



## **Closing the Case**

Yikes! There's been a kidnapping! We're on the case for a CSI Camp-for-a-Day and we need your help to solve it. By utilizing CSI expertise in change blindness, fingerprint identification, and face recognition, you can work alongside us as we close this case!

### **Activity**



This crime scene investigation will center around three key pieces of evidence: an eyewitness report, a fingerprint, and a suspect sketch. In order to process these pieces of evidence, you will need to get familiar with change blindess, fingerprint identification, and facial recognition.

Use these skills to narrow down the list of suspects. You can find the suspect line-up sheet at this link: http://bit.ly/1cMUQN3

#### **#1 - Change Blindness**

Eye witnesses are important during crime scene investigations but how much weight should we put on people's observations? Unfortunately, eye witness testimony isn't always very reliable and people don't always notice changes in their environment or see something that may be happening in the background. This phenomenon is called *change blindness*.

Test how observant you are by watching this video:





And this video:



Now that your observational skills have been honed, follow this link to play the Go Cognitive Change Blindness Game. If you win, we'll know that you processed the eyewitness report properly.

#### #2 - Fingerprint Identification

We're in luck. The perpetrator left a partial fingerprint at the scene of the crime. In order to use this fingerprint to narrow down our list of suspects, you will need to familiarize yourself with the physical properties found in fingerprints.

First, check out this lesson on the biometric technology behind fingerprint identification. http://bit.ly/1hffewb

Next, use this picture of the partial fingerprint found at the scene to identify which *fingerprint type* our perpetrator has.







Now that you have determined our perpetrator's fingerprint type, who can you rule out on the suspect list?

### **#3 - Facial Recognition**

Finally, we can use the suspect sketch provided by the eyewitness to determine our perpetrator's identity. How can we do that, you ask? By using facial recognition technology.

First, go to our blog page that contains a copy of the suspect sketch. Link: http://bit.ly/1cMUQN3

Then, head over to our Kids Ahead page that contains the procedure you'll use to determine the facial ratios of our perpetrator. Link: http://bit.ly/HucVoF

Finally, compare the measurements you wrote in the "Normalized" column with the measurements listed in the "Ratios" column on your line-up sheet. The person whose measurements come closest to the suspect sketch must be our perpetrator!

Now that you know the perpetrator's identity, be sure to return to the blog to share your determination!





# Now it's your turn!

Can you find any new and interesting ways that other countries are using biometric technology? Find a cool biometrics story from anywhere around the world and submit it at <a href="http://bit.ly/16LnDiX">http://bit.ly/16LnDiX</a>. Who knows, your submission might just end up on our websites!