



Science Technology Engineering Art Math

December STEAM Challenge:

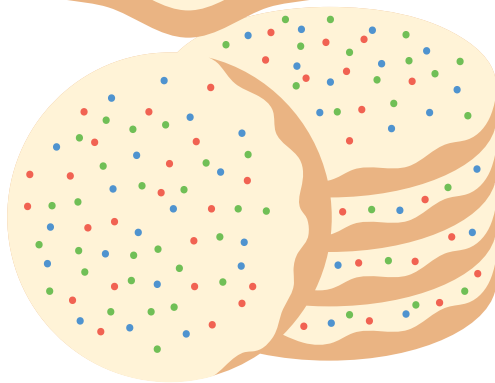
COOKIE CHEMISTRY

Step 1: Think

Baking cookies is a great way to learn about chemistry! When a cookie is baked in the oven, it goes through several chemical and physical changes. What do you know about making your favorite cookies?

Here are some things to think about:

- What ingredients do the cookies include?
- What is the baking process like? What temperature do they need to reach?
- How does the cookie dough change when it is cooked?



Step 2: Find

Explore the resources below and other resources you can find on the topic.



Video: Watch this month's STEAM Challenge video on [YouTube](#).

TV Show: Watch [Magic School Bus Season 1, Episode 9 Get Ready, Set, Dough on Hoopla](#)



Game: Play Ruff's Cookie Creator at [PBSkids.org](#)



Contact your local LCPL branch for more resources.

December STEAM Challenge:

COOKIE CHEMISTRY

Video: Watch The [Chemistry of Cookies on YouTube.](#)



Ebooks: Look [through some digital cookbooks on Hoopla](#) and find some [recipes you would like to try.](#)



Step 3: Create & Explore

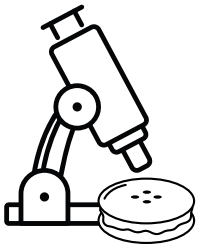
Cookie Comparison

1. Make a batch of cookie dough with an adult. You can use any cookie recipe you like. Before putting your cookies in the oven, print and fill out the first column of the Cookie Comparisons worksheet found on the next page.




2. Bake your cookies and allow them to cool completely. Give your cookies a taste and fill out the rest of the cookie comparison worksheet.
3. Your cookies changed when they baked. Can you use what you learned this month to explain how these changes happened?

Contact your local LCPL branch for more resources.



Cookie Comparisson

	Raw Dough	Baked Cookies	What changes did you notice?
Texture			
Smell			
Color			
Shape			
Size			
Taste	 Skip this box- Do not eat raw dough.		