

SOIL YOUR UNDIES CHALLENGE

Soil pH Testing activity sheet



Testing the Acidity and Alkalinity of Soil

What do we do?

1. Collect a small amount of soil from where you have buried your undies. You will only need a 5c piece worth for the test.
2. Place a small sample of soil onto the white laminated card provided.
3. Using the pipette and Universal pH indicator, place around five drops of the Universal pH indicator onto the soil. Use less if the soil looks as though it is become saturated and 'swimming' in the solution.
4. Give the soil and indicator a mix if it is not combining easily.
5. Using the pop-stick, scoop up a small amount (just to cover the tip of the stick) of barium sulfate, and carefully sprinkle this over the moistened soil.
6. You will see a colour start to emerge. Using your pH colour chart, match up the colour of your soil with the colours on the card and read the corresponding number. That is your soil pH!
7. As an extension see if soil from different areas measure different pH (eg under trees vs open spaces).
8. Explore what this result means with your parent and teacher!

Displaying our results:

If you have undertaken different pH tests around your home or school, we can draw a map to see how soil pH varies. In the space below, draw a map of your home or school. Then, draw a square on the map where you sampled your soil for the pH test. Using a coloured pencil matching your pH, colour in this square corresponding to your pH test. What do you notice?