

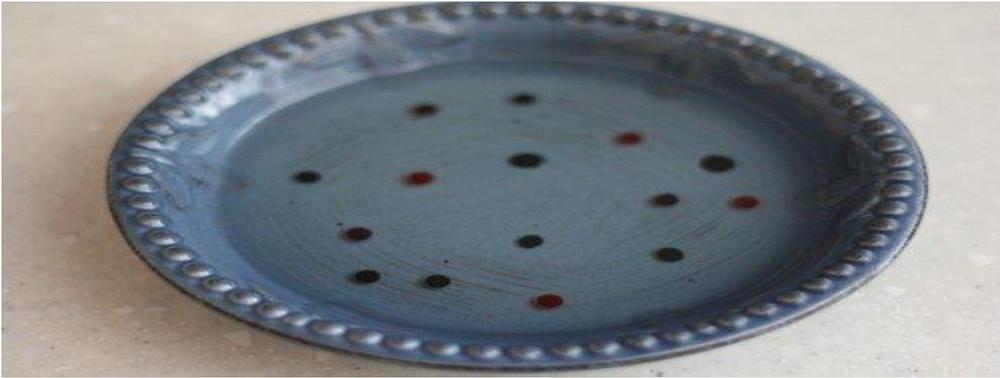
# FIREWORKS IN A JAR



If you have a little one who is fascinated with colors and fireworks, this simple experiment is for you (and your child). The idea for this experiment originally came from [Action Pack](#). You most likely have everything you already need in your cupboard for these fireworks in a jar: oil, water, and food coloring! If you haven't already, [be sure to download my FREE \*Fascinating Science for Kids\* eBook](#) with this experiment and 14 equally-engaging others!



1. Fill your jar 3/4 of the way full with warm water.



2. In a separate bowl, mix a 3-4 tablespoons of oil and several drops of different colors of food coloring (I used 4 drops of each color: red, yellow, blue, and green).



3. Use a fork to gently mix the oil and food colouring together.



4. Gently pour the oil mixture into the jar.



5. Watch what happens—the food colouring will slowly sink out of the oil and into the water. When this happens, it will expand and begin to mix with the other colours.

## Materials



- **Lemons** | recommend 2 lemons per volcano
- **Baking Soda**
- **[Liquid Watercolors](#)/ Food Colouring**
- **Craft Stick**
- **Dish soap**
- **Tray**
- **Cup & Spoons**

## Instructions



**You can do this experiment using a cored lemon or an open faced lemon or both!**

- **Step One** (Adults only) Prep your lemon by slicing the bottom off to make them sit flat. Flip the lemon over and slice out the core. If you are making an open faced volcano, slice the lemon in half.
- **Step Two** Prepare extra lemon juice by slicing a second lemon in half and juicing it. Pour juice into a cup and set aside.
- **Step Three** Place your cored lemon on a tray. Use your craft stick to mush the center of the lemon and bring out the juices. Be sure to keep the juice in the lemon!
- **Step Four** Place a few drops of food coloring or liquid watercolors (do not dilute) in the center of the lemon.
- **Step Five** Add in a good squeeze of dish soap to the lemon. This is not necessary but causes the bubbles to ooze and froth more and longer.
- **Step Six** Add a spoonful of baking soda into the lemon. It should start to fizz. Take your craft stick and stir the lemon and lemon juice. It should start foaming really well as you stir it!
- **Step Seven** To keep the reaction going alternatively add more baking soda, coloring, dish soap and the reserved lemon juice to the reaction. Squeezing the lemon to release the juices also enhances the reaction. Or if you are like my kids, just stick your whole hand in there and give it a good squeeze...ha!



## The Science Behind Lemon Volcanoes

Lemon juice contains citric acid which when mixed with baking soda (sodium bicarbonate) reacts to form carbon dioxide and sodium citrate, which causes the liquid to fizz and bubble. Citric acid is a common food additive used in soft drinks as a preservative and flavoring.

