Lesson 3: Classifying Substances Lab

Purpose: We are learning to classify common substances as pure substances or mixtures.

Hypothesis:

_____

_____

Materials and Equipment:

- common substances (aluminum foil, baking powder, water, sugar, vinegar, vegetable oil, corn starch)
- plastic cups
- zip-lock bags

Safety:

- Do not eat or taste any of the substances
- Wash your hands after handling the substances
- Dispose of all substances as instructed

Procedure:

1. For substances A – G, carefully examine each substance in its bag or container and determine whether it is a pure substance or a mixture. Complete the observations table below.

2. Add **Substance C** to **Substance G** by pouring it into the ziplock bag. Seal the bag and mix gently. Your mixture should be hard when under pressure (when you are touching it) and fluid when it is not. Record your observations in the observations table below under **Substance H**.

3. Extension: Try creating your own mixtures by combining substances. What do you notice?

4. Dispose of your substances in the garbage (solids and Substance H) and sink (liquids). Clean your work area.

Lesson 3 - Classifying Substances Lab Name:_____

Observations:

Letter	Observations (smell, look)	State (solid, gas, liquid)	Composition (pure substance, mixture)	Substance Name?
A				
B				
C				
D				
E				
F				
G				
H				Quicksand

Discussion Questions:

1) How can you tell the difference between a pure substance and a homogeneous mixture?

_____

_____

2) Were any substances hard to distinguish between? Why? How could you tell them apart?

_____

_____