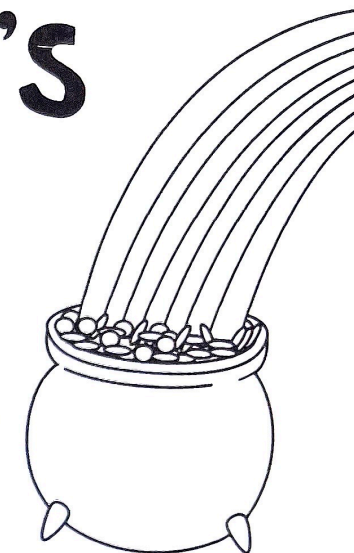


# 5

# St. Patrick's Day Science Experiments



## ST. PATRICK'S DAY SCIENCE ACTIVITIES



MATERIALS LIST	
Activity	Materials Needed Per Student/Group
Create Your Own Lava Lamp	<ul style="list-style-type: none"><li>• Cooking oil</li><li>• Water</li><li>• Green food coloring</li><li>• Empty water bottle</li><li>• Alka Seltzer antacid tablets</li><li>• Gold glitter (optional)</li></ul>
What liquid will dissolve Lucky Charm marshmallows the most?	<ul style="list-style-type: none"><li>• 3 different liquids</li><li>• 3 clear cups</li><li>• 3 marshmallows</li><li>• Spoon</li><li>• Timer</li><li>• Paper towels</li></ul>
St. Patrick's Day Slime	<ul style="list-style-type: none"><li>• ½ Cup of water</li><li>• ½ Cup of white glue</li><li>• ½ cup of liquid starch</li><li>• Green food coloring</li><li>• Mixing bowl</li><li>• Spoon</li><li>• Baggies (optional)</li></ul>

va Lamp

re Lucky  
he most?

me

ition

can you  
coin?

# What's Included?

- Materials Page
- Student Recording Sheets that include the materials and procedure
- 5 Science Activities:
  - Create Your Own Lava Lamp
  - What liquid will dissolve Lucky Charm marshmallows the most?
  - St. Patrick's Day Slime
  - Rainbow Milk Investigation
  - How many drops of water can you fit on the head of each coin?



Name: \_\_\_\_\_

## WHAT LIQUID WILL DISSOLVE LUCKY CHARM MARSHMALLOWS THE MOST?

### Procedure:

1. Label the cups to match the liquid that you'll put inside.
2. Place one marshmallow in each of the three cups. Pour  $\frac{1}{2}$  cup of liquid in each cup to match the label.
3. After 5, 10, and 15 minutes, use the spoon to pick up the marshmallow. Carefully place the marshmallow back in the container and wipe off the spoon. Record your observations in the chart below.
4. Repeat for each marshmallow.

### Materials:

- 3 different liquids
- 3 clear cups
- 3 marshmallows
- Spoon
- Timer
- Paper Towels

	Liquid #1:	Liquid #2:	Liquid #3:
	<u>water</u>	<u>salt water</u>	<u>vinegar</u>
5 minutes	still whole	somewhat dissolved	dissolved!
10 minutes	half dissolved	dissolved!	
15 minutes	dissolved!		

In which liquid did the marshmallow dissolve the most? vinegar  
do you think it dissolved more than the others? The  
because it is acidic

Other liquids would you want to try? soda

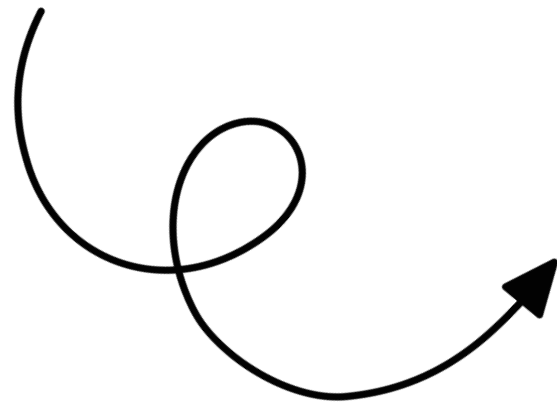
Review  
the  
Scientific  
Method  
while  
having fun!

# Materials Needed

- Create Your Own Lava Lamp
  - Cooking oil, water, green food coloring, empty water bottle, Alka Seltzer antacid tablets, gold glitter (optional)
- What liquid will dissolve Lucky Charm marshmallows the most?
  - 3 different liquids, 3 clear cups, 3 marshmallows, spoon, timer, paper towels
- St. Patrick's Day Slime
  - Water, white glue, liquid starch, green food coloring, mixing bowl, spoon, baggies, gold glitter (optional)
- Rainbow Milk Investigation
  - Milk, liquid food coloring, dish soap, cotton swab, bowl or pan
- How many drops of water can you fit on the head of each coin?
  - Eyedropper, variety of coins, water, plate/tray to catch overflow



# Record Observations & Draw Conclusions on the Recording Sheets




Name: \_\_\_\_\_

## RAINBOW MILK INVESTIGATION

**Materials:**

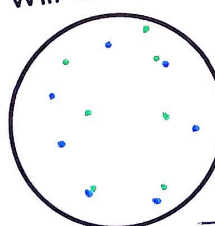
- Milk
- Liquid food coloring
- Dish soap
- Cotton swab
- Bowl or pan



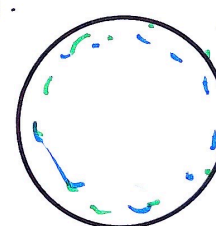
**Procedure:**

1. Pour a thin layer of milk into the bowl or pan.
2. Add drops of food coloring all around in the milk to create a rainbow.
3. Pick up a cotton swab and dip it in the dish soap.
4. Touch the cotton swab to the milk. Press down in one spot and hold it there to see the reaction. You may need to dip the cotton swab in the dish soap in between turns so the reaction will still occur.

