

# Reasoning about Numbers

*Year 2 Autumn Term Week 8*

*Lesson 3*

Today we will be learning to:

- investigate square numbers
- find ways of investigating numbers
- find square numbers by using a pattern.

Excuse me  
Owl, but I can't  
find any square  
looking  
numbers on  
my 100  
square!



A 'square  
number' is the  
number of  
objects needed  
to make a  
square shape.



# Mental Activity

Starting from 0.

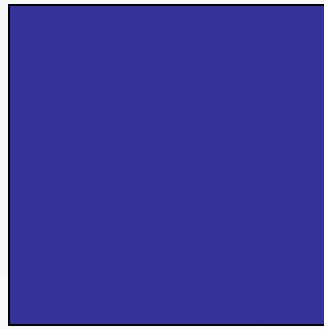
How far can you count up to?



# Main Activity

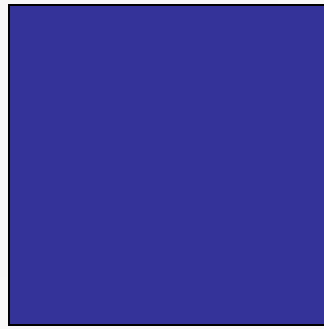
Today we are going to investigate square numbers.

What do you remember about a square?



How many sides?

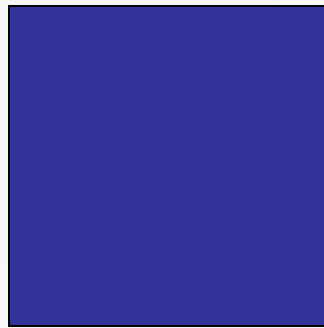
What do you remember about a square?



How many corners?



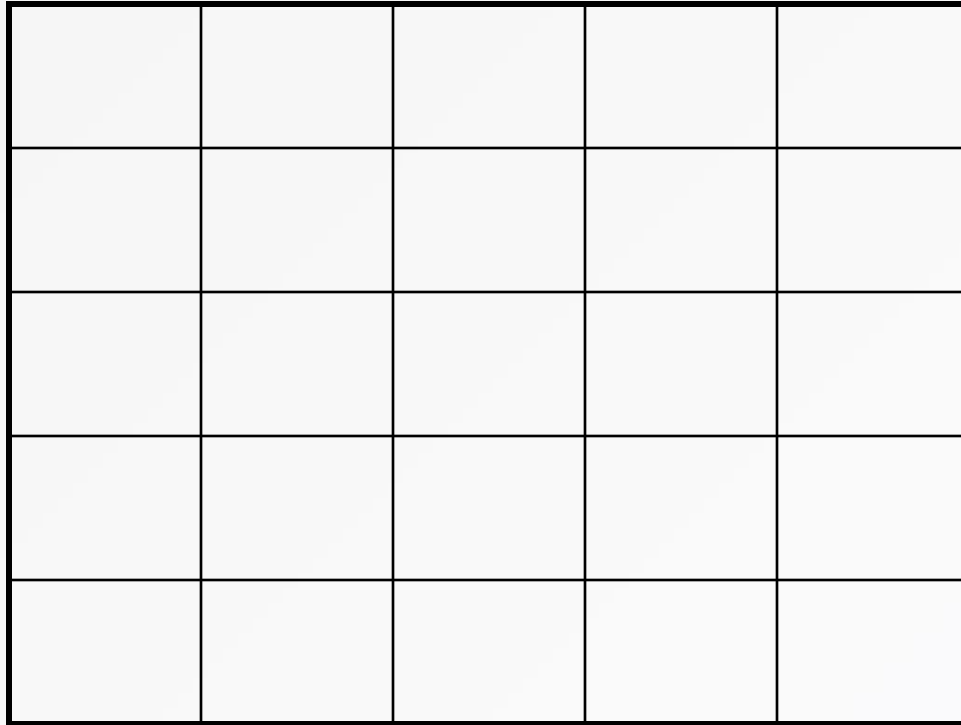
What do you remember about a square?



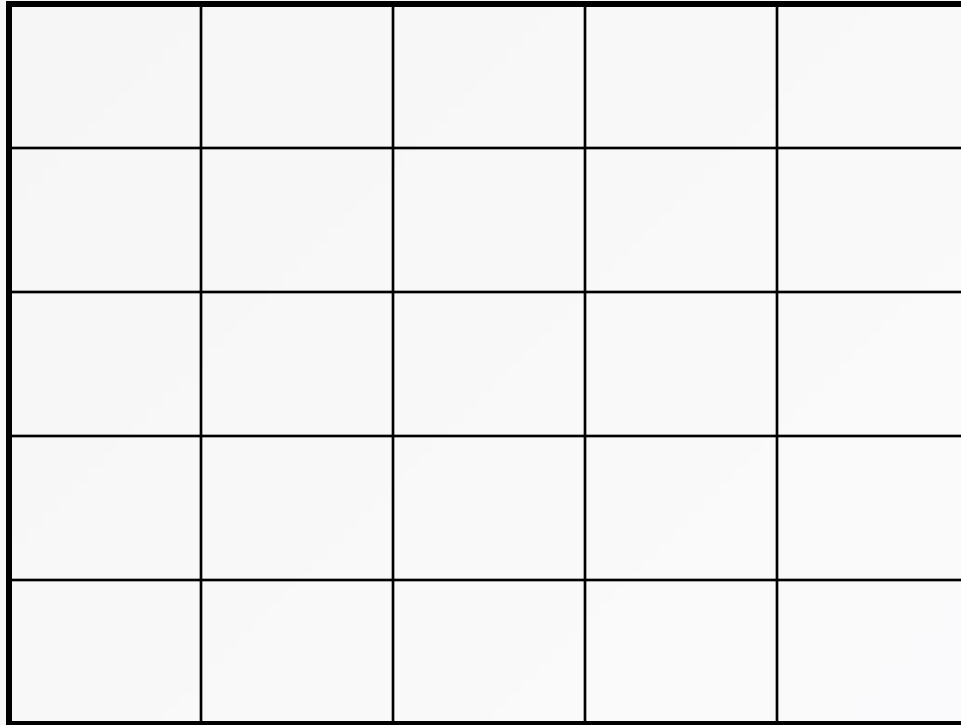
What is special about the length of the sides of a square?

