

Can I count on in twos, fives and tens and use this to begin to say multiplication facts?

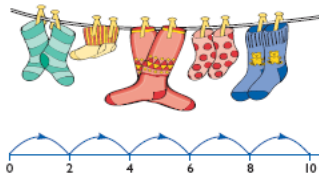
Teaching guidance

Key vocabulary

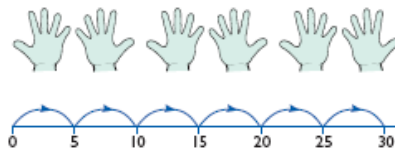
count in twos...fives...tens, multiply, multiplied by..., times, lots of, groups of, multiple of, count forward

Models and images, resources and equipment

Link counting in multiples using practical equipment to counting in multiples on a number line and associated number sentences



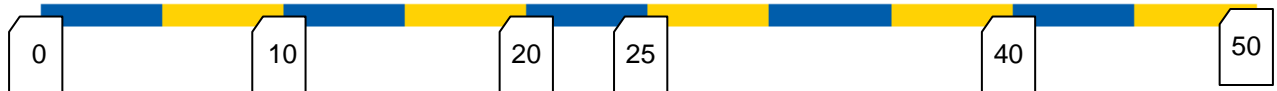
$2 + 2 + 2 + 2 + 2 = 10$
 $2 \times 5 = 10$
 2 multiplied by 5
 5 pairs
 5 hops of 2



$5 + 5 + 5 + 5 + 5 + 5 = 30$
 $5 \times 6 = 30$
 5 multiplied by 6
 6 groups of 5
 6 hops of 5

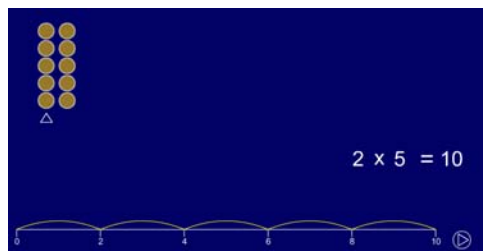
Counting stick

Count forwards and backwards with the multiples marked. Use sticky notes to mark multiples and gradually remove them as children gain confidence and familiarity.



Arrays

Arrays can be created using squared paper, counters, tiles, pegboards, ICT, etc.



Multiplication facts ITP

Teaching tips

- Use visual aids such as a set of multiple cards (don't include zero as this would make the third multiple, the fourth card). Ask questions such as: What is this sequence of numbers? (use the word 'multiple') What's the third multiple of 5? So what are three fives? How many fives are there in 15? Continue to ask several questions of this kind keeping to the pattern in the questions. Occasionally, stop and record the questions they have answered, e.g. $5 \times 3 = 15$. Turn over/hide the numbers on some of the cards. Can children still count forwards and backwards and respond to a similar sequence of questioning?
- Using a counting stick (initially with the multiples marked) say the facts in order and then point to random divisions on the stick so that children have to work out which fact is indicated.
- Show children how they can use their fingers to keep track of how many multiples they have counted.
- It is important that children are shown how the questions they are responding to orally would look if they were recorded. Show children that a question such as 'What are three fives?' can be written as 5×3 . The language in this question is challenging for EAL learners – the word 'fives' is heard as a plural as well as a verb that implies the operation between 5 and 3. Children would benefit from continuing to see concrete objects displayed in groups of five and from linking this phrase to other more familiar phrases such as 'groups of'.
- Help children explore, identify and visualise patterns in multiples by, for example, highlighting the multiples of 2, 5 or 10 on a number grid.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20

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

Number grid ITP

- For more guidance on using arrays, see the 'Can I describe an array and write number sentences about it?' section of this resource.