

Name: _____ Date: _____ Class: _____

Personal Rain Garden Worksheet

Time of day _____ Temperature _____ Humidity _____ Dew point _____

Weather _____

Personal Rain Garden Properties

1. From the *Does Media Matter? Worksheet*, list the media mix combination materials and ratio, and its average infiltration rate.

Material 1	Material 2	Material 3	Material 4
Volume/ratio of material 1	Volume/ratio of material 2	Volume/ratio of material 3	Volume/ratio of material 4
Average infiltration rate			

2. From the *Magic Sidewalk Worksheet*, list the types of materials used to create the concrete mix combination, and the ratio.

Material 1	Material 2	Material 3
Amount (volume/ratio) of material 1	Amount (volume/ratio) of material 2	Amount (volume/ratio) of material 3

3. From the *Magic Sidewalk Worksheet*, list the infiltration rates.

	Volume of water (ml)	Time (sec)	Infiltration rate (ml/sec)
Trial 1			
Trial 2			
Trial 3			
Calculated average infiltration rate			

4. From top to bottom, what are the four zones that make up a typical rain garden?

Zone 1	
Zone 2	
Zone 3	
Zone 4	

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5. Select an appropriate location on the school campus to construct a rain garden and describe characteristics of the runoff area in terms civil engineers would use (infiltration, percolation, permeability, bioretention, green infrastructure, low-impact development, transpiration rate, etc.).

Measure the rainfall runoff area: _____ ft².

Determine the rain garden area, usually 2% to 5% of the runoff area: _____ ft² and _____ ft².

6. Make a sketch of the rainfall runoff area. Include labels, measurements and rain garden location.



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7. From the ***Just Breathe Green Worksheet***, select native plants to grow in your personal rain garden.

Plant species			
Common name:			<i>Scientific name:</i>
Light requirements			
Height			
Soil conditions			
Transpiration rate (ml/min)			

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8. Plant, mulch and water.

9. Mark and label on the sketch (#6) the location of your team’s personal rain garden, as well as the locations of other groups’ personal rain gardens.