**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Per: \_\_\_**

**Mini-Assessment – *Forensic Science***

**Today you will read a passage about how forensic science is used to solve crimes. You will then answer several questions based on the text. I will be happy to answer questions about the directions, but I will not help you with the answers to any questions. You will notice as you answer the questions that some of the questions have two parts. You should answer Part A of the question before you answer Part B, but you may go back and change your answer to Part A if you want to.**

**Take as long as you need to read and answer the questions. If you do not finish when class ends, come see me to discuss when you may have additional time.**

**Now read the passage and answer the questions. I encourage you to write notes in the margin as you read the passage.**

**Write your answers on a separate sheet of paper to turn in.**

***Forensic Science: Evidence, Clues, and Investigation***

**by Andrea Campbell**

1 Today, more than a century after Sherlock Holmes first astonished and delighted readers with his brilliance, most crimes are still solved the way they were in the Victorian era: through confessions or eyewitness accounts. Increasingly, however, police and prosecutors rely on evidence of the type Holmes often used to get at the truth: scientific, or forensic, evidence. Today that evidence typically comes from sources such as fingerprints, body fluids, and bullets.

2 In contrast to the romantic image of one Holmes-like supersleuth single-handedly uncovering the facts of a case, truth seeking in law enforcement and criminal justice is actually a collaborative effort, involving the police, a medical examiner or coroner, investigators, and lab technicians. Each applies his or her own expertise to the problem. But modern criminal investigations still begin in a manner Sherlock Holmes would find familiar—with careful examination of the crime scene. After police have secured the site, criminal investigators collect physical evidence. This evidence will be sent to crime labs, where expert technicians and forensic scientists will analyze it. Their findings, in turn, will affect the course of the police investigation and, if a suspect is charged, will be presented to the jury at trial.

3 In our title, we have referred rather informally to forensic science. However, distinction should be made between the terms *forensic science* and *criminalistics*, which are often used interchangeably. Forensic science is a science applied to answering legal questions. It draws together principles and knowledge from one field, or a combination of fields—such as medicine, mathematics, physics, chemistry, biology, and anthropology—and applies them to legal proceedings. For example, *serology* is the study of blood and other body fluids; *forensic serology* is the study of blood and body-fluid evidence to help reconstruct a crime or an accident. Criminalistics, on the other hand, is a branch of forensic science that deals specifically with the scientific collection and examination of physical evidence as it relates to a crime. Any references in this text to forensic science are actually references to the entire field of discovery.

4 But what exactly is forensic evidence? How is it used, and what does it mean in court?

5 Like any competitive game, a criminal trial is governed by rules. The rules of evidence dictate how evidence can be presented in the courtroom. For example, the prosecution, or the attorney representing the state (and the people in that state), may present various legal proofs in order

to convince the judge or jury of the defendant’s guilt. These can be witnesses, records,

documents, objects, or other materials.

6 Four kinds of evidence may be admitted at trial:

1. *Testimony*, statements from competent, sworn witnesses.

2. *Direct evidence*, which refers to observations of eyewitnesses.

3. *Circumstantial evidence,* which is any information that tends to prove or disprove a point at issue.

4. *Real*, or *physical*, *evidence*, sometimes also called hard evidence, which refers to any tangible article or object of any kind, such as fingerprints, weapons, and bloodstains. (Real evidence

may also include facsimiles such as photographs and reproductions.)

7 Seldom is guilt proved or blame assessed with a single piece of evidence. But forensic evidence, which falls into the fourth category above, often serves as the added weight that helps tip the scales of justice. It may be used to reconstruct the crime, identify participants, or confirm or discredit an alibi. It also frequently helps to eliminate suspects. It establishes the facts of the crime—for example, that the bullet that lodged in the victim’s heart and caused his death came from the defendant’s gun. It can provide a step-by-step analysis of the events leading up to, including, and following the incident. In short, forensic science can be the glue that holds all the facts of a case together.

8 Sometimes prosecutors have little except forensic evidence from which to construct a case; other times they use forensic evidence merely to corroborate the other types of evidence they’ve developed. Forensic evidence does not serve all cases. Typically it plays a far more important role in the investigation of violent crimes than in the investigation of property crimes or accidents. But one thing is certain. Forensic evidence is static. It stands immobile. Because unless the criminal takes something away from the crime scene, hard evidence does not leave. Unlike crime scene bystanders, hard evidence will not get confused or become frightened. And unlike criminals, it will not make up stories or lie.

9 Yet hard evidence is only as reliable as the people who collect, analyze, and interpret it. At trial, different experts sometimes draw different conclusions from the same evidence. And defense attorneys frequently attack the validity of forensic evidence by pointing to lapses in the way the evidence was collected or handled. Thus it is essential that law enforcement officers, forensic scientists, and prosecutors understand and meticulously follow proper evidence-handling procedures. Otherwise the guilty may go free, or the innocent may be wrongly convicted.

