## Diving into Mastery - Diving

## Adult Guidance with Question Prompts

Children should first sort the buttons by colour (or another object could be used). They should put the items in each group in a straight line.


Then, children should touch each object as they count and say the number aloud. They should understand that the last number they say is the total.

## How could we sort these objects?

Can you put the objects in that group in a straight line?
Why is it a good idea to put the items in a straight line?
How does it help us?
How can we make sure that we have counted all the objects in the group?

How many are there? How do you know?
Write the number three on a whiteboard.
Which group has this number of buttons?
Repeat with five and six.

## Counting Challenge

Sort the buttons. Count how many are in each group.


How could you arrange them so that they are easy to count?

## Diving into Mastery - Deeper

## Adult Guidance with Question Prompts

Encourage children to touch each animal as they count them. These pictures and digits could be cut out for children to match or this activity could be replicated with any practical objects and digit cards

Can you see how the animals are laid out in a straight line? How does that help us?

What number will we say first when we start counting the cats?
How many cats are there?
Can you see the digit that matches that amount?
Children should recognise zero (0).
Are there any animals in this empty box?
What digit can you see to match to this box?
How do we say that number?
Which group of animals doesn't have a matching number?
How many hamsters are there?
Can you show me with your fingers?
How would you write the missing number?

## Counting Challenge

Match the correct digit to the groups of animals.


What number is missing from this box?


## Diving into Mastery - Deepest

## Adult Guidance with Question Prompts

Provide real coins for this activity (or plastic ones if real coins are not available). Children should look to see if Asma's answer seems correct. To prove it, children should find out how many coins there actually are.
Can you tell without counting if Asma is right or wrong?
How could we prove it?
If we want to find out how many there are, what do we need to do first?

Children can choose how to sort the coins. Then, they can line up the coins in each group before counting all the coins as they touch them.

## How could we sort these coins?

How can we arrange them to make them easier to count? How can we make sure that we have counted every coin? Can you explain how to find the total?

Record the total on a whiteboard.
Can you find a different way to sort them?
Do you think the total will be the same or different? Why?
What mistake do you think Asma has made?

## Counting Challenge

The piggy bank has these coins inside.


Asma says,


Is she right? Prove it!

