

## Percolation Test Worksheet

Follow the steps in the Conducting a Percolation Test Activity. Make sure you fill the 8” hole completely 24 hours before you conduct the test. Each hour go out to the sample hole/s and measure how much the water has gone down.

Example:

Sample Number	Time	Starting Level	Current Level	Change
0	Start	8”	n/a	n/a
1	2 hours	8”	7.5”	.5”
2	4 hours	8.0”	7.0”	1.0”
3	6 hours	8.0”	6.5”	1.5”

Enter your information in the table below.

Sample Number	Time	Starting Level	Current Level	Change
0				
1				
2				
3				
4				
5				
6				

Next, we need to figure out how much water would infiltrate the ground in a 24 hour period. The percolation rate for the example table is:

$$\frac{1.5 \text{ inches}}{6 \text{ hours}} = \frac{“x” \text{ inches}}{24 \text{ hours}} \quad x = 6 \text{ inches} \quad \begin{array}{l} \text{Infiltration Rate} = 6 \text{ inches per 24 hours} \\ \text{Raingarden Depth} = 6 \text{ inches} \end{array}$$

Calculate the percolation rate for your test by using the same formula. To solve, cross multiply your measured inches by 24 hours and then divide by how many hours you ran the test. You are finding a ratio/proportion.

$$\begin{array}{l} \text{Final change in water level} \longrightarrow \text{inches} \\ \text{Total time} \longrightarrow \text{hours} \end{array} = \frac{\text{“x” inches}}{24 \text{ hours}} \quad \text{“x”} = \text{your infiltration rate}$$

What is the infiltration rate for the proposed raingarden spot?

