

Smokies to Schoolyards

Curriculum to help teachers make learning more local, personal, and relevant

Mini Hike in Your Schoolyard

As November approaches, now is the perfect time to get your students outside to observe organisms that will soon go dormant for the winter season. Going on a hike during the school day may not always be feasible. However, you *can* take your students on a “mini hike” around your schoolyard and give them the opportunity to grow their observational skills!

INVITE your students to take on new personas as miniature explorers and observe their schoolyard from a brand new perspective. To help your students conceptualize being a miniature explorer, you can give each of them a Sour Patch Kid candy as a reference.

EXPLORE a small section of your school’s outdoor space with your students. Let each student lay out a 1 ft. x1 ft. plot, using yarn or string, where they can imagine themselves as a mini explorer. Let each student use a hand lens to observe what takes place in his or her plots at the insect level. Let the students explore their plot as if they were a tiny explorer hiking through this new plot of land.

WONDER Have your students write questions in their journals about the relationships between the organisms and the environment within their plot. For example, if they were a tiny explorer, what would they see, and what would they have to overcome as they venture through the isolated terrain? Allow each student to use their creativity to see their space from a different point of view by drawing their observations in their science journals. Additionally, your class can make predictions on the effects of changing weather on the biodiversity of the plot to build the students’ critical thinking skills.

CREATE individual observation records with your students, as you all practice deepening your observation skills. Instruct your students to list everything they observe, and really emphasize the importance of looking at their outdoor spaces from the perspective of a mini explorer. Tell your students to really hone in on the different sizes, colors, textures, etc. living in their space as they make their observations. As an extension to this exercise, ask the students to use their observation records to write a short story about what life is like in that space from the perspective of a miniature explorer, or even an organism that lives there.

SHARE Give your students an opportunity to share their stories with one another in small groups or pairs. They can take turns reading their short stories aloud to each other, or they can swap stories and read silently. You can also display the students’ observational illustrations around the classroom and have everyone do a Gallery Walk to see what their classmates observed. This can lead to a class discussion about the biodiversity of the schoolyard and how, even within the same general area, the types of organisms can vary based on where they are found. Send your students’ observational findings and stories to Tremont so we can compare and contrast what’s living in your schoolyard with what’s living in Great Smoky Mountains National Park.

Corresponding Science & Engineering Practices (SEPs):

- Asking questions and defining problems
- Planning and carrying out investigations
- Analyzing and Interpreting data
- Obtaining, evaluating, and communicating information

Corresponding Crosscutting Concepts (CCCs):

- Cause and Effect
- System and system models
- Energy and matter
- Structure and function
- Stability and change

Corresponding Disciplinary Core Ideas (DCIs):

- Life Sciences

Coordinating Academic Standards

English Language Arts

SL.PKI.4 – Present information, findings, and supporting evidence such that listeners can follow the line of reasoning; the organization, development, and style are appropriate to task, purpose, and audience.

W.TTP.2 – Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.

W.TTP.3 – Write narratives to develop real or imagined experiences or events using effective techniques, well-chosen details, and well-structured event sequences

W.PDW.4 – Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience.

W.RW.10 – Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.

Science

SCRE.ETS3.10 – Create a scientific journal and/or lab notebook for recording qualitative and quantitative data.

SCRE.ETS3.4 – Make observations and ask questions about the natural world. Refine the questions such that they can be answered by way of scientific investigation.