

# FIZZ-BUBBLE-POP SCIENCE NIGHT



# FIZZ-BUBBLE-POP SCIENCE NIGHT



# ACTIVITY 4

**What You Do:**

**Give each kid 1 QUART SIZE BAGGIE**

**ADD 1 BOTTLE OF GLUE IN BAG (1 Bottle of Glue 4 oz size same as ½ Cup)**

**ADD 1 GLUE BOTTLE OF WATER (1 BOTTLE IS 4 OZ.)**

**SEAL BAG AND SQUISH UNTIL MIXED WELL.**

**2 DROPS OF GREEN FOOD COLORING**

**SEAL, SQUISH, MIX WELL**

**SET ASIDE**

**GIVE EACH KID ONE SANDWICH BAGGIE WITH 1 TSP OF BORAX ALREADY INSIDE**

**ADD 1 CUP WATER**

**Seal, Squick and Mix until the borax is dissolved.**

**Seal and Set Aside.**

**Team up with the person beside you...Take turns holding the bag open for the other one and adding the borax solution to the glue solution...GET IT ALL IN THE BAGGIE**

**Seal and start squishing.**

**The slime will begin to form immediately**

**Stir as much as you can, then dig in and knead it with your hands until it gets less sticky.**

**(No one makes slime without getting a little messy!)**

**Don't worry about any leftover water in the bowl; just pour it out.**

## **ACTIVITY ONE**

### **ELEPHANT TOOTHPASTE**

- 1. Put on safety goggles**
- 2. Add Peroxide in bottle ( 1 Cup)**
- 3. Add 16 drops of your favorite food coloring into the bottle.**
- 4. Add about 2 tablespoon of liquid dish soap into the bottle and swish the bottle around a bit to mix it. (DON'T SHAKE)**
- 5. In a separate small cup, combine the warm water and the yeast together and mix for about 30 seconds.**
- 6. Pour the yeast water mixture into the bottle (a funnel helps here) and stand back and watch the foaminess begin!**

## **ACTIVITY 6**

**PLACE A GUMMY WORM ON THE PLATE.**

**COVER WORM WITH  $\frac{1}{2}$  - 1 CUP OF  
PUDDING**

**KIDS MUST EAT THE PUDDING, LICK THE  
PLATE AND EAT THE GUMMY WORM...YELL  
"DONE" WHEN FINISHED. PRIZE**

# **ACTIVITY 3**

**SLIME WARS**

**5 GALLON BUCKETS OF SLIME**

**DIVIDE INTO 5 TEAMS (5 BUCKETS OF SLIME)**

**1 SLIME CONTAINER PER KID (RED SOLO CUP)**

**PLASTIC SPOONS FOR FLICKING THE SLIME AT EACH OTHER (1 PER CHILD PLUS A FEW EXTRA'S  
IN CASE OF BREAKAGE)**

**DIVIDE INTO 5 TEAMS**

**GIVE EACH TEAM A BUCKET**

**GIVE EACH CHILD A SPOON**

**FLICK SLIME AT EACH OTHER...CAN FLICK  
AT ANYONE...MUST USE YOUR TEAM  
BUCKET. ONCE IT IS GONE, IT IS GONE.**

## **ACTIVITY 2**

**Diet Soda and Mento's Eruption – This is for the leader to do only!**

**a. 32 Oz. Diet Soda**

**b. Roll of Mento's**

**Tube to put the mento's into**

**Instructions: Put Mento's into the tube, remove the cap from the diet soda, pour the mento's into the bottle of diet soda...Stand back and watch the soda explode**

## **ACTIVITY 5**

### **CHILDREN'S ROCKETS**

- A. Add 1 tsp of water to the canister**
- B. Make sure lid and rim of canister is clean**
- C. Drop the alka seltzer into the canister**
- D. Place lid on firmly**
- E. Turn canister upside down and step back**



## Slime Zone - Science Night

### DEMONSTRATION #1

## Elephant Toothpaste

<http://sciencebob.com/fantastic-foamy-fountain/>

### You will need

A clean 32 ounce plastic soda bottle

1 cup 20-volume hydrogen peroxide liquid (20-volume is a 6% solution, ask an adult to get this from a beauty supply store or hair salon)

2 Tablespoon (one packet) of dry yeast

6 Tablespoons of warm water

Liquid dish washing soap

Food coloring

Small cup

Spoon for stirring yeast and water

Safety goggles

Funnel

**NOTE: The foam will overflow from the bottle, so be sure to do this experiment on a washable surface, or place the bottle on a tray.**

## What to do

### Hydrogen peroxide can irritate skin and eyes

1. Put on those safety goggles and ask an adult to carefully pour the hydrogen peroxide into the bottle.
2. Add 16 drops of your favorite food coloring into the bottle.
3. Add about 2 tablespoon of liquid dish soap into the bottle and swish the bottle around a bit to mix it. **(DON'T SHAKE)**
4. In a separate small cup, combine the warm water and the yeast together and mix for about 30 seconds.
5. Now the adventure starts! Pour the yeast water mixture into the bottle (a funnel helps here) and watch the foaminess begin!

