

Reasoning and Problem Solving – Fractions Consolidation – Year 2

Today, the children of Parkland Primary School are very excited. They are excited because they are going on a trip to the zoo. They find a partner and climb onto the coach. After a short while, they arrive at the car park. They climb off the coach and stand in a big group around the class teacher. Mrs Bates says, “There are too many of us to walk around the zoo as a whole class. I think it will be better if we split up into groups.”

1. How many different ways can Mrs Bates split the class into equal groups?



2. Mrs Bates decides to split the class into two equal groups. Has she correctly split the class in half?

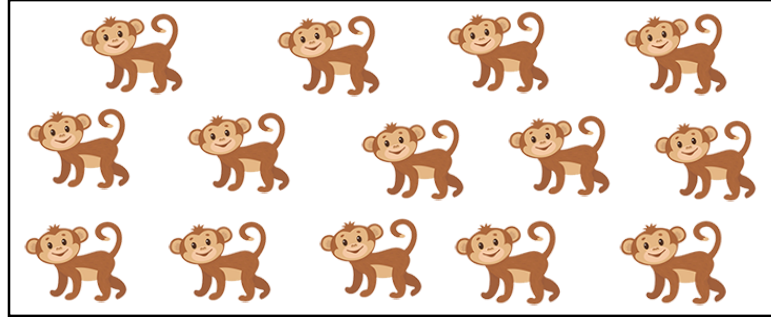
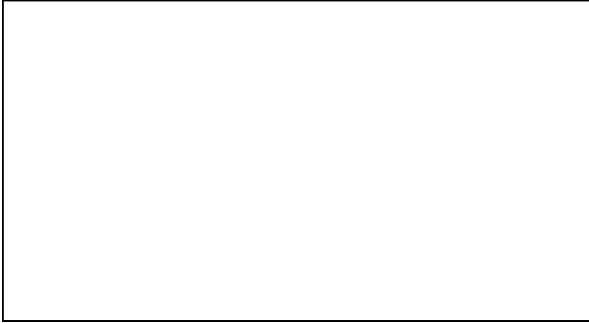


Once the children have been split into their groups, they are ready to enter the zoo. Mrs Bates has some very exciting news for them. She says, “The zoo keeper has allowed us to feed some of the animals. My group are going to feed the monkeys. The other group will get the chance to feed some animals later on. Let’s get going!”

The children head off towards the gates of the zoo. Once inside, Mrs Bates’s group go in search of the monkeys.

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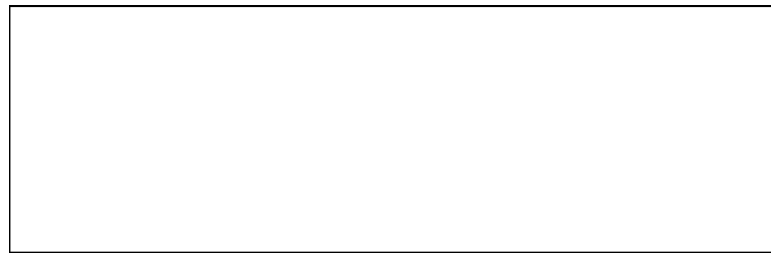
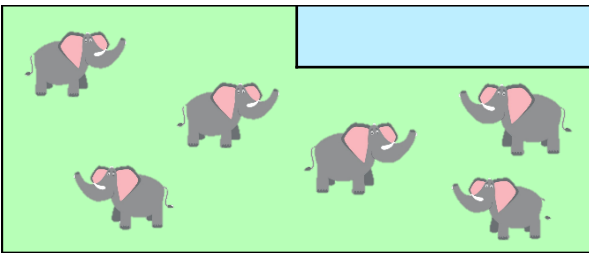
3. The zoo keeper is waiting for them by the monkey cage. She looks a bit sad. She tells the children that there are only enough bananas to feed $\frac{1}{2}$ of the monkeys. How many monkeys will get a banana?



Luckily, the zoo keeper finds some more bananas. Now all of the monkeys have been fed.

4. Next, the children go to see the elephants. Mrs Bates says that $\frac{1}{4}$ of their field is full of water because elephants like to play in it.

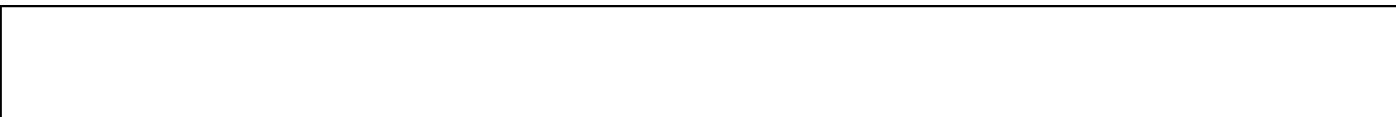
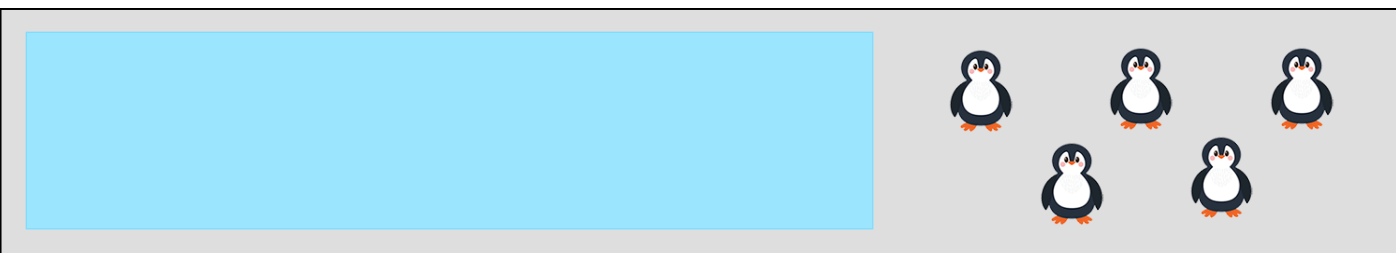
Is Mrs Bates correct?



The elephants are great fun to watch. They love to fill their trunks with water and spray it all over themselves. They look nice and cool.

The other group go to watch the penguins. The penguins love being in the water even more than the elephants.

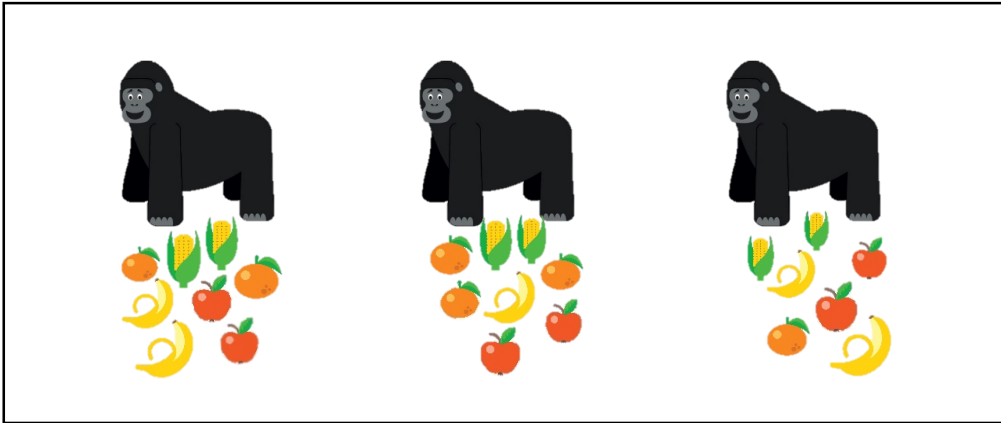
5. The zoo keeper says that the children can only see $\frac{1}{4}$ of the penguins. The rest of them are hiding in the pool. How many penguins are there in total?



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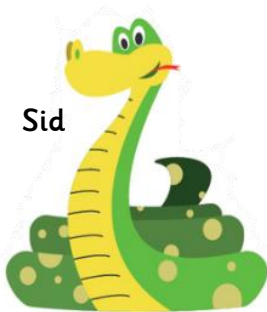
Next, the children go to find the gorilla enclosure. They see 3 big gorillas who are waiting for their dinner. The zoo keeper arrives with their food.

