

Grouping according to how many groups

introduction

1 The number of groups is fixed — find out how many end up in each

Pose the problem: there are six basketballs, share them into two baskets. Set out the two empty baskets first.

"There are six basketballs. Share them into two baskets. How many baskets do we start with?"

Deal the basketballs out one at a time, alternating between the two baskets, until none are left.

"One here, one there, one here, one there. Keep going until all six are shared out."

Count how many ended up in each basket to answer the question.

"Count one basket. How many are in it? Now check the other basket — is it the same?"

Repeat with a different fixed number of groups: there are twelve chairs, share them around three tables.

"This time there are twelve chairs. Share them around three tables. How many tables do we start with?"

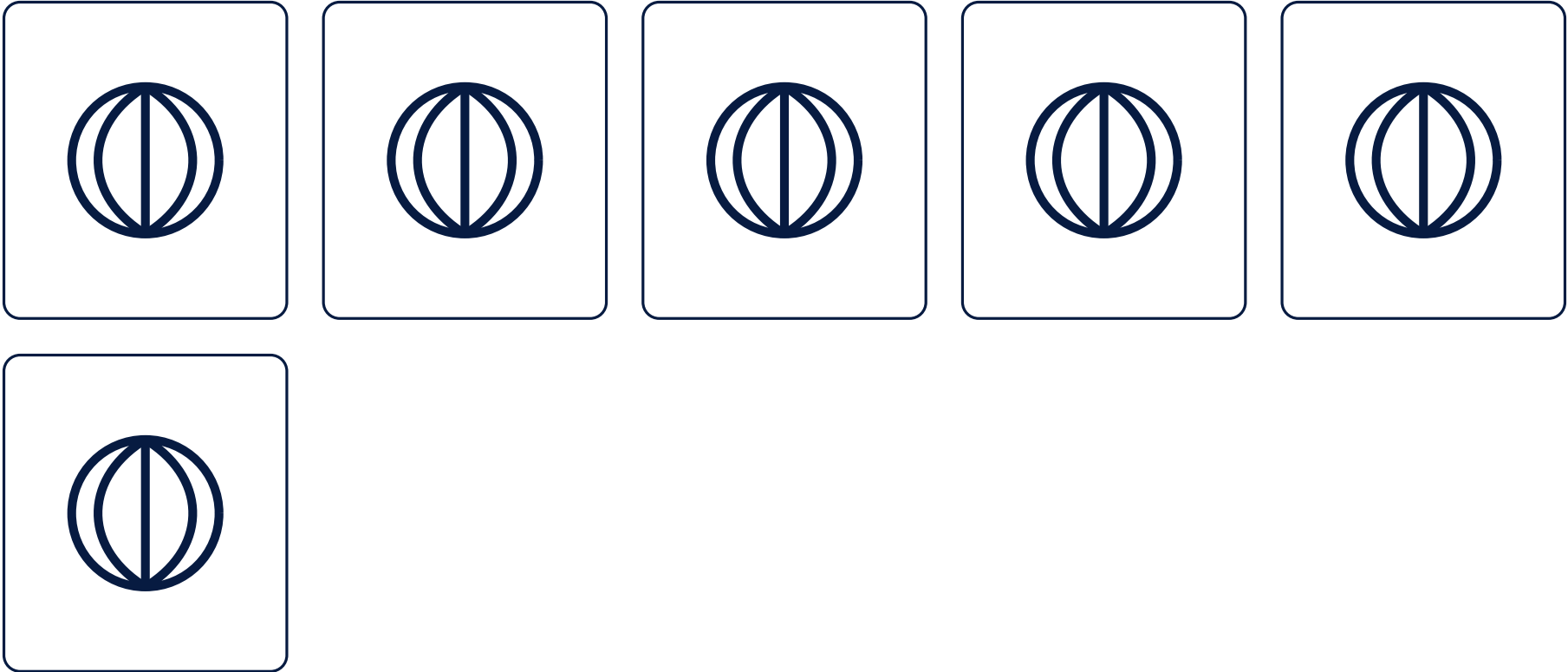
Connect it back to the grouping language: name the result as 'N groups of M'.

"Three groups — and however many ended up at each table, that is our group size. Four chairs at each of three tables."

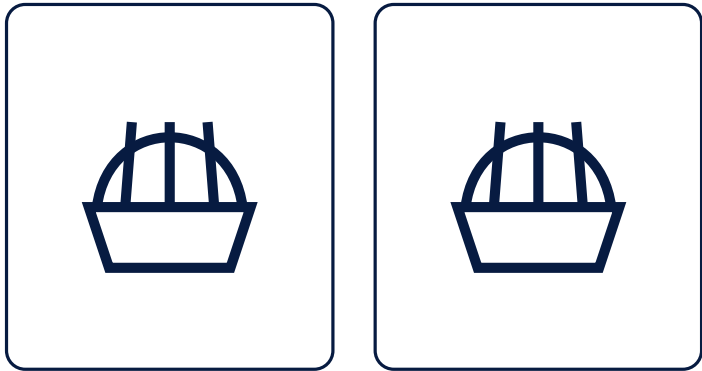
Show a common mistake: dealing unevenly, giving some groups more than others. There are six basketballs shared into two baskets as four and two. Check it: does every group have the same number?