### How does it work?

Foam is awesome! The foam you made is special because each tiny foam bubble is filled with oxygen. The yeast acted as a catalyst (a helper) to remove the oxygen from the hydrogen peroxide. Since it did this very fast, it created lots and lots of bubbles. Did you notice the bottle got warm. Your experiment created a reaction called an Exothermic Reaction – that means it not only created foam, it created heat! The foam produced is just water, soap, and oxygen so you can clean it up with a sponge and pour any extra liquid left in the bottle down the drain.

This experiment is sometimes called “Elephant’s Toothpaste” because it looks like toothpaste coming out of a tube, but don’t get the foam in your mouth!

**TEACHER EXPERIMENT ONLY. USE GOGGLES...KIDS STAND BACK**

[http://www.carolina.com/catalog/detail.jsp?prodId=868146&s\\_cid=ppc\\_gl\\_products&gclid=CkzD5PumvMUCFQiUfgodKbgANQ](http://www.carolina.com/catalog/detail.jsp?prodId=868146&s_cid=ppc_gl_products&gclid=CkzD5PumvMUCFQiUfgodKbgANQ)

(30% PEROXIDE - \$11.00)

Use 30% peroxide(HAVE TO ORDER OR PERHAPS PHARMACY) to make a huge eruption. Put in a very large CLEARR bottle...maybe a large CLEAR flower vase with a neck OR A TALL FLASK OF SOME SORT WITH A NECK and get back quick.

---

## DEMONSTRATION #2

Diet Soda and Mento's Eruption – **This is for the leader to do only!**

- a. 32 Oz. Diet Soda
- b.
- c. Roll of Mento's
- d. Tube to put the mento's into

**Instructions: Put Mento's into the tube, remove the cap from the diet soda, pour the mento's into the bottle of diet soda...Stand back and watch the soda explode**

## ACTIVITY #3 – MONSTRE SLIME WARS

MAKE **MONSTER SLIME** AND HAVE A **SLIME WAR**

**Note: make 25 gallons of slime**

**MONSTER SLIME – MY RECIPE – MAKES ABOUT 2 ½ GALLONS OF SLIME  
EXTRA LARGE PAN (3 GALLON OR MORE)**

**2 GALLON OF WATER**

**4 C. CORN STARCH**

**6 C. WATER**

**NOTE: ADD 2 GALLON S OF THE ACTIVATED YUCK THAT I SAVED FROM  
LAST WEEK-RINSED WELL TO REMOVE ANY ODORS)**

**PUT 2 GALLONS OF WATER INTO PAN AND TURN ON HIGH  
DISSOLVE THE CORN STARCH IN THE 6 CUPS OF WATER. STIR UNTIL  
SMOOTH**

**WHEN WATER STARTS TO BOIL, ADD HALF THE CORN STARCH AND  
MIX. ADD THE REST AND MIX STIR UNTIL THICKENS.**

**COOL**

**ADD 2 GALLON OF YUCK**

**CAN MAKE THE INITIAL SLIME A DAY OR TWO IN ADVANCE BUT WILL  
HAVE TO RE-HEAT, COOL SLIGHTLY AND THEN ADD THE YUCK.  
EASIER TO JUST MAKE ON THE DAY OF EVENT.**

**5 GALLON BUCKETS OF SLIME**

**1 SLIME CONTAINER PER KID (RED SOLO CUP)**

**PLASTIC SPOONS FOR FLICKING THE SLIME AT EACH OTHER (1 PER  
CHILD PLUS A FEW EXTRA'S IN CASE OF BREAKAGE)**

**DIVIDE INTO TEAMS (DEPENDING ON THE NUMBER OF BUCKETS OF  
SLIME I HAVE. ONCE THEIR BUCKET IS GONE, IT IS GONE. THEY CAN'T  
GET INTO SOMEONE ELSE'S.**

## ACTIVITY #4

### 1. Ooblec

40 Sandwich Size Bags ZIPPER ONES

40- Quart Size Zip Lock Bags– ZIPPER ONES

Glue – 1 Bottle of Glue Per Child (4 Oz Per Child – SAME AS ½ CUP)

