

Home Scientist Challenge



Be a scientist at home!

1. Make something bubble up

2. Be a kitchen chemist and learn about density

3. Create static electricity

4. Share @gsnnj

While we are home, lets get baking and creating. Bake bread, make something bubble up, make your own salad dressing and static electricity.

Share your creation with us @gsnnj.

Project 1: Lets get baking

<https://iheartvegetables.com/4-ingredient-olive-oil-bread-yeast-required/>

- 1 cup all-purpose flour
- 1 teaspoon baking powder
- 2 tablespoon olive oil
- 1/2 teaspoon salt (to taste)
- 1/3 cup warm water
- (Rosemary or other herbs, optional.)

Project 2: Making salad dressing and learn about density

- 1 teaspoon of mustard
- 1 tablespoon of vinegar
- 1/2 cup oil (any kind used for dressing)
- Spoon and one clear glass
- Jar/bottle with lid to save

Project 3: It's electric

Supplies:

- Balloon (if available rub on hair)
- Socks (put socks on and shuffle on a carpet, then touch your hair)



Home Scientist Challenge Examples

Project 1:



Some chemical reactions to be aware of:

- Heat helps baking powder produce **tiny bubbles of gas**, which makes the bread light and fluffy.
- Oil keeps the heat from drying out the bread.
- Rosemary and other herbs makes it tasty.

Project 2:



Density is the amount of mass per unit of volume. If an object is heavy and compact, it has a high density.

Why do you think some items float and others don't?

Project 3:



Static electricity occurs when there is a build-up of electrons on something, giving it an electric charge.

The electrons will then be attracted to something with less electric charge, so they'll jump to an object that has fewer electrons.