**Criminal Investigation and DNA**

**Procedure:**

1. Choose someone read each crime scene to the group.
2. Choose someone to be the recorder that will write down the answers for the group.
3. Write your group number and names at the top of a sheet of paper.
4. Read the questions that follow each Crime scene investigation and working as a group answer the questions and record them on the sheet of paper.

**Crime Scene Investigation #1**

You have recovered the following in connection with a criminal investigation:

(A) A screwdriver which may have been used as a weapon was found in a back alley dumpster near the spot where a murder victim was found.

(B) A can of Mountain Dew was found in the victim’s apartment.

(C) An envelope containing a typed death threat letter was found in the victim’s apartment**.**

Your suspect in this investigation claims not to know the victim and not to have sent any threatening letters to the victim. What trace of the victim or suspect might be found on the evidence? What might DNA fingerprinting tell you about this case? Can DNA fingerprinting tell you if your suspect telling the truth?

**Crime Scene Investigation #2**

You have recovered the following in connection with a criminal investigation:

(A) A socket wrench which may have been used as a weapon was found near the body of a murder victim.

(B) A pair of latex gloves was found in the cab of the pickup truck that is owned by the son of the murder victim.

The victim’s son has been taken to police headquarters for questioning about the murder. What trace of the victim or suspect might be found on the evidence? What might DNA fingerprinting tell you about this case? Can DNA fingerprinting implicate the son as the prime suspect in this investigation?

**Crime Scene Investigation #3**

You have recovered the following in connection with a criminal investigation:

(A) A Coke can was found 3 feet away from the body of a murder victim. The victim was found in a large public park by a gardener who works there.

(B) A box cutter which may have been used as a weapon was found near the victim’s body.

The victim was last seen walking near the park with her roommate. During questioning the roommate claims that she know nothing about the crime. She was however surprised to see that the police had found her box cutter. She mentions that she accidentally cut herself while using the box cutter at school several days earlier. The roommate also claimed that she lost the box cutter sometime after her injury. What trace of the victim or suspect might be found on the evidence? What might DNA fingerprinting tell you about this case? Can DNA fingerprinting help you to accept or reject the roommate’s story in this investigation?

**Crime Scene Investigation #4**

You have recovered the following in connection with a criminal investigation:

(A) A piece of the tile flooring removed from washroom of the victim’ home that has a couple of drops of blood.

(B) A knife which may have been used as a weapon was found in the garage a few feet away from the victim’s body.

One of the neighbors informs police that the victim’s father had gotten into a major fight earlier in the day. The current whereabouts of the father are unknown. What trace of the victim or suspect might be found on the evidence? What might DNA fingerprinting tell you about this case? Can the DNA fingerprints help you to decide whether or not to consider the father to be a suspect?

**Crime Scene Investigation #5**

You have recovered the following in connection with a criminal investigation:

(A) A piece of broken window glass from the back door of the victim’s home.

(B) A telephone cord that may have been used to strangle the victim.

This may be a case of burglary and murder. Your prime suspect admits that he is guilty of breaking and entering. He claims that he cut himself by accident during the break in. However, he also claims that the homeowner was alive when he left. Your prime suspect suggests that another person came later and committed the murder. What trace of the victim or suspect might be found on the evidence? What might DNA fingerprinting tell you about this case? Do you believe the suspect’s explanation? (Note blood pattern evidence on glass i.e., drop on print)

**Crime Scene Investigation #6**

You have recovered the following in connection with a criminal investigation:

(A) A metal chain which may have been used as a weapon was found in a trash can at a highway rest stop 2 miles away from where the victim was discovered in an abandoned car.

(B) A bottle was found in another trash can at a campsite where your prime suspect was discovered and arrested.

Your suspect claims that he has no connection to the bottle, the chains, or the murder. What trace of the victim or suspect might be found on the evidence? What might DNA fingerprinting tell you about this case? Can DNA fingerprinting help you to decide if the suspect is telling the truth?