The 49ers STEM Leadership Institute’s
Weekly Digest
During the coronavirus shutdown
March 23rd, 2020

Chemistry in the Kitchen: Yeast Bread
When flour & water mix, they make a glue-like paste (that can actually be used for paper mache!). So, what makes bread fluffy? For the average sandwich bread, live single-celled fungus called yeast creates this effect. In bread dough, yeast (which is activated by warm water) feeds off sugar (in flour & added sugar) & releases carbon dioxide gas. This gas is then trapped in the dough, causing it to inflate & grow fluffy. How is this gas trapped? By molecular nets of gluten chains generated from mixing flour and water (remember the paste from above?). Want to experiment with making your own bread? Here are two easy recipes to try! You’ll need flour, yeast, water, & salt (& sugar & oil for the 2nd one)
(1) Crunchy No-Knead Bread
(2) Simple Bread-in-a-Bag Recipe
Next week: “Quick Rise Breads” like banana bread, brownies, & cake!

Logical Fallacy of the Week
Not a Cause for a Cause
I ate chocolate & then I tripped; the chocolate made me trip. “[This logical] fallacy assumes a cause for an event where there is no evidence that one exists. Two events may occur one after the other or together because they are correlated, by accident or due to some other unknown event; one cannot conclude that they are causally connected without evidence.”
bookofbadarguments.com

Did you know...
You can grow plants from a shoot cut from an adult plant? Check out this article with instructions on how to take a cutting! How many new plants can you grow?

Check this Out!
Penguins, sea otters, and jellies, oh my! Check out the Monterey Bay Aquarium’s Live Cams for streaming video from several of the aquarium’s exhibits & visit their Instagram feed for some awesome videos!
@montereybayaquarium
The Mars Rover had to hit itself with a shovel? Check out this Popular Science article for more details.
What did Sir Isaac Newton do while quarantined? Find out in this Washington Post Article.

Craft Corner
LUNCH DOODLES with Mo Willems!
“Learners worldwide can draw, doodle and explore new ways of writing by visiting Mo’s studio virtually once a day for the next few weeks. Grab some paper and pencils, pens, or crayons and join Mo to explore ways of writing and making together”
kennedy-center.org/education/maowillems
Origami lanterns, flowers, boxes, bracelets, and more! How can you use origami to decorate your home workspace and make it more pleasant for yourself?
instructables.com/id/Origami-For-Everyone/

Taking care...
The Peer-Run Warm Line is a non-emergency phone or online chat service for anyone needing any kind of emotional support.
Need a way to activate your body or to find a bit of peace? Check out Yoga with Adriene. She has videos for all skill levels and a cute dog too!

Culture during COVID-19
World-Famous Cellist Yo-Yo Ma plays “Songs of Comfort” on his Instagram feed @yoyoma

Happy Pic Of the Week
RAWRRRRR!