ELEMENTARY SCIENCE MADE EASY TM Science at Home: pH Potion Lab Notes (middle school)

COLOR-CHANGING POTION

The goal of this lab is to identify chemicals in your home that are acidic, basic, and neutral. Red cabbage juice is a pH indicator that will change colors when mixed with acidic or basic chemicals. When mixed with different pH materials the color will turn (or not) as follows: Acids - Red/Pink; Bases - Green/Blue-Green; Neutrals - no change/blueish-purple.

Pick a variety of chemicals (including food or juice!) you want to test. Predict whether you think they are acidic, basic, or neutral. Test your prediction by mixing with purple cabbage juice and observing the color of the mixture.

my materials

write down the kitchen chemicals you will mix with cabbage juice in this experiment

Trial 1:			
lam testing			
I predict this chemical is (circle one):	acidic	neutral	basic
I predict the cabbage juice will (circle one):	turn red	stay purple	turn green

What is the resulting color after mixing the chemical and cabbage juice? (circle one)

RED/PINK	PURPLE	BLUE-GREEN/GREEN
acidic	neutral	basic

Trial 2:

lam testing			
I predict this chemical is (circle one):	acidic	neutral	basic
I predict the cabbage juice will (circle one):	turn red	stay purple	turn green

What is the resulting color after mixing the chemical and cabbage juice? (circle one)

RED/PINK	PURPLE	BLUE-GREEN/GREEN
acidic	neutral	basic





ELEMENTARY SCIENCE MADE EASY TM **Science at Home: Material Madness Worksheet** Trial 3: lam testing I predict this chemical is (circle one): acidic basic neutral I predict the cabbage juice will (circle one): turn red stay purple turn green What is the resulting color after mixing the chemical and cabbage juice? (circle one) **RED/PINK** PURPLE **BLUE-GREEN/GREEN** acidic basic neutral Trial 4: lam testing I predict this chemical is (circle one): acidic neutral basic I predict the cabbage juice will (circle one): turn red stay purple turn green What is the resulting color after mixing the chemical and cabbage juice? (circle one) **RED/PINK** PURPLE **BLUE-GREEN/GREEN** acidic basic neutral Trial 5: lam testing I predict this chemical is (circle one): acidic basic neutral I predict the cabbage juice will (circle one): stay purple turn red turn green What is the resulting color after mixing the chemical and cabbage juice? (circle one) **RED/PINK** PURPLE **BLUE-GREEN/GREEN** acidic neutral basic

ELEMENTARY SCIENCE MADE EASY TM **Science at Home: Material Madness Worksheet Trial 6:** lam testing I predict this chemical is (circle one): acidic basic neutral I predict the cabbage juice will (circle one): turn red stay purple turn green What is the resulting color after mixing the chemical and cabbage juice? (circle one) **RED/PINK** PURPLE **BLUE-GREEN/GREEN** acidic basic neutral Trial 7: lam testing I predict this chemical is (circle one): acidic neutral basic I predict the cabbage juice will (circle one): turn red stay purple turn green What is the resulting color after mixing the chemical and cabbage juice? (circle one) **RED/PINK** PURPLE **BLUE-GREEN/GREEN** acidic basic neutral Trial 8: lam testing I predict this chemical is (circle one): acidic basic neutral I predict the cabbage juice will (circle one): stay purple turn red turn green What is the resulting color after mixing the chemical and cabbage juice? (circle one) **RED/PINK** PURPLE **BLUE-GREEN/GREEN** acidic neutral basic

Observations

Make additional observations here!

What did you learn from this activity? What questions do you still have?

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