

Lesson 26 **NUMBER****Division with remainders**

CURRICULUM ALIGNMENT

NUM.OPS.3

understand and apply flexibly the four operations; and the relationships between operations.

INTERACTIVES Equal Groups (Sharing) · challenge, display

WHAT THIS LESSON TEACHES

When you share a number into equal groups and it will not divide evenly, the amount left over is called the remainder. The remainder is always smaller than the number you are dividing by.

→ 13 hurleys shared among 4 players gives 3 each, remainder 1.

→ $23 \div 5$ gives 4 in each group, remainder 3.

MODEL THIS ON THE BOARD

DIVISION WITH REMAINDER

- 1 How many 5s fit into 17? Count 5, 10, 15: that is **3** groups.
- 2 15 taken from 17 leaves **2**.
- 3 Check: **2** is smaller than 5, so the remainder is correct.

$$\begin{array}{r} 3 \quad r \quad 2 \\ 5 \overline{) 17} \end{array}$$

DISCUSSION STARTER

REFLECT What does a remainder tell you, and why must it always be smaller than the divisor?

ANSWER KEY

Scaffold: visual check on the page

Q1: 4 remainder 3

Q2: 4 remainder 2

Q3: 3 remainder 2

Q4: 7 remainder 2

Spot: The remainder must always be smaller than the divisor. $23 - 20 = 3$, so the answer is ****4 remainder 3****, not remainder 5.

EXTENSION SHEET · STRETCH ANSWERS

S1: 16 r 1

S2: 11 r 5

S3: 19 r 2

S4: 11 r 1

S5: 19 r 6

Investigation: What should we do with the leftovers? — open-ended; scan pupils' working for valid solution paths rather than a single answer.