

Activity-50: Is the soil from different places same?

The above two activities are dealt under a common heading.

For this study collect soil from different places (sources).

Explore your surroundings. If your native town is elsewhere, collect some soil when you are returning back from a vacation.

Procedure:

To study soil, you must know what to observe for. The following table sets out a set of characteristics of soil.

CHARACTERS	OBSERVATION
Do the particles cling to magnet when rubbed with one?	
Colour of soil on ground	
Colour of dry soil	
Colour of wet soil	
Colour of soil solution	
Texture of soil-how does it feel in your hand.	
Smell of dry soil	
Smell of wet soil	
What is the size of the largest particle in the soil?	
What is the size of the smallest particle in the soil?	
What is the water content of the soil? (Per 100 grams).	

What is the water percolation rate of the wet soil? Volume per unit time	
What is the water percolation rate of the dry soil? Volume per unit time.	
Do you find any living organisms in the soil? If found describe them.	
Do you find the shells, dried skin or bones of any living organisms in the soil?	
Do you find any eggs in the soil?	
Did you find any dead plant material in the soil?	
Can you compress the soil in your palms?	
After sun dried, does the soil retain any shape?	
What is the pH of the soil?	
What are the shapes of the different particles of the soil when you observe under a microscope? Describe by mentioning the number of sides/surfaces of each particle.	
After you boil the soil in some water, do you find any particular kinds of particles missing from the sample? If so, mention them.	
Heat the soil for some time at a very high flame in a crucible.	

Do you observe a colour change during/after heating or cooling?

Can you sense any odours during /after heating?

After cooling dissolve in sufficient quantity of water, do you observe any change in colour of solution?

Under the microscope, do you observe any new kinds of particles or find any particular kinds of particles missing? If so, mention them.