



GO DISCOVER... ENVIRONMENTAL GEOGRAPHY

WHY USE TREE TOP ADVENTURE TO DEVELOP STUDENTS' KNOWLEDGE AND UNDERSTANDING OF ENVIRONMENTAL GEOGRAPHY?

"Tell me and I forget, teach me and I may remember, involve me and I learn." While we're not suggesting our Tree Top Adventure will nurture the next President of the United States, we do agree with Benjamin Franklin's sentiment. The classroom can teach fundamental concepts, but there is no substitute for real life experiences out in the wider world.

GO BITESIZE

- What is the biodiversity in the forest?
- Discuss chemical and physical processes that are affecting the forest in a geographical way?
- Discuss how urbanisation affects the forest environment.
- Using the terms 'low, medium and high' or 'small, medium, and large', define the different characteristics of these soils:

SOIL TYPE	PARTICLE SIZE	AIR CONTENT	PERMEABILITY TO WATER
Clay soil			
Sandy soil			
Loam			

GO PROJECT

Gather soil samples from the forest and use these techniques to assess their contents back in the classroom:

- 1. DETERMINING WATER CONTENT:** Weigh the original sample of the soil, then heat the soil in a warm oven. Reweigh the soil and repeat the steps until the weight of the soil no longer changes. The total loss of mass is equal to the loss of water.
- 2. DETERMINING HUMUS CONTENT:** First complete the water test and use the remaining soil to identify the humus content. Heat the dry soil vigorously so that the humus burns away. The loss of weight is the mass of humus that was burnt away.
- 3. DETERMINING AIR CONTENT:** Weigh a fresh sample of soil in a beaker. Slowly add water to the beaker until the water is level with the top of the soil. Reweigh the beaker - the extra mass is due to the water that has filled the air spaces. The volume of 1g of water is equivalent to 1cm³.