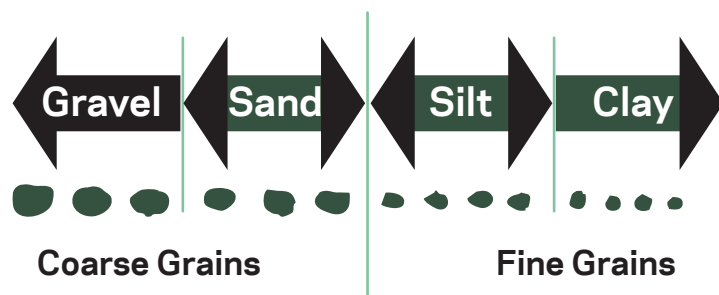


Use the cards to answer the questions

1. Minerals

Soil minerals are the inorganic parts of soil, made up of various types of rock and mineral particles such as sand, silt, and clay.

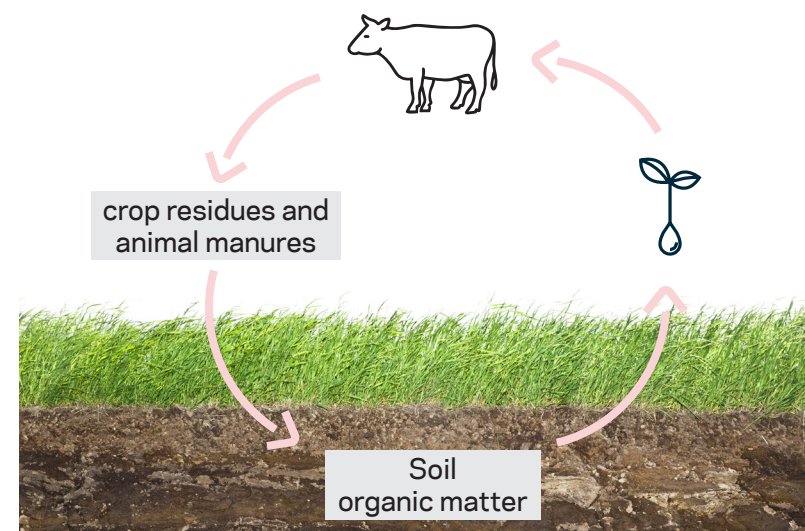
These minerals provide important physical and chemical properties to the soil, such as texture, porosity, and nutrient availability. Some minerals like clays can help the soil water storage capacity because their fine grains have a larger surface area to hold water.



2. Organic matter

Organic matter in soil is made up of dead and decaying plant and animal material, as well as living organisms such as roots and microbes.

Organic matter contributes to soil fertility by providing nutrients to plants and supporting soil structure and how much water it can hold. It also helps to store carbon, which can contribute to reducing climate change.

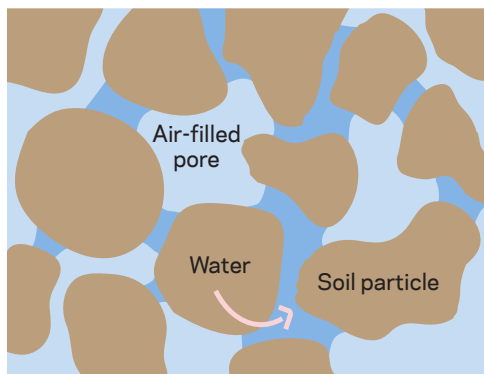


Use the cards to answer the questions

3. Air

Soil also contains air spaces, which are needed for plant roots to respire and for soil organisms to survive. It also provides space for water to drain through.

Air in soils affects the soil texture. Sandy soils have more air space between particles, which allows for better aeration. Clay soils can become firmly pressed together and have poor aeration.



4. Living organisms

Soil is home to a variety of living organisms, including decomposers e.g. bacteria and fungi and detritivores (e.g. insects and worms).

These organisms play important roles in nutrient cycling, decomposition, and other ecosystem functions that support plant growth and soil health. They break down dead matter and release nutrients, like potassium, magnesium and nitrogen, into the soil.

When worms dig through the soil, they mix different layers of soil together, helping to distribute nutrients and organic matter more evenly throughout the soil profile, and their tunnels help with drainage and aeration.