Borax

3-4 Buckets of Water

Green Food Coloring – The one with a dropper – 2 Drops per child

1 C. MEASURING CUP

½ C MEASURING CUP (IF YOU ARE MEASURING THE GLUE FROM LARGE BOTTLE INSTEAD OF INDIVIDUAL 4 OZ. BOTTLES

1 tsp measuring spoon – TAKE SEVERAL TO SPEED THINGS UP – OR PRE-MEASURE THE BORAX & PUT IN SECOND BAGGIE (I AM GOING TO DO THIS)

MARKER TO WRITE NAME ON BAG

What You Do:

Partner Up

1 QUART SIZE BAGGIE

1 BOTTLE OF GLUE IN BAG (1 Bottle of Glue 4 oz size same as ½ Cup)

1 GLUE BOTTLE OF WATER (1 BOTTLE IS 4 OZ.)

Seal bag and squish until mixed well.

2 DROPS OF GREEN FOOD COLORING

Seal, Squish, Mix Well.

Set Aside

SANDWICH BAGGIE

1 teaspoon of borax (CAN ADD THE BORAX TO THE BAGGIE IN ADVANCE TO SAVE TIME)

1 cup water

Seal, Squick and Mix until the borax is dissolved.

Seal and Set Aside.

**Team up with the person beside you...Take turns holding the bag open for the other one and adding the borax solution to the glue solution...GET IT ALL IN THE BAGGIE**

**Seal and start squishing.**

**The slime will begin to form immediately**

**Stir as much as you can, then dig in and knead it with your hands until it gets less sticky.**

**(No one makes slime without getting a little messy!)**

**Don't worry about any leftover water in the bowl; just pour it out.**

## **ACTIVITY #5 - Alka Seltzer Rockets**

- a. Alka Seltzer Tablets (broken into small bits- 4 per tablet)**
- b. Film Canisters – 1 per child (more if you want to do the demonstration)**
- c. 1 tsp. Water per rocket**

### **Instructions:**

#### **DEMONSTRATION: SETTING OFF A BUNCH OF ROCKETS AT THE SAME TIME**

- A. Glue the alka seltzer tablet to the underneath side of the lid and let dry.**
- B. Add 1 tsp of water to each canister and set on a large cookie sheet.**
- C. Make sure lids and rim of container are clean**
- D. Place lids on all containers**
- E. Set another cookie sheet upside down on top of the canisters and hold firmly while you flip all the canisters at once.**
- F. Remove the top cookie sheet quickly and step back.**

#### **CHILDREN'S ROCKETS**

- A. Add 1 tsp of water to the canister**
- B. Make sure lid and rim of canister is clean**
- C. Drop the alka seltzer into the canister**
- D. Place lid on firmly**
- E. Turn canister upside down and step back**

**Canisters will pop and fly into the air**

## **FEAST OF WORMS**

**CHOCOLATE PUDDING**

**GUMMY WORMS**

**PAPER PLATES**

**½ C MEASURING CUP**

**1 C. MEASURING CUP**

**PRIZE**

**PLACE A GUMMY WORM ON THE PLATE**

**COVER WITH ½ - 1 CUP OF PUDDING**

**KIDS MUST EAT THE PUDDING, LICK THE PLATE AND EAT THE GUMMY WORM...YELL DONE WHEN FINISHED. PRIZE**



## Pre-Demonstration

### Think Ink – Sin Experiment

<http://www.courageouschristianfather.com/sin-christ-simple-illustration/>

<https://www.youtube.com/watch?v=qkfH8cmt5QI>

3 Clear (Tall) Flower Vases

3 Labels... one for each Vase YOU, SIN, CHRIST

Red Food Coloring

Bleach

Fill the 3 containers 1/3 full of:

Container # 1 with the "YOU" label - 1/3 full of water

Container #2 with the "SIN" label - 1/3 full of water & red food coloring

Container # 3 with the "CHRIST" label - 1/3 full of water & bleach

**Be careful to wash the vases very well after your practice round or else it will not work during demonstration.**

You = water

Sin = water+ red food coloring

Christ = water+bleach

As you pour the liquid from one container to another, pour about 1/2 of what is in the jar into the other jar.

---

To Start.....

Have all three labels facing you.

---

Show the kids the three containers - Slowly turn each container around towards the audience...starting with Christ and tell them what each one represents.

**Point to the "US" container and talk about**

- Creation
- Perfection
- How sin entered our world

**(Point to the "SIN" container) and ask the children what sin is and ask for examples of sin.**

- Add a few drops of food coloring to the already red mixture (for each sin mentioned)
- Add a drop for cheating and a big squirt for murder, etc.
- We are all sinners
- Sin ruins lives
- Sin steals our joy
- Sin steals our peace
- And Sin Separates us from God

**Pick up the red “SIN” and pour it into the clear WATER turning it red say:**

The Bible tells us in Romans 3:23 for all have sinned and fall short of the glory of God... we have ALL sinned....we are all sinners.

