



20 VALENTINE'S DAY

SCIENCE & STEM ACTIVITIES

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VALENTINE'S DAY

SCIENCE & STEM ACTIVITIES

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DISCLAIMER

The activities in this book are intended to be done under adult supervision. Appropriate and reasonable caution should be taken at all times. Please read our slime safety notes very carefully. The author of this book disclaims all liability for any damage, mishap, or injury that may occur from engaging in any of the activities in this book.



VALENTINE'S DAY

SCIENCE & STEM ACTIVITIES



INTRODUCTION

This book full of AMAZING Valentine's Day science and STEM activities is dedicated to my equally AMAZING kiddo who loves the holidays as much as I do!

Over at littlebinsforlittlehands.com, we have been bringing the magic of these special days to our simple science experiments for 5+ years!

Because I know kids love the novelty of the changing holidays, I have created and re-created many kid-favorite and classic science activities with special or unique themes to fit the occasion.

Join us as we celebrate the changing holidays with a bit of science and STEM. In these pages, you will find multi-sensory, hands-on learning experiences you can try over and over again each season.

Easy to set up, inexpensive, and PERFECT!

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**FUN
SCIENCE &
STEM!**

AMAZING sensory
rich experiences!

EASY to find
supplies!

Simple to set-up
science ideas
and fun
STEM
projects!



VALENTINE'S DAY

SCIENCE & STEM ACTIVITIES



VALENTINE'S GUIDE

What is the best way to use these Valentine Science Activities?

Just pick an activity and go for it! Make a (science supplies) list and check it twice! Grab the items on your next grocery shopping trip! I bet you have plenty of supplies already on hand!

Many of these activities are playful! Some activities can take as little as 5-10 mins or as long as an hour if your kids are still having fun observing, exploring, and experimenting!

Also, make sure to check out the printable Valentine STEM Pack included! You will find lots of extras and fun ideas for the kids to try as well as science journaling pages!

Don't forget to visit the dollar store and craft stores around the holidays. You can find many fun and inexpensive items that can enhance your Valentine themes and be saved from year to year!

You can also fill a bin with recycled and up-cycled items for future projects! Then you always have a stock of neat materials available to use.

SIMPLE SCIENCE!

Erupting Hearts
Cupid's Rocket
Dancing Hearts
Cupid's Magic
Milk
Inflating Hearts
Exploding
Hearts
Valen-Slimes
Secret Love
notes
and more



VALENTINE'S SCIENCE & STEM

SCIENCE ACTIVITIES & STEM PROJECTS



SAFETY GUIDE

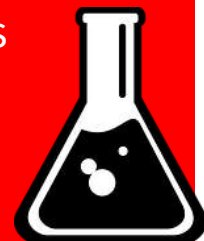
While all the ingredients in this Valentine's Day Science and STEM guide are easy to find at your local stores, I always **RECOMMEND adult supervision** and assistance at all times depending on the abilities and needs of each kiddo.

- Be prepared to get a little messy!
- Stock your pantry with all the ingredients you need!
- Read through the instructions or recipe thoroughly before starting it!
- Do NOT eat or drink any of these activities.
- Wash hands thoroughly after all activities.
- Wash all surfaces, utensils, and bowls thoroughly after activities.
- Protective eyewear is always recommended and perfect for the junior scientist!

**ALWAYS
BE
SAFE!**

Make sure you have an appropriate work space and the correct supplies or ingredients.

Always ask for adult help before trying any science activities



CUPID'S MAGIC MILK

A classic science experiment with a heart twist exploring the chemistry of different liquids and how they interact.

SUPPLIES NEEDED

- Whole milk
- Food coloring
- Dish soap
- Cotton swabs
- Valentine's Day cookie cutters

SET UP

Start by pouring the milk into a shallow container or dinner plate to about a 1/4 inch in depth. Place a cookie cutter in the middle.

Next, add food coloring drops to the surface of the milk, but don't stir or mix them into the milk!

Take a cotton swab and dip it into the dish soap. Lightly touch the surface of the milk. Watch what happens!

QUICK SCIENCE

Milk is made up of minerals, proteins, and fats.

Proteins and fats are susceptible to changes. When the dish soap is added to the milk, those molecules run around and try to attach to the fat molecules in the milk. You wouldn't see this without the food coloring! The food coloring looks like fireworks because it's getting bumped around.

Repeat the process with another cotton swab to see if there are any milk fat molecules the soap hasn't found!

*Experiment with different milk fat percentages.



CUPID'S LAVA LAMP

A classic science kid's science activity perfect for Cupid! Explore liquid density and a fun chemical reaction the kids will want to try over and over again.

SUPPLIES NEEDED

- Water
- Cooking oil
- Food coloring, heart sequins, glitter
- Fizzy tablets (Alka Seltzer style)
- Jar or tall glass

SET UP

Start by adding about a 1/3 of a cup of water to a jar and fill the rest of the way with cooking oil. Watch what happens?

Do the oil and water mix? Which liquid is heavier or denser?

Next, add several squeezes of food coloring, but don't stir. Also, add glitter and sequins

Drop in a fizzy tablet and watch the activity!

QUICK SCIENCE

Why don't all liquids simply mix together? Did you notice the oil and water separate? That's because water is heavier than oil. Liquids are made up of different numbers of atoms and molecules. In some liquids, these atoms and molecules are packed together more tightly resulting in a denser or heavier liquid.

Now for the chemical reaction! When the tablet and water mix, they create a gas called carbon dioxide which is all the bubbling you see. These bubbles carry the color water to the surface of the oil where they pop. Then the color water falls back down due to gravity.



ERUPTING HEARTS

A classic baking soda and vinegar chemistry activity gets a Valentine's Day twist. Let the kids create their own glittery, erupting hearts for fun science!

SUPPLIES NEEDED

- Plastic heart containers
- Cookie cutters
- Baking soda
- White vinegar
- Food coloring
- Glitter
- Eyedropper, turkey baster, squeeze bottle

SET UP

Set up a tray or baking dish with heart shaped cookie cutters and small containers.

Next, add a tablespoon or so of baking soda to each heart along with glitter and food coloring as desired.

Then, use an eye dropper or baster to squeeze vinegar into each one and watch the results.

You can also color the vinegar! Additionally, you can put a drop of dish soap in a squeeze bottle with vinegar.

QUICK SCIENCE

When the acid in the vinegar and the base in the baking soda mix together they form a gas called carbon dioxide. This gas releases the bubbles that you can see and hear. The mixture has nowhere to go but up and out making the exciting eruption kids will want to do over and over again. Stock up on vinegar and baking soda for this one!



VALENTINE'S SKITTLES

Classic candy science with a Valentine twist! This heart theme skittles science activity is always a hit with the kids with a bit of learning too!

SUPPLIES NEEDED

- Pink, purple, and red Skittles candy
- Water
- Dinner plate or pie plate
- Heart shaped cookie cutters

SET UP

Arrange the Skittles in a pattern around the plate alternating colors in any number - singles, doubles, triples, etc...

Put a heart shaped cookie cutter in the center of the plate!

Carefully pour water into the center of the plate until it just covers the candy. Be careful not to shake or move the plate once you add the water or it will mess up the effect. Wait and watch the colors stretch out.

QUICK SCIENCE

Skittles Science demonstrates a process called stratification. The simple definition is stratification is the arrangement of something into groups. Specifically, this is water stratification. Water has different masses with different properties that create the barriers you see within the different colors of candies.

Each color of Skittles has the same amount of food coloring that is being dissolved off the shell. As the color spreads it doesn't mix with the other colors.



CUPID'S LOVE POTIONS

A colorful, bubbling, exploding, and totally safe chemistry experiment. Cupid's Love potions will be a hit!

