

LESSON 1-5: ON THE SCENE

A LESSON ON CRIME SCENE EVALUATION

The art of forensic science begins at the crime scene. It is very important to protect and secure the area where the crime took place to ensure that evidence is not destroyed. Investigators carefully comb the crime scene for clues and evidence that later may be used in a court. In order to record the crime scene, notes are taken, photographs are made, and sketches are done. Photographs are usually the best record of the scene. However, there are times when good photographs are not possible because of environmental restrictions. In such cases, sketches and notes must be very detailed.

When possible, the crime site and adjacent locations are photographed before any other investigative work is done. All victims are photographed as they were found. The size of a body and other items are determined by placing a ruler in the photograph. Some larger police departments are replacing photography with videotaping of the crime site.

Scene Sketch

Once the photographer has completed his or her job, the crime scene investigator makes a sketch of the crime scene. The initial sketch he or she makes is a "rough" sketch that accurately represents the dimensions of the scene and shows the location of all objects that may be important in the case. These objects, which help establish that a crime was committed, are called physical evidence. To give his or her sketch scale, the investigator selects two fixed points at the crime scene. In a room, these may be the corners or windows. The investigator uses a tape measure to determine the distance of each important object in the room from both of these fixed points. These distances are recorded in the sketch (Figure 6).

Once the locations of the objects have been recorded, each object is assigned a "letter." At the bottom of the sketch, these lettered objects are identified. The sketch is also oriented to North (Figure 7). Later, a finished sketch is drawn from this rough sketch by a skilled artist. This finished sketch reflects information in the rough sketch, but is much neater (Figure 8). It may be used as evidence in the courtroom during a trial.

Note It

Notes are also taken at the scene of a crime that describe all physical evidence in detail. Notes include information about who discovered the evidence, the time that it was discovered, and how the evidence was collected and packaged. Notes must be very detailed in case they are needed to refresh someone's memory years after a crime has been committed.

