



# Camp Quest North

## TRY IT AT HOME: MAKE SLIME OUT OF STYROFOAM

### Objectives

Learn a simple way to make slime out of styrofoam (finally a way to upcycle that pesky packing material for something before it goes to the landfill!) and nail polish remover.

### Principle of Humanism Supported by Lesson

- ★ *We ask questions and are open-minded, critical thinkers.*
- ★ *We are committed to the arts as a form of human expression.*
- ★ *We strive to protect and sustain the earth, its resources, and other species.*

### Materials Needed

Styrofoam materials (packing peanuts, foam boards, cups, etc)  
Nail polish remover (must be acetone based)  
Glass bowl or metal baking pan  
Well ventilated room or a place outside to try this experiment!  
Food coloring and ziplock bag (optional if you want to dye your slime)

### Differentiation for Age Groups

This activity is pretty fun for all ages, but younger and middle aged campers will want to ask a caring adult for some help setting up and helping getting supplies.

# Activity Instructions

## **Learn:**

### What is styrofoam?

Styrofoam (actually a brand name, like kleenex or band-aids) is polystyrene foam. Polystyrene foam is a widely manufactured polymer ( meaning it's made up of many long chains of molecules). This polymer plastic has been injected with gasses to make it full of pockets of air. Styrofoam is actually 95% air making it super lightweight and great for shipping material.

### Separation of polymers

So what happens when styrofoam is placed in acetone? The acetone ends up breaking the long chains of molecules that make up the polymer. When these molecules break apart they release all the air that was injected in the plastic foam.

### Life cycle of styrofoam

While styrofoam has been a great packing material because it's so lightweight (thus takes less fuel to ship) and it is cheap to make, it is considered a single use product. Styrofoam is not an easily recycled material so it usually ends up going to the landfill after it is used to help ship something.

## **Create:**

Safety First! Find a well ventilated room or do this activity outside. As you can imagine, using acetone nailpolish remover gets a bit smelly and can be harmful if inhaled in large amounts.

- 1) Find a glass or metal bowl or pan for this activity, do not use any plastic containers as the acetone could affect it.
- 2) Place ½ cup of acetone into the bowl.
- 3) Slowly lower your styrofoam into the bowl and watch it dissolve as the air pockets escape.
- 4) Once the foam has dissolved down you can scoop up the newly formed slime and stretch, fold, and mold it into different shapes.
- 5) Optional: place the foam slime in a plastic ziplock bag and add a few drops of food coloring. Close the bag and knead the slime around with the food coloring. Remove the slime from the bag.

## Exploration

Over time the slime will dry and harden out. Use this to your advantage to make a cool art project.

## Discussion

Styrofoam is widely used for shipping material and used for single use containers such drink cups or food containers. Can you think of where you see and use styrofoam products in your life? What are ways you can reduce the amount of styrofoam you use?

Are there other single use materials around your house that you can find a new use for before it is thrown away?