


 **Digging In:**
My First Look at Soil

What Lives in the Soil? · A Semester of Underground Discoveries

 **This book belongs to:**

Teacher: write the child's name in large dotted letters below. Child traces over their name with a crayon.

.....
 *Trace your name with your favourite crayon!*

 **My Scientist Hand**

Put your hand flat in this box. Trace all the way around it with a crayon. This is YOUR mark — you are a scientist!

What Is Soil? Let's Look!

Extends slides 1-6 · Key concept: **FORM** — What does soil look like?

Teacher Note

Before this page: Place a small tray of real soil nearby for children to look at and touch for 30 seconds. Say: "This is soil. What do you notice? Let's look really carefully at this big picture of soil too." Key vocabulary from the slides to use: **soil, texture, creature.**

STEP 1 — LOOK AND CIRCLE

👁️ Look at the big soil picture. **Can you find these things?**

Circle each one you can spot!



Find these things →



stone



root



beetle



soil clump

STEP 2 — DRAW WHAT YOU NOTICED

✎ Draw **one thing** you saw in the soil picture *or* in the real tray!

👁️ I noticed...

✎ Teacher scribes: Child says — "I saw a..."

👉 Feel and Find: Two Kinds of Soil

Extends slides 7–12 · Key vocabulary: **texture, soil** · Key concept: **FORM**

📄 Teacher Note

Prepare two small trays or zip-lock bags: one with dry, sandy, pale soil — one with dark, damp, rich soil. Let children touch both before working. Say: "Feel this one. Now feel this one. Are they the same or different?" This page extends the slides' vocabulary introduction of **texture**.

STEP 1 — FEEL IT, THEN CIRCLE!

Touch the soil in each jar. Then circle **one choice in each row** for each jar.

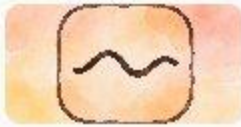


Jar 1

How does it feel?



or



Rough & Gritty

Clumpy & Damp

What colour is it?



or



Dark Brown

Light Brown



Jar 2

How does it feel?



or



Rough & Gritty

Clumpy & Damp

What colour is it?



or



Dark Brown

Light Brown

STEP 2 — WHAT'S HIDING INSIDE? DRAW IT!

? What do you think might be **hiding inside** each soil? Draw it in the box!

🌱 Jar 1 — what's hiding?

Teacher writes: I think...

🌱 Jar 2 — what's hiding?

Teacher writes: I think...

My Soil Colour Match

Key vocabulary: **soil, texture** · Key concept: **FORM** — What colour is soil?

Teacher Note

Have the soil samples from page 3 still available. Say: "Soil can be lots of different shades of brown! Let's match the colours." Children draw lines with a crayon connecting each colour swatch to its matching jar. Then they colour their own 'favourite soil' jar. Ask: "Which colour is your soil?" — scribe their answer in the speech bubble.

STEP 1 — MATCH THE COLOUR TO THE JAR!

Look at each colour on the left. Draw a line to the jar that matches it!

Colour Swatches

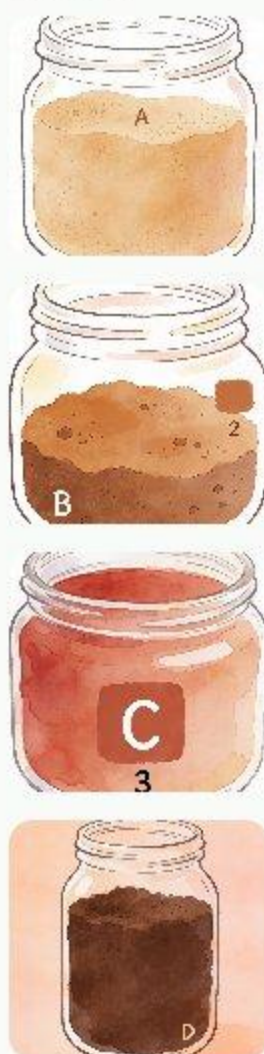
pale tan ① Pale sandy tan

mid-brown ② Warm mid-brown

terracotta ③ Red-brown clay

dark choc ④ Dark chocolate

Soil Jars



Draw your matching lines with a crayon!

