



History @ Home!



Independence Day

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On July 4, 2020 the United States of America will be 244 years old. Each year Americans celebrate the Continental Congress's passage of the Declaration of Independence on July 4th, 1776. The Declaration of Independence proclaimed the 13 colonies independence from England, an event that led to the formation of the United States of America.

On July 8, 1776, the first public readings of the Declaration were held in Philadelphia's Independence Square to the ringing of bells and band music. One year later, on July 4, 1777, Philadelphia marked Independence Day by adjourning Congress and celebrating with bonfires, bells and fireworks.

DIY Underwater Fireworks

Supplies

Water
Oil (Vegetable, Canola, or Olive)
Food Coloring (Different Colors)
Tall Clear Glass, or Vase
Clear Glass
Fork

Directions

Step 1

Fill the tall glass or vase almost to the top with room-temperature water.

Step 2

Pour 1 to 2 tablespoons of oil into the other glass.

Step 3

Add 3-4 drops of food coloring into the glass with oil

Step 4

Briefly stir the oil and food coloring with a fork. You want to break up the food coloring drops into smaller drops, but not thoroughly mix the liquid.

Step 5

Pour the oil and coloring mixture into the tall glass.

Step 6

Now watch! The food coloring will slowly sink into the glass, with each droplet expanding outward as it falls, resembling fireworks falling into the water.

How It Works

Food coloring dissolves in water, but not in oil. When you stir the food coloring in the oil, you are breaking up the coloring droplets (though drops that come into contact with each other will merge... blue + red = purple). Oil is less dense than water, so the oil will float at the top of the glass. As the colored drops sink to the bottom of the oil, they mix with the water. The color diffuses outward as the heavier colored drop falls to the bottom.

[DIY Fireworks Under Water Experiment Video](#)