All the sides of a square are the same length.

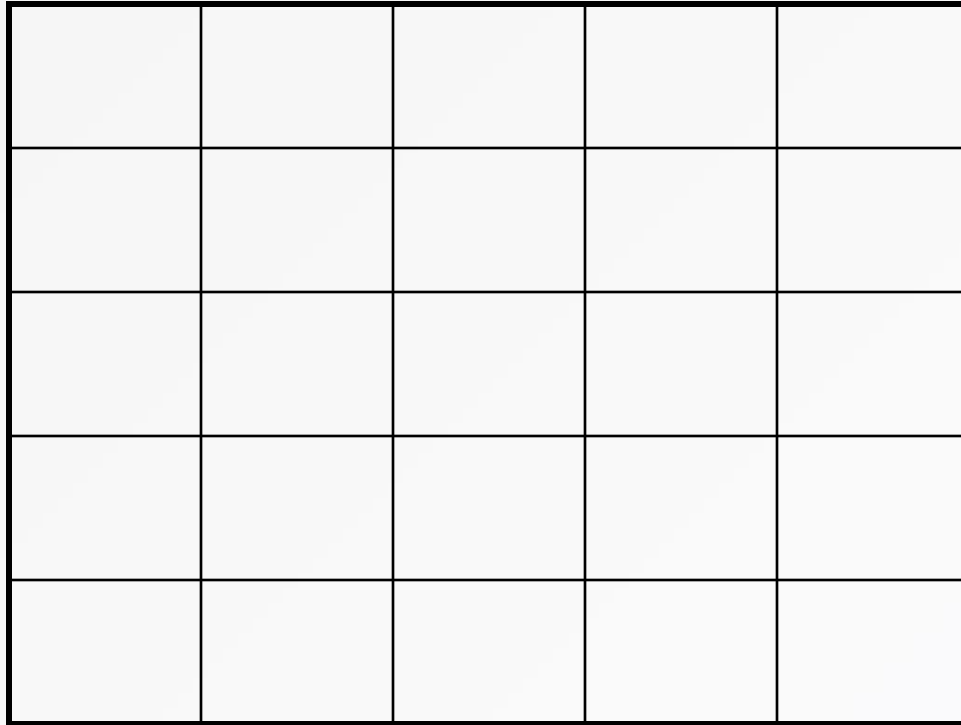
Colour in the smallest square  
on the board.



How many squares will be needed for the next sized square? 4 squares

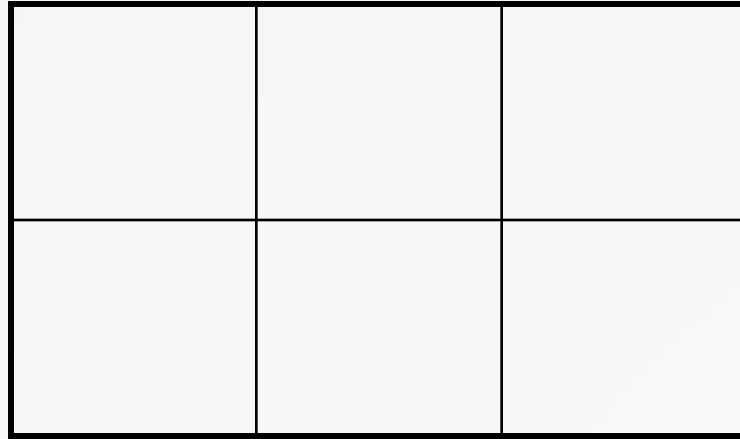


How many squares will be needed for the next sized square? 9 squares



What are these special numbers called?

These numbers are called  
square numbers.




How many small squares is this?

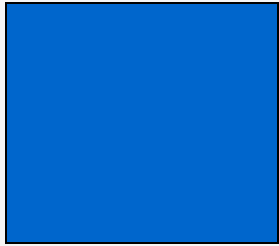
Is this a square number?

Why not?

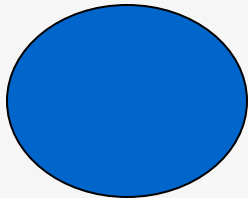
Today you are going to investigate which numbers are square numbers.



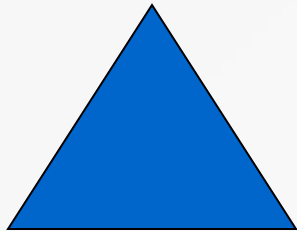
# Group Work



Investigate square numbers.  
Draw and cut out squares in  
increasing size.



Investigate square numbers.  
Draw and cut out squares in  
increasing size.



Investigate square numbers.  
What will the next square look  
like?