# Hands-On Science at Home | Issue 2

# Water Fireworks

What happens when water and oil mixed together?

Have you ever heard of 'underwater' fireworks? Let's enjoy beautiful and safe fireworks right in front of our eyes!

## **Things You Need**

Water, oil, food coloring, 16oz clear glass, any type of cup or glass, and a fork





### **Steps**

- 1. Fill the glass almost to the top with water.
- 2. Pour 2 tablespoons of oil into the other glass/cup.
- 3. Add a couple drops of food coloring to the oil.
- 4. Stir the oil into food coloring using a fork until you break up the food coloring into smaller drops.
- 5. Pour the oil and coloring mixture into the glass with water.
- 6. Enjoy the water fireworks happening in the glass!

#### **Takeaway**

It's all about the different density of water and oil! Food coloring dissolves in water, but not in oil. Oil is less dense than water, so the oil floats at the top of the water-filled glass. The food coloring drops down into the water (because it is denser than the oil) while the oil stays on top of the water (water is also denser than the oil). When the food coloring starts to mix with water, it creates an explosion like a firework!

