Soil - It’s Not Just Dirt
4th grade

Overview
Students will learn about sand, silt, and clay, the three major particle types within each soil. Using the scientific process, they conduct two experiments to learn more about these particle types. First, they will examine how the particle types affect the rate at which water can move into the soil, through a game and then an experiment. Then they will separate two soils (mesa / river) to compare the amounts of sand and silt in each one.

Vocabulary
• **Sand** - the largest soil particle size (sediment whose particles are larger than silt - typically greater than 0.06 mm).
• **Silt** - the medium soil particle size (sediment whose particles are between clay and sand in size - typically 0.002–0.06 mm).
• **Clay** - the smallest soil particle size - (sediment with particles smaller than silt -typically less than 0.004 mm).

NM Science Standards Addressed
1-1-1-1 Use instruments to perform investigations (e.g., timers, balances) and communicate findings.
1-1-2-1 Communicate ideas and present findings about scientific investigations that are open to critique from others.
3-1-1-4 Know that both men and women of all races and social backgrounds choose science as a career

CCSS Language Arts Standards Addressed
SL.4.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 4 topics and texts, building on others’ ideas and expressing their own clearly.
SL.4.1.B Follow agreed-upon rules for discussions and carry out assigned roles.
SL.4.1.C Pose and respond to specific questions to clarify or follow up on information, and make comments that contribute to the discussion and link to the remarks of others.