

Composition of three

Learning aims

- To begin to understand that the number three (whole number) can be made up, or composed, from two or more smaller numbers (parts) e.g. 3 and 0, 2 and 1 or 1 and 1 and 1 (this is composition)
- To begin to understand simple addition and subtraction by partitioning (or splitting) numbers and putting them back together again
- To begin to practice subitising (saying how many are in a set without counting) and beginning to understand the conservation of number (knowing that the number of objects in a set does not change if the objects are moved around).



Resources

- 3 yellow ducks, green and blue paper to represent grass and pond
- 3 currant buns, tray, shopping basket
- 3 skittles, small ball
- Clipboard, paper and pencil or whiteboard and pen
- Fruit pieces for snack, such as slices of apple and orange segments.

Activity outline

1. Show the children the 3 ducks. Ask them to guess how many ducks there are altogether. Encourage children's efforts and their ability to subitise (know how many there are without counting). Demonstrate, or ask a child to demonstrate, counting how many ducks there are by pointing to each one and saying a number word. Make sure the child starts at 1 and counts in order, ensuring that everyone knows there is 3 altogether
2. Show the children the paper and explain that the green is for grass and the blue is for the pond. Put the 3 ducks on the 'pond'. Check the children have remembered how many ducks there are altogether. Encourage them to subitise 3 without counting again
3. Sing the song '3 little ducks went swimming one day'. While singing, move one of the ducks from the pond to the grass. At the end of the first verse, ask the children how many ducks are on the pond and how many ducks are on the grass. Count the ducks one-to-one if needed. Now ask how many ducks there are altogether. If the children do not say 3, then put all the ducks back on the pond to remind them that they started with 3 and have just moved one duck onto the grass, so there are still 3 ducks altogether
4. Repeat with the next verse. Reinforce how many are on the grass, how many are on the pond and how many ducks there are altogether
5. Repeat the next verse. This time there will be no ducks on the pond. Encourage the children to use the word 'zero' as this is the correct mathematical word for the number 0. Again talk about how many ducks are on the grass, the pond and altogether
6. The children may be helped to understand the composition by making marks. Using the clipboard and paper or using a whiteboard and pen, draw a line down the centre to divide the space into 2 sections. To start with, make 3 marks on the left to represent the 3 ducks in the pond and no marks on the right as there are no ducks on the grass yet. At the end of each verse, make marks on the board and use these to reinforce that each time there are only 3 marks. The number of marks doesn't change even though where they are placed does change.

Extending the activity

- The children are likely to need lots of repetition to help them to understand composition and partitioning so provide a range of loose parts and containers in continuous provision for the children to explore
- Repeat the activity above using the 3 currant buns, using the tray and shopping basket as the 2 areas to separate the buns
- Use the skittles as another way to help the children understand the composition of 3. When the child has rolled the ball, ask them how many are still standing and how many have fallen down. Remember to keep reminding them of the total. See if they can suggest ways to record what is happening
- Have two types of fruit for snack. Let the child know they can take 3 pieces of fruit. What are they going to do? They could take 2 orange segments and 1 apple slice, or 3 pieces of apple and no orange, and so on.

Special considerations

Important: Activities with children must always be risk assessed, including for allergies and choking. Children must always have adequate supervision. Resources and materials must always be appropriate for children's age and stage of development.

NDNA products to support you with this activity

[Publication - Supporting maths using rhymes](#)

[Online training - Let's look at Maths: Number](#)