Name: _____ Date: _____ Period: _____

Water Conservation: Are You A Water Wizard?

Calculate your weekly water use to find out! Estimate the amount of water you use in a typical week by filling in the table below with the number of times you usually do each activity in one week. Multiply your total by the water use (gallons) to determine the total weekly use in gallons.

Water Use Table

Activity	Number of Times Per Week	Water Use (Gallons)	Total Weekly Use (Gallons)
Bath	*Total*	35	
Shower (15 min)	*Total*	45	
Teeth Brushing	*Total*	5	
Hand Washing	*Total*	5	
Washing Machine (clothes)	*Total*	35	
Toilet Flush	*Total*	3	
Dishwasher	*Total*	10	
Washing Dishes By Hand	*Total*	15	
Drinking a Glass of Water	*Total*	0.06	
Cooking a Meal	*Total*	3	
Watering Small Lawn	*Total*	100	
		Total Weekly Gallons	

Multiply Number of Times Per Week by Water Use (in gallons).

Add the total weekly use for each activity.

Station – Land Contouring

1. Complete the following table as you explore methods of land contouring to reduce surface run-off and conserve water.

Trial	# Water Beads Total	# Beads in Run-off (at bottom of tray)	% Beads in Run-off $(\#\ beads\ in\ runoff\ \div 50) \times 100$
Control (no land contouring)	50		
Berm 'n' Basin OR Boomerang Berms	50		

2. Which method had the lowest percentage of surface run-off? (circle one)

Control (no contouring) or Land Contouring (changing the shape)

Station – Rooftop Rainwater Harvesting

1. Prediction: I think the roof will collect _____ % of the rainwater. (circle one)

0 – 25% 26 – 50% 51 – 75% 76 – 100%

2. Complete the following table after you measure the amount of water collected in the cistern.

Amount of Rainwater Harvested (mL)	% of Total Rainwater Harvested (mL harvested ÷ 500) ×100

3. Was your prediction correct? (circle one) yes no

4. Was the actual amount of rainwater harvested higher, lower, or equal to your prediction? (circle one)

Higher Lower Same

Station – Greywater Recycling

1. Complete the following table before you begin rolling marbles. This table will tell you how many marbles you need to roll for each activity.

Greywater Recycling		
Activity	**Gallons per use**	**Marbles to roll** $Gallons\ per\ use\ \div 5$
Bath	**35**	
Shower	**45**	
Teeth brushing / Hand washing	**5**	
Washing machine	**35**	

2. How many marbles were in your cistern after your group completed the household activities?

3. If each marble represents 5 gallons of water, how many gallons of greywater could be recycled in one day?

Conclusions

1. Explain why it is important to practice water conservation methods in a changing climate.

2. List at least two ways you that you can change your habits to conserve water.