CRIME SCENE EVALUATION LAB

Objective
You will draw rough and final sketches of a crime scene.

Introduction
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 1).

![Figure 1. An investigator measures the distance between a piece of evidence and each fixed point.](image)

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 2).
Figure 2. A sketch is oriented to north.
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 3). It may be used as evidence in the courtroom during a trial.

Figure 3. The finished sketch is a polished drawing of the rough sketch.
Background Information
Last night a murder was committed. The victim was identified as a 25-year-old, single, female. At 9:00 pm, she was discovered by her neighbor. The victim had been stabbed in the chest and was laying 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

Procedure
Rough Sketch:
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.

Final Sketch:

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 poster board or computer paper.
   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 to be 600 cm wide and 610 cm long you would draw this room about 15 cm wide and a 15.25 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 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.
   f. Place the actual length and width of the room on the drawing. Use the same numbers you used in Data Table 1. Place the actual distances of the evidence from the fixed points on the dashed lines using the numbers you placed in Data Table 2.
   g. Your drawing should contain all information in the rough sketch and nothing extra.

DATA TABLE 1

<table>
<thead>
<tr>
<th>length of room</th>
<th>width of room</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>name of object</td>
<td>fixed point 1</td>
</tr>
<tr>
<td>----------------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>Ex. broken glass</td>
<td>doorknob on front door</td>
</tr>
</tbody>
</table>
Post-Activity Questions

1. Describe any weapons found at the scene of the crime and their locations in the room.

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___________________________________________________________________

2. Why were you asked to use fixed points in your drawing?

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3. Why did you need more than one fixed point for each object?

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4. Why did you not make your final sketch at the crime scene?

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