## Make an Easy Lava Lamp

Learn how to make an easy lava lamp with this fun science experiment for kids. Use simple household items such as vegetable oil, food coloring, Alka-Seltzer and a bottle to create chemical reactions and funky balls of color that move around like a real lava lamp.

## What you'll need:

- Water
- A clear plastic bottle
- Vegetable oil
- Food coloring
- Alka-Seltzer (or other tablets that fizz)

## Instructions:

1. Pour water into the plastic bottle until it is around one quarter full (you might want to use a funnel when filling the bottle so you don't spill anything).
2. Pour in vegetable oil until the bottle is nearly full.
3. Wait until the oil and water have separated.
4. Add around a dozen drops of food coloring to the bottle (choose any color you like).
5. Watch as the food coloring falls through the oil and mixes with the water.
6. Cut an Alka-Seltzer tablet into smaller pieces (around 5 or 6) and drop one of them into the bottle, things should start getting a little crazy, just like a real lava lamp!
7. When the bubbling stops, add another piece of Alka-Seltzer and enjoy the show!

## What's happening?

If you've tried our [oil and water experiment](#) you'll know that the two don't mix very well. The oil and water you added to the bottle separate from each other, with oil on top because it has a lower density than water. The food coloring falls through the oil and mixes with the water at the bottom. The piece of Alka-Seltzer tablet you drop in after releases small bubbles of carbon dioxide gas that rise to the top and take some of the colored water along for the ride. The gas escapes when it reaches the top and the colored water falls back down. The reason Alka-Seltzer fizzes in such a way is because it contains citric acid and baking soda (sodium bicarbonate), the two react with water to form sodium citrate and carbon dioxide gas (those are the bubbles that carry the colored water to the top of the bottle).

Adding more Alka-Seltzer to the bottle keeps the reaction going so you can enjoy your funky lava lamp for longer. If you want to show someone later you can simply screw on a bottle cap and add more Alka-Seltzer when you need to. When you've finished all your Alka-Seltzer, you can take the experiment a step further by tightly screwing on a bottle cap and tipping the bottle back and forth, what happens then?



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## Marshmallow rockets

Make these marshmallow rockets in minutes and watch them disappear swiftly into hungry tumms at your Bonfire night feast.

Start by sticking marshmallows onto the end of a wooden skewer.

Then dip them into melted chocolate and dip them again into sprinkles. Stand them upright until they set.

For extra fun you can add some popping candy to your sprinkles, so that it crackles in their mouths when they eat them!

Either way these sizzling rocket sticks are bound to go down a treat on Bonfire night.

## Fireworks Pudding Cookies

These brown sugar pudding cookies are my new favorite cookie recipe! Soft and chewy, they're perfect filled with patriotic colors and M&Ms!



[SAVE RECIPE](#)

[Print Recipe](#)

### INGREDIENTS

- 1/2 cup unsalted butter softened
- 3/4 cup brown sugar packed

- 1 teaspoon vanilla extract
- 1 egg
- 1 box 3.4 ounces INSTANT Vanilla Pudding Mix (just the mix, don't make the pudding)
- 1/2 teaspoon baking soda
- 1/4 teaspoon salt
- 1 1/4 cups all purpose flour
- 1/4 cup red and blue sprinkles or any colors
- 3/4 cup 4th of July M&Ms or any color of M&M

## INSTRUCTIONS

1. Note: This dough requires chilling.
2. Cream butter and brown sugar in the bowl of a stand mixer fitted with the paddle attachment. (You can also use a hand mixer.) Mix in egg and vanilla until smooth. Add pudding mix, baking soda, and salt. Mix until combined. Mix in flour, then stir in sprinkles and M&Ms.
3. Scoop 2 tablespoon balls of cookie dough onto a cookie sheet covered with parchment or a silpat baking mat. There's no need to space them out, you're going to chill them. Cover and chill for at least 30 minutes.
4. Preheat oven to 350°F. Line cookie sheets with parchment paper or silpat baking mats. Place chilled cookie dough balls 2" apart on cookie sheet. Bake 9-11 minutes or until the edges just start to turn brown. Cool 5 minutes on cookie sheet before transferring to a rack to cool completely. Store in an airtight container for up to 4 days or freeze for up to one month.
5. ***A whole toffee apple can be too much for children to eat. Try these Chocolate Toffee Apple Slices instead. Easier to eat and much less waste!***



6.

