

“Introducing Family STEM Snack Boxes”

By Karen Ye and Nicole Ross

Video Transcript:

Hello.

Welcome to this webinar series. I'm Nicole.

And my name is Karen. I will be leading you through a short webinar on the new family stem snack boxes.

Some housekeeping to get us started. We are recording this webinar so please be sure that you are both muted in your audio and your video, unless you want to be recorded.

If you have any questions

or comments during the webinar, please enter them into the chatbox and we will answer them either during or after the

presentation.

All the recordings for the Covideo 19 webinar series

are accessible through the following website:

[IMSA.edu/events](https://imsa.edu/events)

And they're listed on the calendar by their calendar date.

We'd also like to give you guys a brief background. We are the Center for Teaching and Learning at the Illinois Mathematics and Science Academy.

We offer professional development on learning experiences and strategies that reflect our four core competencies:

Inquiry-based, problem-centered, competency-driven, and integrative.

We can provide PD on and off-site and can also customize sessions. If you'd like to learn more about us, please visit [IMSA.edu/centers](https://imsa.edu/centers)

Our objectives for tonight are to introduce the Family STEM Snack Box Series

focusing on two of our offerings in particular

and to highlight the various uses or applications of these activities.

All of the activities that are featured in the Family STEM Snack Boxes use familiar and safe materials and can be done in a classroom or at home.

The questions are rigorous but also accessible and can be scaffolded for various grade levels.

For our activities, we included four separate grade bands.

The activities also integrate content across multiple scientific content areas and highlight the science and engineering practices.

Each activity we write has a specific format.

We asked the students to record detailed observations and drawings while conducting their experiments or activities.

We also devised questions that utilize the CER or "claim evidence reasoning" format

widely utilized throughout various subject areas in schools.

Questions and observation can be

easily adapted

depending on the use of the activity.

Next, we're going to highlight two of the Snack Box activities for you.

First, let's take a look at the marbled paper activity. You can access the link to the activity on Digital Common.

It is also available for download after the webinar.

And we're going to go ahead and just play a short clip of how the activity works.

Alright.

[video clip, lively music]

All right. So marble paper is a great hands-on activity that integrates science with art and could also be a great activity if you're looking for a creative way to make some fun birthday cards or bookmarks.

We read the suggested focus questions for each grade band and while they are differentiated by grade level, there are some things that they have in common. The questions focus on making observations, drawing connections, thinking about why something occurs, so just why the food coloring powder can be printed on the paper.

The questions that have students look at how various scientific concepts such as solubility and hydrophobic and hydrophilic interactions are related to the behavior and properties of familiar household items such as shaving cream and food coloring.

And lastly, we also try to have one question that has the same focus for all grade bands.

In this case,

this was question four, in which we have students draw and explain how various substances interacted with each other.

A lower-level version simply has students sketch what they think was going on, whereas the higher level grade questions has students use content specific...

content specific vocabulary to explain what they thought was going on.

The next activity is... it involves making butter.

Called "Buttery Science". Again, it's available through Digital Commons.

And you can get that after this webinar if you like.

And essentially, all you really need is a few containers,

some heavy whipping cream,

and physical energy

to produce butter and another substance called

called "butter milk".

The questions for this activity are derived mostly from the Next Generation Science Standards that are grade specific.

The high school level questions touch upon more biologically related or relevant topics like the properties of lipids.
in water. Whereas other questions

at the other grade bands as well as the high school

delve into the physical characteristics:

measurement of concentration,

physical changes, and energy.

All right. So, while all the STEM Snack Box activities were originally developed as a way to support remote learning, you can certainly use these activities just as a normal science lab at school, a science excursion at home, as part of a science or STEM Camp curriculum or even as a fun activity for a parent or back to school night event.

The Snack Boxes, along with other free offerings, are available at [IMSA.edu/e-teaching](https://www.imsa.edu/e-teaching).

These offerings may be updated weekly, so please check back

for new resources.

You can also make one-to-one video conferences

appointments with a curriculum or professional development specialist

just like me or Karen. We can help with a variety of topics

including helping discuss ways to bring your classroom into the remote environment

and adapt to remote teaching.

Thank you. Again, this webinar was brought to you by Nicole and Karen. We hope can utilize both the family and grade specific STEM Snack Boxes.

Feel free to reach out to us at the Center for Teaching and Learning at the Illinois Mathematics and Science Academy if you have any questions. Thank you.

Thank you.