

Navigation by Plants KS3

Use the landscape to estimate compass points

Aim: Pupils become more observant in looking at trees and landscape details.

Some or all of the following points may be observed in your locality.

- A line of alder trees can indicate a watercourse, stream or river.
- Trees can also help to identify compass points: longer and more horizontal branches tend to be on the south side as they reach for the light. Branches on the north side tend to be more vertical. This gives the tree a characteristic 'tick' shape (see photo below). A lone oak in an exposed position such as the middle of field is likely to be a better indicator of this than trees in a woodland. Beech can also be a good indicator as it is faster growing than an oak.
- Mosses will also be more likely to grow on the northern, more shady side, of any tree trunk away from the sunlight.
- Some trees and shrubs can be 'sculpted' by prevailing wind, especially along coasts and in mountainous regions – see below.
- Look closely too at the bottom of the trunk/roots of trees, where you may find that the tree has grown with more anchor roots on the windward side (usually south west) and roots in the lee of the wind may have formed a 'buttress'.

Resources:

Ideally you will have local trees that you know demonstrate some of these features, in the grounds or on a field trip: Alternatively, use photos and video.



Natural Navigators
Navigate with plants

More springboards:

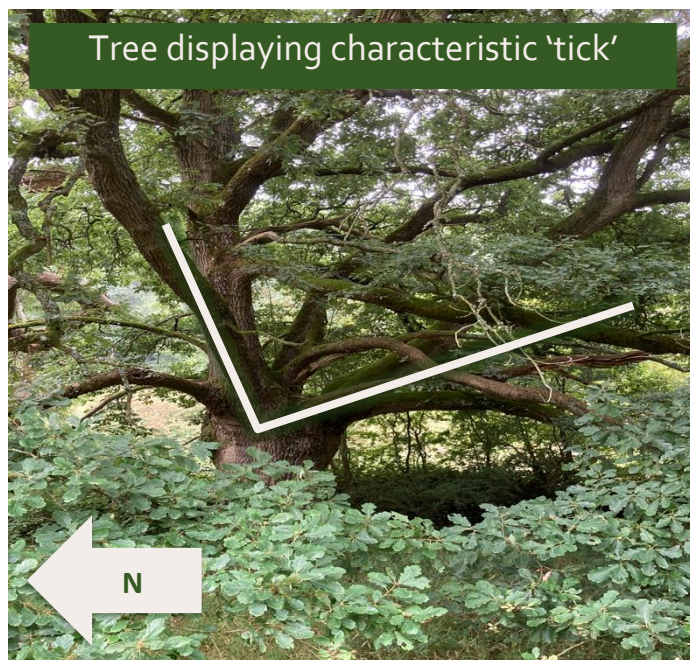
- ✓ Geography Learning Springboards: Field work
- ✓ Science Learning Springboards: Forces

Key vocabulary:

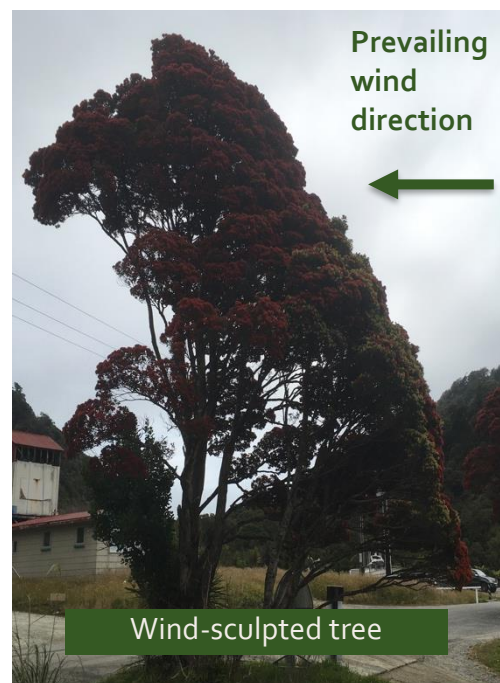
Prevailing wind
Buttress
Compass points

Success Criteria

- ✓ I can use fieldwork and observational skills to study and describe the geography of my school
- ✓ I can describe the effect of prevailing winds on trees I see in my surrounding environment
- ✓ I can use compass directions



Tree displaying characteristic 'tick'



Wind-sculpted tree

