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

Science of Sugar

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Cooking is an experience universally shared by children that can be used to tangibly engage them in scientific exploration. Within the context of cooking, sugar presents an interesting topic of study. Found in a variety of food items ranging from drinks to prepared foods, sugar is a substance familiar to children. This unit will lead fourth grade students in an investigation of sugar that shows them the significance of the substance's chemical properties. They will experience foundational ideas of chemistry by creating sugar solutions, growing sugar crystals, and creating caramel apples. Through an interdisciplinary approach that emphasizes experiential learning, this three-week unit will also engage students in the scientific process, familiarize them with the history of sugar, and allow them to develop an understanding of the health implications of sugar consumption.

(Developed for Science, grade 4; recommended for Science, grades 3-5)

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