

## **HUGK12 Activity**

TITLE:

Fluids

PREPARED BY:

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DCPS STANDARDS:

8.5. Broad Concept: Energy and matter have multiple forms and can be changed from one form to another.

GOAL:

Students will know the types of fluids and understand Boyle's law.

OBJECTIVES:

Students will observe the behavior of a type of fluid.  
Students will observe Boyle's law in action.

PREREQUISITE KNOWLEDGE:

Background

I. Types of Fluids

Liquids, gases, and plasmas

II. Boyle's Law

Pressure and volume are inversely proportional in a closed system when the temperature is fixed.

ESSENTIAL QUESTIONS:

What are the types of fluids?

What is the relationship between pressure and volume in a closed system containing a gas?

**LABORATORY MATERIALS:**

Pair of syringes

**DIFFERENTIATING INSTRUCTION:**

English Language Limited students should have no problems with this activity.

**RATIONALE:**

This activity is designed to have students become familiar fluids and Boyle's law

**RESEARCH ACTIVITY:**

Students will observe behavior of a certain amount of air in a syringe without applied pressure.

Students will observe behavior of the same amount of air in a syringe with applied pressure.

**EVALUATION AND ASSESMENT:**

Students will evaluate differences in volume of air in syringe with and without pressure.