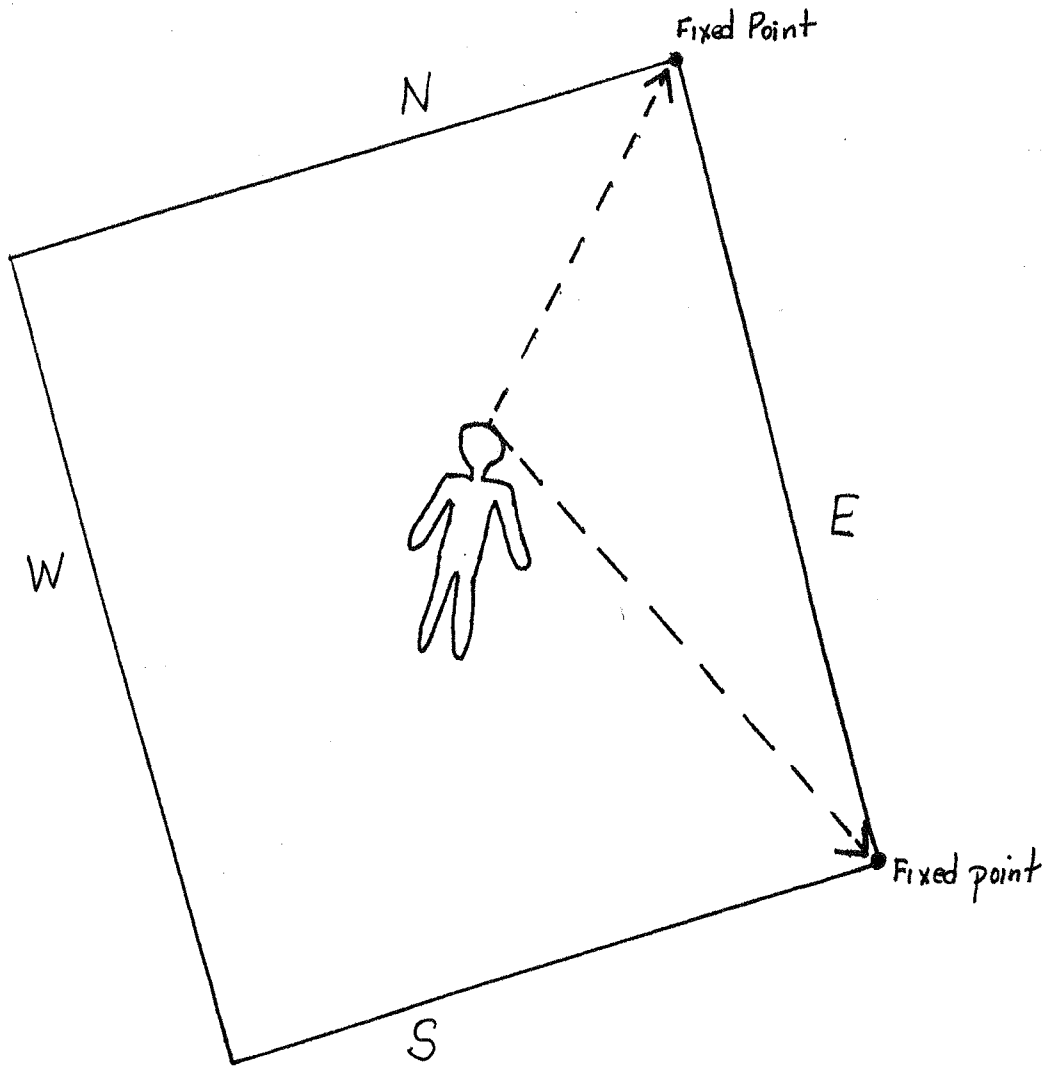


Figure 6. An investigator measures the distance between a piece of evidence and each fixed point.