6. Each gorilla should get a third of the food. Has the zoo keeper shared the food correctly?



After the gorilla cage, the children race off to the reptile house. The zoo keeper says that the children can hold a snake if they want to. She brings out 2 snakes for them to hold.

7. Sid is a big snake and he weighs 18kg. Susan is smaller than Sid. She is a third of his weight. How heavy is Susan?



18kg

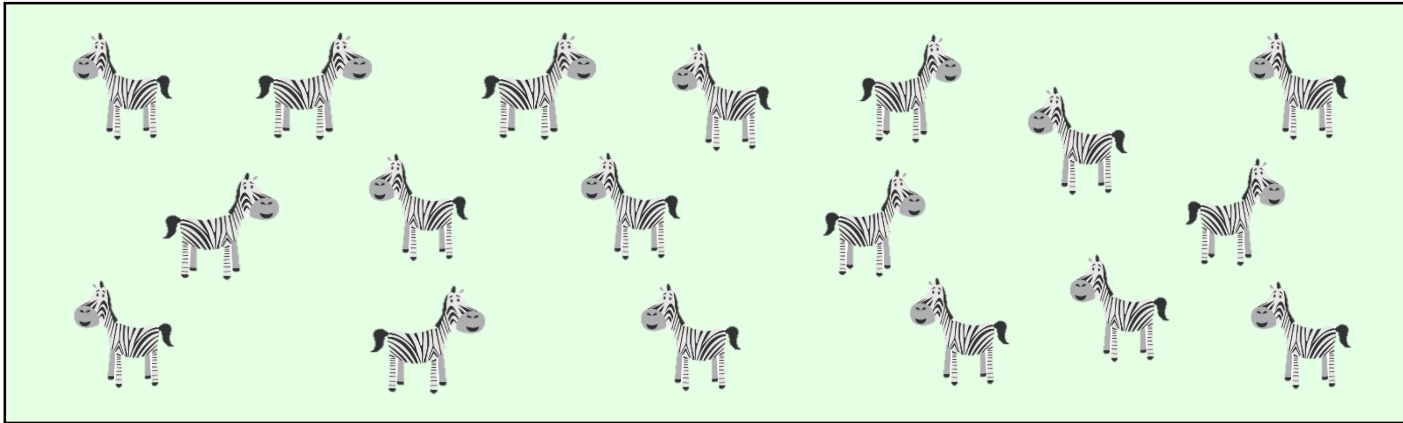


After holding the snakes for a while, the teacher decides it's time for the 2 groups to meet back up again. She wants everyone to go for a ride on the cable car. Mrs Bates follows the map to take them all to the cable car station.

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The cable car gives the children a brilliant view of the whole zoo. They also get to have a nice rest at the same time. The cable car takes them over a field full of zebras.

8. Thomas says, “I can find $\frac{1}{2}$, $\frac{1}{4}$ and $\frac{1}{3}$ of these zebras so that they are sorted into equal groups.” Is Thomas correct?



9. Whilst relaxing on the cable car, Mrs Bates asks the children to vote for their favourite animal.

$\frac{1}{3}$ of the class vote for the snake. The rest of the class vote for the gorilla. What fraction of the class like the gorilla best?

The cable car ride comes to an end. The children get off next to the bird enclosure. The enclosure is full of flamingos and ostriches.

10. Gavin says:

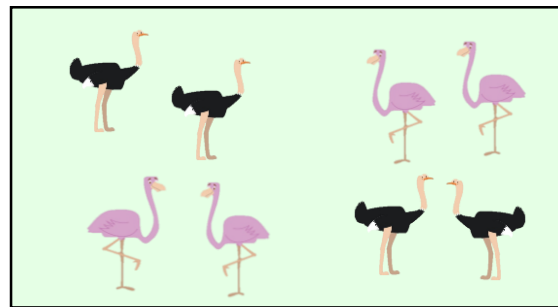


I think that $\frac{1}{2}$ of the birds are flamingos.

Rosa says:



I think that $\frac{2}{4}$ of the birds are flamingos.



Who is correct?