SUPPLIES NEEDED

- Empty water bottles or flasks
- Yeast packet (1 tbsp per container)
- Very warm water (2-3 tbsp per container)
- 1/2 cup hydrogen peroxide (per container)
- Dish soap
- Red food coloring

SET UP

Place your bottles on some kind of tray or shallow container to catch the overflow.

Use a funnel to pour ½ a cup of hydrogen peroxide into each of the bottles.

Next, add 3 or 4 drops of dish soap and 3 or 4 (or more) drops of food coloring to each bottle.

In a separate container mix together the yeast and warm water until yeast is mostly dissolved.

Quickly and carefully pour the yeast mixture into each bottle.... Watch it go!

QUICK SCIENCE

Feel the container, can you feel the warmth that has been created? That is the energy being released. The reaction between the yeast and the hydrogen peroxide is called exothermic reaction. The yeast is helping to remove the oxygen from the peroxide and the tiny bubbles created to make that awesome foam along with the water and dish soap. Add a few more drops of food coloring as it swells for more color.



HEART FELT OOBLECK

Oobleck is a big hit with the kids. It's high on the list of classic science experiments too! Super simple supplies and a Valentine twist make it perfect for everyone to try.

SUPPLIES NEEDED

- Cornstarch
- Water
- Conversation candy hearts
- Food coloring (optional)

SET UP

Start by mixing a 2:1 ratio of cornstarch and water in a baking dish or shallow bowl. You can add food coloring to the water.

The mixture should be neither too dry nor too soupy! You can adjust the texture by adding more water or more cornstarch.

Decorate with candy hearts and observe how they begin to also dissolve in the oobleck.

QUICK SCIENCE

Oobleck is a fun substance made from a mixture of cornstarch and water. It's a bit messy too!

Oobleck is called a non-Newtonian fluid. This means it is neither a liquid nor a solid! You can pick up a clump of the substance like a solid and then watch it ooze back into the bowl like a liquid.

Touch the surface lightly and it will feel firm and solid. If you apply more pressure, your fingers will sink into it like a liquid.



DISSOLVING CANDY HEARTS

Which liquids will dissolve candy hearts the best? Use what's in the fridge!

SUPPLIES NEEDED

- Conversation candy hearts
- Clear cups (or test tubes)
- Variety of liquids such as water, oil, vinegar, milk, rubbing alcohol, etc...
- Stirrers

SET UP

Set out as many cups or test tubes as the number of liquids you will use for the experiment. Make sure to label the cups to remember which liquid is which.

Add a conversation heart to each cup of liquid. Give a stir if desired.

Set a timer for 1, 5, and 10 minutes. Check the progress of the dissolving candy hearts along the way! Give each one a stir at each time mark.

Be patient and observe the changes in the candy.

QUICK SCIENCE

For a liquid to dissolve a solid, the molecules in both the liquid and the solid must be attracted to each other. The molecules in the sugar (candy heart) and the water are definitely attracted to each other!

The candy cane is called the solute and the liquid is called the solvent.

Experiment with different types of liquids such as vinegar, oil, soda water, or milk and see if the changes are similar or different.



CRYSTAL HEARTS

Grow a crystal heart, explore chemistry, and make an ornament to hang in the window!

SUPPLIES NEEDED

- Pipe Cleaners
- Water
- Borax Laundry Booster Powder
- Glass Jars
- Ribbon, Craft Sticks, Scissors

SET UP

Make your pipe cleaner hearts! Twist one or two pipe cleaners together and bend into a heart shape.

Cut a length of ribbon so that your candy cane hangs freely in the middle of the jar. Use a popsicle stick to hang the candy cane. The candy cane should not touch the bottom or the sides.

Make a borax solution. Mix approximately 1 cup of boiling water with 3 tablespoons of borax powder. Make enough to fill however many jars you have. The candy cane should be completely immersed.

Set the jars aside for 24 hours where they will not be disturbed. Remove crystalized candy canes from the solution, and let them dry on paper towels.

QUICK SCIENCE

The borax powder is suspended throughout the solution and remains that way while the liquid is hot. A hot liquid will hold more borax than a cold liquid! This is also called a saturated solution.

