

Washington Township School District

STEM/Makerspace Curriculum

Grade:	5	Mystery Science Unit/Project Title:	Mystery Science Lab One: Chemical Magic Dental STEM: Hygiene Eggxperiment
NJ Learning Standard(s):	5-PS1-2		
Objective:	SWBAT: <ul style="list-style-type: none"> • Compare and contrast different sugary drinks and their effects on teeth • Evaluate how proper dental care can help prevent tooth decay 		
STEM/ Unit Activities	Dental Hygiene Eggxperiment - *Note: This activity can also be done with deer teeth and/or animal bones.		
Suggested Assessments:	<ul style="list-style-type: none"> • Worksheets • Project notes/discussions • Project Rubric • Unit Test 		
Supplies Needed:	<p>Materials for each group (for a class of 30, working in groups of 5):</p> <ul style="list-style-type: none"> • 3eggs • 3cups • 1 can of Coca-Cola • 1 can of Hi-C • Water • 3 beakers for measuring 200 mL of liquid and putting the eggs into • Scale for weighing eggs • Permanent marker • Tweezers • Gloves <p>Student Eggxperiment Lab SHEET (Teacher created & Shared)</p>		
Resources to Support Unit:	Extension: You can extend the lab for higher-level students by adding a segment about toothbrush and toothpaste, which demonstrates the beneficial effects of brushing your teeth.		

<https://www.drugabuse.gov/sites/default/files/files/Busboom.pdf>

Washington Township School District

STEM/Makerspace Curriculum

Grade:

5

**Mystery Science
Unit/Project Title:**

Mystery Science: Chemical Magic Lab Three
STEM: Density of Liquids

**NJ Learning
Standard(s):**

5-PS1-3

Objective:

SWBAT:

- Compare and contrast the density of liquids
- Analyze how density of liquids can be beneficial in chemical engineering, and elsewhere

STEM/ Unit Activities

Students will evaluate how the change in density within liquids can effect a solid in a surprising way.

Suggested Assessments:

- Lab Packet
- Lab Work
- Unit Test

Supplies Needed:

Liquid Materials, 1.5 to 3.5 oz (50 to 100 ml) of each:

- Honey, Corn Syrup , 100% Maple Syrup , Whole Milk , Dish Soap , Water, Vegetable Oil, Rubbing Alcohol, Lamp Oil

Other Materials:

- 1 Quart (1L) container – tall, narrow, clear, 9, 4 oz (118 ml) plastic cups , Turkey baster, Food coloring, Metal bolt , Popcorn kernel, Board game die , Cherry tomato , Plastic beads
- Plastic soda cap

**Resources to
Support Unit:**

<https://www.stevespanglerscience.com/lab/experiments/density-tower-magic-with-science/>

Simple extension activity:

<http://inspirationlaboratories.com/layering-liquids-density-experiment/>

