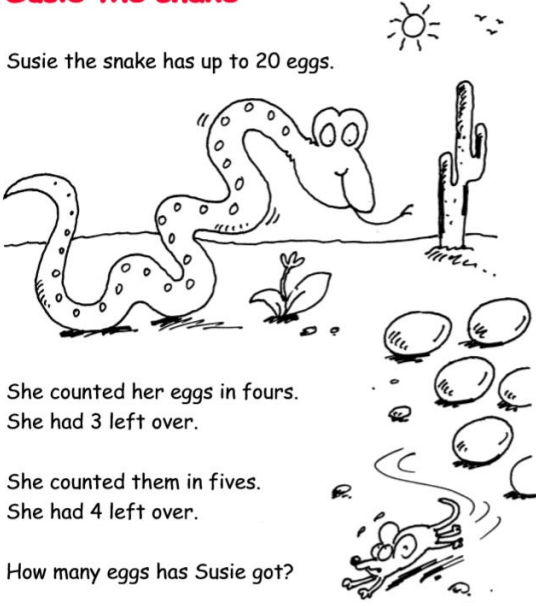


Objective: Solve problems including missing number problems involving multiplication and division

Year 4 Task:

Susie the snake

Susie the snake has up to 20 eggs.



She counted her eggs in fours.
She had 3 left over.

She counted them in fives.
She had 4 left over.

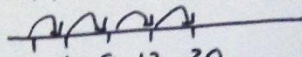
How many eggs has Susie got?

From Mathematical Challenges for able pupils
in Key Stages 1 and 2

Dfe 0083/2000

Worked example

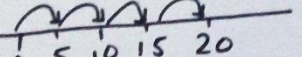
• Count in 4s... up to 20

| | | | | |
|---|------|------|------|----|
| $+4$ | $+4$ | $+4$ | $+4$ | |
|  | | | | |
| 0 | 4 | 8 | 12 | 20 |

So number of eggs could be

| | |
|----|--------|
| 7 | (4+3) |
| 11 | (8+3) |
| 15 | (12+3) |
| 19 | (16+3) |

• Count in 5s... up to 20

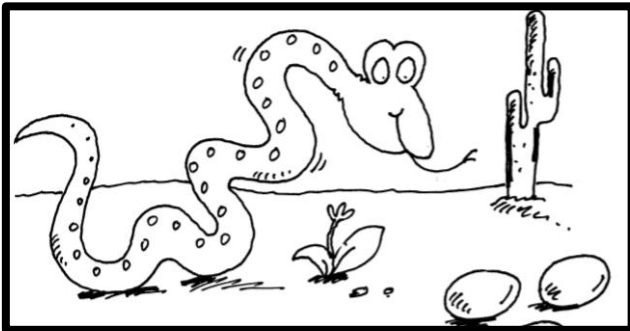
| | | | | |
|---|------|------|------|----|
| $+5$ | $+5$ | $+5$ | $+5$ | |
|  | | | | |
| 0 | 5 | 10 | 15 | 20 |

So number of eggs could be

| | |
|----|--------|
| 9 | (5+4) |
| 14 | (10+4) |
| 19 | (15+4) |

• Which number in both lists?
19 so 19 eggs

Variation



Sally the snake has up to 35 eggs.

She counted the eggs in 4s and has 3 left over.

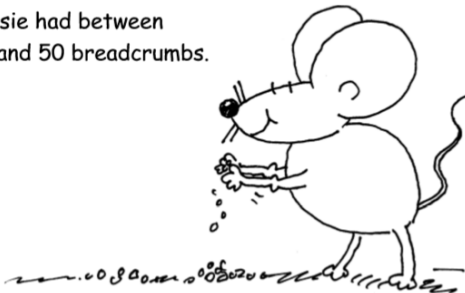
She counted the eggs in 5s and had 1 left over

How many eggs has Sally got?

Variation

Maisie the mouse

Maisie had between
30 and 50 breadcrumbs.



She counted the breadcrumbs in fours.
There were 2 left over.

She counted them in fives.
There was 1 left over.

How many breadcrumbs did Maisie have?

Answers: 31 eggs for Sally; Maisie has 46 breadcrumbs