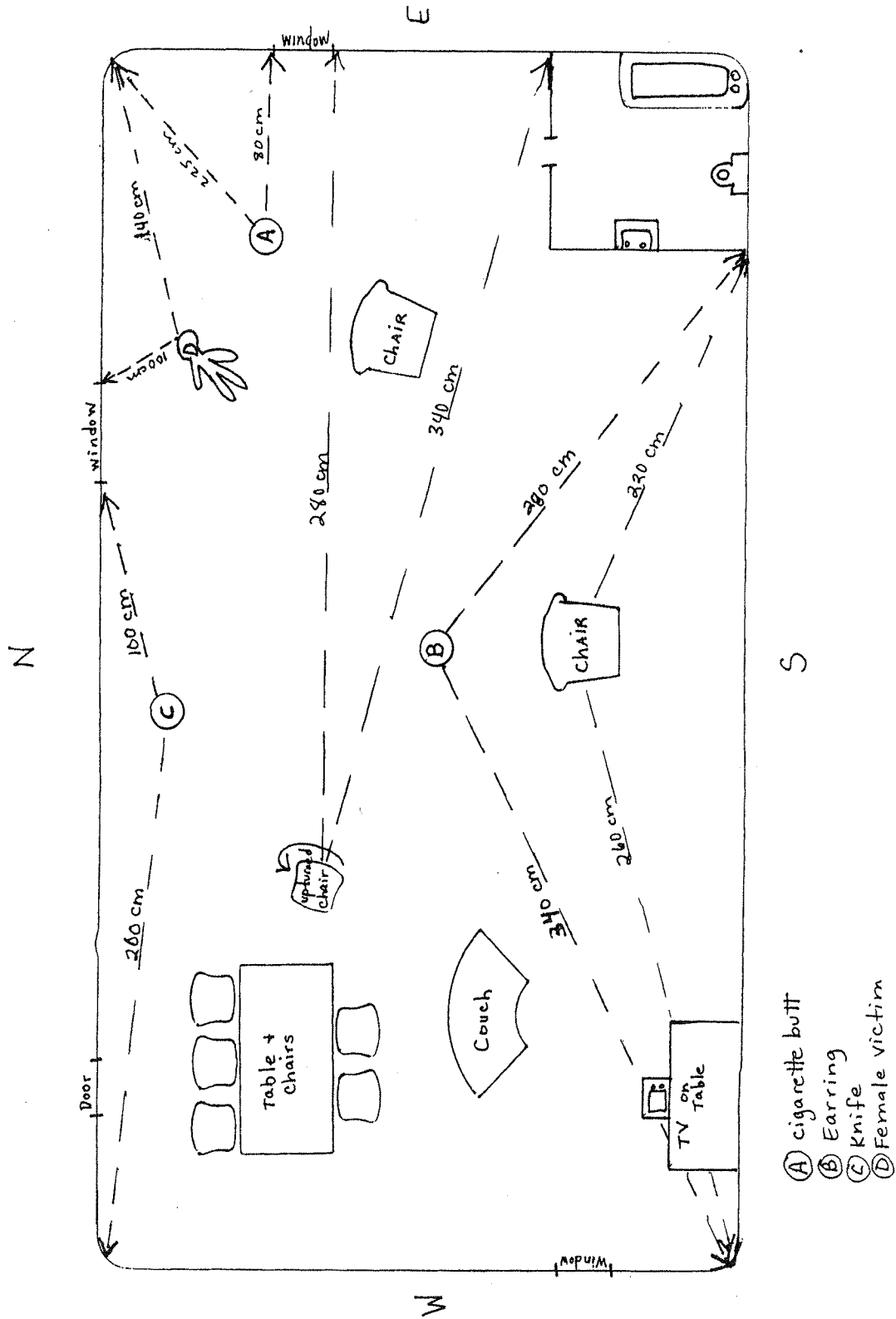


Figure 7. A sketch is oriented to north.

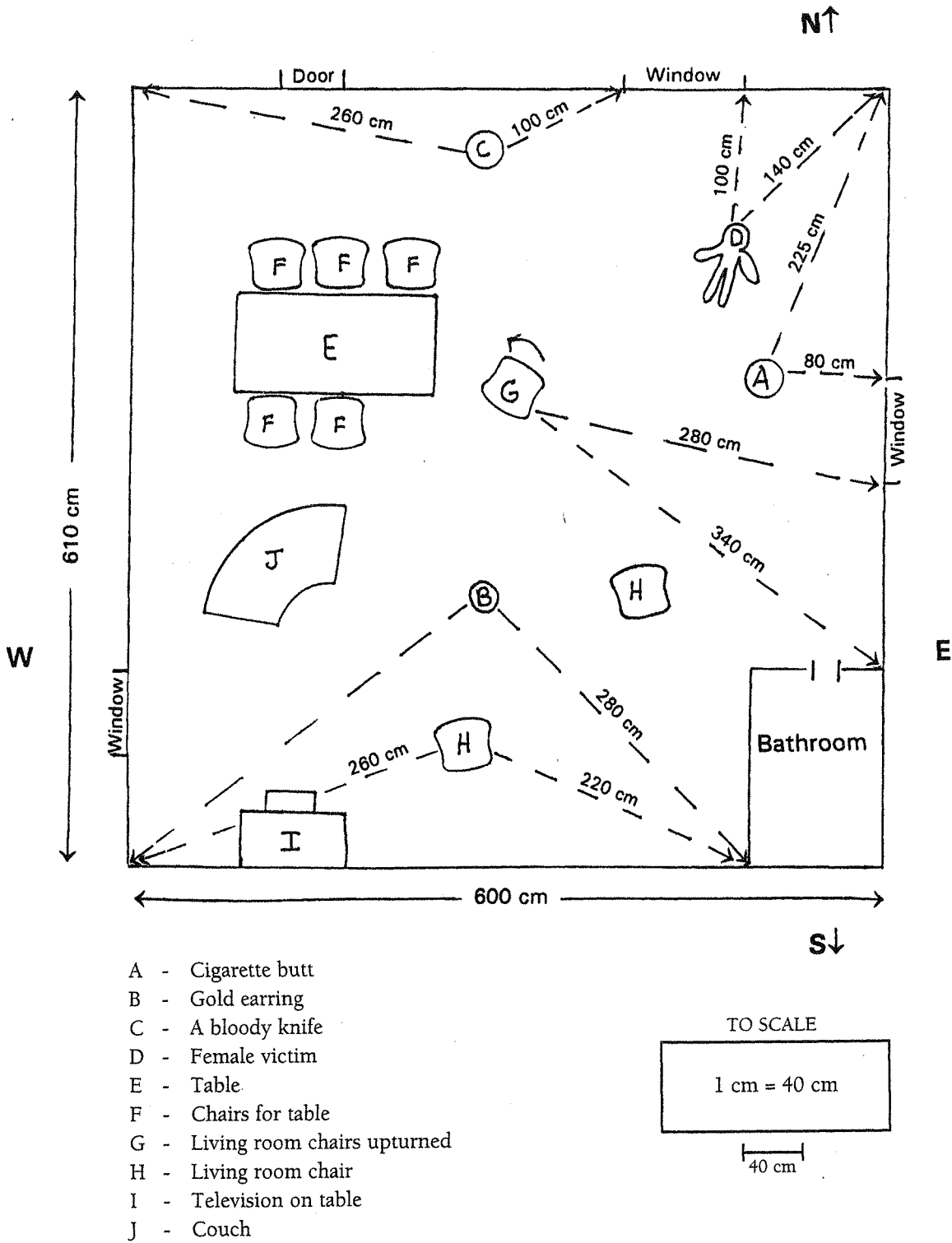


Figure 8. The finished sketch is a polished drawing of the rough sketch.

