



# SCIENCE RENDEZVOUS AT ONTARIO TECH PRESENTS: **ELEPHANT'S TOOTHPASTE**

**HANDS-ON SCIENCE EXPERIMENT AT HOME!**

## **MATERIALS**

- Empty plastic soda or water bottle – label removed (473 mL works best, but larger ones will also work)
- 3% hydrogen peroxide (typically found in grocery stores or pharmacies)
- Dry active yeast or 1 package of instant yeast
- Warm water
- Liquid dishwashing soap
- Food colouring
- Small cup
- Funnel
- Safety goggles

## **INSTRUCTIONS**

- Place  $\frac{1}{2}$  cup of 3% hydrogen peroxide into the bottle using the funnel
- Add 10 drops food colouring to the bottle
- Add 1 tablespoon of liquid dish soap to the bottle and swish it around to mix it
- In a separate cup, combine 3 tablespoons of warm water and 1 tablespoon of yeast and stir together for about 30 seconds (it should look like melted ice cream - add more warm water if needed)
- Use the funnel to pour the yeast-water mixture into the bottle and watch the toothpaste form!

## **IMPORTANT SAFETY NOTES**

- ! Do not eat or touch the foam. It may have some unreacted hydrogen peroxide which could irritate eyes and skin
- ! Ask an adult to pour the hydrogen peroxide into the bottle and handle it with care
- ! Before the experiment, place the bottle inside a tray or container. Perform the experiment on a washable surface as the foam will overflow