**Glow in the dark Mountain dew**

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I tried this experiment during our Super Science Saturday STEM lab; it was so much fun although we made rather a mess! 😊

I had the children wear goggles and gloves for safety.

The hardest part for me was cutting open the glow stick to access its contents. Please be careful!

**Supplies**

- Small bottles of Mountain Dew
- Glow sticks (I used 1 per child)
- Hydrogen Peroxide
- Baking Soda
- Dish soap

**Procedure**

- Empty most of the Mountain Dew from the bottle
- Snap/cut open a glow stick
- Add the contents of the glow stick to the Mountain Dew
- Squirt in a little dish-washing liquid
- Add 1 to 3 capfuls of hydrogen peroxide
- Mix in a dash of baking soda
- Seal the bottle and shake it up
- Take them somewhere dark and listen to the oohs and aah’s!
**Scientific Explanation**

When a chemical reaction emits light, the type of science is called chemiluminescence

chem·i·lum·i·nes·cence

Is the emission of light during a chemical reaction that does not produce significant quantities of heat

You get Mountain Dew to glow using a florescent dye such as Luminol.

When Luminol is oxidized by the hydrogen peroxide, the electrons in the dye become excited and emit a glow! Different florescent dyes emit different colors.

Glow sticks contain luminol, a chemical substance used at crime scenes which glows when mixed with blood. This powdery substance made of carbon, hydrogen, oxygen, and nitrogen, is mixed with a liquid that contains hydrogen peroxide and a hydroxide, plus some other chemicals.