Dots

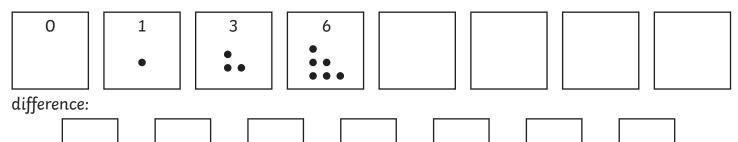
Triangles

Here is a pattern of dots as triangles.

0 1 3 6

Note: the first triangle has no dots.

Write the number of dots and find the difference between each number. Continue the pattern for the next 4 triangles.



What do you notice about the difference in the number of dots in each triangle?

Can you explain why?

Can you explain why?

Dots

Squares Here is a pattern of dots as squares. 0 Note: the first square has no dots. Write the number of dots and find the difference between each number. Continue the pattern for the next 4 squares. 0 1 difference: What do you notice about the difference in the number of dots in each square?

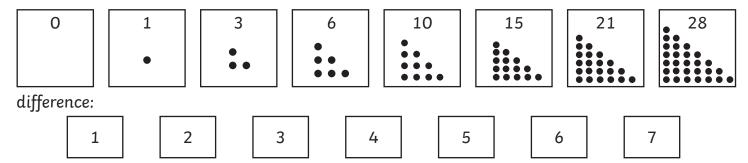


Can you explain why?



Answers

Triangles

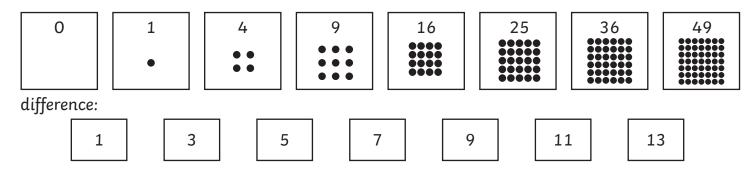


The difference is increased by 1 each time.

Each triangle has a new row of dots which increases by 1 each time.



Squares



The difference is increased by 2 each time.

Each square has a new row and column of dots which increases by 1 in each for every square (so 2 in all), and the corner dot (which makes the extra number of dots odd).

