

Name: _____

Date: _____

Determining the pH of Unknown

Objective: To use a variety of indicators to determine the pH of an unknown substance.

Materials:

cabbage juice indicator

seltzer (2.9 – 3.3), drain cleaner (14.0), distilled water (7.0), baking soda (8.3), tomatoes (4.0 – 4.5), ammonia (11.0), soap solution (10.0)

Procedure:

For preparing the cabbage juice indicator:

1. Break off a few small pieces of red cabbage and place inside a small beaker filled with water. Place the beaker on a hot plate. Heat it until it begins to boil and the cabbage juice has leached from the cabbage into solution.
2. When the cabbage juice has boiled, remove it from the hot plate and place it on the table top for two minutes.
3. When it has cooled, filter the solution through a funnel and resting in an Erlenmeyer flask.

Testing the substances:

4. Using the spot plate and the indicators listed above, test the given compounds. Record the observed color. Ammonia should be tested under the hood.
5. All of the solutions may go down the sink.

Data:

Record the identity of the material tested, pH, indicator used, and color observed.