- 3 medium apples
  - 100g dark chocolate
  - 2 tbsp toffee / caramel sauce
  - sprinkles or desiccated coconut to decorate
  - lollipop or popsicle sticks
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#### INSTRUCTIONS

1. Cut the apples lengthways into 3 large slices. Cut a very small slice from the end pieces so that they lie flat. Insert a lollipop or popsicle stick into each apple slice.
2. Melt the chocolate over a pan of boiling water or in the microwave and pour it into a small deep bowl.
3. Dip each apple slice into the chocolate and fully coat it in a thin layer of chocolate. Place the apple slice on a plate or tray and repeat until all the slices are coated. Put the plate in the fridge for 20 minutes or until the chocolate has hardened.
4. Spread a small layer of toffee caramel sauce onto the top of each apple slice and decorate with sprinkles or coconut.
5. Serve immediately or store in the fridge. These apple slices are best eaten the same day that they are made.

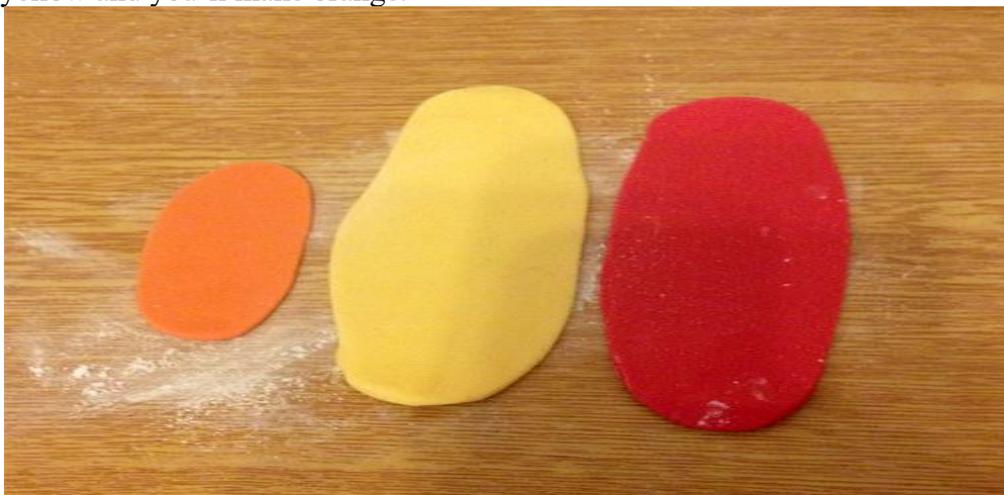
## **BONFIRE CUPCAKE**

You'll need:

A batch of your favourite flavoured cupcakes and frosting, a pizza cutter, a rolling pin, a Cadbury's Flake and some red, yellow and orange sugar paste. You'll also need a sprinkling of icing sugar too.



Start off by rolling your sugar paste, (you might want to dust your work space with some icing sugar to stop it sticking) you'll want to make it 3-4mm thick. If you don't have any sugar paste, you can buy some ready coloured in your local super market. Most supermarkets will have some, Asda for instance have this **Dr Oetker** one, use a small piece of the red and yellow and you'll make orange.



Once you've done this get your pizza cutter and start cutting your sugar paste, you don't want straight lines so try and make them a little wobbly if you can. After all, flames aren't straight are they. Set them aside.



Once you've done this you'll need to ice your cupcakes. I used a Jem 2D nozzle for this, but you can use any nozzle you might have at home. Place your frosting in a piping bag with your desired nozzle, or snip the corner of a zip lock bag. Gently squeeze the top of your piping bag, bringing it around the outside of the cupcake, towards the centre, gradually overlapping the icing and building up a spiral. It doesn't have to be perfect, nobody is going to see it.



