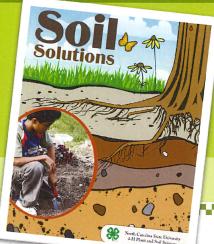
## Buncombe County 4-H School Enrichment Presents...

# Soil Solutions

3rd Grade



#### About the Curriculum:

Soil Solutions brims with hands-on science lessons that utilize the local school landscape to connect students to the world of soils and plants in an inviting and relevant way. Activities are structured to foster wonder and curiosity and encourage ways to turn student questions into investigations. The teacher's role becomes one of a collaborator and partner in inquiry with their students. Aligned to meet North Carolina's Essential Science Standards third grade science ecosystems, the curriculum draws from current research and knowledge in crops, horticulture and soil sciences.

Materials and pre-class preparations are laid out, along with a suggested script. Where appropriate, vocabulary lists, worksheets, and activity sheets are included. An educational kit containing most of the non-consumables needed for implementing these lessons is available through the Buncombe County Cooperative Extension Service's 4-H Program.

### **Essential Standards:**

Ecosystems (2<sup>nd</sup> Grade)
Understand How Plants Survive in their Environments

## Clarifying Objectives:

- 3.L.2.1 Remember the functions of the following structures as they relate to the survival of plants in their environments:
  - Roots absorb nutrients
  - Stems provide support
  - Leaves synthesize food
  - Flowers attract pollinators and produce seeds
  - ✓ Soil Solutions Pollination Partners
  - ✓ Soil Solutions Seeds Up Close
- 3.L.2.2 Explain how environmental conditions determine how well plants grow and survive.
  - ✓ Soil Solutions Happy Homes for Plants
  - Soil Solutions A Balancing Act
- 3.L.2.3 Summarize the distinct stages of the life cycle of seed plants
  - ✓ Soil Solutions Plant Growth Experiment
- 3.L.2.4 Explain how the basic properties (texture and capacity to hold water) and components (sand, clay and humus) of soil determine its ability to support the growth and survival of many plants.
  - ✓ Soil Solutions Is It Soil Yet?
  - ✓ Soil Solutions Living Off the Land
  - ✓ Soil Solutions A Balancing Act



Interested in more 4-H School Enrichment Programs?

Please contact .

Buncombe County Cooperative Extension Service (828) 255-5522