

A little support on how to explain the 'Counting in Fractions' questions

This is very hard work for Year 2, particularly the last 3 questions, so please do not worry if this is quite a challenge for your child. Counting in fractions is a greater depth skill. Hope this helps!

Miss Daniel 

Q1: The fraction coloured is $\frac{1}{4}$. Children should be able to work that out as it's split into 4 parts and 1 is coloured in. When you colour another, it's still in 'quarters' as it's still split into 4 parts, but now 2 are coloured in so the fraction would be $\frac{2}{4}$. Read it back to them "so first we had 1 quarter, then we had 2 quarters, what do you think will be next?" They should start to hear the pattern and be able to continue with $\frac{3}{4}$ and $\frac{4}{4}$. It would be worth pointing out at this stage that when you have 4 quarters, the whole shape is coloured because you've coloured '4 out of 4'.

Q2: As above but using thirds instead of quarters. They should be able to hear the counting pattern: "1 third, 2 thirds, 3 thirds".

Q3: Exactly the same as question 1, except here we begin to explore what happens after we make a whole. When you get to the last picture, explain that there's already 1 whole shape coloured (ask how many quarters the whole shape was – $\frac{4}{4}$), but "then we have one more quarter coloured in too on the next shape, so how many quarters are coloured in altogether?" It would be $\frac{5}{4}$. Explain that this is the same as having "1 and a quarter". If the top part of the fraction is bigger than the bottom part, it means you've already filled up a whole and then you've started a new shape.

(One way you could help children to visualise this is to get some large squares of paper and cut them into 4 quarters, writing $\frac{1}{4}$ on each one. Start putting the quarters out in front of your child and counting "one quarter, two quarters, three quarters, 4 quarters". When you have 4 quarters, point out that you have made a complete square - a whole - and put it to the side. Then add another quarter. Explain that you now have 5 quarters in front of you, which is the same as having 1 whole and then another quarter, so we can also call it "one and a quarter").

Q4: Some of the strawberries are wholes and one of them is a fraction of a strawberry. Count the wholes first and then ask what fraction of the strawberry we have left at the end. So it would be "4 and a $\frac{1}{2}$ "

Q5: Ask "if these are quarters, how many of them would be need to make a whole?" (4). Then get your child to put them into groups of 4 to see how many whole apples you could make - they could do it just be circling groups of 4.

Q6 (HARD): I would use paper squares cut into quarters again, or you could draw out one quarter at a time. Make or draw 5 whole squares and then say we're going to keep adding

one quarter at a time to make more whole squares. Add/draw a quarter to show 5 and $\frac{1}{4}$, then add another to show 5 and $\frac{2}{4}$, then another to show 5 and $\frac{3}{4}$. When you get to that stage, stop and ask "what will we have when we add the next quarter?". Talk about how we will have made another whole, so "we won't have 5 whole squares any more, we will have...?" (6 squares). And then begin the process of adding quarters again from 6.

Q7 (HARD): Again, use drawings or cut-outs of halves of a square or circle to help. Put out or draw $\frac{1}{2}$ then add another half to show $\frac{2}{2}$. "What have we made?" Explain that we've made 1 whole and put them together in a group, and now we're going to keep adding more halves. Each time you add a half, record how many halves you have used in total on the bottom part of the number line ($\frac{1}{2}$, $\frac{2}{2}$, $\frac{3}{2}$, $\frac{4}{2}$ etc) but then every time you get two, put them together in a group to form a whole so children can also keep track of how many wholes there are too, for the top part of the number line.

Q8 (HARD): Same as Q7 but using thirds instead of halves. Add Ron's counting onto the number line. Remind children that every time he gets 3 thirds, he has made another whole (again, pictures or cut-outs of a shape split into thirds would be useful to help them visualise this). So when we get to $\frac{3}{3}$ we've made a whole set so that's 1, then when we get to $\frac{6}{3}$ we've made another whole set so that's 2, and when we get to $\frac{9}{3}$ we've made another whole so that's 3. So yes, Ron is correct.