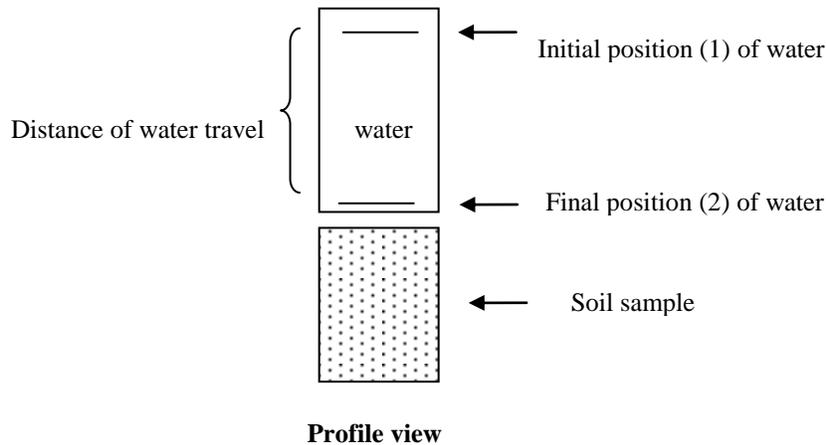


Name: _____ Grade: _____

How Fast Does Water Travel Through Soils? Datasheet

This datasheet will help you to organize the data you collect during this activity. First, you will run the test using rulers and a timer. The ruler will be used to measure the distance of water travel, as shown in the figure below. The timer will tell you how much time it took for the water to change from position 1 to 2.

Position 1 should be set very close to the top of the container while position 2 should be very close to the bottom of it.



Running this activity with the ultrasonic sensor attached, which is the second part of this task, will give you the chance of using neither ruler nor timer.

Once you finish the first test, put your data into the table below. Several tests using the same soil sample should be conducted to check for the accuracy of the test.

| Tests without sensor | | | | Tests with sensor | | | |
|----------------------|---------------|------------|----------------------------|-------------------|---------------|------------|----------------------------|
| Test Number | Distance (cm) | Time (sec) | Water flow (distance/time) | Test Number | Distance (cm) | Time (sec) | Water flow (distance/time) |
| 1 | | | | 1 | | | |
| 2 | | | | 2 | | | |
| 3 | | | | 3 | | | |