Draw a sketch of your milk and food coloring drops **before** the cotton swab touched it.



Draw a sketch of your milk and food coloring drops **after** the cotton swab touched it.



What did you observe? The colors spread out.

What do you think caused the reaction?  
The polar vs. nonpolar interactions

How could you change this investigation to an experiment?  
I would change the liquid.

# Tips to Manage Science Activities

- Give students time to “explore” materials. If you give time to explore, play with, and get acquainted to the new materials, there is less time wasted during the actual experiment.
- Have small group sizes so everyone can take on an active role in the experiment.
- Limit downtime. If students need to wait for results, give them a task to work on while they wait: make a prediction, draw and label experiment, answer questions about observations, etc.
- Try the experiment ahead of time as a teacher.

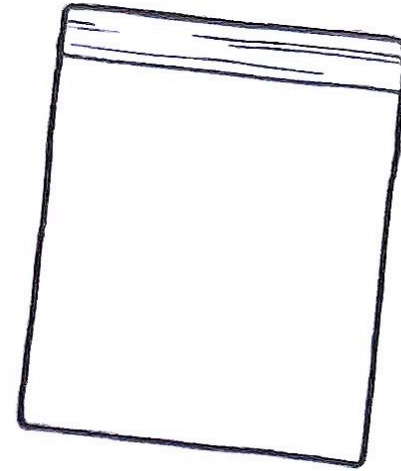
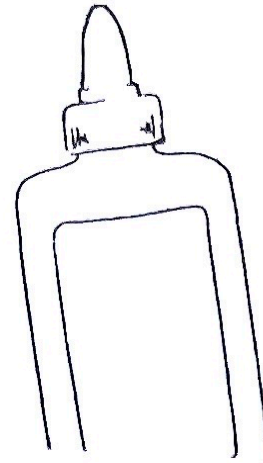
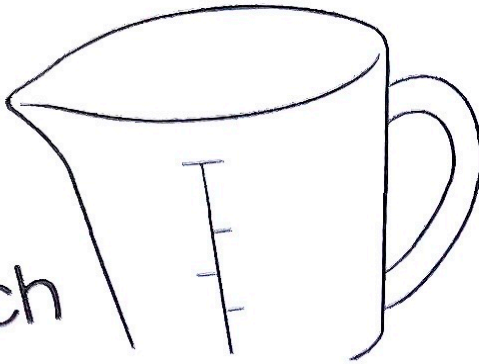


Name: \_\_\_\_\_

# ST. PATRICK'S DAY SLIME

## Materials:

- $\frac{1}{2}$  Cup of water
- $\frac{1}{2}$  Cup of white glue
- $\frac{1}{2}$  cup of cornstarch
- Green food coloring
- Mixing bowl
- Spoon
- Baggies
- Gold glitter



Name: \_\_\_\_\_

## HOW MANY DROPS OF WATER CAN YOU FIT ON THE HEAD OF EACH COIN?

### Procedure:

1. Make a prediction for the number of drops of water you think you can fit on the head of each coin.
2. Start with one coin. Use the eyedropper to place one drop of water on the coin at a time. Count the number of drops that stay on the coin.

### Materials:

- Eyedropper
- Variety of coins
- Paper towel to catch water

### Procedure:

1. Pour
2. Stir
3. Add

## HOW TO MAKE YOUR OWN LAVA LAMP





# Why Should I Use Science Experiments on St. Patrick's Day?

- There's always an extra level of energy during special holidays. Take student energy and channel it towards something academic.
- Have fun with your students! They can see your personality and you can learn more about them, too.
- Hands-on activities will allow students to be social...while still learning. This will be a great relationship building activity for students.
- Hands-on activities create a level of student buy-in. There's motivation to learn and grow now that the student has enjoyed a learning activity.



Procedure

1. Pour
2. Stir
3. Add

2. Start with one coin. Use the eyedropper to place one drop of water on the coin at a time. The number of drops is the number of drops.

Variation: of coins  
of water  
y to catch

Name: \_\_\_\_\_

# CREATE YOUR OWN LAVA LAMP

## Materials:

- Cooking oil
- Water
- Green food coloring

- Empty water bottle
- Alka Seltzer antacid tablets
- Gold glitter (optional)

## Procedure:

1. Fill your water bottle about  $\frac{2}{3}$  of the way with oil then fill the rest with water. Leave about an inch free at the top of the bottle.
2. Add several drops of green food coloring.
3. Take an Alka Seltzer tablet and break it into 3 or 4 pieces. Then drop a piece in and watch the magic. As soon as the tablet hits the layer of water, it will start to fizz and the water will erupt. The tablet dissipates but it will stay at the bottom of the bottle. If the oil is on top of the water, it will stay at the top.

Water



# Save Money & BUNDLE!

60 experiments  
included!

