

**Purpose:** To investigate the effects of distilled (pure) water and salt water on Gummi Worms over 48 hours.

**Procedure:**

- 1.) Label 2 beakers with your names and either 'Distilled Water' or 'Salt Water'. Fill each beaker about half way with one of the 2 liquids.
- 2.) After measurements are recorded below, place one worm in each beaker.
- 3.) Measure the worms after about 48 hours. (Next class).

**Observations:**

**Predictions**

\* After 48 hours, I predict that the worm in the distilled water will be \_\_\_\_\_  
(smaller or bigger)

\* After 48 hours, I predict that the worm in the salt water will be \_\_\_\_\_  
(smaller or bigger)

**Data Table:**

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Time (Hours)	Colour	Length (mm)	Width (mm)	Height (mm)	Mass (g)	Volume (mm <sup>3</sup> )
Salt water 0 hours						
Salt Water 48 hours						
Distilled Water 0 hours						
Distilled Water 48 hours						

**Graph:** Create a double bar graph of mass and and a double bar graph for volume. /8

**Discussion:**

1.) In your own words describe what is meant by "OSMOSIS". /1

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Use these facts to help answer the following:

Distilled water = 100% water, salt water = 20% water, Gummi Worm = 30% water.

1.) Use a diagram to show why the Gummi worm grew sooo large after being in the distilled water. Include the % of water and the direction the water moved. /1

2.) What happened to your worm after it spent time in the salt water? Explain why this occurred. /1

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3.) Suggest what might happen to the Gummi Worm if we used tap water instead of distilled water. /1

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4.) What is meant by the term DIFFUSION? /1

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5.) Provide a real life situation (not the Gummi Worm Lab) where you have experienced diffusion. /1

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**Conclusion:** /1

In this lab I learned \_\_\_\_\_ and

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*(Tell me 2 Scientific facts you learned from doing the lab)*