

STEM CHALLENGE DATA & RESULTS

TODAY MY CHALLENGE IS:

WHAT PROBLEM DO I NEED TO SOLVE?

WHAT SUPPLIES WILL I USE?

WHAT IS MY PLAN?

WHAT WORKED FOR ME?

WHAT DID NOT WORK FOR ME ?

Key Concepts for Acids and Bases

Bases—

compounds that produce hydroxide ions (OH^-) when dissolved in water



Acids—

compounds that produce hydrogen ions (H^+) when dissolved in water

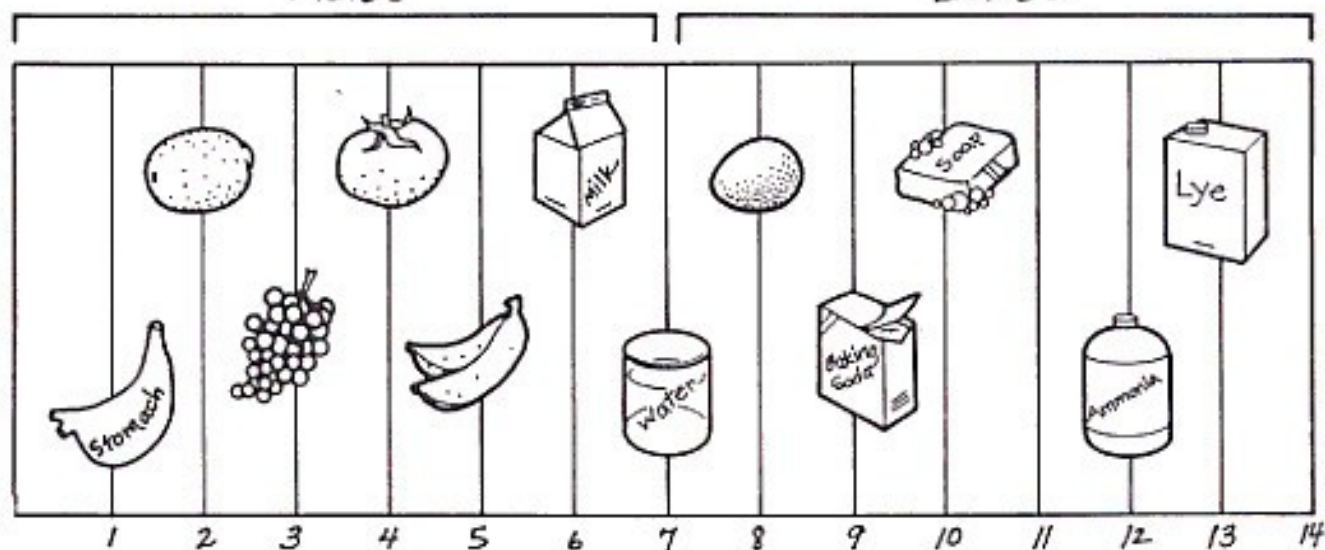


pH—

measurement of the strength of an acidic or basic solution; more specifically, the measurement of hydrogen ion (H^+) concentration

Acids

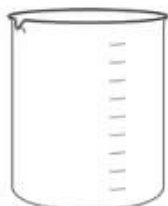
Bases



DISSOLVING CANDY

SCIENCE EXPERIMENT

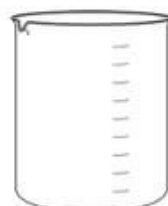
SUPPLIES: CUPS * CANDY * LIQUIDS * STOPWATCH



LIQUID #1

TIME TO DISSOLVE

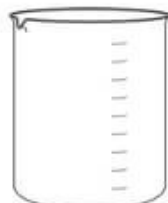
RESULTS



LIQUID #2

TIME TO DISSOLVE

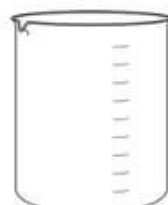
RESULTS



LIQUID #3

TIME TO DISSOLVE

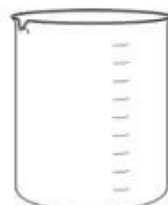
RESULTS



LIQUID #4

TIME TO DISSOLVE

RESULTS



LIQUID #5

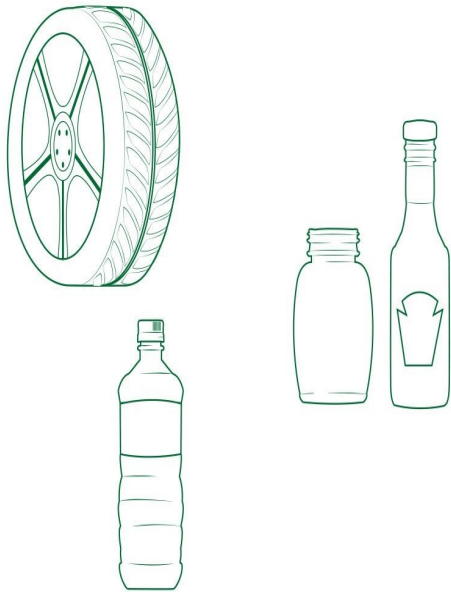
TIME TO DISSOLVE

RESULTS

Do you know the difference between insulators and conductors? Materials act differently when they come in contact with an electric current. Insulators provide difficult paths for electricity, so the current doesn't flow through them. For this reason, insulators can help protect you from electric shock. Conductors provide easy paths for electricity, which means currents pass through them quickly. This makes conductors dangerous around electricity, including lightning.

Unscramble the letters to reveal the names of common insulators and conductors for electricity. Use the pictures below for clues.

INSULATORS:



- 1. REBUBR
- 2. LGSAS
- 3. SIPALTC

CONDUCTORS:



- 4. LATME
- 5. TERWA
- 6. SRETE
