



Curriculum Units by Fellows of the Yale-New Haven Teachers Institute  
1995 Volume III: The Constitution and Criminal Justice

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## Science and the Law

Guide for Curriculum Unit 95.03.07  
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This unit aims to be enjoyable and creative as well as to enhance the thinking skills of the students by utilizing the scientific method with a myriad of hands-on activities. This unit will also show diversity between science and other disciplines. I will introduce scientific techniques that a criminalist may use in a court of law to aid in convicting or proving innocent a suspect. A criminalist encompasses areas of the physical and natural sciences which are applicable to the analysis of physical evidence.

In this unit, the following topics will be addressed:

1. Forensic Science, which is the application of science to criminal investigation in order to provide evidence that can be used in the solution of criminal cases.
2. Forensic psychology or forensic psychiatry, which is concerned with how psychology or psychiatry interact with the law.
3. Physical evidence, which consists of any and all objects that can help establish that a crime has been committed.
4. DNA (deoxyribonucleic acid), the blueprint for life, which carries information that controls the building of protein and is present in the blood. DNA is unique in each individual except some identical twins. DNA fingerprinting is a procedure that produces a unique genetic map or "fingerprint" for each individual. The validity of DNA fingerprinting has been well established by the courts. Critics, however, complain that sloppy laboratory procedures reduce the test's reliability.
5. Fingerprints, which penetrate through layers of skin, start to develop during the fetal stage of growth and remain the same throughout life.

I plan to use this unit in my eighth grade Earth Science class. It can be used up to grade 10. This unit will run for three weeks. Included in this unit is a vocabulary list, a career choice, lesson plans with laboratory

activities, teacher reading list, student reading list and a bibliography. Additional resources such as speakers (criminalist Henry Lee, police, detectives, other criminalists, forensic scientists, judges, lawyers) may visit the classroom, and students will take a trip to the courthouse. Various hands-on activities are recommended; and resource books, CHEMS kits for fingerprinting and crime solving are available.

I am sure that this unit will enhance and broaden the minds of students as they correlate science and the law. This unit will give students the opportunity to do research and explore ideas. The O.J. Simpson murder trial is being used as a core for this unit.

(Recommended for Earth Science grade 8, General Science grade 9, Civics grade 10 and Social Studies grades 8-9)

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