



WAYNE STATE UNIVERSITY

STEM Day Lesson Plan

Title: Liquid Nitrogen Ice-cream

Subject Area: Chemical Engineering

Learning Activity Description: Learning to how make ice-cream using liquid nitrogen. Learn about liquid nitrogen and its application in science and industries.

Lesson Activity Objective: Liquid Nitrogen, effect of temperature on pressure.

Lesson Activity Outcomes: Liquid Nitrogen temperature, how make ice-cream at home using liquid nitrogen.

Materials/Supplies Listed: Liquid nitrogen, heavy milk, half-half milk, vanilla syrup, sugar, safety gloves and goggles.

Teacher Procedures: <https://www.youtube.com/watch?v=2jUFdH7gvfY>

Preparation Time for Learning Activity: 10 minutes

Room set-up:

Group Strategies (example, group size, expected time for groups, etc.)
10 to 15 students for each serving.

Student Products/Artifacts/work pages:

Assessment Criteria/Rubric:

Closing/Transition to next activity: