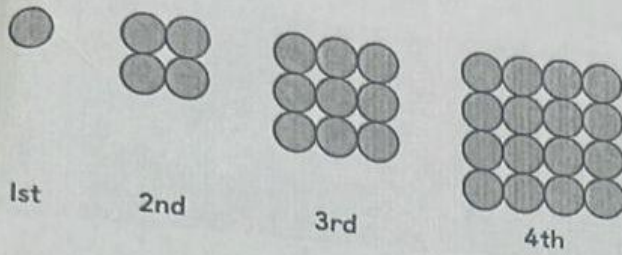


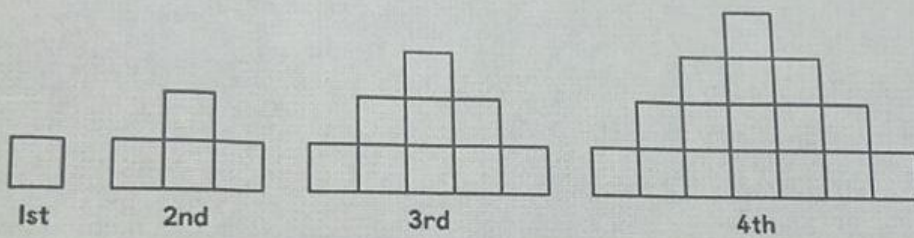
Look at the pattern below.



Complete the sequence.

| 1st term | 2nd term | 3rd term | 4th term | 5th term | 6th term |
|----------|----------|----------|----------|----------|----------|
| 1        | 4        |          |          |          |          |

5. Look at the pattern below.



(a) Complete the sequence.

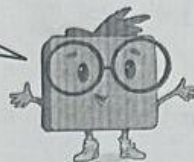
| 1st term | 2nd term | 3rd term | 4th term | 5th term | 6th term |
|----------|----------|----------|----------|----------|----------|
| 1        | 4        |          |          |          |          |

## Worksheet C: Make Special Number Sequences

1. Find the values of each of the following.

(a)  $4^2 =$  \_\_\_\_\_

$4^2 = 4 \times 4$



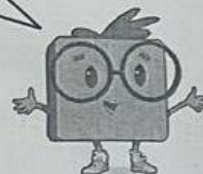
(b)  $3^2 =$  \_\_\_\_\_

(c)  $5^2 =$  \_\_\_\_\_

(d)  $7^2 =$  \_\_\_\_\_

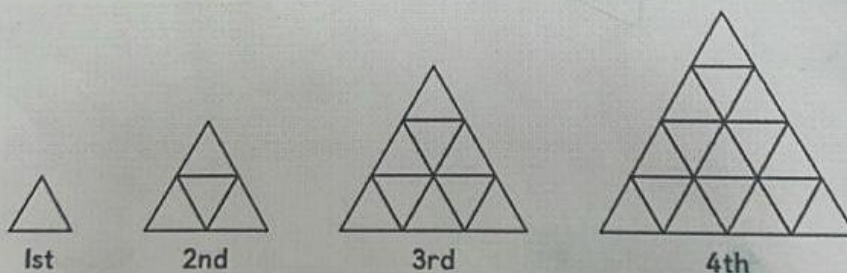
2. Circle the square numbers.

A square number is made by multiplying the number by itself.



17      25      38      36      64      66      88  
81      1      55      16      9      2      100

3. Complete the sequence.



| 1st term | 2nd term | 3rd term | 4th term | 5th term | 6th term |
|----------|----------|----------|----------|----------|----------|
| 1        | 4        | 9        |          |          |          |

6 Ralph looks at the chessboard pattern below.



He records the size of each term and the number of squares he sees in the table below.

| Size of chessboard | $1 \times 1$ | $2 \times 2$ | $3 \times 3$ | $4 \times 4$ | $5 \times 5$ | $6 \times 6$ |
|--------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Number of squares  | 1            | 5            | 14           | 30           |              |              |

a Complete the table. How did you do it?



b What pattern do you notice between the size of the chessboard and the total number of squares?

Make a generalisation about the number of squares on any chessboards.

Tick (✓) to show what you can do.

- ☐ I can recognise square numbers from 1 to 100.
- ☐ I can recognise and extend spatial patterns of squares and triangular numbers.