

# Year 3 Unit 9 (Summer term) Support Session 2

## Division

### Objectives

Count in fives.  
Find remainders after division.

### Vocabulary

multiples  
divided by  
remainder

### Resources

Numbered cards 1-50  
Interlocking cubes in a variety of colours

### Oral and mental starter

Ask the children to count in fives from zero, using their fingers as a tally (one finger for each 5).  
Stop at 35.

Q How many fives in 35?

Write on the board  $35 \div 5 = 7$ .  
Repeat for other multiples of 5.

Q If we count in fives will we say 26 in our count? Why not?

Establish that the only numbers in the count will be multiples of 5.

### Main activity

Ask the children to put interlocking cubes in towers of 5 of the same colour.

Count the multiples of 5 together.

Take a handful of towers of 5 and tell the children how many bricks you have altogether, e.g. 50.

Q How many towers of 5 do I have?

E.g. 50 bricks is 10 towers of 5.

Write  $50 \div 5 = 10$ .

Underneath write  $52 \div 5 =$   and take two extra single bricks.

Establish that there are 10 towers of 5 in 52 and 2 left over. Record this as  $52 \div 5 = 10$  remainder 2.

Take a numbered card (up to 50) and ask the children if it will have a remainder when divided by 5.

Demonstrate how to count in fives to check, and or use towers of bricks.

Give a group of cards to each pair of children and ask them to sort the cards into two piles: those that will give a remainder when divided by 5 and those that won't.

### Plenary

Write some of the numbers from each of the piles of numbers on the board.

e.g.

| NO REMAINDER |    |   |
|--------------|----|---|
| 10           | 15 |   |
| 25           | 20 | 5 |

| REMAINDER |    |
|-----------|----|
| 37        | 46 |
| 17        | 24 |

Q. What do you notice about the numbers in the 'no remainder' box?

Establish that they are all multiples of 5.

Write on the board  $17 \div 5$  and show 17 cubes in groups of 5.

Establish  $17 \div 5 = 3$  remainder 2, because there are 3 groups of 5 cubes and 2 cubes left over.

# Year 3 Unit 9 (Summer term) Support Session 1

## Division

### Objectives

Count on in tens.

Find remainders after division.

### Vocabulary

multiples  
divided by  
remainder

### Resources

Whiteboards  
Bead string  
0-100 numbered  
cards

### Oral and mental starter

Ask the children to count in tens from zero, using their fingers as a tally holding up one finger for each ten. Stop at 90.

Q How many tens in 90?

Write on the board:  $90 \div 10 = 9$ .

Start again from zero and stop at 70.

Q How many tens in 70? What number sentence can we write?

Repeat. Ask the children to write calculations on white boards.

### Main activity

Ask the children to read out some of their number sentences.  
Demonstrate a couple of these on a bead string, e.g.  $40 \div 10 = 4$



Say 40 divided into groups of 10 gives exactly 4 groups.

Q What if I had  $41 \div 10$ ?

Establish that there would be 1 left over and record this as  $41 \div 10 = 4$  remainder 1.

Pick out a number card (two-digit number) and divide it by 10,  
e.g.  $74 \div 10 = 7$  remainder 4.

Ask the children to pick out their own two-digit numbers, divide them by 10 and to record the calculation.

### Plenary

Write on the board:

60    57    29    30    43    70

Q. Which of these numbers can you divide by ten without a remainder?

Establish that dividing 60, 30, 70 by 10 will not give a remainder.

Q. How do you know that the other numbers will give a remainder if you divide by 10?

Establish that the other numbers have tens and ones, not just multiples of 10.