STEP 2 — COLOUR YOUR SOIL JAR!

Pick the crayon that matches **your soil**. Colour this jar!



My soil is...

Teacher writes the child's colour word here:

Soil Has a Pattern! Big, Medium, Small

Key concept: **FORM** — Soil is made of different-sized parts · Pattern thinking

Teacher Note

This page uses the science concept of soil particle size within a pattern activity. Show children the three sizes (big stone, medium pebble, small grain) and say: "Look! The soil has big pieces, medium pieces, and tiny pieces. Can you see the pattern in the row?" Point to each illustrated particle as you say big → medium → small → big → medium → ...

STEP 1 — CONTINUE THE PATTERN!

Look at the pattern. What comes next? **Draw it in the empty circles!**

● Big stone

● Medium pebble

• Small grain



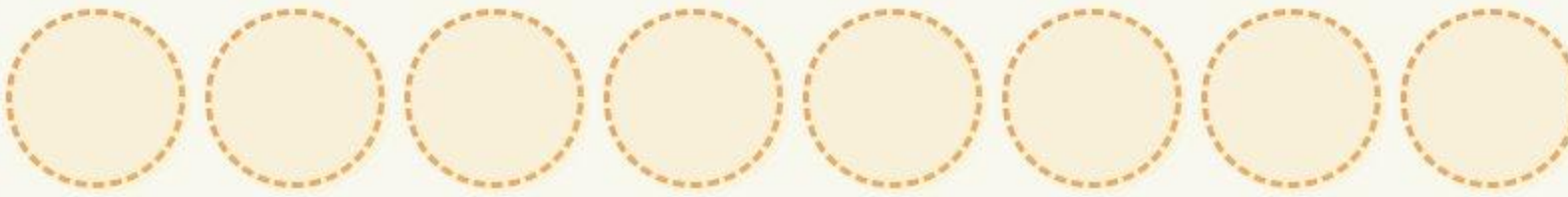
What comes next? Draw a BIG stone and then a MED pebble in the empty circles!



STEP 2 — MAKE YOUR OWN PATTERN!

★ Now make **YOUR own** pattern! Use big circles (big stones) and small circles (tiny grains). Draw them in the boxes below — make a pattern!

● = big stone ● = small grain



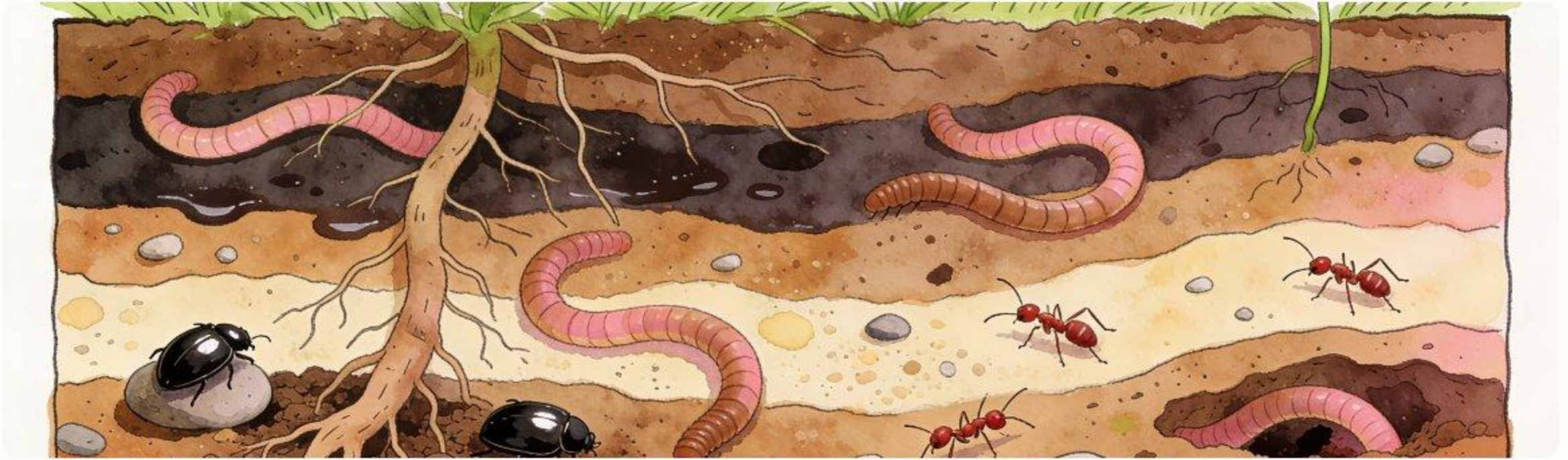
Teacher writes: My pattern is...

