Plotting Particles

Graph monthly concentrations of Particulate matter 2.5 to identify trends

In the ACT, air particles called Particulate matter 2.5 or $PM_{2.5}$ come from home wood heaters, industry, motor vehicles, controlled burns, bushfires, dust storms and plants in the form of pollen.
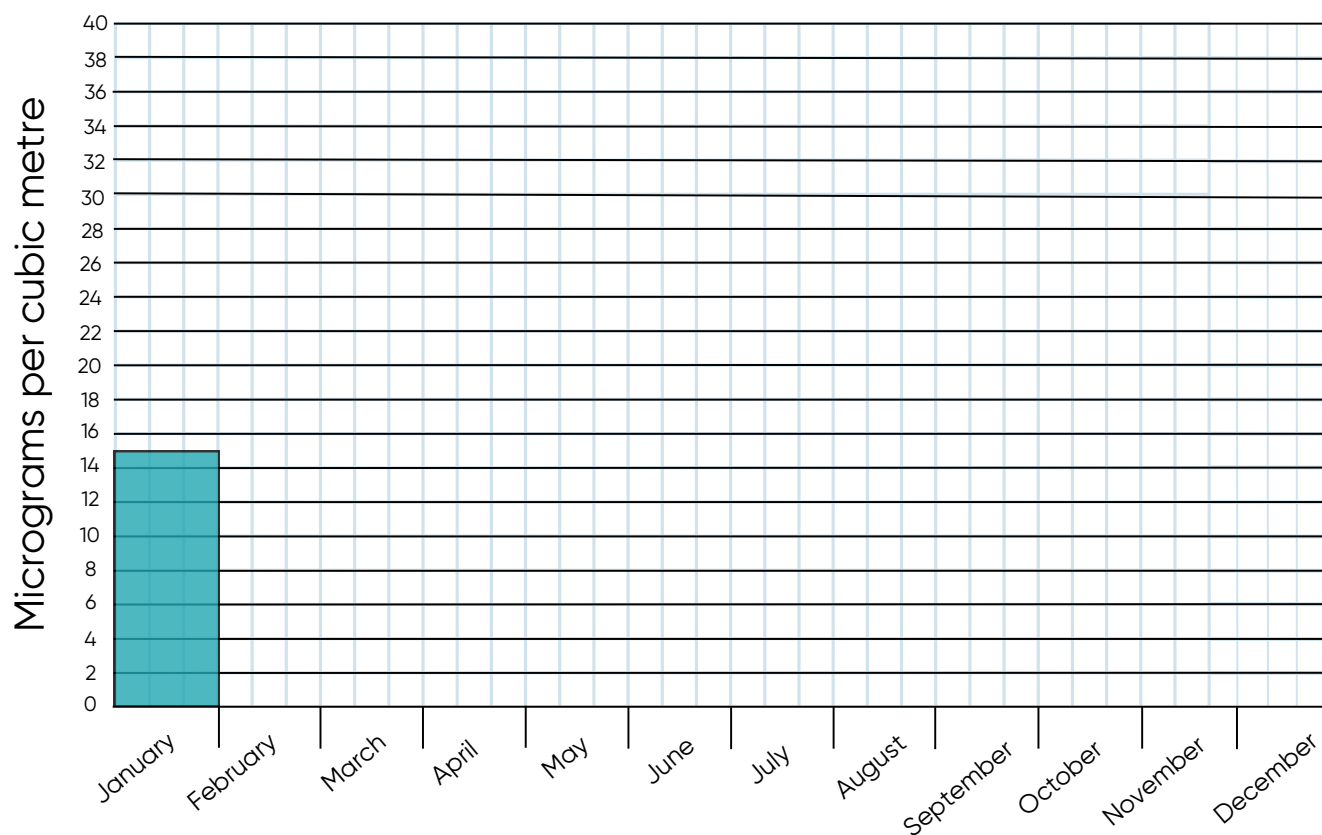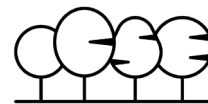
The Monash air quality monitoring station in Tuggeranong takes measurements of $PM_{2.5}$ every hour throughout the year. In this activity, you will use real data to identify trends in air pollution.

The table below shows the average of the highest $PM_{2.5}$ readings taken each month from 2016 to 2022.

Month	Micrograms per cubic metre
January	15
February	17
March	15
April	23
May	32
June	36
July	32
August	26
September	19
October	13
November	16
December	13

Using a computer spreadsheet program, graph paper or the graph template below, plot the concentrations in the air against the months from January to December.

The first month has been done for you.

Questions:

1. During which months are Particulate matter 2.5 concentrations greatest?

2. Can you suggest reasons why?

3. How does poor air quality affect human health and wellbeing?