Virtual Purple Museum

Chemical Reaction: Citrus and Baking Soda

What better way to test out your sense of smell than with citrus chemical reactions! What do you think will happen when we add baking soda to some of our favorite high acid citrus fruits? Let's find out!

Materials:

- Baking soda
- Lemons, limes, grapefruits, and/or oranges. (At least two different types of citrus fruit)
- Small containers or muffin pan

Try it!

1. Compare the different types of citrus fruits you have. How are they similar? How are they different?
2. Cut your citrus fruits in half on the sideways.
3. Point out different parts of the fruit: skin, membranes, segments and seeds.
4. Smell with your citrus fruits before beginning to experiment. What do you smell? Do they smell the same or different?
5. Scoop 2 or 3 tablespoons of baking soda into each small container.
6. Have your child make a prediction: What do you think will happen when you squeeze out the juice of the fruit to the baking soda?
7. Squeeze the juice from each fruit into its own container.
8. Engage your child into the experiment by asking questions in suggested "Guiding Questions" below.

Guiding Questions:

- Do you think the scent of fruit changes when we mix the juice with baking soda?
- Which fruit had the strongest reaction? Why do you think that happened?
- Was your prediction accurate?
- What do you hear when the baking soda is mixed with the fruit juice?

Learning Behind the Play:

- Encourages curiosity and inquiry in your children.
- Encourage problem-solving skills and observation skills.
- Building language skills and social/emotional skills as you work together with your child.

Take It Further:

You may try this experiment with vinegar or other fruits like apples or tomato**.**