

# Diving into Mastery - Diving

## Adult Guidance with Question Prompts

Children count on from the number by touching each animal. Alternatively, they could use a number line or practical equipment, e.g. ten-frame and counters. They also need to know that the smaller number can come first in a calculation.

How many chickens are in the coop?

How many chickens are outside the coop?

How can you use these numbers to find how many there are altogether?

Can you show me how to count on?

Can you write a number sentence to describe it?

Which number did you start with?

What symbol did you use?

Repeat with each animal.

Do all your calculations start with the greater number?

Does it matter if the greater number comes first or second?

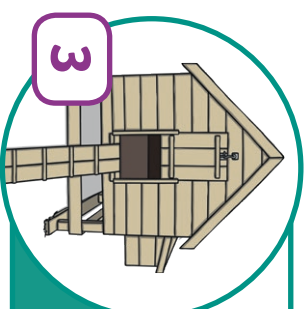
Try changing the order of the numbers in your calculation.

What happens?

## Add by Counting On



Farmer James has counted how many animals are in their houses. There are some animals outside too. Count on to find out how many animals there are in total.



3

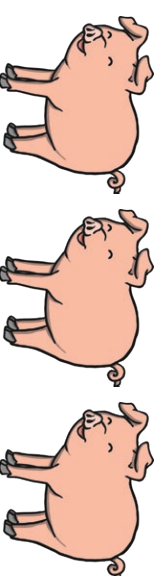


How many chickens are there in total?

$$3 + \_ = \_$$

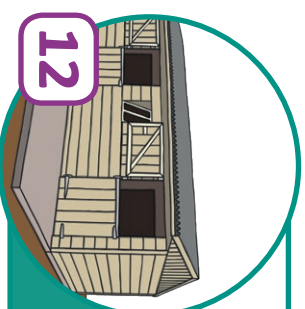


15



How many pigs are there in total?

$$\_ + 3 = \_$$



12



How many horses are there in total?

$$\_ + \_ = \_$$

# Diving into Mastery - Deeper

## Adult Guidance with Question Prompts

This activity shows children that the smaller number can come first in calculations when counting on. They can use a number line alongside concrete materials to help them check the answer.

Can you describe what is happening on the number line?

Does it match the calculation that Farmer James said?

Where did he go wrong?

What should he have done?

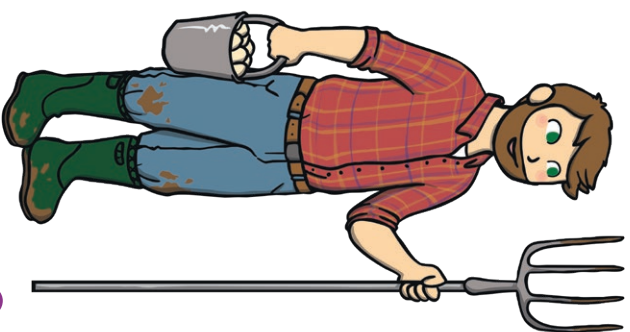
Can you draw the number line correctly?

Does Farmer James's calculation start with the greater number?

Does a calculation always have to start with the greater number?

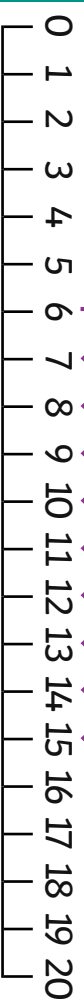
Is Shep correct?

## Add by Counting On



Farmer James is using a number line to count his 7 cows and 9 sheep.

This number line represents the calculation  $7 + 9$ .



Is Farmer James correct? Explain your answer.

When counting on, you always need to start at the greater number.



Is Shep correct?  
Explain your answer.

# Diving into Mastery - Deepest

## Adult Guidance with Question Prompts

Children solve problems by counting on. They use a number line to count on from four to 16 or use practical equipment, e.g. a ten-frame and counters. Some children may try to count on using their fingers but, as they need to add more than ten, they would be better supported by a number line or concrete materials. If you have access to toy farm animals, children could act out their own problems using these.

How many sacks were in the barn?

How many did Farmer James have altogether?

Can you show me on the number line/ten-frame?

How many more sacks did he have outside the barn?

Does your answer match a number in the box?

Can you write it as a number sentence?

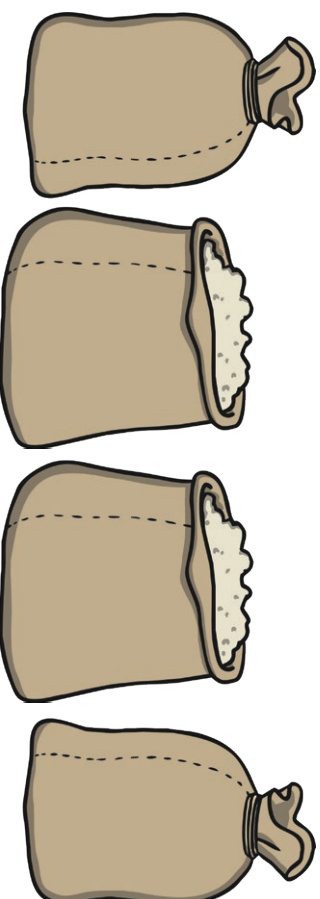
Can you think of your own problem that involves counting on?

## Add by Counting On



Farmer James is counting his sacks of animal feed.

He has 4 sacks in the barn.



Altogether he has 16 sacks.

How many were outside the barn?

Ring the answer.

**16**    **15**    **13**    **14**    **12**

Write the number sentence.

Can you make up your own problem for Farmer James that involves counting on?