

You now know how DNA fingerprinting works to possibly incriminate a suspect. It can also be used to prove someone's innocence. Today you will do some Googling to learn a little bit about two real life criminal cases.

1. Search the internet to find an example of a real case where DNA fingerprinting was used to convict someone.
 - a. What is the name of the person who was convicted?

Colin Pitchfork

- b. What crime did they commit?

Sexual Assault (Rape) and Murder

- c. What genetic evidence was present at the crime scene that incriminated them?

DNA fingerprinting and semen samples

- d. When did this take place?

July 31, 1986

- e. Where did this take place?

Leicester, England

- f. What sentence did they receive after the conviction? Did they spend time in jail? If so, how much time? Were they on death row?

He was convicted rapist and murderer, he was sentenced life imprisonment without parole on January of 1988 but in 2009 the Secretary of State reduced the minimum sentence of 30 years making Pitchfork's sentence was reduced on appeal to 28 years.

- g. Copy and paste links to any webpages you used in the box below.

<https://online.maryville.edu/blog/how-is-dna-profiling-used-to-solve-crimes/>
https://en.wikipedia.org/wiki/Colin_Pitchfork

2. Watch the following video: <https://www.youtube.com/watch?v=QxCoG5vuinc>.

- a. The very first time DNA profiling was used in a criminal case, what was the outcome?

The DNA from fingerprint and semen samples matched to the samples obtained from the two girls, the murder/rapist was caught and sentenced to life imprisonment.

- b. After the first suspect didn't turn out to be the killer, how was the actual killer caught using DNA?

When the police asked all the men living in Leicester to give samples of their DNA, the criminal also gave his blood sample-thinking that he will not be caught due to the number of men who participated. Eventually, the DNA from the victims matched his, and he was caught.

3. Search the internet to find an example of a real case where DNA fingerprinting was used to exonerate someone. (Someone was convicted of a crime, but DNA fingerprinting was used after the conviction to then prove they were innocent) You can't do the person in the first case that was part of the video in Question 2.

- a. What is the name of the person who was convicted?

David Butler

b. What crime were they convicted for?

He was convicted for Murder

c. What genetic evidence was present at the crime scene that falsely incriminated them?

DNA found under the victim's fingernail clippings and cardigan buttons.

d. When did this take place?

September 2005

e. Where did this take place?

Liverpool city, England

f. How long did they spend in prison before they were proven innocent?

The Suspect spent 8 months in prison before proven innocent.

g. Other than being set free, was anything else done for them to make up for the fact that they were wrongfully convicted?

The DNA samples used to convict him were only a partial match and of poor quality. He also has a rare skin condition, and he sheds flakes of skin, leaving behind much larger traces of DNA than the average person, given that he was a taxi driver that made him transfer his DNA faster.

h. Copy and paste links to any webpages you used in the box below.

<https://www.bbc.com/news/science-environment-19412819>

3. Watch the following video: <https://www.youtube.com/watch?v=Cqg35eNBIIA> .

a. What is the Innocence Project?

The innocent project was built as an organization to end the injustices in the criminal justice system. It helps accused victims exonerate themselves from being wrongly convicted through DNA testing. The innocent project serves as the voice of people who lived their life in prison for being falsely accused and now making noise to prevent future injustices.

b. What's one thing that stood out to you while watching the video?

The life stories of those people, their sufferings, and their courage to fight for what is right and true are the things that stood up the most for me. Being in Jail for long years for the crimes they didn't even commit is a very hard thing to endure and yet they still fought without being sure what will happen to them for their loved ones and for themselves.

4. Go to <https://innocenceproject.org/dna-exonerations-in-the-united-states/>. Write down 10 interesting facts you learned on this page.

1. 60% that was falsely convicted are African American.
2. Most of the falsely accused spent almost a decade in prison.
3. 50% of real the culprits was convicted after the accused was exonerates.
4. Ever since the DNA testing was used to convict criminals, there are also reports proving that DNA testing can wrongly accuse innocent.

5. When DNA exonerates worked with Innocent Project actual perpetrators went to be convicted for their other crimes that were being unresolved.
6. The number of people being exonerated and was served justice becomes higher.
7. 8.8 % of the accused pled guilty for the crimes they didn't commit.
8. Some are accused using composite sketch that partially matched them and some are involved through voice misidentification.
9. Misapplied forensics can also lead to wrongful convictions
10. Some exonerates has available DNA samples that can prove their innocence during trial and yet still convicted.