What Lives Underground? Let's Count!

Key vocabulary: creature, underground, habitat, living · Key concept: CONNECTION

Teacher Note

Point to the underground scene illustration. Say: "Soil is a habitat — a home for living things! Lots of creatures live underground. Let's count them!" Guide children to point to each creature and count with one-to-one correspondence. Key vocabulary from slides: **creature, underground, habitat, living**. Children then circle the correct numeral from 3 choices — no reading needed, just numeral recognition.



STEP 1 — COUNT AND CIRCLE THE NUMBER!

Count each creature in the big picture. Then circle the right number!



Worms — How many?

3 5 2



Beetles — How many?

4 1 3



Ants — How many?

2 4 6

STEP 2 — WHICH HAS MORE? CIRCLE IT, THEN COLOUR IT!

Look at the worms and ants. Which group has **more**? Circle that creature. Then colour it with any crayon!

Worms



5

OR

Ants



4

Circle the one that has MORE, then colour it!

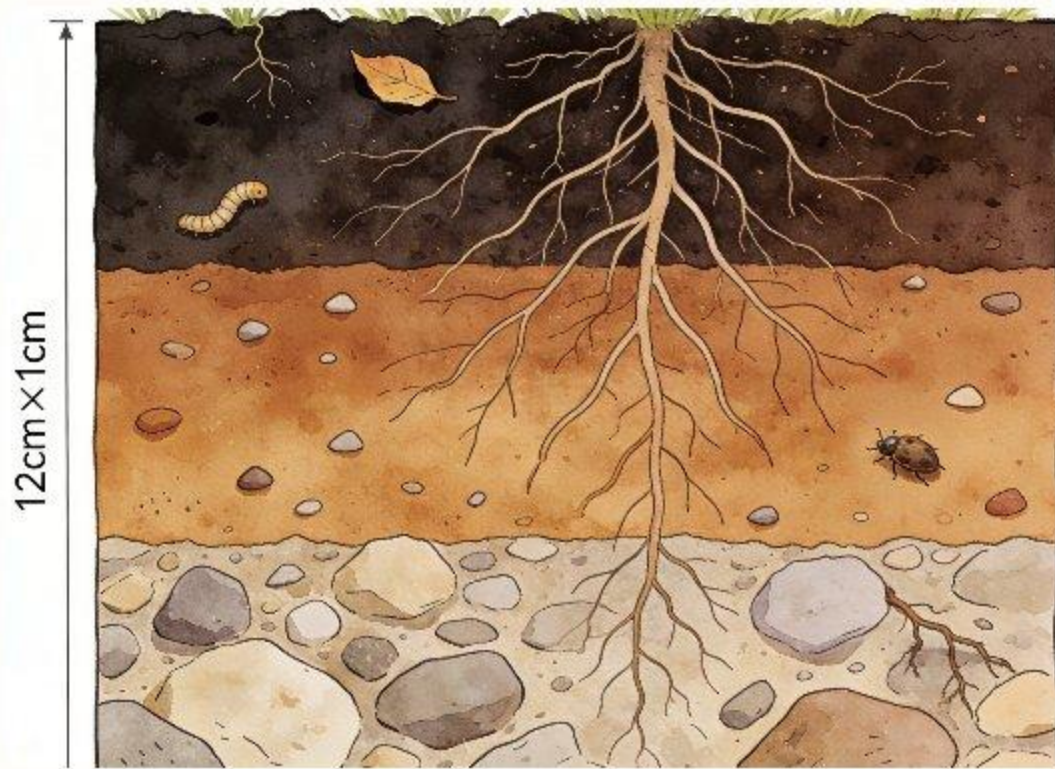
The Soil Layers: A Close Look

Our slides showed us that soil has layers! Let's look at each layer and match the label to where it belongs. Then find something you recognise!

