# GROWING GUMMY BEARS LAB

| | 1 MINUTE | 6 HOURS | 12 HOURS | 24 HOURS | 48 HOURS |
|---|---|---|---|---|---|
| SALT WATER | | | | | |
| TAP WATER | | | | | |
| DISTILLED WATER | | | | | |

Will a gummy bear grow? Using different liquids (distilled water, tap water, salt water, juice, vinegar soda, cooking oil etc.) observe how gummy bears **expand**, or don't, in a variety of **solutions**, and determine why that is. Don't forget to measure and record the size of your gummy bears before and after!

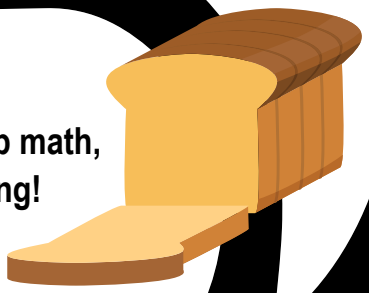
Measure after 6 hours, 12 hours, 24 hours, and even 48 hours!

## What's Happening?

Osmosis! Gummy bears will expand in size due to osmosis. Osmosis is the ability of water (or another liquid) to be absorbed through a semi-permeable substance which in this case is the **gelatin**. The gelatin in the gummy bears also keeps them from **dissolving** except for when they are placed in an **acidic** liquid such as vinegar.

# EAT YOUR SCIENCE

## Tasty Experiments That Kids Love

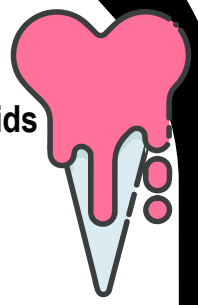


### BREAD IN A BAG

This bread in a bag activity for kids is a great way to develop math, science, and even fine motor skills! Plus, it tastes amazing!
Click here for instructions.

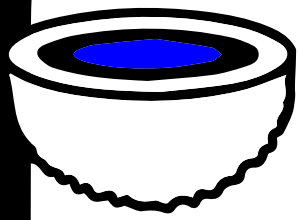
### HOMEMADE BUTTER IN A JAR

Delicious homemade butter is minutes away and all you need is one simple ingredient and your own two arms.
Click here for recipe and instructions.



### ICE CREAM IN A BAG

This homemade ice cream in a bag recipe is chilly chemistry for kids you can eat! Click here for recipe and instructions.

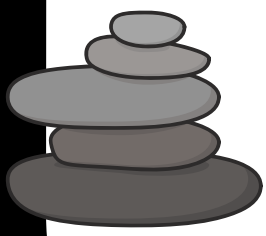


### CANDY GEODES

Eat your science with a totally SWEET activity!
Connect with your kids and learn about geology!
Click here for instructions.

### POPCORN IN A BAG

Popcorn is a great example of physical changes in matter including irreversible change. Get set to experiment with our easy microwave popcorn recipe, and find out why popcorn pops.
Click here to learn more.



### ROCK CYCLE BARS

Go ahead and try this rock cycle for kids activity that is sure to please because it's edible!
Click here for instructions.

LITTLE BINS FOR LITTLE HANDS

www.littlebinsforlittlehands.com

# Scientific Process

# Ask a Question

What do you want to learn or test?

# Do Some Research

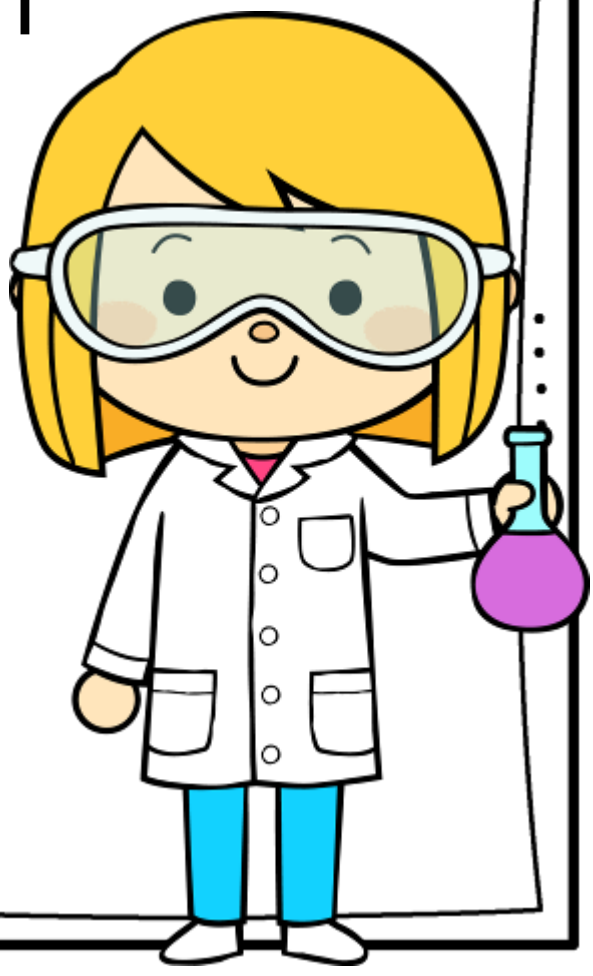
Gather information about what you want to learn.

