

Lesson 26 **NUMBER**

Division as grouping and the division–multiplication link

WHAT THIS LESSON TEACHES

Division as grouping finds how many equal bags or boxes fit into a total by making groups of the same size.

→ How many bags of 5 apples from 20 apples? $20 \div 5 = 4$.

→ Knowing $6 \times 5 = 30$ tells you $30 \div 5 = 6$.

MODEL THIS ON THE BOARD

WORKING $18 \div 6$ AS GROUPING

- 1 Start with eighteen apples to pack.
- 2 Make equal groups of six apples each.
- 3 Count the groups made to find the answer.

DISCUSSION STARTER

REFLECT Do you find sharing or making groups easier when you divide? Why?

ANSWER KEY

a) $4 \times 5 = 20$, $5 \times 4 = 20$, $20 \div 4 = 5$, $20 \div 5 = 4$

b) $3 \times 6 = 18$, $6 \times 3 = 18$, $18 \div 3 = 6$, $18 \div 6 = 3$

Q1: 4 bags

Q2: 3 boxes

Q3: 7

Q4: 6 bags

Q5: 6

a) **Always** — Every grouping division has a times fact that gives the same numbers.

b) **Always** — Both use the numbers 5 and 6 to make 30.

c) **Never** — You can use a known multiplication fact as a short cut.

d) **Always** — Both facts use the numbers 3 and 4 to make 12.

EXTENSION SHEET · STRETCH ANSWERS

S1: 10

S2: 6

Investigation: How many groups fit? — open-ended; scan pupils' working for valid solution paths rather than a single answer.