WONDERROOTS KIDS

MY BACKYARD MUD LABORATORY

a simple, low-stimulation outdoor STEM activity sheet for little roots (Ages 2–6).

1 Gather Your Lab Tools

Before heading outside, help your little scientist find these simple items around the house or garden:

- ☐ 3 Small Bowls (To hold your different dirt samples)
- ☐ 1 Small Wooden Stick or Spoon (For rhythmic stirring)
- ☐ 1 Small Cup of Water (For mixing our liquid experiments)
- ☐ A Handfulof Twigs& Leaves(Our natural building materials)

2 Run the 3 Mud Tests

Scoop a little bit of dry dirt into your three bowls, add a splash of water to each, and use your hands to test the soil cohesion just like Arin!

Bowl 1: Sandy Mud Test

☐ Action: Squeeze it tightly in your fist. Does it hold together or crumble through your fingers? (Learned concept: Low Cohesion)

Bowl 2: Clayey Mud Test

☐ Action: Roll it between your palms. Can you mold it into a sticky, dense ball like playdough? (Learned concept: High Cohesion)

Bowl 3: The Perfect Mix Test

☐ Action: Mix a little sand, a little clay, and a few small leaf pieces. Toss it from hand to hand. Does it hold its shape perfectly? (Learned concept: Balanced Builder’s Mud)

3 The Snail Architect Challenge

Now it’s time to build a safe shelter for a backyard friend like Sammy the Snail!

- ☐ Lay the Foundation: Place two thick sticks flat on the ground parallel to each other.
- ☐ Apply the Mud Glue: Stand four medium twigs upright at the corners and pack your “Perfect Mix” mud tightly around the bases to hold them like cement.
- ☐ Add the Weather Roof: Gently lay flat autumn leaves across the top to keep your backyard critters warm and dry!

Mindfulness Minute for Parents & Kids

When cleanup time arrives, don’t rush! Sit together by your new stick structure. Take one deep breath in together as you feel the cool mud drying on your skin like a hug... and listen to the crisp, soothing sound of clean water washing the dirt away.