## Join The Dots investigation:

In this investigation, you will investigate the number of lines that can be used to join a different number of dots.

Draw 3 dots. How many lines can be used to join the 3 dots?

- Here is one dot. No lines can join a single dot.
- Here are 2 dots that can be joined by 1 line.

Continue with 4, 5 and 6 dots

Now draw a table to record your results:

| Number of dote | Number of lines |
| :---: | :---: |
| 1 | 0 |
| 2 | 1 |

Can you spot any patterns?

Can you predict the number of lines used with $7,8,9$ and 10 dots? Test your answers.

