

BACKYARD SOIL DETECTIVE

Grades 3-6 • Soil Science • Observation • Evidence

YOUR MISSION

Choose a patch of ground outdoors - a yard, schoolyard, garden, park, or other safe place. Look closely at the soil and the life around it. Your job is to collect evidence about what is happening beneath your feet.

1. LOOK AT THE GROUND

Plant cover

- ☐ Mostly covered by plants
- ☐ Some bare soil
- ☐ Mostly bare soil

Soil surface

- ☐ Smooth ☐ Crumbly
- ☐ Cracked ☐ Crusted
- ☐ Loose ☐ Other

Evidence of life

- ☐ Roots ☐ Insects
- ☐ Worms ☐ Plant litter
- ☐ Animal tracks or holes

Evidence of moving soil

- ☐ Small channels ☐ Soil piles
- ☐ Exposed roots ☐ No evidence noticed

2. INVESTIGATE THE SOIL

Color: _____ Moisture: ☐ dry ☐ slightly moist ☐ wet

Texture test: Rub a small amount of soil between your fingers. Which words fit best?

☐ gritty ☐ smooth ☐ sticky ☐ powdery ☐ crumbly ☐ other: _____

What else do you notice? _____

3. SKETCH YOUR SOIL SITE

4. THINK LIKE A SCIENTIST

I NOTICE...

I WONDER...

What evidence tells you this soil is part of a living system?

How might plant cover change what happens when rain falls here?

SOIL DETECTIVE CHALLENGE: Compare your site with a second place that has a different amount of plant cover. What differences do you observe? What might explain them?