ACTIVITY 1 – MATCH THE LAYERS

TEACHER READS ALOUD:

"Each label belongs to a part of the soil. Draw a line from the label to where it belongs in the picture!"



Draw a line to the right layer →



Top Layer



Middle Layer



Deep Layer

ACTIVITY 2 – I RECOGNISE THIS!

TEACHER READS ALOUD:

"Find one thing in the soil picture that you know. Circle it! Then colour in the matching picture below."

root	worm	stone	leaf
ROOT	WORM	STONE	LEAF

Circle the one you found in the big picture – then colour it in!

Rough or Smooth? A Texture Path

Follow the path through the soil! Stop at each station and think about texture. Then draw what you find at the end!

TEACHER READS ALOUD:

"Trace the path with your pencil. Stop at each station and circle the answer. Then draw what a scientist might find at the end!"

ACTIVITY 1 – FOLLOW THE PATH

soil texture path maze

START 🔍 → wind through soil → STATION 1 → STATION 2 → FINISH 🪴

child traces dotted path · circles ROUGH or SMOOTH at each station

Station 1 – This soil looks...



ROUGH

SMOOTH

Circle your answer!

Station 2 – This soil looks...



ROUGH

SMOOTH

Circle your answer!

ACTIVITY 2 – WHAT DID THE SCIENTIST FIND?

TEACHER READS ALOUD:

"You reached the soil jar! Draw one thing a scientist might find inside dark, smooth soil."

draw

What's in the soil jar?

