

# Soil pH

## Summary

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

## Main Core Tie

Science - Chemistry

[Standard 6 Objective 3](#)

## 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 CO<sub>2</sub>(aq) [carbon dioxide gas in solution]. Store in a sealed container after boiling to keep out CO<sub>2</sub>.

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 think 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](#)