# Name: ………………………………………………………………………………….

# Measuring local air quality

## Aim

To investigate how much pollution is in the air in your local environment.

## Method

1. Write about what you are going to investigate.

…..............................................................................................................................................

…..............................................................................................................................................

1. Write about the different variables in your experiment.

Independent variable: …..........................................................................................................

Dependent variable: …............................................................................................................

Control variables: …................................................................................................................

….............................................................................................................................................

1. On the top of each piece of graph paper, write the location of your particle trap and the names of the people in your group.
2. Cover your grids with a thin layer of petroleum jelly. Make sure that you can still see the grid lines.
3. Choose a good site for your air particle traps and use garden wire to fix it to something.

**Make sure that you have permission to put your trap here!**

## Results

1. Once you have collected your particle traps, count how many particles there are in each square. You can use a magnifying glass and a microscope to help.
2. Write down the number of particles in each square using the table below.

You should have one table for each of your particle trap locations.

**Location 1:**

A grid with black text

Description automatically generated

Calculate the mean number of particles in each square:

...................................................................................................................................................

**Location 2:**

Calculate the mean number of particles in each square:

...................................................................................................................................................

**Conclusion**

Compare everyone’s results for the average number of particles, then answer these questions:

1. Which area(s) had the highest pollution?

…..............................................................................................................................................

1. Did any of the sample cards have more or less pollution than you expected?

…..............................................................................................................................................

3. Describe how the outdoors pollution looks different to the indoors pollution.

…..............................................................................................................................................

…..............................................................................................................................................

…..............................................................................................................................................

1. Why do you think the results for the outdoors pollution were different to the ones for the indoors pollution?

…...............................................................................................................................................

…...............................................................................................................................................

…...............................................................................................................................................

…...............................................................................................................................................

A crossword puzzle with words

Description automatically generatedIf you finish early, try this wordsearch!