

It's a Matter of Space *(cont.)*

Science Experiment Form

Team Name _____ Date _____

Question (What do I want to find out?)

What will happen if two kinds of matter try to take up the same space at the same time?

Hypothesis (What do I think or guess will happen?)

Procedures (What are the steps to find out?)

1. Adding a solid to a liquid
 - a. Use your measuring cups to put 1/4 cup of water into a clear plastic cup.
 - b. Use your marker to draw a line on the cup which shows how high the water is in the cup now. Do not draw a line which goes up and down. Draw a line straight across the cup. Record the measurement on the data-capture sheet.
 - c. Use your measuring cups to put 1/4 cup of beans in the cup.
 - d. Put a new mark on the cup to show how high the water is in the cup now.
 - e. Measure the mark and record it on your data-capture sheet.
 - f. Subtract the first mark from the second mark to see how much space the solid took up and record it on your data-capture sheet.

2. Adding a gas to a liquid
 - a. Put 1/4 cup (62.5 mL) water in another plastic cup and draw a line to show how high the water is.
 - b. Use your ruler to measure the line and record the measurement on your data-capture sheet.
 - c. Put your straw in the water and blow some gas into it while another team member puts a mark on the cup to show how high the water in the cup went when you blew gas into it.
 - d. Measure the mark and record it on your data-capture sheet.
 - e. Subtract the first mark from the gas mark to see how much space the gas took up and record it on your data-capture sheet.

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Science Experiment Form *(cont.)*

3. Adding a liquid to a liquid
 - a. Put 1/4 cup (62.5 mL) water in another plastic cup and draw a line to show how high the water is.
 - b. Measure the line. Record the measurement on your data-capture sheet.
 - c. Use your measuring cups to put 1/4 cup (62.5 mL) of juice in the cup of water.
 - d. Put a mark on the cup to show how high the water in the cup went when you put another liquid into it.
 - e. Measure the mark and record it on your data-capture sheet.
 - f. Subtract the first mark from the second mark to see how much space the other liquid took up and record it on your data-capture sheet.

Results (What did I see actually happen?)

1. Adding a solid to a liquid _____

2. Adding a gas to a liquid _____

3. Adding a liquid to a liquid _____

Conclusion (What is the answer to the question?)

It's a Matter of Space *(cont.)*

What will happen if two kinds of matter try to take up the same space at the same time?

Team Name

Date

Beginning Water Measurement	Water Measurement After Matter Is Added	Amount of Space the Matter Took Up
Part 1: The water was ___ cm high before any matter was added.	The water was ___ cm high after the beans were added.	The beans took up ___ cm of space in the water.
Part 2: The water was ___ cm high before any matter was added.	The water was ___ cm high after the gas was added.	The gas took up ___ cm of space in the water.
Part 3: The water was ___ cm high before any matter was added.	The water was ___ cm high after the juice was added.	The juice took up ___ cm of space in the water.