

Letterboxing

Letterboxing is an outdoor activity that combines a love of outdoors, solving puzzles and treasure hunting.

To make your own stamp for letterboxing, you will need the following supplies:

- A small wooden block like 2x2" or bottle cap/small jar lid that is flat and sturdy
- 4-6 small Foam sticky shapes or a piece of smooth styrofoam tray (2 x 2 inch) & glue
- scissors
- Ink pad or they can use markers to color their stamp
- A few pieces of paper folded and stapled for their letterboxing journal

For details on how to make a stamp and journal, find a letterbox, and more. Check out the Girl Scouts of Connecticut live video on the DEEP Facebook page.

Hot Chocolate Science

You can also try this fun experiment with us on the Facebook Live or on your own. You'll need:

- Three heat-proof mugs
- Three packets of instant hot chocolate mix
- Measuring cup
- 8 ounces of cold water
- 8 ounces of room-temperature water
- 8 ounces of hot water
- Spoons
- Stopwatch or a timer
- Notebook or piece of paper to record your observations

The question we are researching today is: What temperature of water will dissolve the hot chocolate mix the fastest?

As scientists, we need to first make a prediction and write it down at the top of our notebooks. "I think the hot chocolate mix will dissolve fastest in _____ water." Then we can get started with our experiment!

Empty each packet of hot chocolate into a mug. Decide if you are going to start your timer before you add in the water, or after and make sure you do it the same way for each mug. In the first mug, we will add 8 ounces of ice-cold water. After adding the water, stir the mixture and see how long it takes to dissolve the hot cocoa mix. Stop the timer when you think the mixture is completely dissolved. Record your time in your notebook.

Repeat the process with the room-temperature water and the hot water and record your observations. Which temperature of water made the mixture dissolve the fastest? Write down your answer in your notebook.

SPOILER ALERT! Do not read on until you have completed your experiment.



Experiment Conclusions

Why do you think the hot water made the hot chocolate dissolve so much quicker?

Hot water has more energy than cold water. The extra energy causes the water molecules to move around faster, breaking down the hot chocolate and causing it to dissolve faster! Now you know why the box recommends you use hot water when making your hot chocolate.

For the next part of the experiment, we highly suggest a taste test. It is best performed with some marshmallows and some whipped cream (or maybe even a candy cane) if you happen to have them. 😊

For more information about Girl Scouts, please check out our website at <https://www.gsofct.org/>.

To see our calendar of events and upcoming council programs, please check our calendar here: <https://app.doubleknot.com/openrosters/ViewActivitySpaceAvailable.aspx?OrgKey=3538&CategoryId=16841>

To find letterboxes in the Connecticut State Parks, follow these links for more information:

<https://portal.ct.gov/DEEP/Forestry/Letterboxing/Letterboxing-in-Connecticuts-State-Forests>

<https://portal.ct.gov/DEEP/Forestry/Letterboxing/The-Clues-to-Letterbox-Sites-on-Connecticuts-State-Forests>

<https://portal.ct.gov/NCLI/Outdoor-Activities/Letterboxing>