As the solution cools, the particles settle out of the saturated mixture. The settling particles form the crystals that you see on the pipe cleaners. The impurities remain behind in the water. The cube-like crystals will form if the process of cooling is slow enough.



SALT CRYSTAL HEARTS

There's more than one way to grow crystals! Try using good old table salt to grow crystals on heart-shaped construction paper cut-outs!

SUPPLIES NEEDED

- Construction paper
- Water
- Salt

SET UP

Cut out Valentine theme shapes from construction paper. You can even trace cookie cutters!

Make a salt solution. Start with hot water. Let the tap water run really hot or boil the water if desired.

Tablespoon by tablespoon we added salt until the water could not hold anymore. The hotter the water, the more salt you will be able to add. The goal is to add as much salt as the water will hold to make a saturated solution.

Place your shapes on a tray and pour just enough to cover the paper. You may even see some salt left over in your container, that's ok!

Set your tray aside for a few days to wait and watch the crystals form. Eventually, the water will evaporate. Be careful not to disturb the tray! Let the paper fully dry on paper towels. These crystals will be more delicate than the borax crystals.

QUICK SCIENCE

As the salt solution cools and the water evaporates, the atoms (sodium and chlorine) are no longer separated by water molecules. They begin to bond together and then bond further forming the special cube-shaped crystal for salt.



DANCING HEARTS

Can you make candy dance? You can even try this with raisins, grains of salt, and even popping corn. This is a combo of physics and chemistry, but we are going to focus on the buoyancy part here.

SUPPLIES NEEDED

Tiny Candy (like Nerds)
Club Soda
Clear Glass

SET UP

Very simple set up!

Fill your glass about 2/3 of the way with club soda.

Drop in a few candies, watch, and wait. Every so often we added more candy and a bit of club soda. What do you see happening?

QUICK SCIENCE

Can you change the buoyancy of something? Yes, you can! You observed that the candies sunk to the bottom of the glass because they are heavier than the water.

However, the club soda has gas in it which you can see with the bubbles. The bubbles attach themselves to the surface of the candy and lift it up! When the candy reaches the surface, the bubbles pop and the candy falls back down. You do have to be a little patient at times to observe this happening!



JUMPING HEARTS

Classic static electricity with a balloon is perfect for dry weather too.

SUPPLIES NEEDED

- Balloon
- Construction Paper (or colored copy paper or tissue paper)

SET UP

Cut out small hearts from your construction paper.

Blow up a balloon but not all the way. All you need is for it to be big enough for your kids to hold comfortably and be able to see what's happening.

First, you need to charge your balloon. My son chose to rub it in his hair. Try to go in one direction.

Next, place the balloon near the hearts but don't put it on the hearts. You will see the hearts jumping or floating up to the balloon. The hearts will even tag hearts to follow along. We built towers!

QUICK SCIENCE

Why are the hearts jumping up to the balloon all on their own? They are getting a boost from static electricity!

When you rub the balloon in your hair you give it a negative charge. The electrons from your hair flow onto the portion of the balloon that is touching your hair.

Matter is made up of atoms with have both negative (electrons) and positive (nucleus) parts. You transferred some of the negative atoms to the ballon.

The negatively charged balloon is then able to attract the positive parts of the paper hearts which cause them to jump to the balloon!



SINKING HEARTS

Can you sink the love boat and have fun with buoyancy!

SUPPLIES NEEDED

- Aluminum Foil
- 30 Pennies
- Bowl of Water (large enough to float the boat)
- Additional Themed Items (optional if you want to compare results with different objects)

SET UP

Cut two 8" squares of aluminum foil

Fill a bowl with water and place on a table.

Shape one piece of tin foil into a boat with little sides. We made a heart since we are all about Valentine's Day physics right now!

Start by having your kids place 15 pennies on the square of tin foil (not the boat) and have them ball it up and place it in the water. What happens?

Next, have your kids try to float their aluminum foil boat. Slowly add the 15 pennies. What happens this time with the same amount of weight and same size piece of foil?