Name _____ Date _____

DON'T TOUCH THE EVIDENCE

A Lab on Crime Scene Evaluation

Objective

You will draw rough and final sketches of a crime scene, and explain the scene to your classmates.

Background Information

Last night a murder was committed. The victim was identified as a 25-year-old, single, female. At 9:00 P.M., she was discovered by her neighbor. The victim had been stabbed in the chest and was lying face down when she was found. Before she was removed from the scene of the crime, the position of her body was outlined with tape. None of the other items at the scene were disturbed.

Materials

Pencil
Black pen or marker
White paper
Clipboard
Tape measure
Compass
Ruler
Prepared crime scene

Procedure, Day 1: Rough Drawing of Crime Scene

1. Accompany your partner to the room where the crime was committed.
2. Identify all items in the room that you believe to be physical evidence. Also note the taped outline of the victim on the floor.
3. Calculate locations of physical evidence for your drawing by the following method:
 - a. Use the metric tape measure to determine the width and length of the room. Record these measurements in Data Table 1.
 - b. Use a compass to determine which walls are north, south, east, and west.
 - c. Select two fixed points in the room that are relatively close to one of the pieces of physical evidence. All victims of the crime and objects that seem out of place should be recorded as physical evidence.

- d. Measure the distance (in centimeters) from one of the objects to the first fixed point. Record the name of the object and its location and distance from the fixed points in Data Table 2.
4. Repeat this procedure for all other pieces of physical evidence in the room. You do not have to use the same fixed point each time. You can change points when you change from one object to the next.
5. Using the entries you made in the data table as a guide, sketch the crime scene. As you work, follow these directions:
 - a. Draw the room in which the crime occurred. Allow your sketch of the room to take up at least one-half of the paper.
 - b. Indicate North on your sketch of the room.
 - c. Draw all doors and windows in their proper locations.
 - d. Use squares or circles to represent the locations of different objects in the room. Draw larger objects with larger squares or circles. For example, a table should be larger than a chair.
 - e. Label each piece of physical evidence with a letter. At the bottom of the page, list each letter and describe the item it identifies.
 - f. Beginning with Object A, draw a dashed line from one of the fixed points you chose earlier to Object A. Draw a dashed line from the other fixed point to Object A.
 - g. Write the actual distances above the dashed lines on the drawing. These are the same distances you recorded in Data Table 2.
 - h. Repeat steps f and g for all pieces of physical evidence in the room.

Procedure, Days 2 and 3: Final Drawing and Presentation

1. Use the "rough" sketch you made of the crime scene to draw a polished, final sketch. The final sketch will be used as evidence in a "trial."
2. The final sketch should:
 - a. Be neatly drawn with black ink or marker on a piece of posterboard.
 - b. Be drawn to scale. In your drawing, let 1 centimeter equal 40 centimeters of space in the room. In other words, if you measured the crime scene room to be 600 cm wide and 610 cm long, you would draw this room about 15 cm wide and a little more than 15 cm long.
 - c. Label North on the drawing.
 - d. Draw the squares and circles that represent physical evidence in proportion to each other. For instance, the female body should be drawn larger than the circle or square representing a knife; the tables should be larger than the body and the chairs, etc.
 - e. Have the lines from the two fixed points in proportion to the rest of the drawing. Remember your scale: 1 cm equals 40 cm of actual length.

DATA TABLE 1

Measurements of room where crime occurred.

<i>Length of room</i>	<i>Width of room</i>

DATA TABLE 2

Measurement of physical evidence from fixed points.

<i>Name of object</i>	<i>Fixed point 1</i>	<i>Fixed point 2</i>	<i>Distance of object from fixed point 1</i>	<i>Distance of object from fixed point 2</i>
Ex.: Broken eyeglasses	Doorknob on front door	Corner where front wall meets wall on East side of house	230 cm	300 cm

