

MATHS AND AGRICULTURE

# STEM CHALLENGE

A PIEFA MEMBERS COLLABORATION



FOR  
FOUNDATION

PIEFA  
FUN ON THE FARM

# TEACHER OVERVIEW

## FUN ON THE FARM MATHS CHALLENGE

Year: Foundation

### Outcomes:

Connect number names, numerals and quantities, including zero, initially up to 10 and then beyond (ACMNA002).

Sort and classify familiar objects and explain the basis for these classifications. Copy, continue and create patterns with objects and drawings (ACMNA005).

### Task:

1. Show the introduction to students on a projector or interactive whiteboard, reading the information as a class. When students have attempted to guess the food or fibre being produced in each picture, display the answer pages.
2. Explain that a pattern is a sequence that repeats again and again.
3. Model creating a pattern using different farm animals (this could be done using toy farm animals or by drawing farm animals). Have students guess the next animals in the sequence to continue the pattern.
4. Allow students to work independently to complete the patterns on the 'Repeating Patterns on the Farm' worksheet.
5. Model counting on to solve an addition number sentence using farm animals (this could be done using toy farm animals or by drawing farm animals).
6. Allow students to work independently to complete the number sentences on the 'Farm Animal Addition' worksheet.
7. Students who complete this activity could be challenged to count on to find the total number of legs for the farm animals in each of the addition number sentences shown.

# FUN ON THE FARM MATHS CHALLENGE

## Introduction for students:

Farmers, fishers and foresters produce the food that we eat, as well as the fibre we use to make things such as clothes and furniture. Different plants and animals on the farm produce different kinds of food and fibre, e.g. sheep produce wool and meat; chickens produce eggs; and, alpacas produce fleece to be made into things such as clothes and blankets. Can you guess what type of food or fibre production is taking place in each of the pictures below?



# WHAT FOOD OR FIBRE IS BEING PRODUCED IN THESE PICTURES?

## ANSWERS



Alpacas produce...



Fisheries produce...



Cows produce...



Alpaca fleece.



Seafood.



Beef and dairy products.

# WHAT FOOD OR FIBRE IS BEING PRODUCED IN THESE PICTURES?

## ANSWERS



Chickens produce...



Sheep produce...



Pigs produce...



Eggs and meat products.



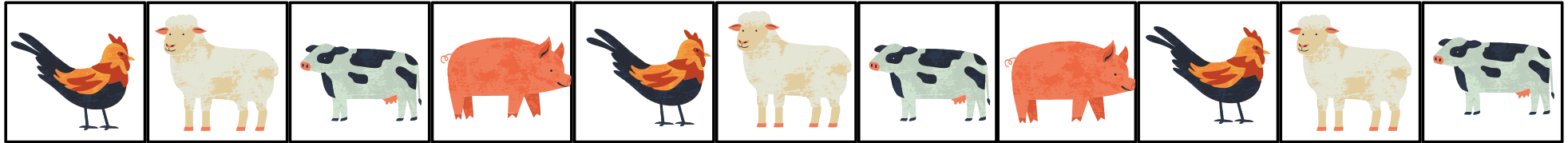
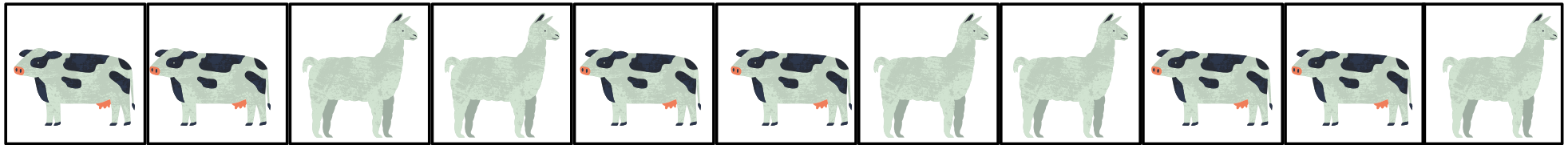
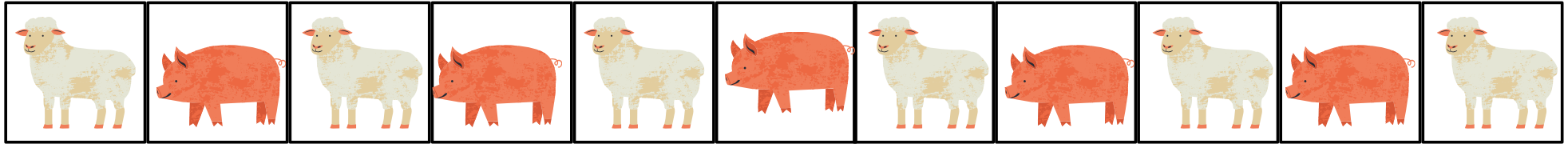
Wool and meat products.



Bacon and pork.

