

EGT Parks & REC at Home

Silly Science & Laugh-a-Lympics Activities

Watermelon Explosion - do this one outside!

Instructions:

This is a fun way to introduce the science behind a base and an acid, with baking soda and vinegar. Take a whole watermelon and cut either a face into it, or cut the "cap" off, and take about half of the fruit (boom - healthy snack too!). You can use any gourd really, pumpkin, cantaloupe etc. Put in one cup of baking soda in the fruit. Whenever ready, have the kids pour vinegar on top of the baking soda, put the "watermelon cap" back on and stand back! The chemical reaction will be instantaneous and fun! The cap should pop off and the ooze should be oozing from everywhere! A tamer version for younger kids can be done by placing a thin layer of baking soda in an aluminum foil tray along with some food coloring. With supervision, give the kids a pipette, spoon, or similar to drop in some vinegar, they'll be making pretty colored rainbows!

Supplies: watermelon, baking soda, vinegar, cutting utensils and a pan

Mentos Geyser

Instructions:

This activity is probably best done outside in the middle of an abandoned field, or better yet, on a huge lawn. Carefully open the bottle of soda. Position the bottle on the ground so that it will not tip over. Unwrap the whole roll of Mentos. The goal is to drop all of the Mentos into the bottle of soda at the same time (which is trickier than it looks). One method for doing this is to roll a piece of paper into a tube just big enough to hold the loose Mentos, with a slit cut into the bottom. Place another piece of paper or card into the slit, this will hold the Mentos just above the soda until you are ready.

Now Try This!

- 1) You'll need a 2-liter bottle of diet soda (diet doesn't make a sticky mess) and an outdoor location for your geyser. Select a flat surface on the lawn or driveway to place the bottle.
- 2) Start by tying one end of the string to the trigger pin (the string might already be attached to the pin).
- 3) Open the bottle of soda and attach the Geyser Tube. Put the



- trigger pin into the hole at the base of the *Geyser Tube*.
- 4) Twist off the top cap on the *Geyser Tube* and drop 7 MENTOS® candies into the tube. The trigger pin will keep the candy from falling into the soda... before you're ready. Replace the twist-on cap.
 - 5) Warn everyone to stand back. Countdown... 3-2-1... and pull the trigger. The MENTOS will drop and the soda will go flying into the air!?
 - 6) Pour out the remaining soda and take a look at the MENTOS®. You can see where the soda has eaten away at the surface of the candy.

Supplies: diet coke, classic mentos, eye protection, card or paper for "trigger"

Fog in a Bottle

1. Fill a jar or bottle with hot water for about a minute.
2. Pour out most of the water and then place a plastic bag with ice cubes over the top.
3. Fog will start to form inside the bottle.

What's happening - the hot air inside the glass jar meets the cold ice/air and produces condensation. You'll see fog form and water droplets cascade down the jar.

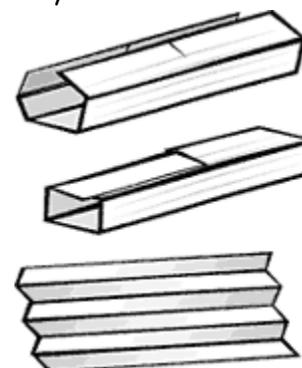
Supplies: glass jar, ice, plastic bag

Playing Card Bridges

Instructions:

Make 2 stacks of books with a gap of about 4 inches between them. Make sure the stacks are the same height. Lay one file card over the gap between the books. About 1/2 inch of the card should be resting on a book at each end. How many pennies do you think you can pile on this flat bridge before it falls into the gap-5? 10? 100? Try it and see how close your guess was. Without adding anything to the file card, try to make your bridge stronger. How could you change a file card to make it stiffer? What happens if you fold the card in half? If you make an arch? How about if you fold the card into pleats? Make a bridge, then test it to see how many pennies it will hold. Some of your bridges may hold a few pennies before falling down. Others may be stronger, but the pennies may slide right off. And some bridges will probably hold a lot more pennies than you'd think.