Once you've done that you'll need to break up your Flake. I find the best way of doing this is by snapping the Flake in half first and then pulling bits of the Flake off so you have uneven pieces.



Next, stick the bigger piece of Flake around the icing of your cupcake, making sure to leave gaps. You won't need all your Flake so make sure you leave some. Don't be sneaking some into your mouth either.



Now, take your sugar paste and start placing them in the gaps of Flake, making sure you put some around the top, middle and bottom.



Once you've done this, take the remainder of your Flake and fill the gaps, and you're done! Go you!



As you can see you'll use a whole Flake for one cupcake, which can send up being quite pricey. Another alternative would be to use chocolate fingers, they'll give you a great wood effect and you'll get more bang for buck.

## Chocolate Sparklers

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Here is an original recipe for "fireworks" occasions such as Bonfire Night, Fourth of July and Canada Day.



**You will need:**

Chocolate finger biscuits  
Small bowl of hot water  
Small bowl of sugar strands (hundreds and thousands)  
Greaseproof paper

**Instructions:**

Dip one end of a biscuit into the hot water and then into the sugar strands. Place on greaseproof paper and leave to set. Simple, quick and kids love them!

## Breadstick Sparklers

These breadstick sparklers are great fun to bake and eat, so get the kids dipping and decorating for your New Year's Eve party!



### Breadstick Sparklers

Preparation time 20 mins plus rising    Baking time 20 mins    Makes 16

#### Ingredients:

##### For the dough:

- 450g strong plain bread flour
- 1/2 tsp sea salt
- 7g dried fast action yeast
- 275ml warm water
- Plain flour for dusting

##### For decoration:

- 150g milk chocolate, broken into pieces
- Popping candy
- Coloured sprinkles – we used Bronze Crunch from Waitrose

#### Method:

1. For the dough, place the bread flour in a large bowl then add the salt to one side of the bowl and the yeast to the other. Create a well in the centre and add enough warm water to make a soft dough, bringing the mixture together with your hands. If the dough is too sticky, add a little more flour.

2. Mix until the flour is fully incorporated then turn out onto a lightly floured work surface. Knead the dough for 8-10 mins until smooth and elastic. Divide the dough into 16 equal portions and shape each portion into a ball. Dust the surface of each dough ball with a little plain flour then roll into long sausage shapes of even thickness.
3. Lightly dust two large baking sheets with plain flour and transfer the dough sticks to the prepared trays leaving enough room between them to allow for spreading. Cover with lightly oiled clingfilm and leave to rise in a warm place for 30 mins.
4. Preheat the oven to 200°C/180°C fan/ gas mark 6. Bake the breadsticks for 20 mins until golden and crisp. Remove from the oven and allow to cool completely on a wire rack.
5. For decoration, melt the chocolate in a heatproof bowl over a pan of gently simmering water. Once melted set aside to cool for a few minutes. Meanwhile pour the popping candy and sprinkles into separate bowls. Dip the end of each breadstick into the cooled chocolate and then into the popping candy and sprinkles. Stand upright in glasses or a jug and allow to set before serving.

**TIP:**

\* For adult flavours try chilli dark chocolate or bitter orange dark chocolate with chopped candied peel.



You will need **chalk**, water, and a black piece of paper.



Start by dipping the end of a piece of chalk into a bowl of water, letting it soak for 30 seconds. After that have the kids draw fireworks and lines!



Add dots all over the page to finish off the fireworks craft! It looks awesome and vibrant :)

## Catherine wheel firework craft

any time you need some fireworks, here's an easy way to make a Catherine Wheel.



Take a circle of paper or thin card. Fold it in half to make a semi-circle shape and make a cut, but not all the way to the centre. Unfold the circle and fold it again to make a semi-circle the other way. Make another cut, but again, not all the way to the centre.

