

# RAINBOW MILK Experiment

**RAINBOW MILK EXPERIMENT**

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

**MATERIALS:**  
Bowl  
Milk (2/ or whole)  
Food coloring  
Dish soap  
Cotton swab

**QUESTION:**  
\_\_\_\_\_

**PREDICTION:**  
What do you think will happen when the cotton swab with dish soap is put into the milk and food coloring?  
\_\_\_\_\_

**OBSERVATIONS:**  
Draw and explain what happened when the cotton swab with dish soap was put into the milk and food coloring.  
\_\_\_\_\_

**MATERIALS**

- Bowl
- Milk (whole or 2%)
- Food coloring
- Liquid dish soap
- Cotton swab

**PROCEDURES**

1. Pour enough milk in a bowl to completely cover it. About a quarter of an inch for the milk to settle.
2. Add 12 drops of each color of food coloring to the center of the milk. Keep the drops together.
3. Dip the cotton swab in the dish soap so it is covered.
4. Place the soapy end of the cotton swab in the middle of the food coloring in the milk. Hold it there for 15 seconds.
5. Experiment with placing the cotton swab at different places in the milk.

**QUESTION**

What happens when soap is mixed with milk?

**HOW IT WORKS**

Milk is mostly water but contains billions of tiny fat molecules. When enough milk is in a bowl to completely cover the bottom of the bowl to the depth of about a quarter of an inch, wait for the milk to settle.

**PROCEDURES**

1. Pour enough milk in a bowl to completely cover it. About a quarter of an inch for the milk to settle.

2. Add 12 drops of each color of food coloring to the center of the milk. Keep the drops together.

3. Dip the cotton swab in the dish soap so it is covered.

4. Place the soapy end of the cotton swab in the middle of the food coloring in the milk. Hold it there for 15 seconds.

5. Experiment with placing the cotton swab at different places in the milk.

EXPERIMENT INFO & ACTIVITY PAGE



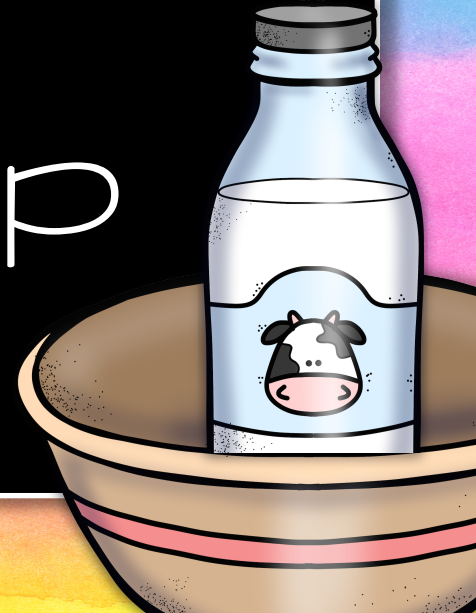
# QUESTION

What happens  
when soap is  
mixed with  
milk?



# MATERIALS

- Bowl
- Milk (whole or 2%)
- Food coloring
- Liquid dish soap
- Cotton swab



# OVERVIEW

In this experiment, you will put food coloring in the center of a bowl of milk. Then you will dip a cotton swab in dish soap and place it in the middle of the food coloring.

# PREDICTION

What do you think will happen when the cotton swab with dish soap is put into the milk and food coloring?

# PROCEDURES

1. Pour enough milk in the bowl to completely cover the bottom of the bowl to the depth of about a quarter of an inch. Wait for the milk to settle.

# PROCEDURES

2. Add 1-2 drops of each color of food coloring to the center of the milk. Keep the drops close together.

# PROCEDURES

3. Dip the cotton swab in the dish soap so it is covered.



# PROCEDURES

4. Place the soapy end of the cotton swab in the middle of the food coloring in the milk. Hold it there for 10-15 seconds.

# PROCEDURES

5. Experiment with placing the cotton swab at different places in the milk.

# HOW IT WORKS

Milk is mostly made of water but it also contains vitamins, minerals, proteins, and tiny droplets of fat.

