



# INVESTIGATING SOIL

by **John Moreau**, St Fintan's National School, Sutton, Dublin.



## Introduction

This activity was originally suggested by my old mentor, Paddy Madden of Marino Institute of Education. The children make “soil soup” in a jam jar, but as the soil settles at the bottom of the jar, the ingredients of soil (sand, silt and clay) settle into separate layers. There are a lot of integration options such as the importance of soil in farming and protecting soil as a resource. Older classes could study the Great American Dustbowl phenomenon of the 1930’s as an example of farmers not taking care of the land. Last year, I had the 6th classes work out the percentage of clay, silt and sand in their soil samples for maths integration.

## Background

Most adults don’t realise that the soil in our garden has four main ingredients. These are:

- Clay
- Sand
- Silt
- Humus or organic material

In this experiment the children collected soil samples in school and using a simple procedure divided the soil into the four ingredients above.

## You will need

- Clean jam jars with lids
- Soil samples
- Water

## Method



- Take a soil sample
- Fill the about one third of the jar with soil, fill the rest of the way with water and shake vigorously.
- Leave the samples to settle in the jar for about 2-3 days
- You should see that the heavy sand has sunk to the bottom. The lighter silt settles on top of this and the lightest ingredient, the clay settles on the top.
- The humus or organic material may float to the surface.