QUICK SCIENCE

Sink the love boat physics activity is all about buoyancy which is how well something floats.

Just now you saw two different results when you used the same amount of pennies and the same size piece of foil. Both items weighed the same, but they were a different size.

The ball of foil and pennies take up less room and there is not enough upward force pushing up on the ball to keep it afloat. However, the love boat takes up a greater surface area so it has more force pushing up on it. Keep going and see how many pennies it actually takes to sink your boat. Can you build a stronger love boat? This is a great physics activity with a fun STEM challenge extension.



FLYING CUPIDS

Explore physics with a fun theme that will really get the kids excited! Demonstrate Newton's 3rd Law of Motion!

SUPPLIES NEEDED

- Balloons
- Cupid cut out (found in the printable pack)
- String
- Straw
- Scissors and tape

SET UP

Find a space with two anchors (chair, doorknob, railing) to tie the string between. This activity can even be done outside.

Cut a length of string that spans the anchors and tie one end of the string to one anchor. Thread the straw onto the string, and tie the other end of the string to the second anchor.

Next, cut out the cupid pattern or design your own. Add a heart or bullseye to the other end of the anchor!

Blow up the balloon filling it with potential energy! Use a clothespin to hold the balloon closed until you are ready to let it go.

Tape the balloon below the straw. Make sure the straw moves freely.

Tape the cupid to the side of the balloon and let the clothespin go!

QUICK SCIENCE

How does Cupid get his go? It's all about Newton's Third Law of Motion. For every action, there is an equal and opposite reaction. When you release the balloon the air/gas escapes creating a forward pushing motion called thrust! When the gas is forced out of the balloon, it is pushed back against the air outside the balloon. This pushes the balloon forward! Turn it into an experiment by exploring different types of string, length or type of straw, or even balloon shapes! Take this one outside on a nice day and have races.



FLYING HEARTS CATAPULT

Play with physics! Our simple heart theme catapult will keep the kids busy for hours!

SUPPLIES NEEDED

- 10 Jumbo popsicle sticks
- 3 Rubber bands
- Firing power (pompoms, marshmallows, hearts)
- Plastic bottle cap
- Adhesive

SET UP

Use a pair of scissors to make two v notches on either side of two jumbo craft sticks towards the ends of the sticks. See photo to the right for placement.

Take the remaining 8 craft sticks and stack them on top of the other. Wind a rubber band tightly around each end of the stack.

Push one of the notched sticks through the stack under the top stick of the stack. Flip the stack over so that the stick you just pushed in is on the bottom of the stack.

Lay the second notched stick on top of the stack and secure the two popsicle sticks together with a rubber band as shown below. The V notches that you cut help to keep the rubber band in place.

QUICK SCIENCE

Newton's Laws of Motion! An object at rest stays at rest until a force is applied. An object will stay in motion until something creates an imbalance in the motion. Every action causes an equal and opposite reaction.

When you pull down the lever arm of the catapult all the potential energy gets stored up! Release it and that potential energy changes over to kinetic energy. Try pushing the stack closer to the tip and moving it back. What changes?



SECRET LOVE NOTES

Write a secret letter with science!

SUPPLIES NEEDED

- Construction paper
- Lemons
- Paint brush
- Scissors
- Markers
- Glue

SET UP

*** Adult Supervision Required***

Make cards! Cut out hearts from your construction paper.

Cut the lemon and squeeze the juice out into a dish. You can also dilute with some water.

Use a skinny paintbrush or cotton swabs to draw/paint a message or picture onto your heart. The larger/thicker the letters the better.

Let the cards dry completely.

***Adult Supervision:** You will need to use a heat source to reveal the code such as a hairdryer. You can also use an iron or light bulb, but be careful to not keep the paper there too long as it could burn or catch on fire.*

QUICK SCIENCE

Lemon juice is an organic substance that oxidizes and turns brown when heated. When you add the heat source to the dry card the message will be revealed as the carbon from the lemon juice is broken down and oxidizes. Oxidization often causes things to become darker like your message.

