

Family STEM Snack Boxes

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Housekeeping

- All participants are muted and video is turned off
- Please type questions in the chat box and they will be answered following the presentation
- This webinar is being recorded and will be made available at <u>imsa.edu/events</u>



Center for Teaching and Learning at the Illinois Mathematics and Science Academy

- Offer professional development sessions for STEM and pedagogy
- IMSA's signature strategy of learning: Inquiry-Based, Problem-Centered, Competency-Driven and Integrative
- On or off-site (and now online!). Can be customized
- To learn more, visit <u>imsa.edu/centers</u>



Objectives

- Introduce weekly Family STEM Snack Box offerings
- Highlight uses and applications STEM Snack Boxes



Activity Properties/Qualities

- Familiar and safe materials
- Rigorous but also accessible
- Can be scaffolded for various grade levels
- Integrates multiple scientific content areas
- Highlights Science and Engineering Practices



Activity Format

- Record detailed observations & drawings while doing activity
- Answer focus questions using CER format
 - Claim that answers the question
 - Evidence from students' data
 - Reasoning that involves a rule or scientific principle that describes why the evidence supports the claim



Snack Box Activity #1: Marbled Paper



Snack Box Activity #1: Marbled Paper

- Questions focus on making observations, drawing connections, thinking about why something occurs
- Questions connect to various scientific concepts and applications
- Question 4 is "the same" for all grade bands





Snack Box Activity #2 Buttery Science

- Buttery Science
- Cream + Agitation (physical force/energy) = Butter









Snack Box Activity #2

- Questions touch upon grade-level NGSS standards:
 - Physical Characteristics
 - Physical Changes
 - Concentration
 - Energy
 - Properties of Lipids in water/biological relevance



Snack Box Uses

- Science Lab at school
- Science Exploration at home
- Science/STEM Camp
- Parent/Back to School Events



Additional Resources: imsa.edu/e-teaching

- Weekly "Snack Boxes" of STEM activities for PreK-12
- Make 1:1 appointments with a Curriculum/PD specialist





Thank You!

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