

# CSI Web Adventures

Name \_\_\_\_\_

Go to <http://forensics.rice.edu/> and click the section for “Case One: Rookie Training” to find the answers to complete this worksheet. Answer the Quick Poll question and click “Play game”.

## 1. Go to the “Forensic Biology” section and choose “Follow Greg” to answer these questions.

### A. What is DNA? Answer these questions as you work through this section.

What does the abbreviation DNA represent? \_\_\_\_\_

Where is the DNA located in a cell? \_\_\_\_\_

Choose the three correct about DNA.

How can forensic scientists use DNA in a crime? \_\_\_\_\_

Which suspect matches the sample from the crime scene? \_\_\_\_\_

### B. What is a DNA Profile? Answer these questions as you work through this section.

Complete: A DNA profile is a \_\_\_\_\_ of one person’s genetic information.

What does CODIS represent? \_\_\_\_\_

How many markers are used to make a DNA profile? \_\_\_\_\_

### C. How do you process DNA? Answer these questions as you work through this section.

What are the four steps in processing DNA? \_\_\_\_\_

What is used to collect a DNA sample from Greg? \_\_\_\_\_ Where? \_\_\_\_\_

What technique is used to copy the DNA markers? \_\_\_\_\_

What does the Genetic Analyzer do? \_\_\_\_\_

Follow the steps to process the DNA sample.

Click Begin Analysis and follow the steps. Which DNA profile matched the sample? \_\_\_\_\_

Complete the Exit Exam.

## 2. Go to the “Toxicology Lab” section and choose “Learn About The Lab” to answer these questions.

What do forensic toxicologists do? \_\_\_\_\_

How much of each is needed for testing? \_\_\_\_\_ of vitreous humor, \_\_\_\_\_ of blood, and \_\_\_\_\_ of urine

What else might be tested? \_\_\_\_\_ or \_\_\_\_\_

Sort the evidence into the three boxes. What was your time? \_\_\_\_\_

What instrument is used to screen for alcohol? \_\_\_\_\_

What test can tell us if certain drugs are in a sample? \_\_\_\_\_

What does the GC/MS instrument do? \_\_\_\_\_

Complete: Every \_\_\_\_\_ has its own specific pattern of \_\_\_\_\_.

What chemicals were found in the blood sample? \_\_\_\_\_ and \_\_\_\_\_

Take the survey by clicking on the computer.

**3. Go to the “Firearms & Tool Marks” section and choose “Training Demos” to answer these questions.**

**A. Parts of a Gun**

Where do you find rifling on a gun? \_\_\_\_\_

What is found in the magazine? \_\_\_\_\_

**B. Part of a Cartridge**

What produces the spark to ignite the gunpowder? \_\_\_\_\_

What measurement is used to determine the caliber? \_\_\_\_\_

**C. Bullet Characteristics**

What term refers to tiny, microscopic scratches on the surface of a bullet? \_\_\_\_\_

What is a rifling impression? \_\_\_\_\_

**Firing Range** - Answer the questions by “shooting” the correct answers. What was your score? \_\_\_\_\_

**Evidence Analysis**

What is the caliber of the bullet? \_\_\_\_\_ What kind of rifling is on the bullet? \_\_\_\_\_

What is its rifling number? \_\_\_\_\_ What type of gun was used to shoot this bullet? \_\_\_\_\_

Which suspect’s gun was used to shoot the bullet? \_\_\_\_\_

**4. Choose the “Medical Examiner” section to answer these questions.**

What is the first thing an examiner does when a person arrives for autopsy? \_\_\_\_\_

Try the autopsy and follow the directions to complete it.

What was the cause of death in this case? \_\_\_\_\_

What percentage of deaths is accidental? \_\_\_\_\_% What percentage is due to homicide? \_\_\_\_\_%

What was the manner of death for each case?

#6877 \_\_\_\_\_ #11989 \_\_\_\_\_ #23380 \_\_\_\_\_

#4775 \_\_\_\_\_ #94575 \_\_\_\_\_

**5. Choose the “CSI Ethics” section to answer these questions.**

Forensic scientists must be \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_.

Answer the questions to finish this section.

**Ready for a challenge? Return to the home page and try  
Case Two: The Burning Star to put your CSI skills to the test.**

