

## Soil Sampling: Best Practices

Intro: Spend a few minutes talking about the importance of soil, how farmers work to take care of the soil, soil as a natural resource, best practices, etc. Lead discussion into soil sampling and variable rate technology that allows us to decide where/how much fertilizer to use to maximize production. Optional: print out several copies of a field with grid sampling showing variability (like this :[Grid Sampling - Agri Trails Coop Inc](#)).

### Activity:

1. Give each student a mini candy bar and straw.
2. Students will take a "sample" by pushing the straw into the candy bar. (Make sure to use the flat, uncut end of the straw).
3. After kids pull the straw back out, they analyze their sample for the presence of nutrients—caramel=nutrients. (For older kids, we picked a specific nutrient to talk about in a little more depth; for younger students we just talked about nutrients in general and how they are important for healthy plant growth).
  - a. Three Musketeers = complete lack of nutrients
  - b. Snickers = low-high nutrients, depends on what the sample looks like
  - c. Milky Ways = consistent nutrients
4. Then we had kids make a decision if they would apply fertilizer to their section of the field, no fertilizer, or maybe a lesser amount.
5. Concluded by emphasizing farmers use these constantly in their work: gather data, analyze, make decisions...all in an effort to be good stewards.

### Materials:

Jumbo Straws: <https://a.co/d/5rqv3Li> (cut in half)

Candy Bars: Milky Ways, Snickers, Three Musketeers

Paper plate or napkins for kids to place candy bars on while sampling

Make sure to have a trash bag handy for candy wrappers!

Posters: [https://www.canva.com/design/DAGhYlrfqO0/9E9C6ZrFqDMUqM0Gn8VUA/view?utm\\_content=DAGhYlrfqO0&utm\\_campaign=designshare&utm\\_medium=link&utm\\_source=publishsharelink&mode=preview](https://www.canva.com/design/DAGhYlrfqO0/9E9C6ZrFqDMUqM0Gn8VUA/view?utm_content=DAGhYlrfqO0&utm_campaign=designshare&utm_medium=link&utm_source=publishsharelink&mode=preview)