

National Curriculum Programme of Study;

- 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.



Y1
Multiplication

BY THE END OF YEAR 1...

Children will be able to understand multiplication as describing an array.

Using grouped objects for addition, without recombining

With support, children in year 1 should be arranging a variety of physical objects into groups of the same size, counting the number of groups, the amount in each group, and the total.



12 green cotton reels arranged into groups of 3

6 clothes pegs arranged into groups of 2

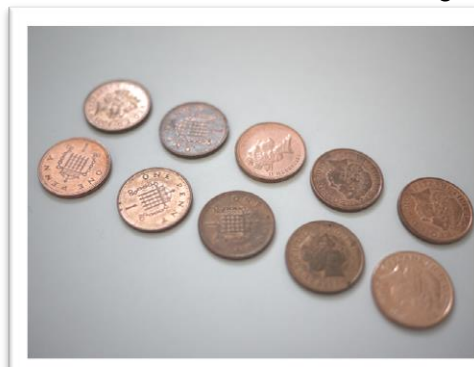


8 socks arranged into groups of 2, or pairs

Arranging objects into rectangular arrays

To support the progression towards a formal visual image of multiplication, and into a formal written method in Key Stage 2, children need to be shown how to arrange their objects into a rectangular array.

Children in year 1 will be counting in steps of 2, 5 and 10, and so it is useful if these numbers are used initially in any arrays created.

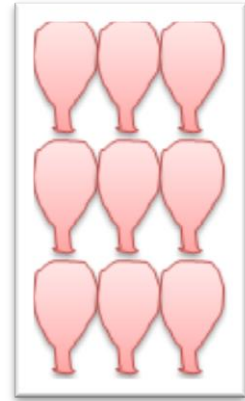


Arrays can then be created with numbers other than 2, 5 and 10, with objects arranged in rows and columns of 3 or 4.

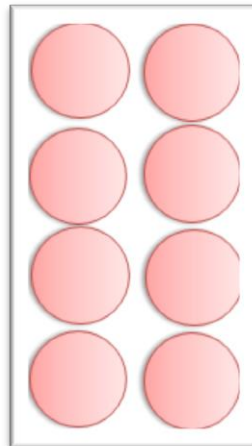
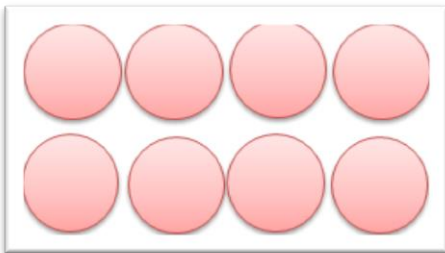


12 balloons arranged into three rows of three

Model the drawing of an array, initially from an arrangement of physical objects. Children can then draw their own arrays to represent their physical groupings.



Physical objects can be replaced with circular counters, representing the objects. Again children will need experience of grouping these physically into rows for an array, before drawing them.



Arrays can be rotated to start to demonstrate the commutativity of multiplication, e.g. 4 groups of 2 is the same as 2 groups of 4