



# YALE NATIONAL INITIATIVE

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Curriculum Units by Fellows of the National Initiative  
2017 Volume IV: Chemistry of Cooking

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## **Matter Chatter: Exploring the effect heat has on states of matter using the five senses**

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Kinderscholars are motivated by curiosity. They want to investigate and explore the world around them. This six-week science unit captures that curiosity and uses it to explore scientific concepts that seem magical to them. The scholars will master the concepts of states of matter, heat, heat transfer and use the five senses to observe the effect that heat has on states of matter in cooking. This unit includes strategies for differentiated learning, learning styles, graphic organizers, journals, scientific method, and the design cycle. The states of matter lessons include read aloud stories that are fiction and non-fiction, research, hands-on inquiry, experiments and presentations. The heat and heat transfer activities include those activities as well as experiments to create butter, applesauce and cupcakes. The standards met by this unit include the Next Generation Science Standards, Common Core, and Oklahoma Academic Standards. This unit is intended for Kindergarten but is applicable to first and second grade as well.

(Developed for Science/States of Matter, Math/Data Analysis, Science/Heat Transfer, grade K; recommended for Science/States of Matter, Science/Heat Transfer, grades K-2)

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