

Groups, Arrays & Sharing

Multiplying and dividing by one-digit numbers

ELABORATION FOCUS

Multiplying and dividing by one-digit numbers using repeated addition, equal groups and arrays.

LEARNING INTENTION I can use groups and arrays to multiply and divide.

Equal groups

Repeated adding

Arrays

Sharing

Partitioning

1

Make Equal Groups

Every group must hold the same number, then count how many groups you made.

2

Build an Array

Rows and columns of counters show the same total in a tidy picture.

3

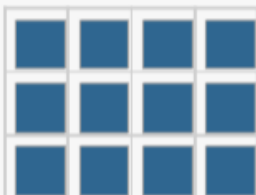
Share It Back Out

Dividing shares the total back into equal groups, so it undoes multiplying.

MODEL • 3 ROWS OF 4 COUNTERS

Three equal rows of four counters, counted as groups and as an array.

3 rows of 4



$$4 + 4 + 4 = 12$$

$$3 \times 4 = 12$$

$$12 \div 3 = 4$$

Repeated adding gives $4 + 4 + 4 = 12$, so $3 \times 4 = 12$ and $12 \div 3 = 4$.

TEACHER MODELLING ROUTINE I do → We do → You do

WATCH FOR

Making groups that are not equal, or counting the groups instead of the total.

REMEMBER

Multiplying and dividing undo each other, just like adding and subtracting.

MATERIALS

Counters, egg cartons, dot cards, array mats, sharing plates, grid paper.