Grouping

National Curriculum attainment targets

• Solve one-step problems involving multiplication by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher

• Count in multiples of twos, fives and tens

Lesson objective

• Understand multiplication through grouping small quantities

Previous related lessons

Unit 3, Week 1, Lessons 1–4; Unit 3, Week 2, Lessons 1–3; Unit 6, Week 1, Lessons 1–4

Prerequisites for learning

Pupils need to:

• count up to at least 20 objects reliably and record the number

• count accurately in twos, fives and tens and write these multiples

• understand that counting in multiples can be applied to counting sets of objects to find a total

**Vocabulary**

zero, one, two, three … twenty, zero, two, four, six … twenty, zero, five, ten, fifteen …. twenty-five, zero, ten, twenty … fifty, count on, count up to, count in twos, count in fives, count in tens, pattern, how many?, groups, groups of, makes, equals, altogether, equal, multiple, multiples of … multiplication

Future related lessons

Unit 6, Week 2, Lesson 2; Unit 10, Week 1, Lessons 1–4; Unit 10, Week 2, Lessons 1 and 2; Unit 12, Week 1, Lessons 1
and 4

Success criteria

Pupils can:

• accurately count a number of objects by counting in multiples of two, five or ten

• begin to understand multiplication through grouping small quantities

Getting Started

• Choose an activity from Number – Multiplication and division/Number – Number and place value.

• Choose a game or activity from *Fluency in Number Facts: Y1/Y2 –* Multiplication and division/ Number and place value.

**Year 1, Unit 6, Week 2**

Teach

• Remind children that they know how to count on in twos, fives and tens.

• Say: **We have counted sets of objects in multiples of two, five and ten.**

• Recall with children that counting in multiples can be a quicker way of finding the total number of objects in a set.

• Say: **We have also used counting in multiples to add together groups that have all been equal. Another way to describe this is repeated addition, or *multiplication***.

• Display: Slide 1 showing three leaves, with two bugs on each leaf.

• Say: **I don’t want to count these bugs one at a time. I don’t want to count them in ones.**

• Say: **I can see that there are two bugs on each leaf** (point)**.** Ask: **Can you suggest how I could count them?** (in twos)

• Ask children to count in twos to find out how many bugs there are.

• Say: **When you know the answer, hold up that number of fingers.** (6)

• Count the bugs in twos with children, to check.

• Say: **Two, four, six** (point to each leaf in turn)**. There are six bugs on three leaves. Three lots of two make six altogether.**

• Display: Slide 2. Agree there are five leaves with two bugs on each leaf.

• Ask children to find out how many bugs there are altogether and hold up that number of
fingers. (10)

• Count the bugs in twos with children to check.

• Say: **Two, four, six, eight, ten** (point to each leaf in turn). **There are ten bugs on five leaves. Five lots of two make ten altogether.**

• Display: Slide 3. Agree that this time there are four leaves with five bugs on each leaf.

• Ask children to find out how many bugs there are altogether, and to work with their partner to hold up that number of fingers. (20 – each child holding up ten fingers) Count the bugs in fives with children to check.

• Say**: Five, ten, 15, 20** (point to each leaf in turn).
**There are 20 bugs on four leaves. Four lots of five
make 20 altogether.**

Alter the range of numbers used as appropriate. If children don’t

count easily beyond, for example, five steps of two, five or ten, revise the activity to use lower multiples. This will help children to appreciate that counting in multiples gives the same answer and is quicker than counting in ones.

If children are working with multiples of two, five and ten confidently and

accurately, gradually extend the range of numbers used up to the tenth multiple of each and even further, if appropriate.

• Display: Slide 4. Establish that there are three leaves
with ten bugs on each leaf. Ask pairs to find out
how many bugs there are altogether. (30)

• Share children’s answers. Agree that there are more
bugs than each pair of children has fingers.

• Count the bugs in tens together with children
to check.

• Say: **Ten, 20, 30. There are 30 bugs on three
leaves. Three lots of ten make 30 altogether.**

• Repeat for Slides 5–10.

Individualised Learning

**Activity Book 1B** – Page 18: Lots of bugs

**Progress Guide 1** – Support, Year 1, Unit 6, Week 2, Lesson 1:
How many bugs?

 Resources: scissors and glue (per child)

Refer to Activity 1 from the
Learning activities on page 258.

Plenary

Resources

mini whiteboard; pen and eraser (per pair)

• Ask pairs to make up a problem for the rest of the class to solve.

• Say: **Draw some leaves, and draw two, five or ten bugs on each leaf. We will work out how many there are altogether.**

• Share some of the problems, displaying them for the rest of the class to see. For each problem, ask the rest of the class to find the total number of bugs.

• Share children’s answers and count together as a class to check.

Overcoming Barriers

• Children may have no problem reciting number sequences to count in steps of two, five and ten, but find it difficult to apply this to counting sets of objects. Continue to provide visual and concrete examples using smaller numbers. For example, place five buttons in each of five envelopes labelled ‘5’. Ask children how many buttons are in one envelope (5) and allow them to count them to check. Replace the buttons and show two envelopes – explain that they have two envelopes and there are five buttons in each one. Ask how many buttons there are altogether (10). Encourage children to count in fives, using a number track to help, if necessary. Then allow them to open the envelopes and count the buttons in ones. Repeat for children to find the total number of buttons in three, four and five envelopes, and to count lots of two and ten.