

Soil Observations Year 1

Name _____

Date _____

Site locations _____

Today I am learning observation skills. Scientists use observation skills to look closely and see what they notice.

Year 1, Material Strand, Knowledge: Soil and rocks have different properties, including firmness, texture, colour and heaviness

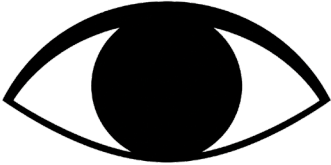
I am able to describe the soil using the vocabulary of

- Clay
- Crumbly
- Wet to touch
- Humus or organic matter
- Silt
- Free flowing
- Compact
- Sand
- Loam



Soil is the scientific name for dirt, earth or mud

Use these prompts to help you decide what soil type you are observing today.

Does it feel like . . . 	Yes or no	Does it look like . . . 	Yes or no
Wet to touch		Can I see pieces of leaves or twigs in the soil?	
Dry to touch		Does the soil look like little crumbs?	
Crumbles when I roll it between my fingers		Does the soil look like sand?	
Forms a ball or collects together when I roll it between my fingers		Is the soil • Dark brown? • Mid brown? • Light brown? • Orange clay colour?	
Does it flow between my fingers like sand?			

Now from your 'yes' or 'no' now have a discussion of what soil type you think it is

Sand		Sand soil is mostly found in hot climates. It does not easily retain or hold water.
Silt		Silt soil has particles that are medium sized and formed from sediments found near lakes, rivers and run off areas.
Loam		Loam soil is made from medium sized particles that are full of nutrients. Loam soil is very suited to growing plants.
Clay		Clay soil has the smallest particles and is able to retain water well. It collects together when squeezed in your hand.

Teacher Notes

Soil in the Te Pourewa valley is a mix of sandy silt clay. It also contains peat and mud from tidal flows. The base level is built upon volcanic rocks (such as rhyolite) weathered from volcanic eruptions from the Auckland and Taupo Volcanic fields.

La Roche, J., & La Roche, S. (2022). The Pourewa valley story. Author.

Other possible links

Science Learning Hub. (n.d.) Taupo eruptions <https://www.sciencelearn.org.nz/resources/941-exploding-taupo>

Science Learning Hub. (n.d.) Volcanic rocks <https://www.sciencelearn.org.nz/resources/650-types-of-volcanic-rock>

Science Learning Hub. (n.d.) Auckland Volcanoes <https://www.sciencelearn.org.nz/resources/655-auckland-s-volcanoes>

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