

Early Years Library

READ THE
INTRODUCTION
TO THIS SERIES

Part of the **Numeracy** Series

ADDING AND TAKING AWAY

What do we
mean by
adding and
taking away?

Adding is the process of working out the total of two or more numbers whereas taking away (or subtracting) is the process of taking one number away from another. At first, children will count objects in groups to figure out how many there are in total, and then again to figure out how many there are once objects have been added or taken away. As they progress, children will be able to find the answer without counting each object out individually. After developing their number and counting skills, children will build on these skills by adding and taking away numbers up to 10. Children begin to understand and remember how to add and take away through practical, meaningful experiences during day-to-day activities.

Why is it
important

Being able to add and take away is foundational to many other mathematics skills and prepare children for learning about other topics, including multiplication and division, in school.

ADDING AND TAKING AWAY

Plus or minus one from a number

Children become familiar with adding or subtracting one from a small number of objects (0-10). As they develop their confidence with numbers, they may be able to name the final number without counting out the whole set (also called 'subitising').

Most commonly used strategies in evidence-based manuals:

- While describing adding and taking away one, demonstrate the action using small objects and finger counting to help children visualise the concept
- Talk to children about what they think will happen if they add or take away from the set they already have
- When practicing adding and taking away one from a set, use visual tools like small everyday objects (e.g. tokens, toys, and linking cubes) to help children visualise what happens

Inspiring Ideas

- Use your fingers when singing counting songs to show children what 'one more' and 'one less' looks like. *"Here are 3 little ducks about to go swimming! 'Mummy Duck says QUACK QUACK COME BACK! And two little ducks came swimming back!' One of my little ducks hasn't come swimming back!"*
- When children are choosing their own fruit at snack time, support children to count how many pieces of fruit or crackers they have on their plate, then count again after adding one more. *"How many pieces did you have at first? And how many do you have now I have given you one more piece?"*
- When playing 'Five Little Speckled Frogs' ask children: *"How many frogs are sitting on the speckled log? Now one of your frog friends has fallen into the pool! How many frogs are left? Let's count and see!"*

ADDING AND TAKING AWAY

Adding two numbers together

Children become familiar with adding two small numbers (0-10) together. This builds on other numeracy skills, such as counting and set production and subitising. Children begin to add two numbers together by counting the number of objects in front of them one for one, and comparing how many objects they have before and after. Children then develop an understanding that numbers, when added together or taken away from one another in different ways, make the same total (also known as 'number-bonds').

Most commonly used strategies in evidence-based manuals:

- Describe and demonstrate to children what happens when two sets are combined, asking children to tell you what they think will happen throughout the activity
- Use visual tools like small everyday objects (e.g. blocks, counting bears, or seeds) to help children understand what happens when two sets are added together

Inspiring Ideas

- Help children to plant sunflowers in rows. *"We have planted three seeds in the first row, and three seeds in the second row... How many sunflowers have we planted altogether? How could we figure it out? We could wait and count the shoots, yes! Maybe we could count on our fingers, too? 3 seeds and 3 more seeds... that makes 6 seeds!"*
- Using two dice when playing a board game, support children to add the numbers together to see how many spaces they should move. At first, children will do this by counting the dots on the two dice. *"Can you count the dots altogether? 1...2... yes! Now on the next dice... 3...4...5! You can move 5 spaces! Brilliant!"* As they become more experienced, children will begin to remember number bonds. *"You rolled a two and a three again! Can you remember what two and three together make? Yes! 5!"*
- When building a tower with a friend, support each child to count how many blocks they have. *"You have four blocks and your friend has two blocks, how many blocks do you have altogether? Shall we build a team tower and see?"*

Tip

Children learn about addition through practical experiences where they can see (and count or subitise) objects in groups in front of them.

ADDING AND TAKING AWAY

Taking away numbers from each other numbers from each other

Children become familiar with taking away (or subtracting) one small number from another (0-10).

Most commonly used strategies in evidence-based manuals:

- Describe and demonstrate to children what happens when units are taken away from sets, asking them to tell you what they think will happen throughout the activity
- Visual tools like small everyday objects (e.g. blocks, counting bears, or seeds) can be used to help children understand what happens when units are taken away from a set

Inspiring Ideas

- When building a tower, support children to count how many blocks they have used. *"If two blocks fell off your tower, how many do you think would you have left? Shall we take two blocks off and check?"*
- At story time, support children to use their fingers to count through objects or events in the story. For example, show how many pieces of fruit a character has when they set off on their journey and how that might have changed by the end. *"Oh no! Now the monkey has taken a piece of fruit AND the ostrich has taken a piece of fruit AND the zebra has taken a piece of fruit, too! Three pieces of fruit... gone! Can we put three fingers down? How many pieces of fruit do they have left?"*
- The Pirate toys must guard their treasure of four large gold coins overnight. In the morning, some coins are missing! *"Oh no! How many coins were there yesterday? 4! And how many are there today? Only 2?! How many do you think we need to look for? So, 4 coins takeaway 2 coins leaves us with 2 coins! Okay, let's search for the missing treasure and see if we're right!"*