Other substances which work in the same way include orange juice, honey, milk, onion juice, and vinegar.



EXPLODING HEARTS

There's more than one way to play with baking soda and vinegar science! Have you tried the classic bursting bags science experiment?

SUPPLIES NEEDED

- Sandwich baggies
- 1/2 Cup of vinegar
- 1/4 Cup of water
- 3 Tablespoons baking soda
- Toilet tissue
- Food coloring (optional)
- Sharpies
- Measuring cups and spoons

SET UP

Draw a heart or Valentine image on the top of each sandwich bag with sharpies.

Fill the bag with 1/2 cup vinegar, 1/4 cup water and a drop of food coloring (optional).

Add 3 tablespoons of baking soda to the center of a tissue square and fold the tissue into a little pack.

Go outside and quickly drop the baking soda filled tissue in the water/vinegar mix and toss the bag gently.

Back up and watch the pressure build until it explodes!

QUICK SCIENCE

The bursting bag is a classic baking soda and science experiment that uses a chemical reaction to burst the bag! When the baking soda (a base) mixes with the vinegar in the bag (acid), a chemical reaction occurs that produces a gas called carbon dioxide. As the gas fills the space of the sealed bag, it has nowhere to go but push on the sides of the bag causing it to burst.

The tissue paper slows the reaction time. Experiment with baking soda amounts if desired.



STEAM FLOWER BOUQUET

Use STEAM to make a homemade floral bouquet this holiday!

SUPPLIES NEEDED

- Paper towel/newspaper
- Coffee filters
- Small 4 or 8oz mason jars
- Green pipe cleaners
- Water
- Water Soluble markers
- Scissors
- Clear tape

SET UP

Flatten out the coffee filters onto a piece of paper towel or newspaper.

Draw a circle on the coffee filter with a marker on the round bottom area.

Fold each coffee filter in half four times.

Add an inch of water to each mason jar and place the folded coffee filter into the water with just the bottom touching the water.

In a minute or two, the water will have traveled up the coffee filter and through the color.

Unfold the coffee filters and let dry.

Fold the coffee filters in half about 4 times again and round the top with scissors.

Pull the center together just a touch and tape with clear tape to make a flower.

Wrap a pipe cleaner around the tape and leave the remaining pipe cleaner for a stem.

QUICK SCIENCE

Chromatography is the separation of a mixture, in this case, the marker's ink by passing it through a solution which is the water as well as through a medium such as the coffee filter. The markers are water soluble meaning the ink will spread in the water. Different color inks that make up a specific color will move at different rates.



INFLATING HEARTS

How can you use chemistry to blow up a balloon and inflate a heart at the same time?

SUPPLIES NEEDED

- White balloon
- Water bottle
- Baking soda
- White vinegar
- Sharpies

SET UP

Draw a heart or another Valentine's Day theme image onto the center of a white balloon with a sharpie.

Fill the water bottle 1/3 way with white vinegar. Carefully add 3 tablespoons of baking soda to your balloon using a funnel or 1/8 teaspoon.

Making sure the baking soda stays in the balloon, stretch the opening of the balloon over the top of the bottle.

Hold the balloon upright and let the baking soda fall into the vinegar bottle.

Watch your balloon inflate and watch the heart grow

QUICK SCIENCE

Carbon dioxide is the gas created when the baking soda mixes with the vinegar. The gas pushes upward as it expands in the bottle to fill the balloon. You can experiment with different amounts of baking soda.

Turn this into an experiment by testing different amounts of baking soda!



TIE-DYE CARDS STEAM

STEAM project, craft activity, and homemade Valentine's Day card all in one.

SUPPLIES NEEDED

- White computer paper or tissue paper
- Construction paper
- Sharpies
- Elmer's glue
- Spray bottle of rubbing alcohol
- Pipe cleaners or rubber bands
- Newspaper

SET UP

Crumble a sheet of computer paper into a ball. Place the ball into the center of another piece of paper and carefully tie the ends together with a pipe cleaner.

