

### Experience and Outcomes

I can analyse how lifestyles can impact on the environment and Earth's resources and can make suggestions about how to live in a more sustainable way. **TCH 2-06a**

### Learning Outcome

Pupils will know that though air pollution can be invisible to our eyes the growth habits of living things can show us where it exists.



### Resources

- OPAL Air Survey Field Guide (1 per pupil)
- OPAL Simple Lichen ID Guide  
<https://www.opalexplornature.org/lichen-identification-guide>
- Making the *Invisible Visible* Survey  
<https://stories.rbge.org.uk/wp-content/uploads/2016/04/Lichens-Making-the-Invisible-Visible-An-Air-Pollution-Survey.pdf>  
(1 per pupil)
- Magnifying glass or hand lens (1 per pupil)
- Pencils 1 per pupil
- Clipboard (1 per pupil)

### Activity

#### **Air Quality Survey**

1. Pupils investigate lichens in the school grounds and using hand lens/magnifier and ID guide (making note of the lichens that tolerate pollution).
2. Complete the survey *Making the Invisible Visible*
3. Discuss results and what they suggest about air quality around the school grounds – where is air quality at its best, where at its worst?
4. Pupils make suggestions for how we can change our routines and behaviours to improve local air quality.

### Assessment

#### **Teacher Assessment of Pupil Contributions to Discussion**

Are pupils will make at least one suggestion for changes in their own behaviour which will help improve local air quality (and be able to suggest ways that we might detect improving air quality).

Pupils may make suggestions for changes in the behaviour of other people that will help improve air quality.