

Forming a Hypothesis

Procedure

- 1. Fill a large pot with water. Drop an unopened can of diet soda and an unopened can of regular soda into the pot of water and observe what each can does.
- 2. In the table in the Data and Observations section, make a list of the possible explanations for your observation. Select the best explanation and write a hypothesis.
- **3.** Read the nutritional facts on the back of each can and compare their ingredients.
- 4. Revise your hypothesis based on this new information.

Data and Observations

Hypothesis on Why Cans Behave Differently in Water	
Observations	
Possible explanations	
Best explanation	
Hypothesis	
Comparison of ingredients	
Revised hypothesis	

Analysis

- 1. What did you observe when you placed the cans in the water?
- 2. How did the nutritional information on the cans change your hypothesis?
- 3. Infer why the two cans behaved differently in the water.
- 4 The Nature of Science



Thinking Like a Scientist

Procedure 🚾 📆

- 1. Pour 15 mL of water into a test tube.
- 2. Slowly pour 5 mL of vegetable oil into the test tube.
- 3. Add two drops of food coloring and observe the liquid for 5 min.

Data and Observations

	Observation of Water in a Test Tube	
After the addition of oil		
After the addition of food coloring		
After 5 min		

Analysis

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