

Discussion Problems

Step 4: Make Arrays

National Curriculum Objectives:

Mathematics Year 1: (1C8) [Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher](#)

About this resource:

As this resource is aimed at Year 1, we recommend that an adult reads the problem to children who cannot yet access it for themselves.

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 1 Multiplication and Division](#) resources.

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

Make Arrays

1. Leo says,



My array has an even number of rows and columns. I have used fewer than 30 counters.

What is the biggest array Leo could have made? Draw the array below.

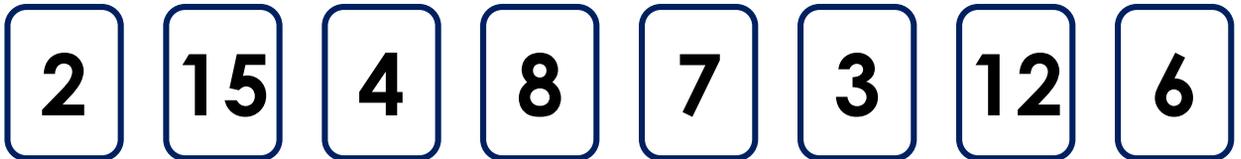
What is the smallest array Leo could have made? Draw the array below.

DP

2. Olivia has made an array using 24 counters. Use the digit cards below to complete the sentence so that it could describe her array.



My array has ____ rows and ____ columns.



DP

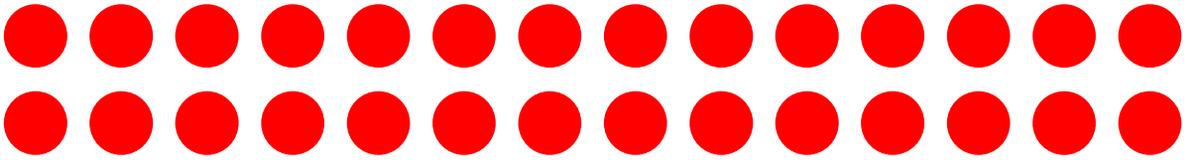
Make Arrays

1. Leo says,

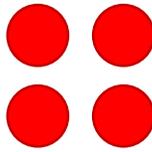


My array has an even number of rows and columns. I have used fewer than 30 counters.

What is the biggest array Leo could have made? Draw the array below. $2 \times 14 = 28$



What is the smallest array Leo could have made? Draw the array below. $2 \times 2 = 4$



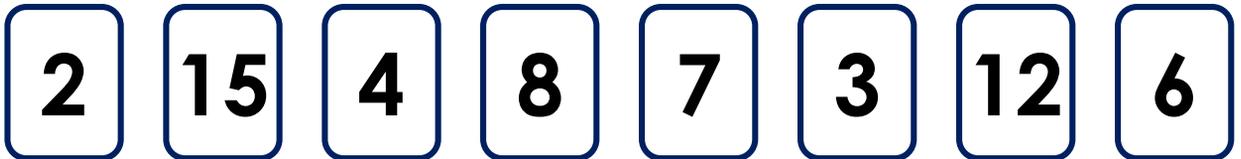
DP

2. Olivia has made an array using 24 counters. Use the digit cards below to complete the sentence so that it could describe her array.

Various possible answers, for example:



My array has 3 rows and 8 columns.



DP