1<sup>st</sup> John 1:9

If we say we have no sin, we deceive ourselves and the truth is not in us.

**But there is good news:**

**Point** to the “**Christ**” container... Show them how clean the water is...how pure...how perfect.

Talk about:

- Jesus
- Perfect
- Sinless...incapable of sinning

**Point** to the **IODINE** and talk about

- How Jesus loves us so much
- How He didn't want us to be separated from Him forever
- How our sin was poured out onto Jesus
- How He took our sin upon His body
- He died and paid the price for our sin.

**Pour the IODINE into the BLEACH container, say:**

Our sins...all of our sins...were placed upon Jesus

**2 Corinthians 5:21** God made him who had no sin to be sin for us, so that in him we might become the righteousness of God.

- Sacrifice for our sins
- How our sins can be forgiven
- How when we ask Jesus into our hearts, He will wipe all our sins away.

And because of what Jesus did for us...we can live with Him in heaven forever IF we do three things...

You see when Jesus died on the cross...He gave us a gift...it's called the gift of salvation.

But like all good gifts...just because I buy you a gift...and I hold that gift out in front of you...It's not yours...until you reach out and take that gift.

That's the same way with Jesus.

Jesus is holding a gift out to each and every one of us...and for us to receive that gift...for us to get that gift.

We must first reach out and:

- Believe that we are a sinner
- We must believe that Jesus is the one and only son of God and that He died for our sins.
- And we must ask Jesus to forgive us of our sins and to come into our hearts and to be our Lord and Savior.

And when we do that

**Pick Up the "Christ" BLEACH and pour it into the WATER container.**

1 John 2:2 - He (Jesus) is the atoning sacrifice for our sins, and not only for ours but also for the sins of the whole world.

Jesus concurred sin

**Pick up the CHRIST container and pour into the IODINE container, say: Jesus Justified the Sins of the Whole World.**

**1 John 2:2**

**He is the atoning sacrifice for our sins, and not only for ours but also for the sins of the whole world.**

**All 3 containers should be clear now.**

**After the experiment...add another drop of food coloring to show that once saved all your past present and future sins are forgiven.**

**Camera**

**Whistle**

**Towels**

### **ELEPHANT TOOTHPASTE**

**Safety goggles**

**A clean 32 ounce plastic soda bottle**

**1 cup 20-volume hydrogen peroxide liquid**

**Food coloring**

**Liquid dish washing soap**

**Small cup**

**One Packet (2 Tablespoon) of dry yeast**

**6 Tablespoons of warm water**

**Spoon for stirring yeast and water**

**Funnel**

### **DIET CODE/MENTO'S EXPLOSION**

**32 Oz. Diet Soda**

**Roll of Mento's**

**Tube to put the mento's into**

### **SLIME WARS**

**Buckets of Slime**

**Spoons to flip slime**

**Red Solo Cups**

## **OUBLECK**

**40- Quart Size Zip Lock Bags– ZIPPER ONES**

**Glue – 1 Bottle of Glue Per Child (4 Oz Per Child – SAME AS ½ CUP)**

**Borax**

**Containers of Water**

**½ c. Measuring cup**

**Funnel**

**Green Food Coloring – The one with a dropper – 2 Drops per child**

**1 C. MEASURING CUP**

**½ C MEASURING CUP (IF YOU ARE MEASURING THE GLUE FROM LARGE BOTTLE  
INSTEAD OF INDIVIDUAL 4 OZ. BOTTLES**

**1 tsp measuring spoon – TAKE SEVERAL TO SPEED THINGS UP – OR PRE-40**

**Sandwich Size Bags ZIPPER ONES**

**MEASURE THE BORAX & PUT IN SECOND BAGGIE (I AM GOING TO DO THIS)  
MARKER TO WRITE NAME ON BAG**

## **ALKA SELTZER ROCKETS**

**Alka Seltzer Tablets (broken into small bits- 4 per tablet)**

**Film Canisters – 1 per child (more if you want to do the demonstration)**

**1 tsp. Water per rocket**

## **FEAST OF WORMS**

**CHOCOLATE PUDDING**

**GUMMY WORMS**

**PAPER PLATES**

**½ C MEASURING CUP**

**1 C. MEASURING CUP**

**PRIZE**

## **SIN EXPERIMENT**

**3 VASES**

**3 LABELS..YOU, SIN, CHRIST**

**WATER**  
**BLEACH**  
**IODINE**