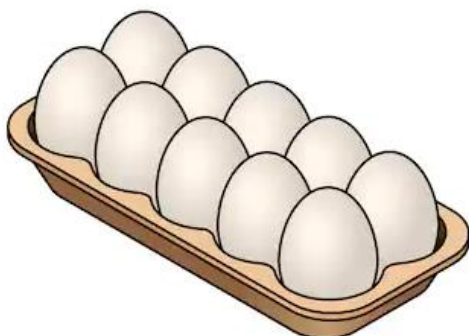
There are three baskets, a brown one, a red one and a pink one, holding a total of ten eggs.

The brown basket has one more egg in it than the red basket.

The red basket has three fewer eggs than the pink basket.

How many eggs are in each basket?

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Share the 10 eggs between the 3 baskets to make the sentences true.

It might be helpful to use 10 objects and 3 baskets or boxes to share between them.

Use the grid on the next page to show all the possible ways. It might help to work systematically and try lots of different ways that are not always right. This is called trial and error. I have given an example that you can work on from.

Red basket eggs	Brown basket eggs: 1 more than red.	Pink basket eggs - 3 more than red.	Is this order correct?
Example: 0	Example 1	Example 3	No because there are less than 10 eggs in the basket.

Hint: There is only 1 way 😊

Answer:

Red basket eggs	Brown basket eggs: 1 more than red.	Pink basket eggs - 3 more than red.	Is this order correct?
2	3	5	Yes because it makes all the sentences correct and it equals 10.

Here are some explanations from children that have completed this problem:

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If there was 1 egg in the brown basket, no eggs in the red basket and 3 eggs in the pink basket, that would only make 4 eggs.

If there were 2 eggs in the brown basket, 1 egg in the red basket and 4 eggs in the pink basket, this only makes 7 eggs. So finally, if there were 3 eggs in the brown basket, 2 eggs in the red basket and 5 eggs in the pink basket, there would be 10 eggs altogether.

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Each had a piece of A4 paper and a pencil which was coloured either red, brown or pink. They drew a basket on their paper in the colour they had been given. They had 10 counters between them to represent the eggs. Phoebe read out the conditions and they started with 4 counters in the red basket, 4 in the brown and 2 in the pink. However, they knew this didn't satisfy the first condition (that the brown basket had to have one more egg than the red) so Alice moved one counter from the red basket to the brown basket. But they soon realised that now there were 5 in the brown and only 3 in the red, so still the first condition wasn't satisfied. The three of them talked about it more and took one counter out of the brown basket, so now there were 4 in the brown and 3 in each of the red and the pink. However, this didn't satisfy the second condition (that the red has three less than the pink). After playing around with the counters a bit more, they eventually found the solution - the red basket has 2 eggs, the brown basket has 3 eggs and the pink has 5.

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