Subtraction facts within ten and related facts

National Curriculum attainment targets

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

• Represent and use number bonds and related subtraction facts within 20

Lesson objectives

• Recall subtraction facts within ten

• Use known subtraction facts within ten to derive related facts

Previous related lessons

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

Prerequisites for learning

Pupils need to:

• recall addition and subtraction facts within ten

• be able to record addition and subtraction facts within
ten correctly, using the symbols + − and =

**Vocabulary**

zero, one, two … ten, count back, how many?, more, less,
take away, subtract, minus, equals, leaves, count, add, plus, more, makes, altogether, sign

Future related lessons

Unit 7, Week 2, Lessons 1–4; 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:

• accurately recall subtraction facts within ten

• use subtraction facts within 10 to derive related addition facts within ten

• recall related addition and subtraction facts within ten with increasing confidence and accuracy



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 1**

Teach

Resources

Resource 4: Subtraction facts within 5 cards or Resource 9: Subtraction facts within 6–10 cards
(per child); beads in two colours (e.g. 4 red, 2 yellow) and a lace (per class)

• Give each child one or more cards showing subtraction facts within ten (from Resource 4 or Resource 9). Ensure that there is at least one subtraction fact for each number 1–10.

• Say: **If you have a card that shows a subtraction fact for three, hold it up.** (3 – 0 = 3, 3 – 1
= 2, 3 – 2 = 1, 3 – 3 = 0)

• Collect children’s cards and write on the board one subtraction fact for three, including the answer, e.g. 3 – 2 = 1.

• Repeat by writing one subtraction fact for each number 1–10.

• Say: **We have found out that if you know an addition fact then you also know a subtraction fact. It also means that if you know a subtraction fact you know an addition fact.**

• Point to one of the subtraction facts, e.g. 6 − 2 = 4.

• Write a corresponding addition fact on the board: 4 + 2 = 6.

• Ask children what they notice. Discuss their responses. They should be able to apply their knowledge of related facts from Lesson 3 to this situation.

• Say: **I have six beads** (hold up a lace threaded with four red and two yellow beads). **I take
away two of the beads** (remove the two yellow beads). **How many beads do I have left?** (4)
**Six take away two leaves four. Six minus two equals four** (point to the displayed subtraction fact: 6 – 2 = 4).

• Say: **I have four beads** (hold up the string of beads). **I thread on two more** (thread two yellow beads onto the lace). **How many beads altogether?** (6) **Four and two more makes six. Four add two equals six** (point to the displayed addition fact: 4 + 2 = 6).

• Display: the Number Line tool showing the numbers 0–10.

• Use the number line to check both calculations with children.

• Point to another subtraction fact, e.g. 8 − 3 = 5.

• Ask: **Can you use this subtraction fact to find an addition fact?**

• Choose a child to answer, and write a corresponding addition fact, e.g. 5 + 3 = 8.

• Use the Number Line tool to check both calculations with the children.

• Invite pairs to choose another subtraction fact from those on display and use it to find an addition fact. Ask them to write down both facts.

• Share children’s subtraction and addition facts.

• Write one of the children’s addition facts next to the related subtraction fact on the board, so that all children are able to compare them.

• Use the Number Line tool to check both facts with children.

• Repeat several times for pairs to choose different subtraction facts and find a related addition fact.

Individualised Learning

**Pupil Book 1B** – Page 29: Subtraction skateboards

**Progress Guide 1** – Support, Year 1, Unit 7, Week 1, Lesson 4:

Bead addition and subtraction

Refer to Activity 4 from the
Learning activities on page 283.

Plenary

**Resources**

0–9 number fan (per child)

• Write several related addition and subtraction calculations within 10 in random order on the
board, e.g. 6 − 1 = □ 5 + 2 = □ 8 – 5 = □ 7 − 2 = □ 3 + 5 = □ 5 + 1 = □

• Point to each calculation in turn and ask children to use their number fans to show the answer, before completing the calculation.

• Once the number facts are complete, ask children whether they can identify which facts are related. As they identify the related facts, write them next to each other, e.g.
6 − 1 = 5 5 + 1 = 6
5 + 2 = 7 7 − 2 = 5
8 – 5 = 3 3 + 5 = 8

• Discuss the calculations children carried out during the learning activity.

• Ask quick-fire questions about subtraction facts within ten.

• Ask: **What is nine subtract three? Seven take away two? What is three less than five? What is the difference between two and eight?**

• Say: **Tell me a subtraction fact for six.**

• Choose a child to answer and write their suggestion, e.g. 9 – 3 = 6.

• Ask: **Can anyone use this subtraction fact to tell me an addition fact?**

• Choose a child to answer and write their suggestion, e.g. 6 + 3 = 9.

• Repeat several times for other addition and subtraction facts within ten.

• Remind children of the relationship between
subtraction and addition: if they know a
subtraction fact then they also know an
addition fact that uses the same numbers.

**Homework Guide 1**

Year 1, Unit 7, Week 1, Lesson 4: Addition and subtraction facts

Overcoming Barriers

• Some children may have difficulty appreciating how a subtraction fact can be related to an addition fact. Provide a concrete representation of the situation, perhaps in story form or in a role-play context. For example, ‘bake’ three play-dough cakes, then ‘bake’ two more. Establish that there are five altogether. Then ‘sell’ the two cakes baked last, and show that the three cakes you started with are left.