*The following passage is from a Wikipedia article about Sherlock Holmes, and discusses the use of science and technology in the stories. Read it and write a short summary, three to four sentences long, of the most important information. Some words and phrases are in blue font - these are links that will take you to websites with more information. You do not have to click on any of these, but feel free to do so if you would like more information, or if you don't understand what is meant by those terms.*

*Turn your practice into the dropbox provided in this week's module.*

### Forensic science

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1852 microscope

Sherlock Holmes remains a great inspiration for [forensic science](http://en.wikipedia.org/wiki/Forensic_science), especially for the way his acute study of a crime scene yields small clues as to the precise sequence of events. He makes great use of [trace evidence](http://en.wikipedia.org/wiki/Trace_evidence) such as shoe and tire impressions, as well as [fingerprints](http://en.wikipedia.org/wiki/Fingerprint), [ballistics](http://en.wikipedia.org/wiki/Ballistics) and handwriting analysis, now known as [questioned document examination](http://en.wikipedia.org/wiki/Questioned_document_examination). Such evidence is used to test theories conceived by the police, for example, or by the investigator himself. All of the techniques advocated by Holmes would later become reality, but were generally in their infancy at the time Conan Doyle was writing. In many of his reported cases, Holmes frequently complains of the way the [crime scene](http://en.wikipedia.org/wiki/Crime_scene) has been contaminated by others, especially by the police, emphasising the critical importance of maintaining its integrity, a now well-known feature of [crime scene](http://en.wikipedia.org/wiki/Crime_scene) examination.

Owing to the small scale of the trace evidence (such as tobacco ash, hair or [fingerprints](http://en.wikipedia.org/wiki/Fingerprint)), he often uses a [magnifying glass](http://en.wikipedia.org/wiki/Magnifying_glass) at the scene, and an [optical microscope](http://en.wikipedia.org/wiki/Optical_microscope) back at his lodgings in Baker Street. He uses [analytical chemistry](http://en.wikipedia.org/wiki/Analytical_chemistry) for [blood residue](http://en.wikipedia.org/wiki/Blood_residue) analysis as well as [toxicology](http://en.wikipedia.org/wiki/Toxicology) examination and determination for [poisons](http://en.wikipedia.org/wiki/Poison). Holmes seems to have maintained a small chemistry laboratory in his lodgings, presumably using simple wet chemical methods for detection of specific toxins, for example. [Ballistics](http://en.wikipedia.org/wiki/Ballistics) is used when spent [bullets](http://en.wikipedia.org/wiki/Bullet) can be recovered, and their [calibre](http://en.wikipedia.org/wiki/Calibre) measured and matched with a suspect murder weapon.

Holmes was also very perceptive of the dress and demeanour of his clients and others, noting style and state of wear of their clothes, any contamination (such as clay on boots), their state of mind and physical condition in order to infer their origin and recent history. Skin marks such as [tattoos](http://en.wikipedia.org/wiki/Tattoos) could reveal much about their past history. He applied the same method to personal items such as [walking sticks](http://en.wikipedia.org/wiki/Walking_stick) (famously in [*The Hound of the Baskervilles*](http://en.wikipedia.org/wiki/The_Hound_of_the_Baskervilles)) or hats (in the case of [The Blue Carbuncle](http://en.wikipedia.org/wiki/The_Blue_Carbuncle)), with small details such as [medallions](http://en.wikipedia.org/wiki/Medallion), [wear](http://en.wikipedia.org/wiki/Wear) and [contamination](http://en.wikipedia.org/wiki/Contamination) yielding vital indicators of their absent owners.

An omission from the stories is the use of [forensic photography](http://en.wikipedia.org/wiki/Forensic_photography). Even before Holmes's time, high quality photography was used to record accident scenes, as in the [Tay Bridge disaster](http://en.wikipedia.org/wiki/Tay_Bridge_disaster) of 1879, for example, and it was widely used to record the faces of criminals to build index files, as well as crime scenes, especially those involving homicide (such as the [Jack the Ripper](http://en.wikipedia.org/wiki/Jack_the_Ripper) murders in 1888).

In 2002, the [Royal Society of Chemistry](http://en.wikipedia.org/wiki/Royal_Society_of_Chemistry) bestowed a posthumous [honorary fellowship](http://news.bbc.co.uk/2/hi/uk_news/northern_ireland/2332461.stm) of their organization upon Sherlock Holmes, for his use of forensic science and analytical chemistry in popular literature, making him the first and only (as of 2010) fictional character to be thus honoured.