TAPS Cymru
Plan for Focused Assessment

Science & Technology topic: Living things or Materials	Year 5/6 Age 9-11	**Title:** Pollution survey

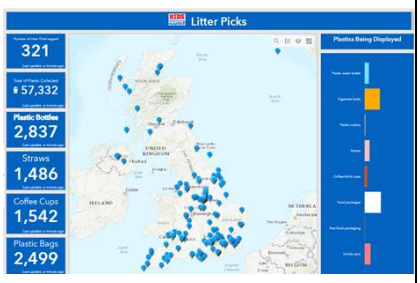
Enquiry Focus
I can evaluate methods to suggest improvements, engaging with scientific evidence to inform my own opinions.

Concept context
I can identify the threats to the development and health of organisms and recognise some natural defences, preventions and treatments.

Assessment Focus
- Can the children decide what data to collect to answer their question?
- Can the children evaluate their data to decide if they can answer their question?

Activity *Today we will be environmental scientists.*
Discuss a local pollution issue, for example, air pollution or litter outside the school. Raise a variety of questions about the issue and select one/some which are possible to investigate e.g. *which gate/route to school is the most polluted? What time of day/week is there the most traffic?* Consider how to collect data to find out more about this issue e.g. traffic survey, sound sensor (noise can act as proxy for pollution, but need to check for other noise like rain or children playing), litter picks, placing of pollution 'catchers' (urban areas, Vaseline on A4 paper on card hung outside for 1 week). https://dreambigathome.uk/activity/pollution-catcher/
Groups/class to collect data over set period of time (if groups trial different methods it provides for more interesting comparisons and evaluation discussions). P2
Discuss findings. Does the data answer our question(s)? How much confidence do we have in our data/conclusions? How could we improve our method e.g. to collect more accurate data?

Adapting the activity
Support: Provide template or guidance for recording of data.
Extension: Compare to other pollution data e.g. from other class/school.
The Kids Against Plastic app/ map could also give an opportunity to look at litter pollution and patterns https://www.kidsagainstplastic.co.uk/map/
Other ideas: PSTT Evolution in cities Peppered moth story.



Questions to support initial and later discussion
- Is air pollution/litter etc a problem near here? How do you know?
- How can we find out more about it?
- What data could we collect? Where? When? How often?
- How can we collect this data safely? How should we record this?
- *Later:* Does the data answer our question(s)?
- How much confidence do we have in our data/conclusions?
- How could we improve our method e.g. to collect more accurate data?

Assessment Indicators
Not yet met: Collects data under direction, but may not be clear about purpose or meaning of data.

Meeting: Contributes to discussion about data collection appropriate for answering the question. Can explain what data was collected and the degree of confidence in their findings.

Possible ways of going further: Makes links between local issue and pollution in other areas. Considers limitations of data collected. Puts forward suggestions for further data collection or ways to reduce pollution.

P2 Pupil box 2 – focus on science objectives. See TAPS pyramid for more examples.