

Counting, properties of numbers and number sequences

As outcomes, Year 2 pupils should, for example:

Respond to questions such as:

- From zero and then from any small number, count on in 2s, 3s, 4s or 5s to 30 or more. Can you go past 100? Now count back.

- Take a 4×4 number grid. Count on in twos from 1. Colour numbers you land on. Describe the pattern you get.

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

Try a 5×5 number grid.

Predict what would happen with a 6×6 number grid.

- 3, 6, 9, 12... 16, 14, 12, 10...
Describe each pattern. What is the rule? What are the next three numbers in each sequence?
- Fill in the missing number in this sequence:
3, 6, □, 12, 15

Create sequences with a given constraint: for example, make a sequence which has the numbers 6 and 12 in it.

Understand, use and begin to read: *multiple*.

Recognise that multiples of:

10 end in 0;

5 end in 0 or 5.

Begin to recognise that multiples of:

2 end in 0, 2, 4, 6, 8.

Begin to recognise two-digit multiples of 10, 5 or 2: for example, that 65 is a multiple of 5, or that 32 is a multiple of 2.

Respond to questions such as:

- Ring the numbers which are multiples of 10:
70 45 12 80 10 27

As outcomes, Year 3 pupils should, for example:

Respond to questions such as:

- Count on from any small number in steps of 2, 3, 4, 5, 10 or 100, and then back.
- Use a number grid computer program to display multiples of 2, 5, 10... on a 10×10 grid, and describe the patterns made.
- Take a 5×5 number grid. Count on in threes from 1. Colour numbers you land on. What do you notice?

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

If you went on, would 28 be in your sequence? Or 40? How do you know?

What would happen if you started at 2? Would the pattern be the same? Now try a 6×6 number grid. Try steps of 4 and 5.

- 2, 7, 12, 17... 78, 76, 74, 72...
Describe each pattern. What is the rule? What are the next three numbers in each sequence?
- Fill in the missing numbers in this sequence:
5, 9, □, 17, 21, □, □

Create sequences with a given constraint: for example, make a sequence which has the numbers 7 and 16 in it.

Use, read and begin to write: *multiple*.

Recognise that multiples of:

100 end in 00;

50 end in 00 or 50;

10 end in 0;

5 end in 0 or 5;

2 end in 0, 2, 4, 6, 8.

Respond to questions such as:

- Ring the numbers which are multiples of 5:
15 35 52 55 59 95
- Count in 50s to 1000, then back to zero. Write three different multiples of 50.
- What is the multiple of 10 before 140? What is the multiple of 100 after 500? What is the next multiple of 5 after 195?