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| Lesson Plan: Science-Hot & Cold Temperatures **Making Ice Cream!** | |
| **Purpose: (the why of the lesson)**  **-**To see the physical change from liquid to solid | **SLE** specific learning expectations (focus of curriculum):  -Science Gr. 2 D 2-9.1, 2-9.3, 2-9.4, 2-9.8 |
| **Materials/Resources:**  -1 cup of milk -1/2 cup of salt  -1/2 teaspoon of vanilla -6 sandwich zip-block bags  -2 tablespoons of sugar -6 freezer zip-block bags  -4 cups of crushed ice -measuring cups/spoon | |
| **Intro/Motivator**: (focus attn., activate prior knowledge)  -Talk about liquid, gas and solids  -Talk about the effect of temperature on the different states  -What happens when you put salt on the icy roads?  -How do we use salt to make ice cream? Let’s find out! | |
| **Development**: Main content, ideas/info, examples)  -Tell students it will not work unless they are listening to instructions and not fooling around  -Have the desks in 6 groups of 4  -Place a small zip-block bag, 4 empty cups and 4 spoons on each groups desk. Measure out in labelled cups the milk, salt, sugar and vanilla. Placed one cup on each student’s desk that way everyone is participating.  -Instruct the experiment step by step asking the students to place the milk, vanilla and sugar in the small bag.  -Pass out a big bag of ice to each group, the student with the salt may pour in their ingredient in the big bag on top of the ice  -Ask the students to observe what is happening to the ice. | **Guided Practice**; (application of concepts, activities  -Once the students have there small bags closed ask them to put ice into the big bag along with their small bags of ingredients  -Each student gets to shake the big bag for 2 minutes, I will have a timer set on the smart board  -Once the ice cream I will go around and divide the small bag of ice cream into the four cups.  -Each student will be able to eat his/her creation! |
| **Closure:** (check for understanding)  -Talk about what happened to the liquid ingredients when we put them on ice and shook it  -Recap the three states of water  -Talk about the effect of salt on the ice and temperature  -We just made ice cream, how cool! | **Assessment:** (retain knowledge, relate to prior knowledge)  -Class discussion  -Ability to listen to instructions |
| **Modifications** : (adaptations):  -Write the steps on the board  -Print out a recipe for the students  -Play song (water cycle or winter theme) while they shake the bag | **Extensions:** |