

GRADE TWO LATE FALL NATURE WALK
Soil – Summary Walk Leader Sheet

Allow 10 Minutes at each site. Have the student complete worksheet for each sample.

For each site, children should:

- **Touch Soil.** Describe what the soil feels like. (Dry, moist, wet, sticky, smooth, gritty)
- **Rub soil and smudge on worksheet** to denote color.
- **Smell** the soil.
- **Look at the sample with the hand lens.** Note the size and shape of the particles.
- **Note things in soil: Living things** (roots, leaves, fungi, etc); **non-living** things (minerals)
- Does soil changes as they dig deeper?
- Fill in their holes and replace any clumps they have removed.

Black Top: *What do you see in the cracks?* (Soil, plants, ant hill). *Is there soil under the blacktop?* Find an edge of the blacktop and look under it. *Is there soil scattered on top of the blacktop?* *What does it feel like?* *What color is it?* *Is this soil?* *What do the grains look like?* *Are they all the same?*

Sample: Soil in the Grassy Area (Topsoil or Humus)

Compare to blacktop: Soil likely to be darker in color. More roots, and pieces of leaves; Fewer mineral bits. Soil feels softer, less gritty, smaller particles. Living things in soil: Earthworms, insects, and fungi help turn once living things into soil.) Non-living things: pebbles, grains of sand

Look for worm castings (worm poop) on top of the soil in the grassy area and notice the color. (Dark brown—matches the soil color.)

Sample: Hillside across from playground on access road (Sand/Gravel)

Is sand soil? (Yes, it just has more minerals and less darker once-living material such as leaves and roots.) Children may notice sparkly grains of mica, a mineral.

Does the soil change as we dig deeper? If it is man-made, it might. *Are there any living things?* *How is this different from being at a beach?* *Are there more or less plants growing in the sand compared to a grassy area?*

Sample: Edge Area or Woods (Mulch)

What do you see lying on the ground on top of the soil? *Where did all the leaves go?* *Does the soil change as we dig deeper?* *Does the soil smell?* Living things: Grass roots, worms, insects.

Say: These plants are **decomposing** and helping to make soil. Tiny living plants and animals help dead leaves and logs decompose and become soil. Some tiny living creatures live in the soil. **Ask:** *How far do you have to dig to find non-living things?* Smells like: potting soil? *Why is this soil so different from the other samples?* (It has more decomposing once-living things in it.)

Turn over a decomposing log and touch it. Notice: Worms, ants, sow bugs, millipedes, centipedes, fungi, etc. **Say:** These living things find their nourishment from decomposing material. *What type of soil seems best for growing plants?* *What makes you think this?* (Soil with both once-living and minerals in it is best; more plants are growing in dark soil.)

Sample: Softball Diamond (Clay) *Do you find any living things?* *Can you make a clay snowball?*

Visit Site: Bedrock/Rocks (at far end of soccer access road)

Is this rock part of the soil? *Why or why not?* *What does the rock feel like?* *Color?* *Smell?* *Do you find any living things?* *Can you think of other examples of bedrock in Lexington?* (The two Hayden rocks behind the Old Harrington playground.)

Mystery Challenge: Have students choose an area of Harrington's BBY to obtain a soil sample. Goal is to stump their fellow classmates of its origins. Bring it back to the classroom and give it to the teacher