

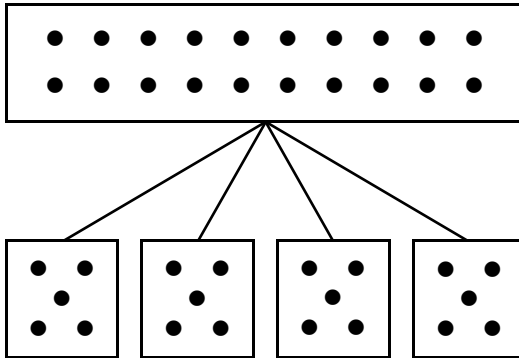
# Sharing Boards

Syllabus Strand: Number

Syllabus Sub-Strand: Multiplication and Division (pp. 52-56)

Syllabus Outcomes: NES1.3, NS1.3, NS2.3 - Unit 1

## Modelling division



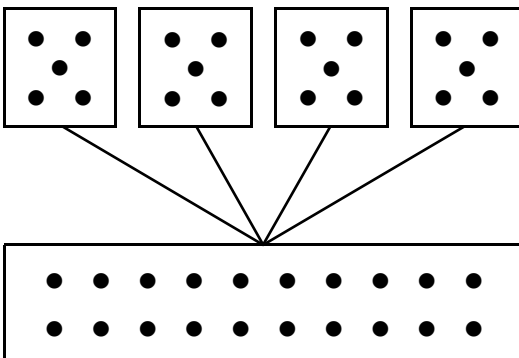
Use manipulatives to model  $20 \div 4 = 5$

- **NES1.3:** using the term 'sharing' to describe the distribution of a collection of objects
- **NES1.3:** recording sharing informally using pictures, numerals and words
- **NS1.3:** division by sharing a collection of objects into equal groups eg 20 objects shared between 4 friends
- **NS1.3:** modelling division as repeated subtraction eg  $20 - 5 - 5 - 5 - 5$
- **NS1.3:** recording division problems using drawings, numerals, symbols and words
- **NS2.3:** Divide 20 counters into 4 equal groups

Possible questions:

- **NS1.3 {Sharing - how many in each group}**  
If 20 lollies are shared between four students, how many does each get?
- **NS1.3 {Grouping - how many groups are there?}**  
If I have 20 lollies and each child is to get five, how many children will get lollies?

## Modelling multiplication



Use manipulatives to model  $4 \times 5 = 20$

- **NES1.3:** using the term 'group' to describe a collection of objects
- **NES1.3:** recording grouping informally using pictures, numerals and words
- **NS1.3:** modelling multiplication as equal groups eg 4 groups of 5 altogether makes 20
- **NS1.3:** finding the total number of objects using repeated addition eg 4 groups of 5 is the same as  $5 + 5 + 5 + 5$
- **NS1.3:** finding the total number of objects using skip counting eg 5, 10, 15, 20
- **NS1.3:** recording multiplication problems using drawings, numerals, symbols and words

- **NS2.3:** linking multiplication and division facts using groups or arrays  
eg 4 groups of 5 is 20  $\rightarrow 4 \times 5 = 20$       20 shared among 4 is 5  $\rightarrow 20 \div 4 = 5$
- **NS2.3:** Students should come to realise that division 'undoes' multiplication and multiplication 'undoes' division
- **NS2.3:** Students should be encouraged to check the answer to a division question by multiplying their answer by the divisor.
- **NS2.3:** To divide, students may recall division facts or transform the division into a multiplication and use multiplication facts eg  $20 \div 4$  is the same as  $\square \times 4 = 20$ .

## Making this resource (class set of 30)

**Option 1:** use a black texta to draw the four boards on the four sides of a manila folder  $\rightarrow$  you will need 30 manila folders, 1 black texta

**Option 2:** photocopy the four boards b/back on two sheets of white paper then laminate  $\rightarrow$  you will need 60 sheets of white A4 paper, 60 laminating pouches

