



Curriculum Units by Fellows of the Yale-New Haven Teachers Institute  
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## **Properties of Matter: A Forensic Science Approach**

Guide for Curriculum Unit 16.04.04  
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Middle school students are naturally fascinated by the world of forensic science, crime scene investigation, law, and criminal justice. This curriculum unit is designed to spark their interests and provide meaningful real-world connections to the standards they are learning in general science, with a particular focus on the application of properties of matter to the field of forensic science. Forensic science is based upon the recognition, identification, and evaluation of physical evidence, so it is the perfect theme for engaging students in the content of properties of matter. Students will develop a strong understanding of how physical and chemical properties can be used to identify crime scene evidence, as well as separate and analyze the components of mixtures. Furthermore, they will begin to develop their knowledge of atoms, elements, and compounds. This unit is packed with hands-on activities that allow students to: explore matter using scientific tools and techniques, apply the scientific method to new questions, use creative thinking and problem-solving skills to analyze crime scenes, and create arguments that are supported by evidence. Students will know from day one why it matters to understand matter!

(Developed for General Science, grade 7; recommended for General Science, grades 7-8)

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