



Choice. Respect. independence.

DIY STEM Experiment Kits for Residents

CRI, Choice. Respect. independence. (formerly known as Community Residences, Inc.), is a community based organization with a focused effort on providing people with developmental disabilities and/or mental health needs the resources, supports and services they need to live their lives with purpose, actively engaged in communities of their choosing. CRI's mission fully supports a person's ability to exercise control of their life's choices, and to live in and contribute to communities of their choosing, as young adults through aging in place. We believe in serving individuals within the communities in which they live & supporting the individual's choices and independence.

With COVID changing the way we all interact with the world, we've had to adjust our routines, implement coping mechanisms, and find new strategies to connect with our loved ones and our community. CRI individuals have had to do the same, but many don't understand why. Nearly two years into the pandemic, it's still difficult to venture into the community for a fun outing and therefore have limited abilities/opportunities to socially engage. Staff have been working with residents to find ways to keep them learning and growing through games and projects that can be done at home – recreation therapy. The goal of recreation therapy is to motivate individuals to practice their fine motor skills and hone their cognitive function through tactile, visual, and auditory stimulation.

Assemble a DIY STEM Kit for a resident! Science experiments are a fun and educational opportunity to engage the senses. Try the experiments yourself or with your friends and family and share any fun tips and tricks that you learned. The STEM Kits are great projects to do either inside on rainy days or outside on sunny days! The additional supplies needed for each project are items that programs will have on hand. Each DIY STEM Kit will contain supplies for each of the three activities listed below.

Supplies

- Liquid food coloring – various colors
- Alka Seltzer (original) individually wrapped tablets
- 0.25 oz packets Active Dry Yeast
- Clean and unused disposable chop sticks
- Bag of regular sized or giant sized marshmallows
- Gallon zipper lock bags
- Sandwich zipper lock bags
- Printed set of instructions for each experiment
- Sharpie

Instructions

1. Assemble the following supplies for each experiment:

Lava Lamp - https://www.findingmyselfyoung.com/2020/05/how-to-make-lava-lamp-alka-seltzer-science-experiment-sensory-bottle.html?fbclid=IwAR1T6GpWHkuV6napWUYx6_FcalW-15_B3WnAcmetfZ02cLaZxt1xTX3J0u8

Ingredients per package:

- 1 Liquid food coloring
- 2 Alka Seltzer (original) individually wrapped tablets
- 1 Clear and clean plastic water bottle with top
- 1 Set of printed Lava Lamp instructions – [Click here to download and print](#)

Bowl-cano - <https://teachingideas.ca/2018/10/28/science-experiments-3/>

Ingredients per package:

- 1 Liquid food coloring
- 2 - 0.25 oz packets Active Dry Yeast
- 1 Set of printed Bowl-cano instructions - [Click here to download and print](#)

Build It – Build a self-standing structure using only chop sticks and marshmallows. - <https://littlebinsforlittlehands.com/wp-content/uploads/2020/06/STEM-Challenge-Pack-Mini-Cards-merged.pdf>

Ingredients per package:

- Clean and unused disposable chop sticks
- Bag of regular sized marshmallows
- 1 Set of printed Build It instructions - [Click here to download and print](#)

2. If you tested the experiments, add any tips, tricks, or observations that you learned on the printed instructions pages. You can even include an encouraging message for the residents!
3. Add each experiment's ingredients to a gallon size zip lock bag and label them with the corresponding experiment with a sharpie.

DIY STEM Kits can be dropped off or mailed to the following addresses:

Chantilly HQ

14160 Newbrook Dr, Chantilly, VA 20151

Donation boxes are located in the lobby beyond the double glass doors

Accepting donations Monday - Friday from 8am to 5pm and Saturdays from 10am to 12pm

Arlington/Falls Church Maintenance Office

7297A Lee Hwy, Falls Church, VA 22042

Donation boxes are located in the lobby just inside the front door

Accepting donations Monday - Friday from 10am to 2pm

Richmond

808 Moorefield Park Dr., Ste. 120, Richmond, VA 23235

Accepting donations Monday – Friday from 10am to 1pm