

ONION BULB GERMINATION TEST

WATER QUALITY

WHAT YOU NEED

One control sample of water

Comparative sample(s)

Test tubes (one per sample of water to be tested plus one for control sample)

Small onion bulbs (one per sample of water to be tested plus one for control sample)

HOW TO DO IT

Measure the root of each onion bulb and record.

Fill each test tube with water samples. Make sure you add enough water so that the root of the onion bulb will be immersed. Record where each sample was taken from.

(Note: You may want to test various samples against your control. Distilled water can be purchased at a local pharmacy. You may also want to take a sample from school or ask students to bring in samples from home)

Fill one test tube with the control sample. Make sure you add enough water so that the root of the onion bulb will be immersed.

Set one onion bulb on the top of each test tube so the root is resting in the water. Make sure to properly label each test tube.

Let sit for 48-72 hours.

Measure the roots again.

Record results.

RESULTS

Contaminated water prohibits or slows the growth process of the roots. The longer the root the better the water quality.

NOTE: This test is easy and inexpensive, however, it does not test WHAT contaminants are present in the water samples.