Unfold your circle and fold one corner of each quarter section into the centre. Fasten in place with a paper fastener.

Decorate your Catherine wheel with sparkly stickers and sequins. Add ribbons or streamers to the edges for extra twirling effect.

Roll up a piece of paper into a long tube shape to make your handle. Use the paper fastener to attach the Catherine wheel to your handle.

Then blow!



## PAINING FIREWORKS



Here is a super easy and fun - Creating Fireworks with Paint!

Using some of the left over cardboard rolls, we created different length 'firework' fans for printing with paint. The print pattern created by the cardboard roll fans mimics that of fireworks brilliantly and children can create as many different size and coloured fireworks as they like.

### WHAT YOU WILL NEED?

You will need coloured paint (we have only chosen 4 colours), large sheets of paper and cardboard tubes.

Cut the cardboard tubes into different lengths as shown in the photo, to create different size firework prints

# Bonfire Collage

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Celebrate Bonfire Night with this wonderful collage bonfire collage. It also makes a good campfire craft for summer.



## You will need:

Large sheet of gold card  
Glue stick  
Yellow, red and orange tissue or crepe paper  
Brown paper or card  
Twigs  
Sticky tape

## Instructions:

Cut a bonfire shape from card.

Cut flames from the tissue paper and glue them to the card. Try not to glue them flat but bend them and only stick bits down to add texture and make the flames look more real.

From brown paper cut some rectangular "log" shapes and glue these to the bottom of the fire. Finish off by taping on some real twigs to bring the collage to life and add even more texture.

# Catherine Wheel Craft

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Here's a fun paper plate craft idea for toddlers and younger children on Bonfire Night (or any fireworks themed holiday). Be prepared to get a little sticky!



**You will need:**

Paper plate  
Paint  
Threads of sequins  
Star stickers  
Sticky tape

**Instructions:**

Drizzle some paint around on the plate. Repeat with a second colour. Tip the plate on it's side so the paint runs and spin around a few times so the colours mix a little.

Leave to dry.

Cut some lengths of sequins and tape to the back of the plate. You may like to add a piece of tape to the ends of the lengths of sequins to stop them falling off.

Decorate the plate and the lengths of sequins with the star stickers.

Either punch a hole in the top of the plate and hang as a mobile, or pin directly to a display board.

If you have black or dark blue plates these will even more effective.

## Fireworks Paintings

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Kids will really enjoy making these glittery fireworks paintings (but please make sure that the kids, and the house, is well covered up first!)



## Fireworks Painting 1

### You will need:

Black construction paper  
Poster paint  
Paint brush  
String

Dip the paintbrush in the paint and hold over the paper. Tap the back of the paintbrush so the paper is showered in dots. Dip the string in the paint. Drop it in coils on the paper to make Catherine Wheels or drag it across the paper to make fireworks flying through the sky.

## Fireworks Painting 2

### You will need:

Black construction paper  
White glue  
Glitter  
Glittery chenille stems

Cover the entire paper in white glue. Sprinkle glitter in several colours over the paper. Make Catherine Wheels by twisting the chenille stems into spirals and gluing down.

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## 6. Wax crayon etching

This one's a little bit magical – just like the Scout Elves – and we love it! All you need are some wax crayons, drawing paper and a lollipop stick. Let's go...



1. Ask the kids to cover their paper in an array of different colours using the wax crayons – make sure they cover the paper!

2. Next, get them to cover the colours in another layer of crayon, this time in black only.
3. Ensuring all the coloured crayon is covered, show them how to use a lollipop stick to etch through the black crayon and create a bonfire scene using swirly lines.

## Rocket Bookmark

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This rocket bookmark is a fun craft for kids of all ages. Perhaps you could try it for Bonfire Night, Fourth of July or Canada Day?



### You will need:

Craft foam in two colours  
Popsicle (lolly) stick  
Sparkly pipe cleaners (chenille stems)  
PVA / White glue  
Star sequins or a star punch and sparkly paper

Cut out a triangle and a rectangle from the foam. Glue the triangle to the top of the rectangle. Glue the popsicle stick to the bottom of the rectangle.

