Explore together

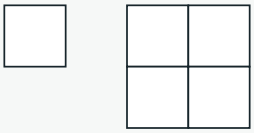
Build a Bigger Square

Build squares with equal rows. Find what changes when a square grows.

Get ready: Matching blocks or square tiles, and a pencil.

01 Make a square

Start with 1 row of 1 tile. There is 1 little square.
Now make 2 rows of 2. There are 4 little squares.



02 Grow it with 3 more

Keep the striped square. Add 1 to its right and 2 above.
Count the top-right corner once, in the top row.



Ask as you play

“Where are the new squares? How did you count them?” Count the smallest squares only.

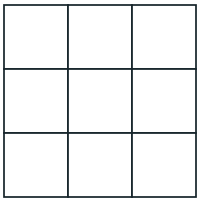
Try it yourself

Build a Bigger Square

Point, build, draw or tell. A grown-up can read each question.

1

How many little squares are in this grid?



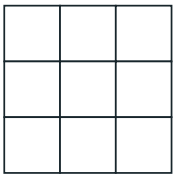
2

Circle the grid with as many rows as squares in each row.

A

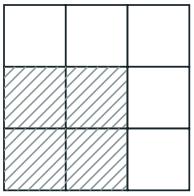


B



3

The striped squares are already there. How many more fill the big square?



4

Make or draw 4 rows with 4 in each. How many? Show how you counted.

5 • Try it if you want

How many new squares turn 3 rows of 3 into 4 rows of 4? How do you know?

Parent answer key

Build a Bigger Square

Keep this page with the grown-up.

1 9. Count each square or count 3 in each of 3 rows.

2 B. It has 3 rows of 3. A has 2 rows of 3.

3 5. Count 2 on the right and 3 above, or subtract 4 from 9. Count the top-right corner once.

4 16. Counting one by one, 4 + 4 + 4 + 4, 4 × 4, and two groups of 8 all work.

5 7. Add 3 on the right and 4 above, or use 16 − 9. Accept any correct explanation.

What did you notice?

Tried alone, tried with help, or skipped? Pointing, building and explaining all count.

Next time

If growing the square is tricky, build 2 by 2 with tiles and add just one side at a time. If it feels easy, grow 4 by 4 into 5 by 5 and show the 9 new squares.