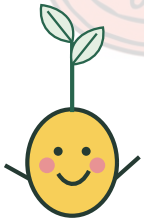
Soil Sponge

Compare how much water drains through sand, soil and hydrated coir.



Little growers, big discoveries

20 MIN | SOIL AND WATER | AGES 5+ WITH AN ADULT

Grab your kit

3 matching plastic cups with drainage holes prepared by an adult, 3 clear collecting pots, clean sand, potting soil, hydrated coir, a measuring jug, water and a tray.

Your discovery mission

1. Label the cups Sand, Soil and Coir. Add the same volume of material to each cup, without pressing it down. Start with samples that feel similarly moist.
2. Support each cup over its own collecting pot on the tray, with the holes above the collected water. Check that all three cups drain freely.
3. Slowly pour 100 ml of water into each cup. Start a timer after each pour and give every cup five minutes to drain.
4. Measure the water in each collecting pot. Less collected water suggests that more stayed in that sample during the test.

What did you discover?

Water collected after five minutes
Sand: _____ ml Soil: _____ ml Coir: _____ ml

Draw your discovery

Let’s wonder...

Which sample let the most water through? Why might roots need both water and air?

NEXT ADVENTURE

Repeat with fresh samples. Do you get a similar result? Starting moisture and how tightly you pack the cups can change the results.

An adult makes the holes. Avoid breathing in dry dust, keep materials away from your face and wash hands afterwards.