"I gave this basket four and this basket two. Does every basket have the same number? Sharing equally means dealing one at a time to each, in turn."

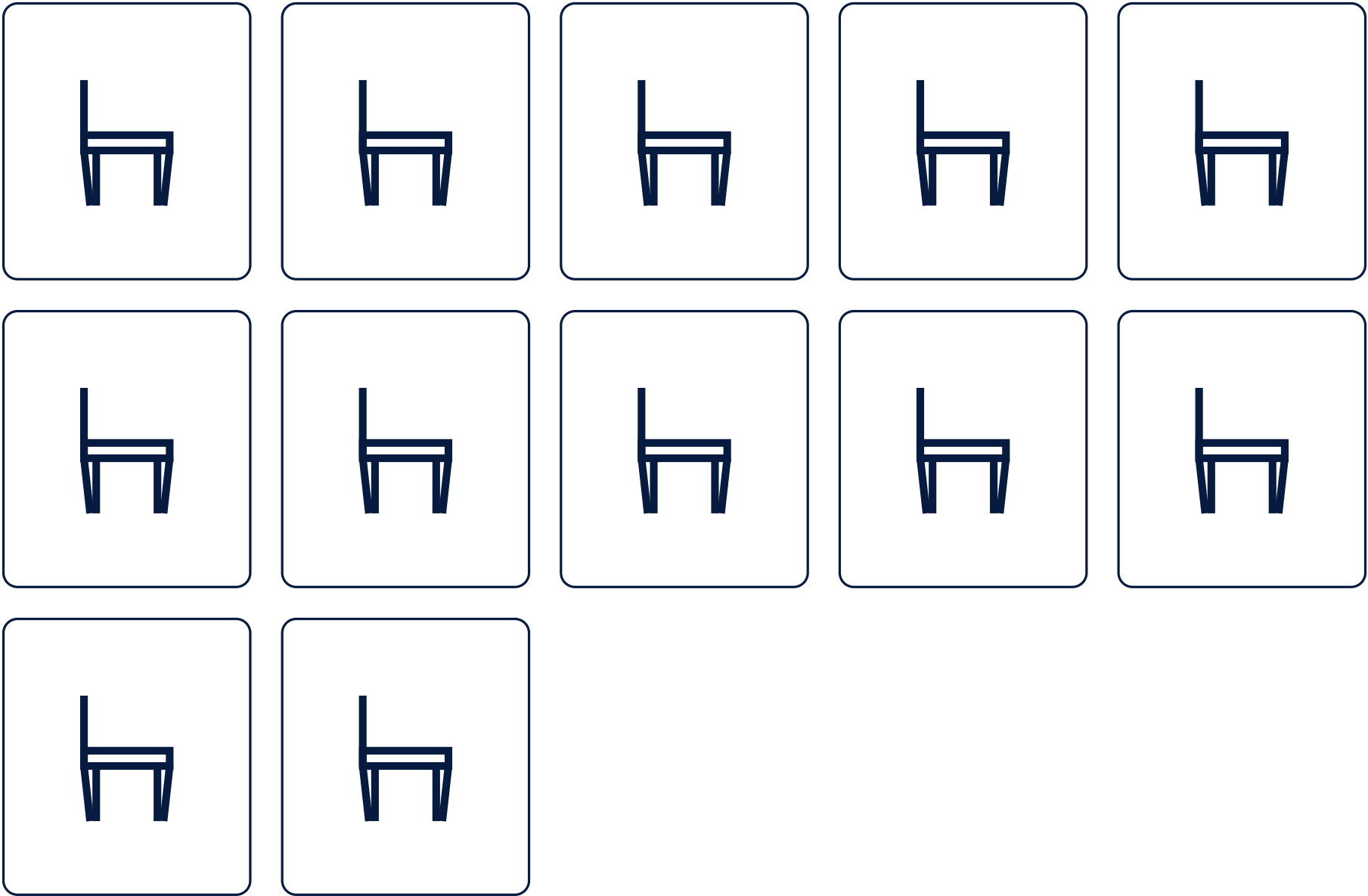
Cards — Basketballs — demonstration (6 needed)



Cards — Baskets — demonstration (2 needed)



Cards — Chairs — demonstration (12 needed)



Cards — Tables — demonstration (3 needed)

