

Name:

Date:

Class:

Gummy Bear Research Worksheet **Answer Key**

Question: Which tested solution best maintains balanced osmolarity in the gummy bear?

Hypothesis: A gummy bear submerged in _____ (select one: water, salt, sugar) solution for 24 hours will best maintain balanced osmolarity over other solutions.

Materials: 3 plastic cups, 50 mL each of water, salt water, and sugar water, 4 gummy bears, centimeter ruler, and gram scale

Procedure:

1. Label one cup water, one salt, and one sugar.
2. Measure 50 mL of the corresponding solutions into each cup.
3. Place one gummy bear in each cup.
4. Measure the length and weight of the control gummy bear.
5. Allow cups to remain undisturbed for 24 hours.

Gummy Bear Research Data				
Solution	Mass		Length	
	Before	After	Before	After
Water	3 g	4 g	2 cm	1.5 cm
Salt	3 g	3 g	2 cm	3 cm
Sugar	3 g	5 g	2 cm	1.7 cm

Conclusion: The gummy bear best maintains balanced osmolarity in salt solution because the weight remains unchanged after 24 hours in solution.