

Secondary Science – Outdoor Learning

Available March to November

This full day ITT/CPD session is designed for students studying PGCE Secondary Science courses. The day is structured into 5 sessions that: explore the benefits and challenges of outdoor learning; provide a range of activity ideas for woodland ecology, photosynthesis and climate change, and plant adaptations; provide an opportunity to design and plan future activities.

Introduction

PowerPoint presentation – the outdoor classroom and experiential learning

Woodland ecology - an active practical session

What's for dinner? An activity that gather evidence of feeding relationships in the woodland
Food chain challenge and Build a web
Energy Flow relay game

Forests for the Future; trees, forests and climate change – an active practical session

What is climate change and where do you stand?
Capturing carbon – the process of photosynthesis and how it can help to mitigate climate change
Moving carbon – exploring different scenarios through history and the impact on CO₂ levels
Forests for the Future – design a forest for the future that would help mitigate climate change

Plant adaptations

Evergreen vs deciduous – a relay game that explores water transportation and transpiration adaptations
Plant survival strategies - comparing an IBSE (inquiry based science education) approach to a more structured team challenge

Activity planning session

Students, individually or in small groups, may like to identify part of the science curriculum they would like to explore in the activity planning session.

If students are delivering lessons that cover relevant aspects of the curriculum during their practice they could then develop activities that could support this in the future.