

Student Name: _____

Date: _____

Activity Sheet

Unknown Powders

Part 1: Observing chemical changes

- ___ 1) Get your paint palette. Use a Popsicle stick to place a small scoop of the powder in 4 sections. Write down the name of your powder in your powder chart.
- ___ 2) Observe the powder. Feel it with your fingers. What does it feel like? Use your magnifying glass to observe the powder. Record your observations in your powder chart.
- ___ 3) Add a few drops of iodine to one pile of powder. Stir with a toothpick and observe what happens. Write down your observations.
- ___ 4) Add a few drops of vinegar to another pile of powder. Stir with a toothpick and observe what happens. Write down your observations.
- ___ 5) Add a few drops of baking soda solution to another pile of powder. Stir with a toothpick and observe what happens. Write down your observations.
- ___ 6) Add a few drops of universal pH solution to another pile of powder. Stir with a toothpick and observe what happens. Write down your observations.
- ___ 7) Clean your paint palette.
- ___ 8) Repeat steps 1-7 for each of the other powders.



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Part 2: Identifying 2 unknown powders

- ___ 1) Get one of the unknown powder mixtures from your teacher. Use a Popsicle stick to place a small scoop of the powder in 4 sections.
- ___ 2) Observe the mixture. Feel it with your fingers. What does it feel like? Use your magnifying glass to observe the mixture. Record your observations in your unknown powder chart.
- ___ 3) Make a hypothesis stating which two powders you think are in your mixture. Try to give a reason why.
- ___ 4) Add a few drops of iodine to one pile of the mixture. Stir with a toothpick and observe what happens. Write down your observations.
- ___ 5) Add a few drops of vinegar to another pile of the mixture. Stir with a toothpick and observe what happens. Write down your observations.
- ___ 6) Add a few drops of baking soda solution to another pile of the mixture. Stir with a toothpick and observe what happens. Write down your observations.
- ___ 7) Add a few drops of universal pH solution to another pile of the mixture. Stir with a toothpick and observe what happens. Write down your observations.
- ___ 8) Clean your paint palette.
- ___ 9) Compare your observations to the chart you made in part A to determine what you think your mixture is. Give evidence for your guesses.
- ___ 10) Check your guess with your teacher.

