Appendix I

District Standards

- HS-FS-F-1 Understand the characteristics of fingerprints that allow them be systematically classified.
- HS-FS-F-1a Students will be able to describe the physiology of fingerprints.
- HS-FS-F-1b Students will be able to describe, compare, and identify the different types of fingerprints.
- HS-FS-F-1c Students will be able to describe, compare, and perform fingerprint detection techniques.

  This unit addresses each of the above standards through activities where students create ten print cards, analyze the prints for patterns and minutiae. In the labs, students will compare their fingerprint characteristics (both class and individual) to those of their classmates. Using sets of known and unknown fingerprints students will match the prints based on the classification system of Henry as well as patterns.

- HS-FS-BS-1 Students will describe how to identify blood and blood types.
- Describe how to screen for the presence of human blood.

  The above standards are addressed through an exploration of human blood types and genetics of blood type inheritance. Students will use commercially available simulated blood for typing as well as testing for blood as evidence.

- HS-FS-T-1a Students will understand that drugs, toxins and poisons may not be apparent at a crime scene and will learn the types of indicators present.
- HS-FS-T-2a Students will be able to describe the difference between drugs, toxins and poisons.
- HS-FS-T-3a Students will understand the process of isolating and identifying drugs, toxins and poisons in human tissue.
- HS-FS-T-3b Students will understand and appreciate the difficulties in isolating drugs, toxins and poisons in human tissue.
- HS-FS-T-3c Students will be able to compare and contrast chromatography, UV/VIS/IR spectrophotometry and mass spectrophotometry.

The previous standards are addressed in the unit through a presentation on toxicology and methods of toxicology testing. Students will explore the history of toxicology through individual reading articles and performance testing.