

SMALL-SCALE LAB: 1 + 2 + 3 = BLACK!

Laboratory Recordsheet

Use with Section 2.4

SAFETY

Wear your safety glasses and follow standard safety procedures.

PURPOSE

To make macroscopic observations of chemical reactions and use them to solve problems.

MATERIALS

- paper
- materials shown in grid
- metric ruler
- reaction surface
- pipet, medicine droppers, and spatulas

PROCEDURE

1. Draw two copies of the grid on separate sheets of paper. Make each square in the grid 2 cm on each side.
2. Place a reaction surface over one of the grids. Use the second grid as a data table to record your observations.
3. Use the column and row labels to determine which materials belong in each square. Depending on the material, add one drop, one piece, or a few grains.
4. Stir each mixture by forcing air from an empty pipet as directed by your teacher.

	NaClO	H ₂ O ₂	CuSO ₄
KI			
KI + Starch			
KI + Paper			
KI + Cereal			

ANALYSES AND CONCLUSIONS

Using your experimental data, record the answers to the following questions.

1. What color is a mixture of sodium hypochlorite (NaClO) and potassium iodide (KI)?

2. What happens when you mix NaClO , KI , and starch?

3. What do NaClO , H_2O_2 , and CuSO_4 have in common?

4. What substance is found in both paper and cereal? How do you know?

5. If you used NaClO instead of CuSO_4 in reactions other than the reaction with KI and starch, would you expect the results to always be identical? Explain your answer.

YOU'RE THE CHEMIST

Use the space below to write your observations to the small-scale activities in the *You're the Chemist* section.