



Rocket Chemistry

Friday, February 5th at 2:00PM
Virtual Classroom 1

Eman I. Beck, NASA OKSG MTPE Class of 2017-2018 Ambassador

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Helena Guidry- NASA OKSG MTPE Class of 2020-2021 Participant

Rockets are a hot topic amongst NASA's recent commercial launch with Space X and the upcoming Artemis missions. Participants will experience parts of a sample unit that will include hands on activities to demonstrate the chemistry and physics behind modern rocketry. Topics related to the lesson include opportunities to explore Newton's third law, states of matter, thermal energy, density, aerodynamics, and chemistry.

Chemistry is at the heart of what makes rockets fly. This session will focus on the internal chemistry involved in both solid and liquid boosters. Additionally, participants will learn how using the phenomena of rockets becomes an opportunity to explore current NASA missions (Commercial Crew program, Artemis, etc..) and empower students to understand the different stages so they can make necessary connections while watching live launches.

While you are welcome to watch our presentation and try out the activities at a later time, we encourage our participants to complete the activities as we present live. If you choose to complete the activities with us in real time, you will need the following materials:

- At least 2 antacid effervescent tablets
- 2 beakers or other containers of the same size (for holding liquids)
- About 300-400 mL of water
- 1 inner-locking film canister
- 2-3 pieces of construction paper
- 1 thermometer (optional)
- 1 tape
- 1 mobile device
- Mobile Applications to Download: [SciJournal](#), [Playground Physics](#), [Lapse It](#) or [iMotion](#)