

Children should be taught to:

Begin to use the vocabulary involved in adding and subtracting

Find one more and one less than a given number

Begin to relate addition to combining two groups of objects; extend to three groups

As end-of-year outcomes, children should, for example:

Through practical activities and discussion, begin to understand and use the vocabulary of addition and subtraction:

- a. in practical contexts, using objects;
  - b. by modelling with apparatus;
  - c. by modelling with fingers.
- more, and, add, make, sum, total, altogether, score...  
take away, leave, how many are left?... how many are gone?  
one more, two more... one less, two less...  
how many more to make ...?  
how many more is ... than ...?  
how many less is ... than ...?  
difference between...*

For example, respond to:

- There are 3 people on the bus.  
1 more gets on.  
How many are on the bus now?  
*(Say together: 4 is 1 more than 3. 3 add 1 is 4.)*
- There are 4 children in the home corner.  
1 more comes to join them.  
How many are there now?  
*(Say together: 5 is 1 more than 4. 4 add 1 is 5.)*
- There are 10 children.  
1 goes out.  
How many are left?  
*(Say together: 9 is 1 less than 10. 10 take away 1 is 9.)*
- There were 5 baby birds in the nest.  
1 flew off.  
How many are left?  
*(Say together: 4 is 1 less than 5. 5 take away 1 is 4.)*

Say how many there are altogether by **counting all** the objects.

For example, respond to:

- Count out 4 cakes. Count out 3 cakes.  
How many cakes altogether? Count all the cakes.  
*(Count: 1, 2, 3, 4... 1, 2, 3...  
Altogether there are: 1, 2, 3, 4, 5, 6, 7.  
Say together: 4 add 3 is 7.)*
- There are 2 cars in the garage. Let's count them.  
3 more arrive. Let's count them.  
How many cars now?  
*(Count: 1, 2... 1, 2, 3... 1, 2, 3, 4, 5.  
Say together: 2 add 3 is 5.)*
- Show me 3 fingers on your right hand.  
Show me 2 fingers on your left hand.  
How many fingers showing altogether?  
*(Count: 1, 2, 3... 1, 2... 1, 2, 3, 4, 5.  
Say together: 3 and 2 is 5.)*
- Buy three things in the 'shop'.  
One costs 2p. One costs 3p. One costs 1p.  
How many pennies do you give the shopkeeper?  
*(Count: 1, 2... 1, 2, 3... 1... 1, 2, 3, 4, 5, 6.  
Say together: 2 add 3 add 1 is 6.)*

Repeat activities with different numbers.

Children should be taught to:

As end-of-year outcomes, children should, for example:

Begin to relate addition to counting on

- Say how many there are altogether by **counting on**.  
For example, respond to:
- When a count is started by another child: ‘one, two, three, four...’ continue: ‘five, six, seven...’
  - Count 5 objects into a cloth bag.  
How many objects in the bag?  
Count 2 more objects into the bag.  
How many objects in the bag now?
  - Sell 3 tickets for the ‘bus’. Sell 5 more.  
How many tickets have you sold now?  
(Count on 5 from 3: 4, 5, 6, 7, 8. Say together: 3 add 5 is 8.)
  - Show me 5 fingers on one hand.  
Show me 2 fingers on the other hand.  
How many fingers altogether?  
(Count on 2 from 5: 6, 7. Say together: 5 add 2 is 7.)
  - Make a hop of three spaces on the number track.  
Now hop two more. Where are you now?  
(Count on 2 from 3: 4, 5. Say together: 3 add 2 is 5.)

Begin to relate the addition of doubles to counting on

- Say how many altogether in a double by **counting on**.  
For example:
- In a playground dice game with large dice, roll double 2. What’s your total score?  
(Count on 2: 3, 4. Say together: 2 add 2 is 4.)
  - One child has 3 pennies. Another child has 3 pennies.  
How much do they have altogether?  
(Count on 3: 4, 5, 6. Say together: 3 add 3 is 6.)
  - There are 4 wheels on the car.  
How many wheels on two cars?  
(Count on 4: 5, 6, 7, 8. Say together: 4 add 4 is 8.)
  - How many toes on two feet?  
(Count on 5: 6, 7, 8, 9, 10. Say together: 5 add 5 is 10.)
  - How many eggs in each row of the box?  
How many eggs altogether?  
(Count on 6: 7, 8, 9, 10, 11, 12. Say: 6 add 6 is 12.)
  - Make two hops, each the same, on a number track.  
Where do you land?

