

Environmental Chemistry

The event will have a combination of multiple choice, short answer, and soil testing. The soil test used shall be the Lamotte Soil NPK test kit from Nasco.

Students should know the below topic areas

- Knowledge of soil components, soil horizons, and the soil triangle. What different soils indicate, and where they are found
- Soil pH, porosity, and permeability and how this relates to water retention.
- Nutrient cycles...ie the Nitrogen cycle...etc
- Macronutrients, micronutrients and what their functions are in a plant
- Growing requirements for tomato, corn and lettuce
- Calculating how much fertilizer is needed in a field to get a given amount of N, P, or K.
- Effects of fertilizer on soil and methods of remediation.
- The appearance of nutrient deficient corn, tomato, and lettuce plants.
- Common types of pesticides.