**Unit 1 - Classification of matter**

Archdiocese standards 8th grade

1. Measure the **volume** of various objects
2. Compare **densities** of various substances
3. Relate **mass, volume, and density**
4. Explain effects of height, depth on **pressure**

**9.** Distinguish between **atoms, elements, molecules** and **compounds**

Ohio 9th grade standards

o Heterogeneous vs. homogeneous

o Properties of matter

o States of matter and its changes

**Concepts-**

***chapter 1- ( attributes game)***

everything is matter

each substance has unique properties that help identify it

basic units of matter are elements, can be combined to make compounds- bonded, and mixtures- unbounded

mass vs weight

density ( mass, volume)

***chapter 2- (ooblick)***

solids, liquids, gases- non-newtonian fluids- how do particles move? + changes in state

gas behavior , Charles law, boyles law, arrow chart ( PHET simulator)

graphing gas behavior

**Activities**

STEMM connection: engineering design: uses for ooblick

Inquiry: phet simulator, ooblick lab, attribute game