## Making groups and arrays

Arrays and patterns are used to help students understand multiplication. When children are learning about multiplication and division they make groups.

These may be made as separate groups or presented as an array so the children can visualise the grouped units.

They learn three groups of four means: three groups with four in each group $=12$

Separate groups: Three groups of four is 12 altogether.


Array: Three rows of four is 12 altogether.

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Later children will learn to describe these as $3 \times 4=12$.

## Skip Counting

Children use these images to start skip counting in groups. They will look at the groups or the arrays (rows) and say 4, 8, 12.


Skip counting is also done on a hundred chart to see the patterns they make.

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 |
| 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 |
| 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 |
| 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 |
| 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 |
| 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 |
| 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 |

This example shows skip counting in fours on the hundred chart.
By skip counting in fours we learn the multiples of four.

