

# JR-SCIENTISTS

## STRAWBERRY DNA

This strawberry DNA extraction lab is perfect for your budding scientist to experiment with in the kitchen.

### INSTRUCTIONS:

**STEP 1:** Chill the alcohol in the freezer.

**STEP 2:** Remove the green stems from the strawberries and add the strawberries to a zip lock bag. Make sure to seal the bag well and then squish the strawberries into a pulp.

**STEP 3:** Add 1 tablespoon of dish soap, a teaspoon of salt, and 1/3 of a cup of water to the bag. Shake the bag to mix well.

**STEP 4:** Line the test tube with the coffee filter.

**STEP 5:** Pour the strawberry liquid onto the coffee filter and then wait for the liquid to filter into the test tube.

**STEP 6:** Now add a one inch layer of chilled alcohol to the test tube. Watch as a clear viscous material rises to the top of the alcohol. This is the strawberry DNA!

### THE SCIENCE

Each individual cell in an organism has a copy of the DNA pattern used to reproduce that cell. Usually, the DNA is combined within the cell, so you can't see it. But when you create a mixture of dish soap and salt and mix it with the strawberry pulp, it helps break down the strawberry cells into individual parts.

### SUPPLIES

Coffee filters

Pipette

Test tube

Strawberries

Dish Soap

Salt

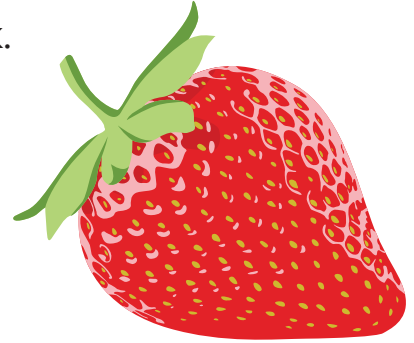
Plastic zip bags

Rubbing alcohol



# Strawberry DNA Observations

Use this worksheet to process and evaluate your work.



Were you able to extract the strawberry DNA?

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Can you see actual DNA with your eyes?

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What does each ingredient do?

Detergent? \_\_\_\_\_

Salt? \_\_\_\_\_

Alcohol? \_\_\_\_\_

What did you learn about DNA?

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