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Activity: What's in Soil?

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What's in the soil?	Why is it important?
Sand Drains well but cannot hold onto nutrients [Large Particles]	Sand is an important part of the soil because it provides drainage
Silt Can hold water, but can be hard to drain. Can hold limited nutrients. [Medium particles]	Silt is an important part of the soil because it holds onto limited nutrients and holds onto water
Clay Holds water well but can become heavy and waterlogged when wet. Can hold nutrients. [Small particles]	Clay is an important part of the soil because it holds water well and can hold onto nutrients
Air Fills all the gaps in soil and allows plant roots and animals to breathe. 35 to 40% of a good soil is air! [A Gas]	Air is important in the soil because it allows the plant roots and animals to breathe
Water Clings to soil particles and is taken up by the plant roots	Water is important in the soil because without it the plants and animals would die
Organic matter Releases nutrients slowly as it rots and improves water Holding	Organic matter is important in the soil because it improves water holding and helps stick the soil together
Animals Includes insects, bacteria and earthworms	Animals are important in the soil because they help rot down dead material

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This activity helps students to understand the components that make up soil and their importance.

Sand particles: form lightweight, free-draining soils; cannot hold onto nutrients

Clay particles: hold water well; can become heavy and waterlogged when wet; can hold onto nutrients**.**

Silt particles: hold water; can be hard to drain; can hold only limited nutrients**.**

All soil contains sand, silt and clay particles, but in differing proportions. Sand particles are the biggest, then silt and finally clay.

Water: clings to soil particles; is taken up by plant roots**.**

Air: fills gaps in soil; allows the plant roots and animals to 'breathe'.

Just under half, about 35 to 40%, of a good soil is made up of water and air! So 'Which one is there most of' - could be air!

Organic matter: includes manure, leaf mould and compost; releases nutrients slowly as it rots; improves water holding. You can say it helps stick the soil together!

Animals: includes insects, bacteria and earthworms; help to break down dead materials**.**

Soil is all around us; in the school playground, at the park and in our gardens. We need to look after our soil.

Suggested key words for class discussion:
Sand, Nutrients, Water holding, Silt, Drainage, Organic matter, Clay, Particles, Air, Animals, Rot, Dead material

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