How Does Soil Feel? My Texture Path

Key vocabulary: **texture, soil** · Key concept: **FORM** — Properties of soil

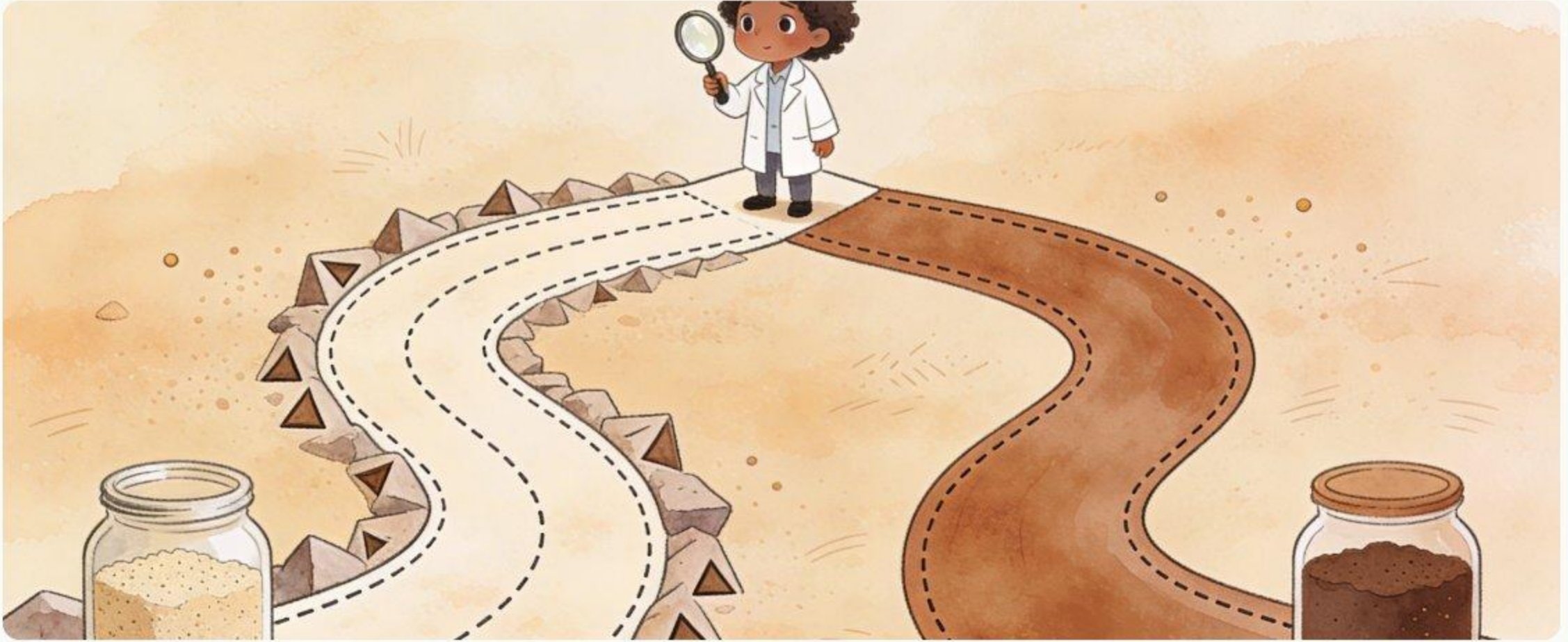
Teacher Note

Say: "Our scientist friend wants to explore two kinds of soil paths! One is bumpy and rough. One is smooth and silky. Let's trace both paths with different crayons!" Suggest: "Use one colour for the bumpy path and a different colour for the smooth path." After tracing, ask: "Which soil did you like best? What do you think lives in it?"

STEP 1 — TRACE BOTH PATHS!

Use **two different crayons** — one for the bumpy path, one for the smooth path.

Trace all the way to the soil jar at the end!



STEP 2 — CIRCLE YOUR FAVOURITE SOIL!

★ Which soil did **you** find most interesting? Circle it!
Then draw one thing you think is **living inside** that soil.

Bumpy Soil



A large, empty rectangular box with a dashed border, intended for drawing a living organism in the soil.

I think...

A horizontal line for writing a response.

Smooth Soil



A large, empty rectangular box with a dashed border, intended for drawing a living organism in the soil.

I think...

A horizontal line for writing a response.

The Soil Scientist's Recording Page

Synthesises pages 2–9 · IB PYP: *How We Understand the World*

Teacher Note

This is the child's mini field journal. Say: "Scientists write down what they find out. Let's record what YOU discovered!" Panel 1: child re-colours the jar using the same crayon choice as page 4. Panel 2: child draws one creature they remember from the investigation. Panel 3: child uses marks to show how soil FELT (scratchy jagged marks for rough, smooth swooping lines for smooth). After completing all three, ask the child to circle their favourite panel.

STEP 1 – FILL IN YOUR FIELD JOURNAL!

 You are a soil scientist! Record what you found out in each box.

 **Panel 1**
What colour was your soil?



 **Panel 2**
What creature did you find?

draw your creature here

 **Panel 3**
How did it feel?

Use marks to show how it felt!

AAA rough ~~~ smooth

STEP 2 – NUMBER YOUR PANELS AND CIRCLE YOUR FAVOURITE!

 Draw a line from each number to the matching panel. Then **circle the panel you liked MOST!**

1 → colour panel **2** → creature panel **3** → feeling panel

 Circle the number of your FAVOURITE panel above!

What Did I Discover?

Let's look back at everything we found out! Draw your discoveries and tell us how soil made you feel.