Color several colorful rows around the outside piece of paper, I chose to do three.

Spray heavily with rubbing alcohol over the garbage and set on a piece of newspaper.

Carefully take the pipe cleaner off, open the sheet of tie-dyed paper up and lay flat.

Let air dry. Cut out hearts, squares or rectangles and glue them to the front of construction paper cards.

QUICK SCIENCE

Soluble vs. insoluble! If something is soluble that means it will dissolve in that liquid. The ink used in permanent markers does not dissolve in water, but it does dissolve in rubbing alcohol. When you added drops of alcohol to the designs on the paper, the ink should spread out and run along the paper with the alcohol. If you test this with water, the ink will not spread because it's not insoluble to water. You can also explore regular markers and water!



LOVELY DENSITY TOWER

Layer liquids for a neat Valentine's Day physics activity!

SUPPLIES NEEDED

- Mason jar or tall glass
- Light corn syrup
- Water
- Cooking oil
- Rubbing alcohol
- Red and purple food coloring
- Turkey Baster

SET UP

Fill your mason jar 1/4 way full with light corn syrup.

Mix a drop of red food coloring with 1/2 cup of water and use a turkey baster to slowly add the water on top of the corn syrup another 1/4 of the way up.

Now use the turkey baster to slowly add cooking oil on top of the red water another 1/4 of the way up.

Mix a drop of purple food coloring with 1/2 cup of rubbing alcohol and use a turkey baster to slowly add the rubbing alcohol on top of the cooking oil.

Make sure to rinse out your turkey baster after each use or have separate ones ready to go!

QUICK SCIENCE

Matter (including liquid) has different densities meaning some will be heavier and some will be lighter.

Like solids, liquids are made up of different numbers of atoms and molecules. In some liquids, these atoms and molecules are packed together more tightly resulting in a denser or heavier liquid like the syrup!

These different liquids will always separate because they are not the same density!



BUBBLING LOVE SCIENCE

Bubbling hearts make a great indoor bubble science activity for winter, and it's always a hit with the kids!

SUPPLIES NEEDED

- Valentine's accessories such as cookie cutters and small containers
- Tray
- Bubbles:
- 1 cup water
- 4 tablespoons dish soap
- 2 tablespoons light corn syrup

SET UP

In a glass measuring cup, mix together 1 cup of water with 1/4 cup light corn syrup and 1/4 cup blue Dawn dish soap.

Place the heart cookie cutters onto your plate or tray.

Carefully pour enough bubble mixture onto your plate that you can blow bubbles but be careful that it doesn't overflow off the sides.

Use your paper straws to blow bubbles into the cookie cutters.

QUICK SCIENCE

What is a bubble? A bubble is simply air surrounded by a thin soapy film. A bubble will always become a sphere once it's sealed shut! No matter what shape it started as. Why do bubbles stick together as you see here? A bubble wants to minimize its surface area, so it will join together to share one common wall. The bubbles will pop when the water in the soapy film evaporates. In cold weather, take this activity outside and see if you can create a frozen bubble tower. It's tricky!



VALENTINE'S DAY SLIME

Kids love slime. Find our favorite, easy slime recipe below. Change the colors and glitter as desired! Find the labels in the printable pack.

SUPPLIES NEEDED

- 1/2 Cup of clear PVA School Glue
- 1/2 Cup of water
- 1 TBSP of saline solution
- 1/4-1/2 TSP of baking soda
- Food coloring, glitter, confetti
- Bowl, spoon, measuring cups
- Storage containers



Mix water, glue and food coloring in a bowl until well combined.



Stir in baking soda. Add desired glitter and heart theme confetti. Mix to combine.



Add saline solution and stir until slime forms and pulls away from the sides and the bottom of the bowl. Saline solution should contain boric acid and sodium borate.



Knead slime to reduce stickiness! If your slime is still too sticky add a drop or two of saline solution. Do not add too much or your slime will become stiff.