

# The Great Green Read

Connecting  
Stories



DONCASTER  
STORIES

## How clean is the air you breathe?

Fresh air is great for our lungs but polluted air can cause health conditions for humans and make it harder for plants and animals to survive. Have a go at these **two experiments** to find out about the air quality in Doncaster and you could **win a really cool prize!**

### Make a DIY air testing kit

This air sensor will help you see what you're breathing in without needing a microscope!

#### What you need:

Something heavy like a big stone or rock

Clingfilm

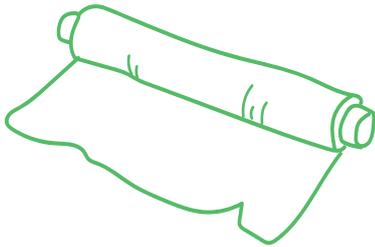
Vaseline or petroleum jelly

White paper

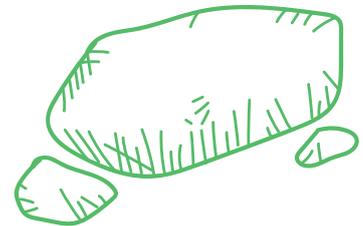
Check the weather forecast – this won't work if it rains!



**Top tip!** Make more than one air testing kit and put them in different locations to compare air quality. Try putting one near a busy road and another where there's more green space.



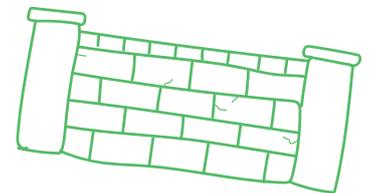
1. Cover your stone in a layer of cling film



2. Smear one side of the plastic covered rock in Vaseline or petroleum jelly. This will help the particles stick!

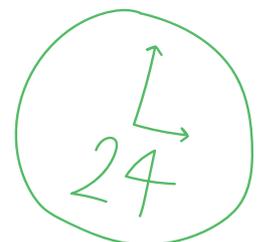


3. Find somewhere outside to place your rock where it won't get moved. Fence post or low walls are better than the ground



4. After 24 hours carefully remove the cling film and place it on top of your piece of paper

5. Inspect the plastic and write a list of the things you can see, describing them as best as you can



# The Great Green Read

## Looking at lichens

Lichens are **miniature ecosystems made of fungus** (you might know them better as moss) and they tell us a lot about air quality. Use the key below and make a note of all the lichens you can find outside. Once you're done **write down what you think this tells you** about the air quality.



### Oakmoss lichen

This bearded lichen is sensitive and doesn't like nitrogen. It's usually found in places where the air is clean.



### Golden shield lichen

This crusty lichen is tolerant of air pollution and it loves nitrogen! Nitrogen is burned by car engines and can harm our health.



### Old man's beard

This furry tentacle looking lichen can grow several feet long. It's usually found on tree branches and only appears in places where no coal has been burnt.

Tally:

Tally:

Tally:

If you find any other types of lichen then check out the **Woodland Trust website!** to find out what they are:

Use this space to make a note of any other lichens or fungi that you found:

Based on the lichens you found in your local area, write down what you think this tells you about the air quality where you live.

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