Guess What! An advertising executive for a car company once made a file card bridge so strong - it could hold a car!



Shocking Wet Cells

In this science experiment we will shock them all! We will recreate an experiment first done two

hundred years ago by Italian physicist Alessandro Volta. We will make a wet cell using lemon juice, pennies and dimes. This wet cell will produce an electrical shock or tingle when it is touched with moist fingertips.

Pour the lemon juice into the small dish.

Soak the paper towel strips in the lemon juice.

Make a pile of coins, alternating the dimes and pennies separating each one with a lemon soaked paper towel strip.

Moisten your fingertip on each hand and hold the pile between your fingertips.

What Happens

You get an electrical shock or tingle!

The Science Of Wet Cells

You have made a wet cell, the forerunner to the modern battery we all buy at the store. The lemon juice, an acid solution, conducts the electricity created by the separated metals of the two coins. What we call a battery is actually two or more dry cells. In each dry cell, thirty-two metals (a zinc metal container and a carbon rod) are separated by blotting paper soaked in a strong acid. Now get your friends and make a wet cell battery!

Supplies: Lemon Juice, Small plate, (9) 1 inch x 2 inch strips of paper towel, (5) Pennies (or other copper coins), (5) Dimes (or other non-copper coins)

Baby Food Roulette

Instructions:

Get six volunteers (works better if you don't tell them what they are in for). Have the jars of baby food in a sack or box so the players can't see them. Have them stand in a circle and pass a spoon while music plays (like hot potato). When the music stops, have the loser blindly pick out a jar of baby food and take a big bite. The grosser the flavor the better. Continue until there is only one person left in the game.

Supplies: random baby food, spoons, music

Whip Cream Bubbles

Instructions:

Divide into teams of 6 - 10 players per team. Set up tables with small paper plates - **one plate per player is what you will need**. On each plate place one piece of unwrapped bubble gum and then

scoop or spray whip cream into the plate to cover the bubble gum. The first players from each team will run to the table place their face into the plate of whip cream (keeping their hands behind their back) to find the bubble gum with their mouth. They are to chew the bubble gum, create a bubble and then run to tag the next player on their team. They are to do the same until all players have had a turn. The first team done with this game is the winners.

Supplies: plates, whip cream, bubble gum

Oreo Cookie Bullseye

Instructions:

Divide into equal teams. One person from each team will put on a garbage bag after cutting a hole for your head! Using cheese whiz, whip cream or similar, "draw" a bullseye on the garbage bag and step back! Each team will then get 30 seconds to throw and land as many crackers/cookies as they can on the bullseye! Messy fun - do it outside or in the kitchen for easy clean up! Variations can include racing to draw a face with the crackers, cracker "Pictionary" etc.

Supplies: garbage bags, cheese whiz or similar, cookies/crackers

Drop the Toothpick

Instructions:

Set up a desired number of teams. Have a starting line and a plastic pop bottle for each team about 6 yards away. On go, one person from each team is to race to their plastic bottle with a box of tooth picks in hand and try to drop a tooth pick into the bottle while standing over it. Once this is achieved they are to race back without spilling toothpicks, back to line and the next person completes drop until the team is done. If toothpicks are too hard, try giving the teams raisins.

Supplies: Tooth picks and 20-oz plastic pop bottle

Shaving Cream Cheese Puff Toss

Instructions:

Divide into equal teams. One person from each team will put on a shower cap and sit in a chair. The other person will put a generous amount of shaving cream on the cap and step back! Players take turns trying to land cheese puffs in the shaving cream! First team to five wins!

Supplies: shower cap or similar, shaving cream, cheese puffs, towels

Messy Man Muscles

Instructions:

Choose someone to make into a "Muscle Man". The person chosen puts long johns on over their clothes. Everyone else will be filling the long johns with messy water balloons. The goal is to have more unpoped balloons in the long johns than any other team.

Supplies, long johns, balloons, water