

# Square Numbers

After working with factors and with prime numbers, turn to square numbers. Start by telling your child we're going to look at square numbers, at numbers times themselves.

Cut out 144 square pieces of card.

Ask your child to arrange them into a square. Write the corresponding equation onto the board.

So one square alone is  $1 = 1 \times 1$

Can he arrange 2 squares into a square? No.

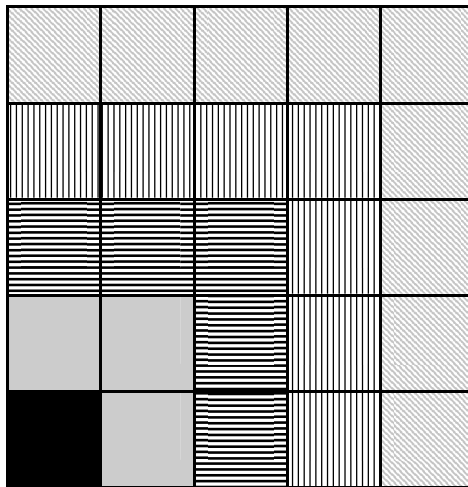
Can he arrange 3 squares into a square? No.

Can he arrange 4 squares into a square? Yes:

Looking at the arrangement we have  $4 = 2 \times 2$

Carry on until you reach  $144 = 12 \times 12$

On the following day, use a sheet of the graph paper you've photocopied to color in the following pattern. Start your child off and have her complete it up to  $12 \times 12$ :



Does he see how the squared numbers work? Do check to make sure that she understands that each consecutive square includes the preceding squares — i.e. that we're not looking at a series of upside-down Ls.