Cut two pipe cleaners in half and glue them to the bottom of the rocket. Punch out lots of paper stars (or use sequins) and, putting a dab of glue on the back of each, glue them along the pipe cleaners. Make sure your bookmark dries thoroughly before using it!

# Kitchen Foil Sparklers

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These kitchen foil sparklers are fun to make and mould and make a satisfying "sparkly" noise when shaken! But be warned, they won't stand up to too much shaking...



## You will need:

A rectangle of kitchen foil  
Star stickers (optional)

## Instructions:

- Cut or rip carefully from one side of the rectangle of foil to the middle, approximately every 1cm along the length, so that you end up with a fringe.
- Carefully roll along the length.
- Twist the solid end tight to keep it together.
- Carefully separate out the cut ends.
- If you like, embellish with some star stickers.



## Flaming Bonfire finger paintings

Get messy with these fiery [Bonfire night finger paintings](#).

Little kids will love dipping their fingers in paint, and swooshing them around to make the flames.

And with a touch of glitter to add extra sparkle, these Bonfire paintings wow everyone. Find out how to make them [here](#).

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## Marshmallow rockets

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Then dip them into melted chocolate and dip them again into sprinkles. Stand them upright until they set.

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Either way these sizzling rocket sticks are bound to go down a treat on Bonfire night.

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## The Catherine Wheel dizzy whizzy game



### Paper roll fireworks craft

#### You will need:

- Cardboard paper rolls
- Pipe cleaners – *colourful or metallic*
- Paints – *we recommend acrylic paints*
- Paint brush
- Sparkly stickers/gems
- Glue gun or very strong glue
- **Step 1: Paint the cardboard tubes**
- Paint your toilet roll tubes with black, gold or silver paint. We find that acrylic paints work best as they provide a good thick layer.
- You might want to decorate them too with glitter, stickers or sparkly gems. We added shiny stars to ours.

### Step 2: Bend your pipe cleaners

Take some metallic or brightly coloured pipe cleaners and bend them into shapes.

You might like to bend spirals or zigzags.



### Step 3: Assemble your fireworks

Using a glue gun (or very strong glue) stick your pipe cleaners inside the top of your tube.

Stick in as many as you want, until you are happy with how your firework looks.



### Glow stick treasure hunt

Have you ever had a treasure hunt in the dark? It adds an extra element of fun to a scavenger hunt.

Hide glow sticks all over the garden. Make some of them trickier to find by hiding them high up in bushes or trees and behind plant pots.

Ask your party guests to set them off and see how many they can find.



## Salt paint firework pictures

Glue some salt onto black card and then drip paints onto them to watch the colours blend into each other. Easy to make and you end up with these vibrant and colourful firework pictures.

Find the step by step instructions for this salt fireworks craft [here](#).

### You will need:

- canvas
- glue
- salt
- paintbrushes
- watercolors
- black paint

First paint the entire canvas black. I used a metallic black paint to make the sky shimmery. Let it fully dry.

Use some glue and draw fireworks all over. Try to recreate your most favourite fireworks that you've seen. Use super thin lines and small dots. The glue spreads out a lot.

Quickly pour salt all over the glue. Shake it back and forth a little bit and pour the remaining salt out. (You can save the salt for another project, but don't eat it!) Let the glue dry.

Once the glue is fully dry. Take a paintbrush and dip it into your water colors. Make sure it's very watery so the colors can spread out. Then touch it lightly to the salt. Watch as the colors spread out. It looks super cool. Don't press the paintbrush into the salt, since it gets very fragile when wet. Try doing rainbows, and different patterns, mixing colors, and anything you can imagine to make it awesome!

## Sparkling names in the night sky

Write your names in the night sky.

Give everyone a sparkler and ask them to try and write their names with them.

If you take photos (or photo bursts on a smart phone) you can capture some great images of their names lit up against the dark.