**Excerpt from *Forensic Science: Evidence, Clues, and Investigation*; pgs. 14-18; by Andrea**

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**QUESTIONS:**

**1. According to the excerpt, how are Sherlock Holmes’ methods similar to the methods of**

**forensic scientists today?**

**A.** Holmes used hard evidence to solve crimes.

**B.** Holmes found instincts rather than testimony more helpful in solving crimes.

**C.** Holmes worked collaboratively with others in order to solve crimes.

**D.** Holmes relied heavily on science to help gather evidence to solve crimes.

**2. The following question has two parts. First answer Part A and then answer Part B.**

**Part A: In paragraph 2, what is the meaning of the word *collaborative*? A.** skillful

**B.** dull

**C.** shared

**D.** unreliable

**Part B: Which antonym that appears in paragraph 2 best helps the reader to understand the meaning of *collaborative*?**

**A.** romantic

**B.** Holmes-like

**C.** single-handedly

**D.** truth seeking

**3. According to paragraph 3, which statement accurately represents the relationship between**

***forensic science* and *criminalistics*?**

**A.** *Criminalistics* combines concepts from many areas of study, but *forensic science* does not.

**B.** *Forensic science* can be useful in court cases, while *criminalistics* cannot.

**C.** *Criminalistics* is a subset of the larger field of *forensic science*.

**D.** *Forensic science* involves more scientific collection than *criminalistics* does.

**4. Mr. Moore was accused of stealing Mrs. Park’s laptop computer from her office. Four main**

**pieces of evidence were used in the trial. Draw an arrow from each piece of evidence to match it to the kind of evidence described in paragraph 6 of the text.**

|  |
| --- |
| **Kind of Evidence** |
| **Testimony** |
| **Direct Evidence** |
| **Circumstantial**  **Evidence** |
| **Real, or Physical, Evidence** |

|  |
| --- |
| **Piece of Evidence** |
| Police found a strand of hair the same color and length as  Mr. Moore’s in Mrs. Park’s office. |
| A computer technician stated in court that the laptop found by the police had been regularly used by Mrs. Park. |
| Mr. Moore’s office mate, Mr. Fowler, heard Mr. Moore tell  Mrs. Park’s that he would take her laptop because she owed  him money. |
| A neighbor named Mrs. Blair stated that she opened Mrs.  Park’s office door and saw Mr. Moore lifting the laptop off  the top of the desk. |

**5. The following item has two parts. Answer Part A and then answer Part B.**

**Part A: Which statement most accurately summarizes the text?**

**A.** Criminal investigators still solve crimes in the same manner Sherlock Holmes solved crimes many years ago.

**B.** Forensic science is a complicated process that relies too much on human perception and not enough on actual scientific evidence.

**C.** From the several types of evidence that can be presented at trial, including eyewitness testimony, forensic evidence is the most reliable.

**D.** Solving crimes involves law enforcement officials working together to gather many types of evidence to construct a clear picture of a crime.

**Part B: Which paragraph best illustrates this summary? A.** Paragraph 2

**B.** Paragraph 5

**C.** Paragraph 6

**D.** Paragraph 9

**6. In paragraph 7, the author includes these three sentences about forensic science:**

***It may be used to reconstruct the crime, identify participants, or confirm or discredit an alibi. It also frequently helps to eliminate suspects. It establishes the facts of the crime— for example, that the bullet that lodged in the victim’s heart and caused his death came from the defendant’s gun. It can provide a step-by-step analysis of the events leading up to, including, and following the incident.***

**What is the purpose of these sentences in paragraph 7?**

**A.** The sentences contrast the role of forensic evidence to the roles of the other kinds of evidence.

**B.** The sentences give specific examples to demonstrate how important forensic evidence can be.

**C.** The sentences warn that using a single piece of forensic evidence carries serious risk.

**D.** The sentences explain the argument that forensic evidence is not enough to prove a case.

**7. Highlight three sentences in the text that reveal the author’s doubtfulness about the accuracy**

**of the role of humans in the legal process.**

**8 (Writing Prompt)**

**Is forensic evidence the most important type of evidence to present at a trial? Write an essay that explains what information the author provides that answers**

**this question. Remember to use information from the text as you delineate and evaluate the evidence the author provides to answer this question. Use the lines on the next pages for your response.**

**Your response will be scored on how well you:**

* + - **Demonstrate your understanding of the ideas of the text**
    - **Use evidence from the text to help develop and support your ideas**
    - **Organize your response in a logical manner**
    - **Demonstrate an appropriate writing style through the use of precise word choice and varied sentences**
    - **Use standard conventions for writing**

8

9