

## Multiplication – Equal Groups

### National Curriculum Objective:

Year 3 Multiplication and Division – Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods.

### Aim of the Game:

To help children understand multiplication by recognising and making equal groups, and to develop confidence in writing multiplication sentences.

### What You'll Need:

- 2 dice
- Counters, cubes, or small objects

### How to Play:

#### Version 1: Using Dice to Create Groups

- Roll each dice once to see how many groups you need and how many counters go into each group.
- Build the groups using counters (e.g. 6 groups of 2).
- Write a multiplication sentence in words to match (e.g. There are 6 equal groups with 2 in each group).
- Flip the dice around to show commutativity (e.g. 2 groups of 6).
- Write the new multiplication sentence (e.g. There are 2 equal groups with 6 in each group).
- Add up the total number of counters to check your answer.

#### Version 2: Starting with the Total

- Give children a set number of counters (e.g., 10 counters).
- Ask them to find as many ways as possible to make equal groups.
- Example: 5 groups of 2 and 2 groups of 5.
- Write down all the matching multiplication sentences.
- Discuss why sentences are different but give the same product.

### Educational Benefits:

- Builds a concrete understanding of multiplication as repeated addition.
- Reinforces the idea of equal groups as the foundation of multiplication.
- Develops use of correct mathematical vocabulary (“groups of...”, “in each group”).
- Strengthens understanding of commutativity in multiplication (e.g.,  $6 \times 2 = 2 \times 6$ ).
- Encourages children to represent multiplication in different ways (using objects, arrays, and sentences).
- Supports reasoning skills by exploring different groupings of the same total.
- Links directly to the Year 2–3 multiplication objectives in the National Curriculum.

# EQUAL GROUPS

There are ..... groups with ..... in each group.  
There are ..... altogether.

There are ..... groups with ..... in each group.  
There are ..... altogether.