# Make a Hypothesis

Try to predict the answer!
A hypotheses sounds like an
*If I do this, then this will happen*.
This being your experiment
and outcome.

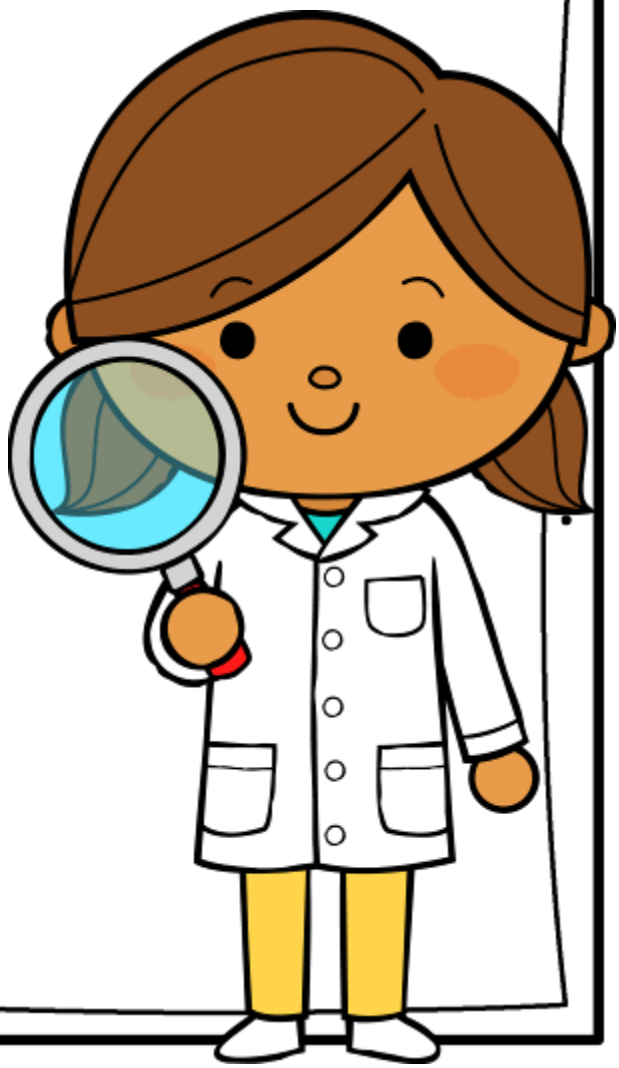
# Set Up An Experiment

Design a test or experiment to see if your hypothesis is correct!



# Record Data

Record what happens during the test or experiment.



# Conclusions

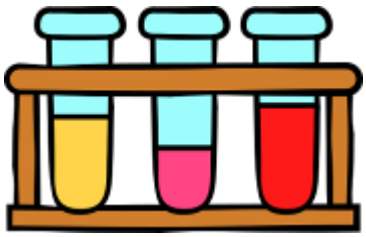
Analyze or review your data to see if your hypothesis was correct!

# SCIENTIFIC METHOD

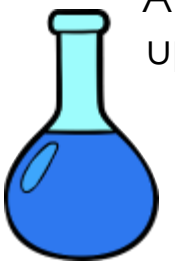
A method or procedure that uses an organized approach to solving a problem or answering a question through the use of a hypothesis, experimentation, observation, and data analysis.

# HYPOTHESIS

An educated guess or simple explanation made as a starting point for further investigation or experimentation.



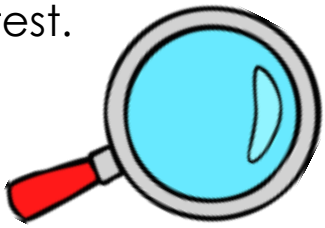
# EXPERIMENT



A scientific procedure set up to test a hypothesis or make a discovery. It usually involves a dependent variable, independent variable, and a control. The outcome is not necessarily known.

# INDEPENDENT VARIABLE

The independent variable is the part of your experiment that you want to test.



# DEPENDENT VARIABLE

The dependent variable is the outcome that occurs in your experiment and a response to the changing independent variable.

# CONTROL

The control is the neither the independent nor the dependent variable. The control is what you will compare the results in your experiment.

# My Science Investigation

## My Question

## My Hypothesis

## Research Notes

## Supplies

## Experiment

## Observations

draw or write

## Conclusions

# My Science Investigation

## My Question

## Hypothesis

## What is the Control?

## Supplies Needed

## What is the Dependent Variable?

## Experiment

## What is the Independent Variable?

## Observations

## Conclusions

Graphics provided by LittleRedsTreehouse.com

# GRAPHICS CREDIT