Soil pH

Summary

Students will test soils they bring from their neighborhoods for pH.

Time Frame

1 class periods of 60 minutes each

Group Size

Small Groups

Materials

- student sheet

(attached)
acid-base or pH indicator paper - 1 vial
soil (1/3 cup) - per group
filter paper or coffee filter -- one per test
plastic cup or beaker - per group
boiled and cooled distilled water
waste container

Instructional Procedures

In advance:

The distilled water needs to be boiled to remove the CO2(aq) [carbon dioxide gas in solution]. Store in a sealed container after boiling to keep out CO2.

Ask students to bring soil samples from their yards and neighborhoods. They should bring at least one and ask them to look for places where they thing the pH might be unusual (under a pine tree, in a heavily fertilized area, an unused area, next to the house etc) They should bring about 1/3 C in a plastic bag.

3. On the day of the lab

, read the introduction with students and discuss procedures.

Give students time to perform the tests. Each group should report on a soil or two that they think is interesting.

Bibliography

Lesson Design by Jordan School District Teachers and Staff.

Authors

Utah LessonPlans