

Manchester College
Education Department

Lesson Plan By: Eric Roof _____

Lesson: _Science_____ Length_45Min_____ Age Level/Grade
Level_1st_____

Academic Standard: 1.3.1

- Recognize and explain that water can be a liquid or a solid and can go back and forth from one form to the other. Investigate by observing that if water is turned into ice and then the ice is allowed to melt, the amount of water is the same as it was before freezing.

Skill

Knowledge

Recognize

Liquid to solid

Explain

Solid to Liquid

Investigate

Water level before freezing

Observe

Water level after thawing

Performance Objective:

The student will be able to explain how water can go from a solid to liquid and liquid to solid.

Assessment:

The students will explain to me why their cup either melted or froze.

Advanced Preparation by Teacher:

Cups of water

Cup of frozen Ice

Procedure/ Introduction/Motivation:

So my little 1st graders I was out looking at the stars last night and I had a cup of water with me. Well I forgot to bring it in last night. So when I woke up this morning and was on my way to school I saw my cup. Only thing is there wasn't any water in it anymore. It was frozen and now was ice! What happened to make it like that? Will you help me figure out how my water became ice? **Gardner: Verbal Linguistic**

Step-by-Step Plan:

- Give students either a cup of water or a cup of ice.
- If they are given water, they need that water to freeze, if they are given ice they want their ice to melt. They can put their cups anywhere in the classroom or outside in the snow.
- Have them observe their water at the beginning, middle and end of the day. Ask them, how does it feel? What's the temperature of the water, cold, hot? **Gardner: Logical-Mathematical Intelligence**
- What happened to those who put the water outside on this cold wintery day? What happened with those who had ice and kept it in on their desk all day?

Closure:

Bring all the students back together and talk about what they experienced today. What happened to our liquid when it went in the freezer? What did the water feel like at the beginning of the experiment? And how did it feel at the very end? What was the process how did it work? Can you do this experiment at home for your parents?

Adaptation/Enrichment:

Issac (Autism/Enrichment) Have him work on his own. Have him make predictions and have him tell you what he thinks will happen.

Jordan (ADHD) Have him pass out the materials.

Self Reflection:

Was the activity long enough?

Did the students understand the process from liquid to solid and solid to liquid?

Was the activity too easy for the students?