

TAPS-NI Progression in Science Skills





Example topics: My garden, Habitats, New life	Primary 3/4 Age 6-8	Activity title: Daisies in a footprint
Science skill focus Predicting	Curriculum: Place Animals and plants have characteristics which are adapted to their habitat (PL1, PL2)	

Progression Focus

- Can children generate ideas and predictions?
- Can children begin to test predictions and to look for evidence?

Activity Today we are ecologists.

NB. Remember to pre-select an area for daisies (or dandelions etc) and check grass is not due to be cut. Slowly reveal a picture of a daisy (or other local flower) and support the children to identify it. Ask them to make predictions about where we might find the flower and how many would grow in different places. Explain that we will use a sampling technique to compare the number of daisies in different areas e.g. a cut out of their own or a standard foot (alternatively use a hoop).

Make predictions and discuss ideas about which areas in/near school will have the most/least daisies e.g. in the middle of the grass area, under a tree, beside a path/ curb, on a slope/flat area. (If the area is new to the children, use photos or make predictions on site).

Direct children to test their predictions, e.g. completing a tally chart in pairs by throwing their footprint/hoop into 3 different areas. ('Throwing' helps the sample to be more random, rather than placing it on the section with the most/least daisies to match their prediction).

Bring the children back together to discuss how their evidence compares to their predictions. If using own footprints, compare sizes and discuss how this affected evidence.

Adapting the activity

Support: A picture of a daisy to help identification. A clear window on footprint so that daisies can be marked with a dry wipe marker for counting. Option to take photos for those who cannot access ground level. **Extension:** Comparing conditions at each of the locations daisies where found. Create a list of conditions that the daisies prefer to grow in e.g. shaded or full sun, sheltered or exposed, deep soil or shallow soil. **Other ideas:** Survey other plants or places, or at other times of year.

Questions to support discussion

- Where should we look for daisies?
- Where do you think we will find the most/least daisies? Why?
- What did we find out?
- Was it what we predicted? Which surprised us?
- Who found the most/least daisies in their footprint?
- Where was the position where most/least daisies were found?

Progression Indicators

Not fully achieved: Pupils make simple predictions, but find it difficult to explain their reasoning or test their predictions e.g. searching for the patch with the most daisies before placing their footprint. They focus on their own ideas rather than the evidence e.g. *I was right*.

Achieved: Pupils make predictions and explain their ideas. They collect evidence from a range of areas and compare their evidence to their predictions.

Exceeded: Pupils use knowledge of plants when making predictions. They may consider the level of trust they have in their evidence, e.g. recognising the need for a larger sample or a way of 'throwing without looking'.