



HYDROPHOBIC (1 of 2) HOT COCOA

 5-10 minutes +
questions and journal time

 Follow all safety instructions from LearnLibre.com
during the experiment.



Before the Experiment

Find a safe and appropriate place to do the experiment, get any safety equipment you will need, and gather your materials on a tray.

Materials

- Cocoa powder
- Milk
- Bowl or cup
- Spoon
- Toothpick

Procedure

1. Fill your bowl or cup with milk so that it is deep enough to fully dunk your spoon in.
2. Get a heaping spoonful of cocoa powder.
3. Carefully dunk your spoonful of cocoa powder into the milk. Does the cocoa powder mix in, or stay on the spoon?
4. Take the spoon out. What do you notice? Is the cocoa powder wet or dry?
5. Poke the pile of cocoa powder with your toothpick. What happened? Can you explain it?

Optional Extension

We know particles have different properties at different temperatures. How would heat affect the outcome of this experiment?

Scan the QR code at the top of the page and go to this experiment for an optional extension.

HYDROPHOBIC (2 of 2) HOT COCOA

Questions

1. What happened when you dunked the cocoa powder in the milk?
2. What happened when you poked it with a toothpick?
3. Do you think cocoa powder and milk like each other?
4. Is the combination of cocoa powder and milk a mixture, a suspension, or a solution?
5. Extension: research how cocoa powder gets from the cacao tree into our grocery stores?



[See answers and learn more about how this experiment works by scanning the QR code at the top of the 1st page.](#)

Clean-up

Wash and dry any tools you used, put materials back where you got them from, clean your work station.

SHARE OUR FREE LESSONS!

Want to share our free activities like this one with your friends?

Send them this link to our free lessons:

<https://learnlibre.com/free-lessons/>