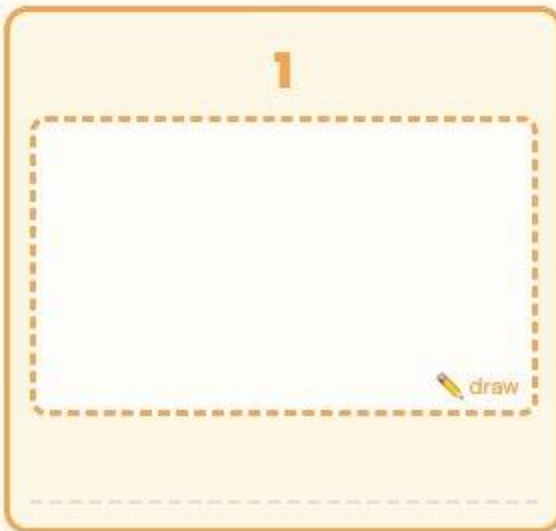
MY THREE DISCOVERIES

 **TEACHER READS ALOUD:**

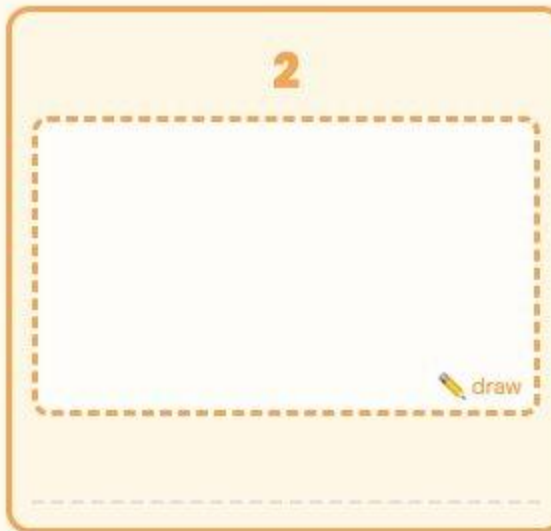
"Think about everything you found out about soil. Draw one thing in each box — and I'll write your words!"

 **I found out about soil!**

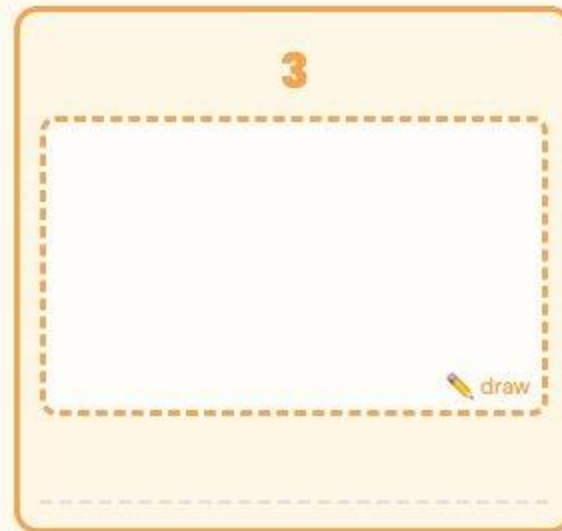
1



2



3



HOW DID SOIL MAKE YOU FEEL?

 **TEACHER READS ALOUD:**

"How did you feel when you explored soil? Circle the face that matches — you can circle more than one!"



All feelings are welcome here — soil science can feel many different ways!

For Grown-Ups: Digging Deeper at Home 🏠

Your child has been investigating soil as a scientist — touching, looking, sorting, matching, and wondering. This workbook is their documentation of that inquiry. Here are three simple ways to keep the investigation going at home — no special materials needed!

THREE WAYS TO EXPLORE AT HOME:



🌱 Soil Walk

Go outside and find two different patches of soil or dirt. Ask: "Do they look the same or different? Touch them. What do you notice?" Let your child lead the observation!



🔬 Kitchen Scientists

Put a spoonful of garden soil in a clear glass of water. Stir and watch together. What do you see? What floats? What sinks? This is real science!



🔍 Wonder Jar

Fill a glass jar with a handful of garden soil. What can you see through the glass? Can you spot anything living? Check it again the next day — has anything changed?

KEY VOCABULARY YOUR CHILD HAS HEARD:



SOIL



TEXTURE



UNDERGROUND



LIVING



LAYER

You don't need to ask your child to read these words — just use them naturally in conversation when you explore together!

→ SOON Our Next Investigation:



Who's Down There?

Underground Creatures

In our next investigation, we will meet the creatures that live underground. Ask your child:

"What do you think lives in soil?"

My child said: _____

Thank you for exploring the underground world together. Every observation matters — you are raising a scientist! 🌱