

FBI Crime Lab

Answer Key

Use the word bank to help you fill in the worksheet as you watch the video.

1. The FBI crime lab is located in **QUANTICO**, Virginia. It cost over **\$150** million to build.
2. According to the FBI Lab Director the most important quality of the lab is to ensure that the evidence is **SECURE** and contamination free.
3. Forensic science is the **ART** of finding whatever is left at a crime scene, developing it in such a way that it can be used to associate it to the person(s) at the scene ... because you can't **FOOL** science.
4. The FBI laboratory is composed of **25** different labs, such as **LATENT** fingerprints, DNA analysis, **TRACE** evidence, and chemistry. It receives over **600** pieces of evidence each day from outside agencies.
5. In 1936 the FBI crime lab was among the first labs to test the **POLYGRAPH** or lie detector.
6. The FBI created a **SEROLOGY** unit, which could test for **HUMAN** blood types.
7. In the mid 1970s the crime lab became a **CRIME** fighting tool. It began to realize that physical evidence is far more **ACCURATE** than any eyewitness description.
8. The FBI was finally **ACCREDITED** in 1997 when a larger lab was built in Virginia.

Firearms & Tool Marks Unit

9. The **FIREARMS** & tool marks unit examines guns, bullets, cartridges, and other items.
10. When matching a bullet to a gun, examiners examine the **GROOVES** of the gun. Every gun will leave its own **UNIQUE** microscopic marks or striations on a bullet.
11. The FBI has the largest working firearm forensic collection in the USA with over **6000** guns.

Explosive Unit

12. The basic component of a bomb is to have some type of **ENERGETIC** material which provides the explosive force.
13. The **LARGEST** case tackled by the FBI explosive unit was the crash of Pan-Am 103 Scotland in 1988.
14. The explosive unit is more important than ever because of **TERRORISM**.

Personal Identification Unit

15. In the 19th Century the **BERTILLON** system was being used as an identification system until the William West case proved it to be flawed.
16. In **1924** the first fingerprint files were created and they started being used to support criminal matters in **1933**. Today there are **80** processes to develop latent prints from **CYANOACRYLATE** (superglue) fuming to alternate light sources.

DNA - Deoxyribonucleic Acid

17. DNA is the biological equivalent to a person's **FINGERPRINT**.

18. In the 1980s the FBI developed **DNA** technology to solve crimes, such as rapes, **HOMICIDES**, and other violent crimes.
19. The FBI uses two types of DNA testing: nuclear and **MITOCHONDRIAL**.
20. The National DNA **INDEX** system comprised of 170 crime labs sharing DNA information.

Chemistry & Trace Evidence Unit

21. Evidence often arrives inside or on everyday items, such **HAIRS** and **FIBERS**.
22. The FBI relies on three forms of instrumentation: spectrophotometry, **CHROMATIC** instruments, and mass spectrometry.
23. The **HAZARDOUS** Materials Response Unit is one of the busiest response units used. One of their first cases involved investigating letters that contained **ANTHRANX**.
24. The bomb data center provides **TRAINING** to all public safety agencies and uses bomb-defusing **ROBOTS**.

Want to learn more about the FBI? Go to <http://www.fbi.gov/about-us/history>.

Questions:

- 1) Who was the first FBI director? Who is the current director?
- 2) What are the requirements for an FBI agent? A crime lab tech? Other employees?
- 3) Where are the FBI field offices located?
- 4) What are some of the famous cases the FBI has solved?
- 5) What is the FBI's Most Wanted list?
- 6) What does it mean to have "FBI clearance"?