

# Soil can get gritty

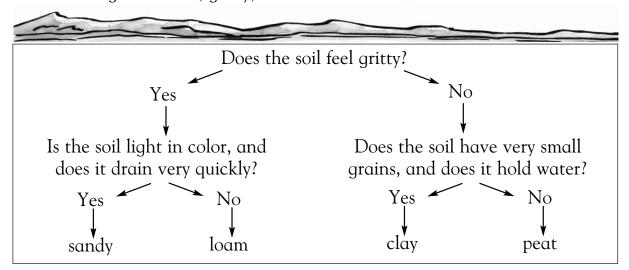
# Background knowledge

Soil is mostly made up of grains of weathered rock (broken up rock) and varying amounts of humus (mainly decayed plant material). The type of soil depends on the mix of humus and on the size of the grains of rock. The grains can be very small and smooth, such as in clay, or they can be larger, like grains of sand or even a piece of gravel.

### Science activity

Use this key to identify the soil described below.

The soil is light in color, gritty, and drains well. The soil is ......



Different plants prefer different types of soil. Which type of soil would be best for a plant that does not require a lot of water, such as a cactus? Explain your choice.

# Science investigation

① Take extra care - ask an adult to supervise you.

**Part I:** Obtain soil samples from different locations. Use the key above to see if you can identify your soil types. Make sure to save some of the soil for Part II.

Part II: You can separate the different parts of soil by using water. Pour water into a quart jar until it is about three quarters full. Stir in about 1 cup of soil and mix well. Observe the soil and water mixture for a few minutes. Describe what you see. Repeat this for different soils using a clean jar of water.







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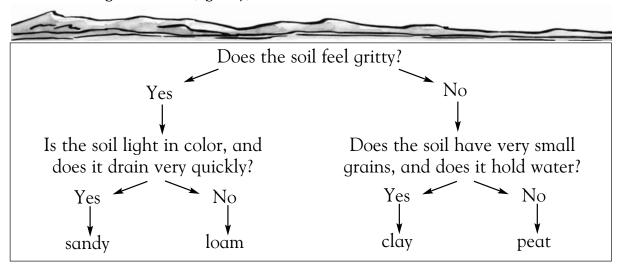
### Background knowledge

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### Science activity

Use this key to identify the soil described below.

The soil is light in color, gritty, and drains well. The soil is ......Sandy.....



Different plants prefer different types of soil. Which type of soil would be best for a plant that does not require a lot of water, such as a cactus? Explain your choice. Sandy soil would drain water away from the roots and prevent them from rotting.

# Science investigation

① In Part II, if the soil is composed of different size particles, the water will separate them based on their density. For example, humus will float. Usually larger particles of soil settle under smaller particles.





