

# Discussion Problems

## Step 1: Recognise Equal Groups

### National Curriculum Objectives:

Mathematics Year 2: (2C8) [Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts](#)

### About this resource:

This resource has been designed for pupils who understand the concepts within [this step](#). It provides pupils with more opportunities to enhance their reasoning and problem solving skills through more challenging problems. Pupils can work in pairs or small groups to discuss with each other about how best to tackle the problem, as there is often more than one answer or more than one way to work through the problem.

There may be various answers for each problem. Where this is the case, we have provided one example answer to guide discussion.

We recommend self or peer marking using the answer page provided to promote discussion and self-correction.

More [Year 2 Multiplication and Division](#) resources.

Did you like this resource? Don't forget to [review](#) it on our website.

# Recognise Equal Groups

1. Mr. Atwood's class are having a relay race on the school field. He sets up six hoops with equal groups of balls, cones and batons. Some items are in bags.

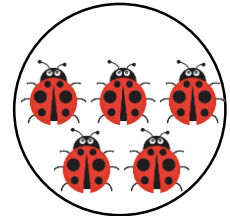
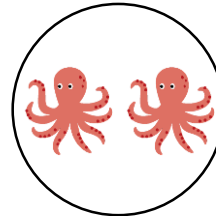
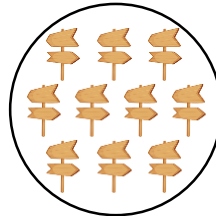
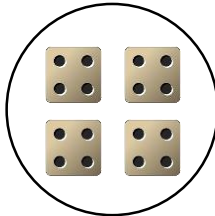
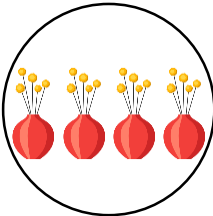
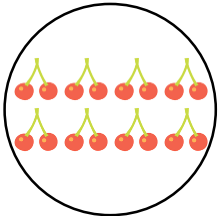
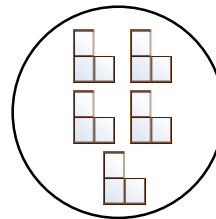
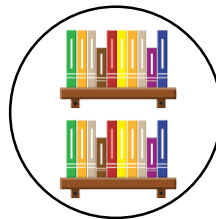
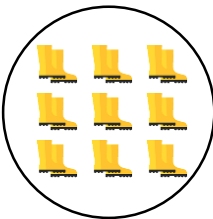
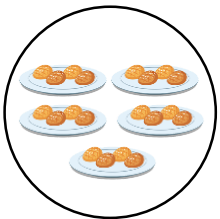
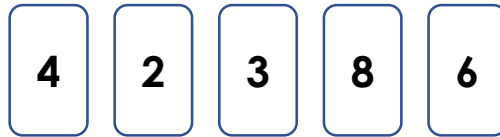


Explore the different combinations of balls, cones and batons that could be in each bag, so that each hoop is equal.

DP

2. Using the stem sentence, investigate which digit cards can be used to describe the possible groups below.

There are \_\_\_\_\_ equal groups with \_\_\_\_\_ in each group.



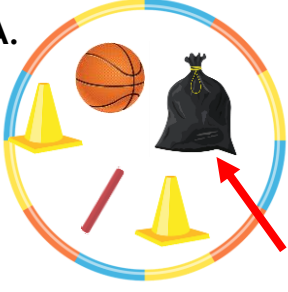
Use the remaining digit cards to complete the stem sentence and draw the groups.


DP


# Recognise Equal Groups


1. Mr. Atwood's class are having a relay race on the school field. He sets up six hoops with equal groups of balls, cones and batons. Some items are in bags.


**Various answers, for example: If each hoop held 7 items (3 balls, 2 cones and 2 batons):**


**A.**  **2 balls  
1 baton**

**B.**  **2 balls  
1 cone**

**C.**  **1 ball  
1 cone**

**D.**  **1 ball**

**E.**  **2 balls**

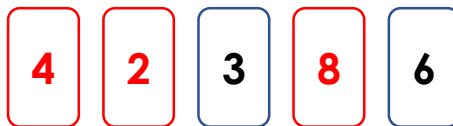
**F.**  **1 ball  
1 cone  
1 baton**

Explore the different combinations of balls, cones and batons that could be in each bag, so that each hoop is equal.

DP

2. Using the stem sentence, investigate which digit cards can be used to describe the possible groups below.

**4, 2 and 8 can be used:**



8 equal groups with 2 cherries in each group.

4 equal groups with 4 dots in each group.

2 equal groups with 8 tentacles in each group.

Use the remaining digit cards to complete the stem sentence and draw the groups.

**There are 3 equal groups with 6 in each group:**



Also accept 6 groups with 3 in each group.

DP