MATTER AND ENERGY

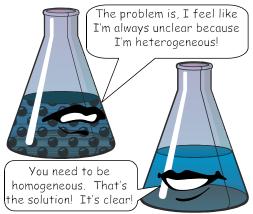
Name	
Date	Period
-	

My Type of Mixture

Not all mixtures are created equal. Besides the fact that the composition of all mixtures is variable, there are also different types of mixtures. Some, such as mechanical mixtures, are heterogeneous, while others, such as solutions, are homogeneous. You can test the difference yourself:

Perform the observations described below. Then answer the questions that follow.

• Fill two test tubes partway with water. Place the test tubes in a test tube rack.



- In one test tube, place a small amount of table salt (sodium chloride).
- In the other test tube, place a small amount of starch.
- Stir each of the two test tubes for several minutes with a glass stirring rod. Then compare the appearance of the two test tubes.
- 1. How many substances appear to be in the test tube containing the table salt? How many substances are present

in the test tube?

- 2. How many substances appear to be present in the test tube containing the starch? How many are present?
- 3. Homogeneous mixtures appear clear. They are called solutions. Heterogeneous mixtures often appear cloudy. They are called mechanical mixtures. Identify which test tube is the solution and which is the mechanical

mixture.

4. If the particles of a mechanical mixture are small enough, it may not appear cloudy, but mechanical mixtures scatter a beam of light much like headlights in the fog. Bring your test tubes up to your teacher to shine a laser

light through them. Describe what you see.