

Pre Lesson Activity Ideas

Introduction

Tell the children they will be learning about soil at Rosemoor.
Ask them what they think soil is.

Activity

Take the children outside to the school grounds and collect soil samples to bring on the visit.

Students can investigate and record what is in soil. Look for stones animals and plants (e.g. roots). Use of magnifying glass could be useful for this activity.

Dry soil samples for several days for Rosemoor visit.

Note: If the school has no garden, children might like to bring soil samples from home instead.

Post Lesson Activity Ideas

A very extensive and detailed web site on soil with lots of activities and resources for Primary and Secondary School students and teachers that is FREE - www.soil-net.com

Introduction

Ask the children to recall the visit to Rosemoor.
What did they learn about soil and compost?
What is the difference between them?

Activity 1

Each child to bring a sample of soil from home. Look for similarities and differences between soils (e.g. colour, texture).

Activity 2 - *Get growing*

Start planting in pots or outside thinking about what soil is giving to the plants. Try experiments with different types of soil (from home, compost and school) to see if this has an effect on their growth. Does adding fertilizer make any difference, which soil needs watering the most etc

Activity 3 - *Water flow*

Fill glass jars or cylinders with different soils (sand, loose school soil, rammed school soil, clay, mixtures of soil with more or less sand). Test how water flows through each type of soil. Explain difficulties for plant roots in getting water in poor draining soil.

Activity 4

Make or explore school compost heap /bin.

Extension - Classroom Compost Column

Using empty plastic drinks bottles, make a compost tower with instructions from www.saps.plantsci.cam.ac.uk

For younger children it might be helpful to draw lines on the bottles ready for cutting out.

Pre Lesson Activity Ideas

Post Lesson Activity Ideas

Activity 5 - Soil Painting

Using soil to find different colours. These can be mixed with water to make paints which children can use to paint a picture with. Other natural materials found outside could be used to add more colour.

- www.nacdn.net/education/contests/poster/2009/soil_painting.pdf - some instructions on painting with earth to give some ideas.
- peterward-artist-illustrator.co.uk/ - a local Devon artist who works with earth. Some ideas of colours and design from looking at this site.

Activity 6 - Worms

Go hunting for worms, what is the best way to find them? Watering the soil is thought to be the best as the worms cant breath in water so come to the surface, however some people think stamping on the ground charms them up to! Funny web site: www.wormcharming.com/

Mark out a meter square and water this area to see how many worms come to the surface. If it is good soil then you might be amazed how many worms live here (remember this wont be all of them as some worms will move outwards as well as upwards).

Identifying worms, there are a number of different types and if you would like to have a go look at the web site www.opalexplornature.org/soilsurvey , this has an identification key and information on surveying earthworms and soil.

Make a wormery, find instructions on the web e.g.

- www.thekidsgarden.co.uk/MakingAWormery.html or
- www.soil-net.com/sm3objects/activities/Activity_Wormery1.pdf

Observe their activity over a number of days before releasing them back outside. Could also try to make or buy a wormery for making compost.