Soil detectives.

Name: _____ Class: _____

Soil is a mix of lots of things. Be a soil detective: find out what is in your soil, and which soil holds the most water.

Part A · What is in my soil?

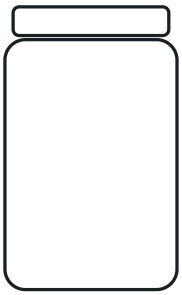
1. Spread a spoonful of garden soil on a white plate.
2. Look at it closely with a magnifying glass. Move it around with a pencil.
3. Tick everything you find.

- [ ] Pebbles
- [ ] Sand grains
- [ ] Sticky clay
- [ ] Bits of dead leaves
- [ ] Twigs
- [ ] Roots
- [ ] Seeds
- [ ] Worms
- [ ] Insects or slaters

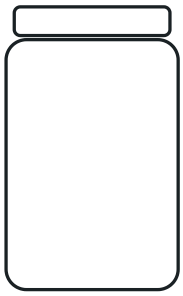
DRAW THE MOST INTERESTING THING YOU FOUND, AND LABEL IT

Part B · Soil in a jar

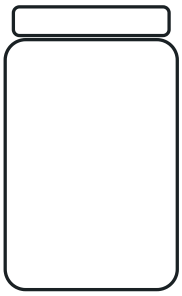
1. Half fill a clear jar with garden soil. Add water until it is nearly full. Screw the lid on tight.
2. Shake it hard for one minute. Put it on a windowsill.
3. Look after one minute, one hour and one day. Draw what you see, and label the layers.



After 1 minute



After 1 hour



After 1 day

Which layer settled first? Why do you think that is?

Stay safe. Use soil from the garden, not potting mix: potting mix can carry germs that make people sick. Wear gloves, keep soil away from your mouth and eyes, and wash your hands afterwards.

Part C · Which soil holds the most water?

You need: a cup each of sandy soil, clay soil and garden soil; three funnels or cut-off drink bottle tops; paper towel; three measuring jugs; a jug of water; a timer.

1. Line each funnel with paper towel. Put one cup of soil in each funnel.
2. Stand each funnel in a measuring jug.
3. Pour 200 mL of water onto each soil, all at the same time. Start the timer.
4. After 5 minutes, read each jug. Write the numbers in the table.

MY PREDICTION

I think _____ soil will let the most water through, because

_____

WAS IT A FAIR TEST?

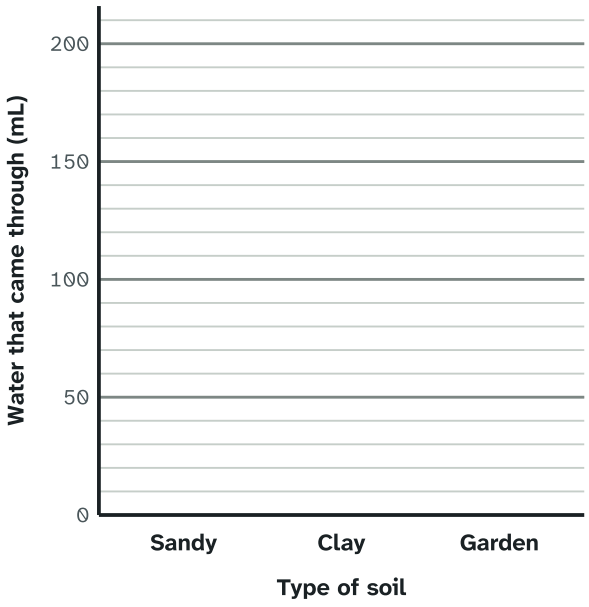
The one thing we changed: _____

The things we kept the same (tick):

☐ Amount of soil ☐ Amount of water ☐ Time ☐ Size of funnel

SOIL	WATER POURED IN	WATER THAT CAME THROUGH
Sandy soil	200 mL	mL
Clay soil	200 mL	mL
Garden soil	200 mL	mL

My column graph



Which soil held the most water?

_____

Was your prediction right?

_____

Which soil would you use for a vegie garden? Why?

_____

READ A PLANT TAG

Find a plant tag at home or at a nursery. What does it say about soil? Which of your three soils would suit that plant?

_____