

Experiment Details for Session 3: **BANG BOOM BLAST!**

Reminder: All experiments recreated at home should be done under the supervision of a parent or guardian to ensure the safety of the child. No experiments listed should cause any harm!

Elephant Toothpaste

Materials:

1. Hydrogen Peroxide (3%) - first aid antiseptic
2. Warm water
3. Any cylindrical-shaped jar or bottle (empty plastic water bottle can work great)
4. Dish soap
5. A packet of dry yeast
6. Tray or large container (you can always work outdoors)
7. Food coloring (optional)
8. A funnel (optional but recommended)
9. A cup/small bowl
10. Something to mix with

Procedure:

1. Have an adult pour about $\frac{1}{2}$ cup of hydrogen peroxide (first aid antiseptic) into the cylinder you are using
2. Add about a tablespoon of dish soap into the cylinder
3. If you would like, add several drops of one colored food coloring! I'm going to be using blue today!
4. Mix the packet of dry yeast ($\frac{1}{4}$ oz) with about 3 tablespoons of warm water for about 30 seconds in a separate cup or small bowl
5. Pour the yeast into the cylinder and watch the elephant toothpaste be created! Please be sure to not touch the foam right away as it can be a little hot or warm!

Bottle Explosion

- We recommend conducting this experiment over a sink or outdoors!

Materials:

1. One empty plastic water bottle
2. Baking soda
3. Vinegar
4. Food coloring (optional)
5. Safety goggles

Procedure:

1. Take the empty water bottle and fill it with $\frac{1}{2}$ cup of vinegar.
2. Put a few drops of your food coloring into the bottle of vinegar (optional!)
3. Take $\frac{1}{4}$ cup* of baking soda and pour it into the vinegar. What do you see?

*Note: If you want a more explosive reaction, just add more vinegar!

Mentos Explosion

- Please make sure a parent or guardian does this experiment for you!
- Please conduct this experiment in a wide-open area and far away from you, as you don't want to get sticky! We recommend wearing old clothes just in case :)

Materials:

1. 2L Coke
2. 2L Sprite
3. 2L Fanta
4. 3 packs of mentos
5. Eye protection (goggles or sunglasses work great!)

Procedure:

1. Starting with Fanta, place the drink on the floor
2. Open the cap and pour a pack of Mentos into the bottle (you have to be VERY quick here and don't forget to step away as soon as you're done!)
3. Watch the amazing explosion take place!
4. Repeat step 1-4 for sprite and coke