# HOW IT WORKS

The dish soap basically "chases" the fat molecules around in the milk.

# HOW IT WORKS

The soap wants to attach to the fat molecules but the fat wants to get away!

# EXTENSION

How would the reaction be different if we used milk with less fat?

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

# RAINBOW MILK EXPERIMENT

## MATERIALS:

Bowl  
Milk (2% or whole)  
Food coloring  
Dish soap  
Cotton swab

## QUESTION:

---

---

## PROCEDURES:

1. Pour enough milk in the bowl to completely cover the bottom of the bowl to the depth of about a quarter of an inch. Wait for the milk to settle.
2. Add 1-2 drops of each color of food coloring to the center of the milk. Keep the drops close together.
3. Dip the cotton swab in the dish soap so it is covered.
4. Place the soapy end of the cotton swab in the middle of the food coloring in the milk. Hold it there for 15 seconds.
5. Experiment with placing the cotton swab at different places in the milk.

## PREDICTION:

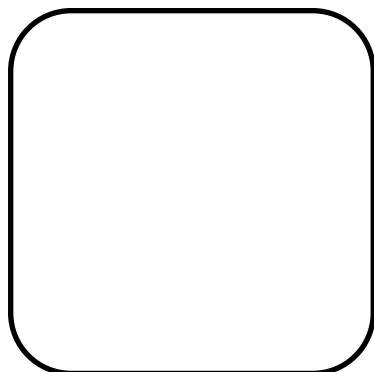
What do you think will happen when the cotton swab with dish soap is put into the milk and food coloring?

---

---

## OBSERVATIONS:

Draw and explain what happened when the cotton swab with dish soap was put into the milk and food coloring!

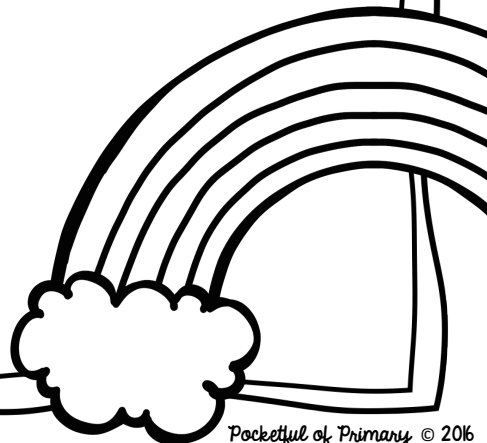


---

---

---

---





# THANK YOU!

## A NOTE FROM THE SELLER

Thank you so much for downloading this product! Your feedback and questions are greatly appreciated and welcomed! Feel free to contact me for any reason at [pocketfulofprimary@gmail.com](mailto:pocketfulofprimary@gmail.com) Don't forget to leave feedback to earn credit towards your next purchase! I hope you and your kiddos enjoy!

*Michelle*

## CREDITS



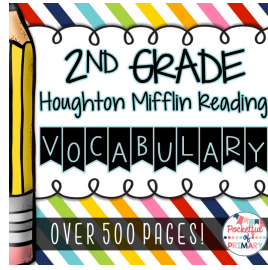
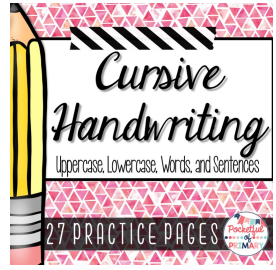
## TERMS OF USE

By purchasing or downloading this electronic file, you agree to the following terms of use. This product is for single classroom use ONLY. You may purchase additional licenses by visiting my store. This product may not be copied, edited, or resold in any form without permission from the author. Violations are subject to the penalties of the Digital Millennium Copyright Act.

**PLEASE E-MAIL ME WITH ANY QUESTIONS ABOUT THE USE OF THIS PRODUCT.**

## OTHER PRODUCTS

If you enjoy this product, please check out these other products of mine!



## FIND ME HERE