Sing, for example, *The animals went in two by two...*

Find a total by counting on when one group of objects is hidden

- Say how many there are altogether by **counting on** when one of the groups of objects cannot be seen. For example:
- Count 4 beans into a tin with a lid on.  
Emphasise that there are 4 beans in the tin.  
Label the lid with 4.  
Put 3 more beans on the table.  
How many beans altogether?  
(Count on 3 from the hidden 4: 5, 6, 7.  
Say together: 4 add 3 is 7.)
  - Count 5 pennies into a purse and shut it.  
Show 2 more pennies in a hand.  
How many pennies altogether?  
(Count on 2 from the hidden 5: 6, 7.  
Say together: 5 add 2 is 7.)
  - Show 2 fingers on one hand, then put it behind your back.  
Show 3 more fingers on the other hand.  
How many fingers altogether?  
(Count on 3 from the hidden 2: 3, 4, 5.  
Say: 2 add 3 is 5.)

Children should be taught to:

Separate (partition) a given number of objects into two groups

Select two groups of objects to make a given total

Begin to relate subtraction to 'taking away', and counting how many are left

As end-of-year outcomes, children should, for example:

Say how up to 10 objects can be separated into two groups. Find different ways of doing it.

Using 5 as an example, find different ways of:

- planting 5 bulbs in two bowls;
- putting out 5 biscuits on two plates;
- bowling at 5 skittles and talking about how many are standing up and how many have fallen down each time;
- throwing 5 bean bags one by one and talking about how many went in the bucket and how many missed;
- choosing all the big dominoes with 5 spots altogether;
- using up and down fingers on one hand to show 5 fingers;
- making two jumps to land on 5 on the number track.

Talk about outcomes, saying, for example, 2 bean bags outside the bucket and 3 inside, so 2 and 3 make 5. Find own way of recording: for example, by making marks or drawing, or by making domino patterns.

Choose two groups of objects to make a given total of up to 10 objects. Find different ways of doing it.

Using 6 as an example, find different ways of:

- putting two kinds of animals in a stable for 6 animals;
- putting 6 eggs in a box, choosing from red eggs and yellow eggs;
- making towers of 6 jumbo bricks in two different colours;
- making bracelets of 6 beads in two different shapes;
- using two large foam dice to try to score 6.

Talk about outcomes, saying, for example, 4 red eggs and 2 yellow eggs, that's 6 eggs altogether. Find own way of recording: for example, by making marks or drawing.

Say how many are left when some are taken away, by **counting how many are left**. For example, respond to:

- We ate 2 of our 6 jellies.  
How many jellies are left?  
(Count: 1, 2, 3, 4, 5, 6. Take away 1, 2... 1, 2, 3, 4 left.  
Say together: 6 take away 2 is 4.)
- You have 10 pennies.  
Spend 3 pennies.  
How much do you have left?  
(Count: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.  
Take away 1, 2, 3... 1, 2, 3, 4, 5, 6, 7 left.  
Say together: 10 take away 3 is 7.)

Children should be taught to:

Remove a smaller number from a larger and find how many are left by counting back from the larger number

Begin to find out how many have been removed from a larger group of objects by counting up from a number

Work out by counting how many more are needed to make a larger number

As end-of-year outcomes, children should, for example:

Say how many are left when some are taken away, by **counting back** from the number. For example, respond to:

- We made 6 mince pies.  
We ate 2 of them.  
How many pies are left?  
(Count back 2 from 6: 5, 4.  
Say together: 6 take away 2 is 4.)
- You have 8 pennies.  
Spend 3 pennies.  
How much do you have left?  
(Count back 3 from 8: 7, 6, 5.  
Say together: 8 take away 3 is 5.)

Find out how many have been removed by **counting up** to the larger number. For example, respond to:

- There were 8 books on this shelf.  
There are only 5 books now.  
How many have gone?  
(Count up from 5 to 8: 6, 7, 8... and say 3.  
Say together: 5 add 3 is 8. 8 take away 3 is 5.)
- Count out 4 pennies.  
Secretly put some in one hand and some in the other.  
Show the pennies in one hand (say, 1 penny).  
How much is there in the other hand?  
(Count up from 1 to 4: 2, 3, 4... and say 3.  
Say together: 1 add 3 is 4. 4 take away 3 is 1.)
- Count 6 cotton reels into an open box.  
Take a few out (say 2) and put them on the table.  
Say (without peeping) how many are still in the box.  
(Count up from 2: 3, 4, 5, 6... and say 4.  
Say together: 2 add 4 is 6. 6 take away 4 is 2.)

Find out by **counting up** how many more will make a given number. For example, respond to:

- We have 2 easels.  
There are 5 children who want to paint.  
How many more easels do we need?  
(Count up from 2: 3, 4, 5... and say 3 more.  
Say together: 2 add 3 is 5.)
- There are 9 cows and 6 sheep in the field.  
How many more cows than sheep are there?  
(Count up from 6: 7, 8, 9... and say 3 more.  
Say together: 6 add 3 is 9.)
- A lolly costs 6p.  
How much change do you get from 10p?  
(Count up from 6: 7, 8, 9, 10... and say 4p.  
Say together: 6 add 4 is 10.)