



NGSX Next Generation Science Exemplar

Argumentation, Explanation, and Modeling of the Behavior of Matter

○ Key takeaways: Grow in your understanding of 3dimensional learning, and in particular, how scientific and engineering practices identified in [A Framework for K12 Science Education](#) and [Next Generation Science Standards](#) play a critical role in helping students build and revise their scientific ideas over time. You will learn about and develop models, and engage in evidencebased argumentation and explanation, and explore classroom video cases, all designed to help you help your students build their understanding and explanations of natural phenomena. You'll also learn about building a classroom culture of reasoning and arguing from evidence where students go public with their ideas and build on the ideas of their classmates. As you participate in this pathway you will find that learning about scientific practices goes hand in hand with your study of a core physical science concept, the structures and properties of matter. Intentionally bringing together disciplinary core ideas and crosscutting concepts with scientific practices.

○ Time Required: 30 hours

○ Available for implementation: November 2015

○ Contact your local Mathematics and Science Center Director