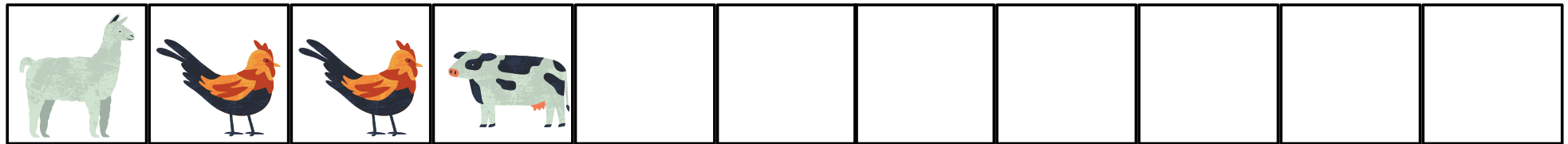
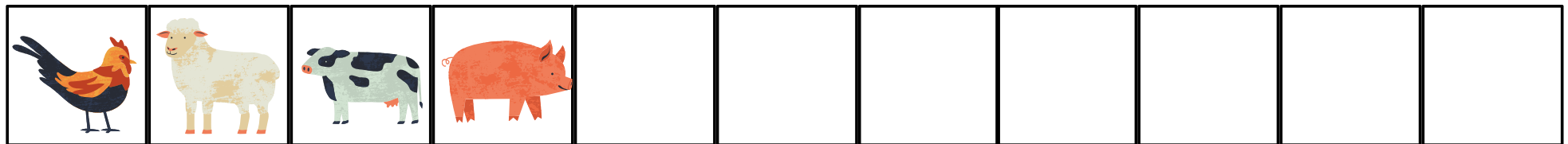
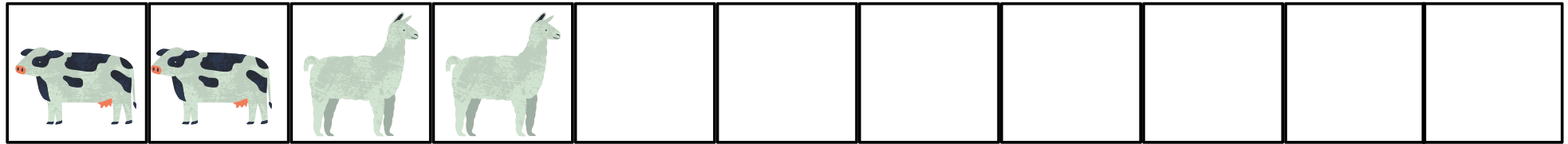
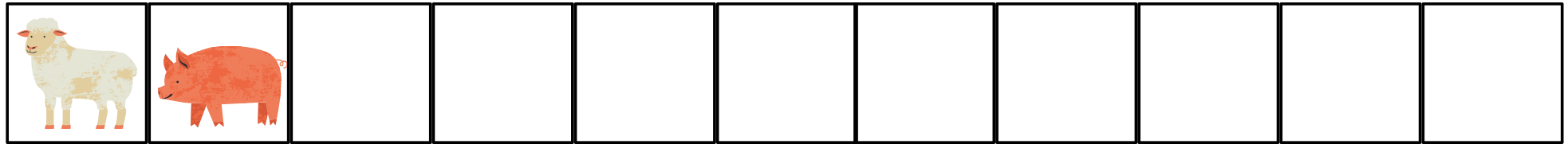
# REPEATING PATTERNS ON THE FARM

A pattern is a sequence that repeats again and again.



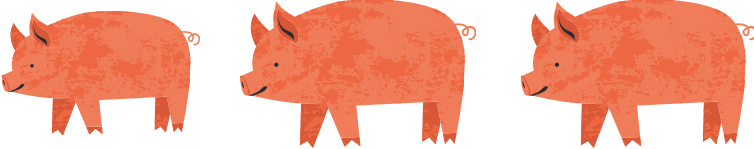
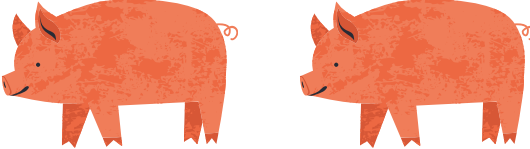
# REPEATING PATTERNS ON THE FARM | ANSWER PAGE

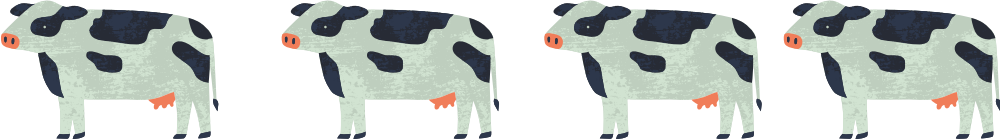
Can you continue these farm animal patterns by filling in the blank spaces with the animals that come next ?

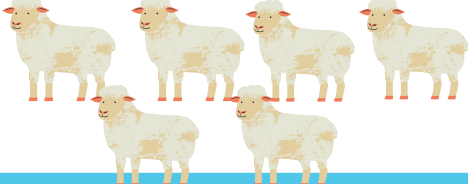




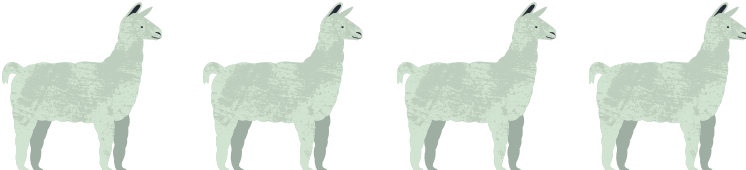
# FARM ANIMAL ADDITION

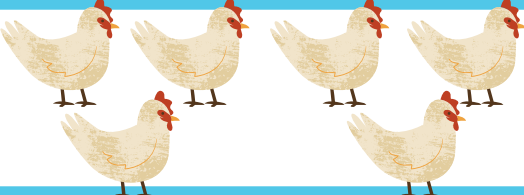
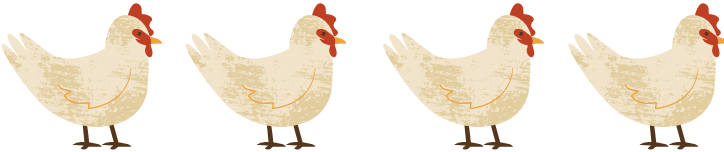
Count on to find the total number of each animal. Write your answer in the circle.

 $+$  $=$

 $+$  $=$

 $+$  $=$

 $+$  $=$

 $+$  $=$