Addition - counting on

National Curriculum attainment targets

• Read, write and interpret mathematical statements involving addition (+) and equals (=) signs

• Represent and use number bonds within 20

Lesson objectives

• Relate addition to counting on

• Recall addition facts within 10, then 20

Previous related lessons

Unit 1, Week 2, Lessons 3 and 4; Unit 2, Week 1, Lessons 2 and 4; Unit 2, Week 2, Lessons 2 and 4; Unit 4, Week 1, Lessons 2, 3 and 4; Unit 5, Week 2, Lessons 1–4; Unit 7, Week 1, Lessons 2 and 3

Prerequisites for learning

Pupils need to:

• recall addition facts within ten

• understand how to use a number line or number track to solve addition problems

**Vocabulary**

zero, one, two, three … twenty, how many?, count, count on, add, plus, total, equals, makes

Future related lessons

Unit 7, Week 2, Lessons 3 and 4; Unit 9, Week 2, Lessons 3 and 4; Unit 11, Week 1, Lessons 1, 2 and 4; Unit 11, Week 2, Lessons 1, 3 and 4

Success criteria

Pupils can:

• recall addition facts within 15

• relate addition to counting on

• begin to recall and record addition facts within 20, using the symbols + and =



Getting Started

• Choose an activity from Number – Addition and subtraction.

• Choose a game or activity from *Fluency in Number Facts: Y1/Y2* – Addition and subtraction.

**Year 1, Unit 7, Week 2**

Teach

Resources

0–15 or 0–20 number cards (per class); mini whiteboard, pen and eraser
(per pair)

• Display: the Tree tool showing two trees and two apples in one tree and nine in the other.

• Ask: **How many apples are there on this tree?** (point) (2) **How many are there on this tree?**  (point) (9) **How many are there altogether?** (11)

• Say: **Two apples and nine apples make: one, two, …** (count the apples in ones) **11 altogether. Two add nine equals 11.**

• Write on the board: 2 + 9 = 11.

• Ask: **What do you think will happen to this addition problem if I swap the trees? Will our answer stay the same?** (yes) **Will we write it in the same way?** (no)

• Swap the number of apples over so that there are nine in the first tree and two in the second.

This is the

commutative law.

• Write on the board: 9 + 2 = 11.

• Say: **Two add nine equals 11** (point to the written calculation)**. And nine add two equals 11**  (point)**. The totals are the same. Remember: addition can be done in any order.**

• Display: Slides 1–3 showing three addition problems as apples in three pairs of baskets (represented by containers). Use number cards to label each basket with the number of apples it contains.

• Point to the first pair of baskets.

• Say: **There are three apples in this basket and there are six apples in this basket. How can we write this as an addition problem?**

• Invite pairs to write and then hold up their suggestions.

• Share children’s answers. Establish that both 3 + 6 and 6 + 3 are correct.

• Display: the Number Line tool showing the numbers 0–20.

• Say: **It is easier to start with the largest number because we have fewer jumps to count on.**

• Point to six and count on three to reach nine.

• Say: **Six add three equals nine. So we know that three add six also equals nine.**

• Count the apples in the baskets with children (counting the basket of three first), to check.

• Repeat, asking pairs to look at the two remaining problems and write them as addition problems, and find the answers.

• For each calculation, share children’s answers and establish that the numbers of apples can be added in either order. Show each calculation on the number line.

• Display: Slide 4 showing a pair of baskets with three apples in the first and 12 in the second.

• Write on the board: 3 + 12 = €.

• Explain that you are going to use the number line to count on to find the total.

• Ask: **Is there a better way we could write this calculation?**

• Encourage children to see that the calculation can be done more quickly as 12 + 3.

• Write on the board: 12 + 3 = €.

Alter the range of numbers used,

as appropriate. For example, if children are confident with addition within 15, gradually extend the range to addition within 20.

• Starting at 12 on the number line, count on three with children (in ones) to reach 15.

• To complete the calculation, write on the board: 15 (12 + 3 = 15).

• Say: **So 12 add 3 equals 15.**

• Also complete the original calculation (3 + 12 = 15).

• Count the apples in the baskets with children (counting the basket of three first), to check.

• Display: Slides 5–10. Repeat for several further addition calculations within 15. For each calculation, invite children to show how to count on using the number line.

Individualised Learning

 **Pupil Book 1B** – Page 30: Alien addition

 **Progress Guide 1** – Support, Year 1, Unit 7, Week 2, Lesson 1:

 Apple basket addition

Refer to Activity 1 from the
Learning activities on page 292.

Plenary

**Resources**

0–9 number fan (per child)

• Display: the Number Line tool showing the numbers 0–20.

• Circle 6 on the number line.

• Say: **I am thinking of a number. It is five more than six. What is my number?**

• Ask pairs to use their number fans together to show the answer (11).

• Choose a pair to answer, then on the number line count the number of jumps (5) from 6 to 11.

• Ask: **How can we write this as an addition calculation?** (6 + 5 = 11; also 5 + 6 = 11)

• Repeat for further addition problems within 15.

Overcoming Barriers

* Some children may find it difficult to add two numbers without using counting objects. Provide them with opportunities to see
 that the total found using a number line or number track is the same as the total found by counting items individually. Using
 numbers 0–10 to begin with, set addition problems for children to solve, first using a number line or track and then with
 counting objects. They will see that the answer is the same, and that using the number line or track is quicker, particularly
 when larger numbers are involved.