## Teacher's Guide: Murder Mystery

Overview: Students will solve a "murder mystery" by gathering evidence, testing evidence and writing a report demonstrating the use of forensic technology in crime solving.

Calendar	Goal	Items Included	Activities
Day 1: Intro (90 min)	Watch CSI, Bones, other forensic investigation show or have a guest speaker. Students should note types of tests/technology used in forensic science, how they analyze a crime scene and the roles of the police investigator, forensic investigator, and lab technicians.	Worksheet: CSI clip.doc	Discussion
Day 2: Background (90 min)	Students will take notes and practice types of skills used in forensic science including ink chromatography, fingerprinting and hair analysis.	Forensic Evidence I.ppt	Chromatography of different brand black markers. Kids take their own index and thumb prints. Categorize class thumbprints by type. Examine students hair by lens and categorize.
Day 3: Background	Students will take notes on types and solve problems for skills used in forensic science including blood typing and DNA fingerprinting.	Forensic Evidence II.ppt Blood Type problems (DNA fingerprint analysis- I used the one in my publisher materials)	Solve blood type problems in pairs.  Complete DNA fingerprint worksheet
Day 4: Background (optional)	Students will create and analyze a DNA fingerprint.	Watch Bones Episode Forensic Evidence I.ppt (last slide)	Create DNA fingerprint (paper, scissors, TAPE)
Day 5: Investigation	Students will collect evidence from "crime scene," conduct interviews and perform tests.	Student Handout Part I and II Murder Mystery.ppt Part I and II	Visit "crime scene" Analyze evidence
Day 6: Report	Working in their groups students will write a court transcript summarizing crime scene, evidence, and their roles.	Student Handout Part III Murder Mystery.ppt Part III	Analyze lab results Write transcript