Bellevue Botanical Garden
Living Lab Extensions with STEAM Emphasis

4th/5th Grade Super Soils Extension: Rocks and Soils at the Garden

1. Video
   Duration: 8 minutes
   Supplies: Paper and pencil
2. Soil Experiment
   At home experiment takes 15 minutes to set up and a day to observe.
   Supplies: Clear container, preferably with lid and a handful of soil.

Correlations to Next Generation Science and Common Core Standards

4th grade

This extension links directly with the fall earth science unit on Soils, Rocks and Landforms. Students employ practices of asking questions for science and carrying out an investigation. Written response is elicited throughout the video.

- SCIENCE – EARTH'S SYSTEMS. 4-ESS2-1. Make observations and/or measurements to provide evidence of the effects of weathering or the rate of erosion by water, ice, wind, or vegetation.

- CCSS.ELA-LITERACY.W.4.2.E
  Provide a concluding statement or section related to the information or explanation presented.

- CCSS.ELA-LITERACY.W.4.10
  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 discipline-specific tasks, purposes, and audiences.

5th grade

This extension links with science units listed below. Students employ practices of asking questions for science and carrying out an investigation.

Fall – Earth and Sun

- 5-ESS2-1. Develop a model using an example to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact.

- 5-ESS3-1. Obtain and combine information about ways individual communities use science ideas to protect Earth's resources and environment.

Winter – Physical Science- Mixtures and Solutions

- 5-PS1-3. Make observations and measurements to identify materials based on their properties.

- 5-PS1-4. Conduct an investigation to determine whether the mixing of two or more substances results in new substances.

Spring – Life Science – Living Systems

- 5-LS2-1. Use a model to describe the movement of matter among plants, animals, decomposers, and the environment.

- 5-ESS2-1. Develop a model using an example to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact.