

Did you know that if the temperature is low enough, you can watch a bubble freeze? Follow these steps to watch ice crystals form right in front of your eyes as a bubble becomes a work of art!





- 1 CUP WARM WATER
- 2 TABLESPOONS GLYCERIN OR CORN SYRUP AS A SUBSTITUTE
- 2 TABLESPOONS SUGAR
- 3 TABLESPOONS DISH SOAP
- BUBBLE WAND OR STRAW



- 1. MIX THE WATER, GLYCERIN, SUGAR, AND DISH SOAP TOGETHER TO MAKE BUBBLE SOLUTION.
- 2. GO OUTSIDE WHEN THE TEMPERATURES ARE BELOW FREEZING:
 - -10°C OR 14°F. THE COLDER THE BETTER.
- **3. ALLOW YOUR BUBBLE SOLUTION TO COOL BEFORE BLOWING BUBBLES.**
- 4. FIND A PLACE OUTSIDE THAT IS COLD BUT PROTECTED FROM THE WIND.
- 5. YOU CAN BLOW A BUBBLE AND CATCH IT ON YOUR BUBBLE WAND OR

BLOW A BUBBLE DIRECTLY ON THE SNOW, IF YOU HAVE SOME AROUND.

6. THE BUBBLE WON'T FREEZE IMMEDIATELY. DEPENDING ON THE TEMPERATURE OUTSIDE,

IT MAY TAKE A FEW SECONDS TO A FEW MINUTES TO FREEZE.

7. WHEN THE BUBBLE IS FROZEN, TOUCH IT LIGHTLY AND SEE WHAT HAPPENS.



THIS EXPERIMENT IS GREAT FOR BEGINNERS, CAN BE DONE USING HOUSEHOLD ITEMS, AND NEEDS YOU TO BE OUTSIDE IN VERY COLD WEATHER.

