

Experiment Details for Session 9: **SCIENCEZOOMZ FAVS!**

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!

Invisible Ink

Materials:

1. Water
2. 100% Grape Juice
3. Baking Soda
4. Q-tip/skewer/toothpick (anything you can write with using your invisible ink)
5. Paper
6. Cotton ball or Paper Towel

Procedure:

1. Make your invisible ink mixture by pouring some water in a plate or bowl
2. Add in baking soda (You should use around one spoon of baking soda for every spoon

- of water!)
3. Take your Q-tip and write your secret message!
 4. Pour some grape juice into a plate or bowl (Just a little bit is enough! Don't pour too much or you won't have any leftover to drink at home!)
 5. Take your cotton ball or paper towel and dip it into the grape juice (let it dry for 10-15 minutes).
 6. Rub it onto the paper to see your secret message be revealed!

Lava Lamp

Materials:

1. Vegetable Oil
2. Water
3. Food Coloring
4. Transparent Glass/Cup
5. Alka Seltzer (Tums may work as well)

Procedure:

1. Fill your cup/glass with about $\frac{3}{4}$ of vegetable oil
2. Fill the rest up with water and watch as the water sinks to the bottom!
3. Add a few drops of your favorite food coloring
4. Take your Alka Seltzer (or Tums) and break it into a few small pieces
5. Put the tablet pieces in a few at a time, and watch your lava lamp erupt with colorful bubbles!
6. If you want your lava lamp to erupt even more, just add another tablet!

Exploding Pop Rockets

Materials:

1. Mini M&M tube (any small cylindrical container with a lid should work!)
2. Alka Seltzers (Antacid)
3. Paper
4. Tape
5. Scissors
6. Colored Markers/Sharpies (optional)
7. Water

Procedure:

1. Design a paper rocket to put around your mini M & M or other small cylindrical tube/container (be careful while using scissors!)
2. Attach the paper rocket to the mini M&M tube using tape
3. Detach the mini M&M lid and add about 1 teaspoon of water to the tube
4. Drop in 1 alka seltzer tablet
5. Quickly close the lid, shake, and put your rocket down

6. Watch your mini rocket launch!!

Have fun!