

Infiltration

http://www.ccge.org/resources/learning_centre/classroom_activities/infiltration.asp

The amount of water that can infiltrate into the soil is influenced by precipitation factors and the nature of the soil. The precipitation factors are type of precipitation, amount, duration and intensity of precipitation. The soil characteristics most important to infiltration are porosity, permeability and texture of the soil.

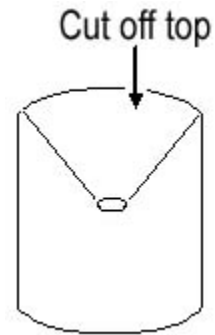
Materials

For magic geofoms:

- Soil sample
- 2 litre plastic bottle with top cut off
- Paper coffee filter
- Water
- Measuring cup or graduated cylinder

Procedures

- Set up bottle as shown
- Place coffee filter in funnel
- Fill coffee filter with dry soil
- Make sure soil sample is spread evenly
- Pour ml of water slowly over soil do not let overflow
- Record time it takes for water to be absorbed into soil and begin to drain into bottle
- Use measuring cup to determine amount of water that drained through soil and record
- Record amount of water retained in soil



Analysis

- Compare your results with another soil sample.
- In which soil did the water drain begin to drain most quickly?
- Which soil absorbed the most water?
- Which soil absorbed the least water?
- Which soil would be most helpful in preventing floods? Why?
- Which soil would be least helpful in preventing floods? Why?

Soil Type	Absorption Rate	Drainage Amount	Water Absorbed