Biology lab report

Business

Destiny Thomas Biology October 19th 2012 Period: 3rd Destiny Thomas October 19th 2012 Biology Period: 3rd Introduction In our experiment we used only the red colored life savers. They all had about the same mass.

We used 9 life savers. In our experiment we had to dissolve our life savers. The concept of dissolving is to place the life savers in water of hot, cold, and warm/ room temperature water.

Many factors effect dissolving, such as how fast you stir the life saver in the water, if you stop stirring the life saver, the mass of the life saver, and the temperature of the water. The purpose of my activity is to try to figure out what which temperature of water dissolves a life saver faster.

I’m using three different kinds of water temperature. im timing which water temperature will make the life saver dissolve in the quickest amount of time. Hypothesis

My hypothesis is if the water temperature is hot then the life saver will dissolve quicker because the hot water has a greater chemical effect on the life saver than the other temperatures. I believe this is because the hot water is creating a chemical change and is changing the solid object into a liquid. Materials * 250 Ml beaker (3) * Red life savers (9) * Graduated cylinder (1) * 120 Ml of water (40 mL per beaker) * Heating plate (1) * Ice cubes (15) * Electric scale (1) Controls/ Procedure IV: Water temperature DV: How quickly it dissolves Control Group: Room temperature water Experimental groups: Hot and Cold water

Constants: amount of water, flavor of life saver Units of measurements: Ml, minutes, seconds Procedure 1.

First we measured each of the nine life savers masses. 2. Next we filled one beaker with 40 mL of water and placed 5 ice cubes and 1 life saver in it. We stirred it until it dissolved. We repeated this 2 more times. 3.

Then we filled another beaker with 40 Ml of warm water and placed 1 life saver in it. We stirred it with a stir stick until it dissolved. We repeated this step 2 more times. 4. We then filled the last beaker with 40 Ml of water and placed it on a hot plate until the water was hot.

We then placed 1 life saver in the beaker and stirred it until it dissolved.

We repeated this 2 more times. 5. We recorded our data. Results/ Data Water temperature Vs. Time it took life saver to dissolve Time it takes to dissolve (min.

) Water temperature| Trial 1| Trial 2| Trial 3| Hot| 4: 00| N/A| N/A| Warm/room temperature| 7: 21| 8: 11| N/A| Cold | 17: 26| 15: 03| N/A| Conclusion For this experiment was hypothesis was if the water temperature is hot then the life saver will dissolve the fastest because of the chemical change that the heat has on the atoms in the life savers.

My hypothesis was rejected. My hypothesis was rejected because for one we didn’t complete the experiment. As well our experiment was not done correctly. Therefore are data was inconclusive and our experiment is unreliable.

In our experiment, numerous things went wrong. For example we didn’t accurately measure the temperature of our water. As well we didn’t stir the life savers in the beaker constantly. We couldn’t control the overall

temperature the water stayed throughout the experiment. We could have changed a lot of things in our experiment to make it better.

To make our experiment better, we should have accurately measured the temperature of the water.

As well we should have actually finished our experiment. These we’re crucial in our experiment to effectively do that experiment. If I could choose another independent variable to test, I would test the flavor of the life savers in hot water to the time it dissolves. I would get 2 red, 2 green, 2 orange, and 2 purple life savers and put them all in hot water. I would stir them until they dissolve completely and record my results to see which one dissolved the fastest.

Reference list Wikipedia. Com Ms. Choi Ms. Beggs