

CRIME SCENE PROCESSING & RECONSTRUCTION

By

DR. N.VENKANNA

M.Sc., M.Tech., PhD

ASSISTANT DIRECTOR & HOD - CLUES TEAMS

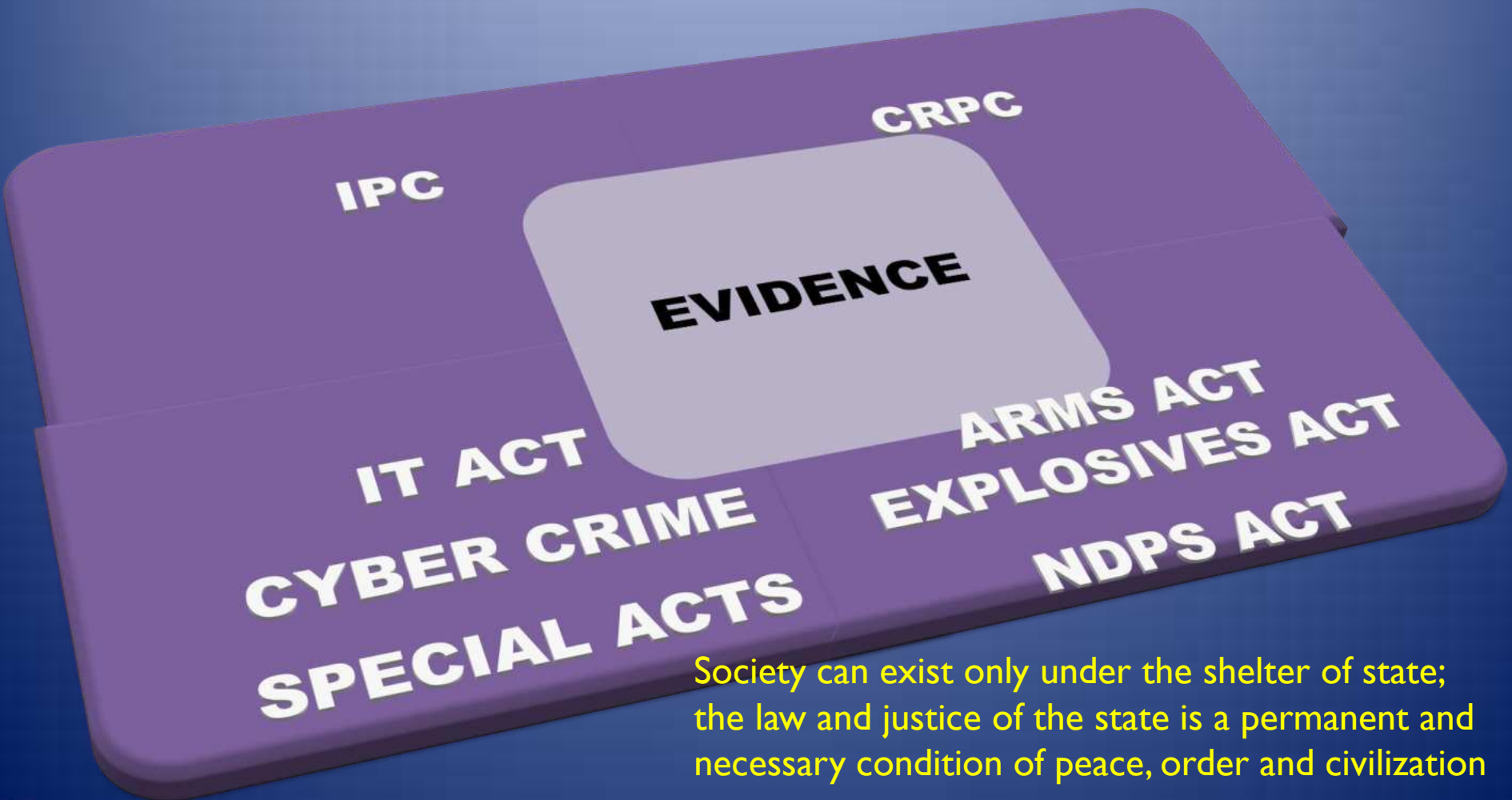
Crime

The commission or omission of an act which the law forbids or commands under the pain of punishment to be imposed by the state by a proceeding in its own name

“the essence of an offence is a wrongful intent without which it cannot exist”

Crime

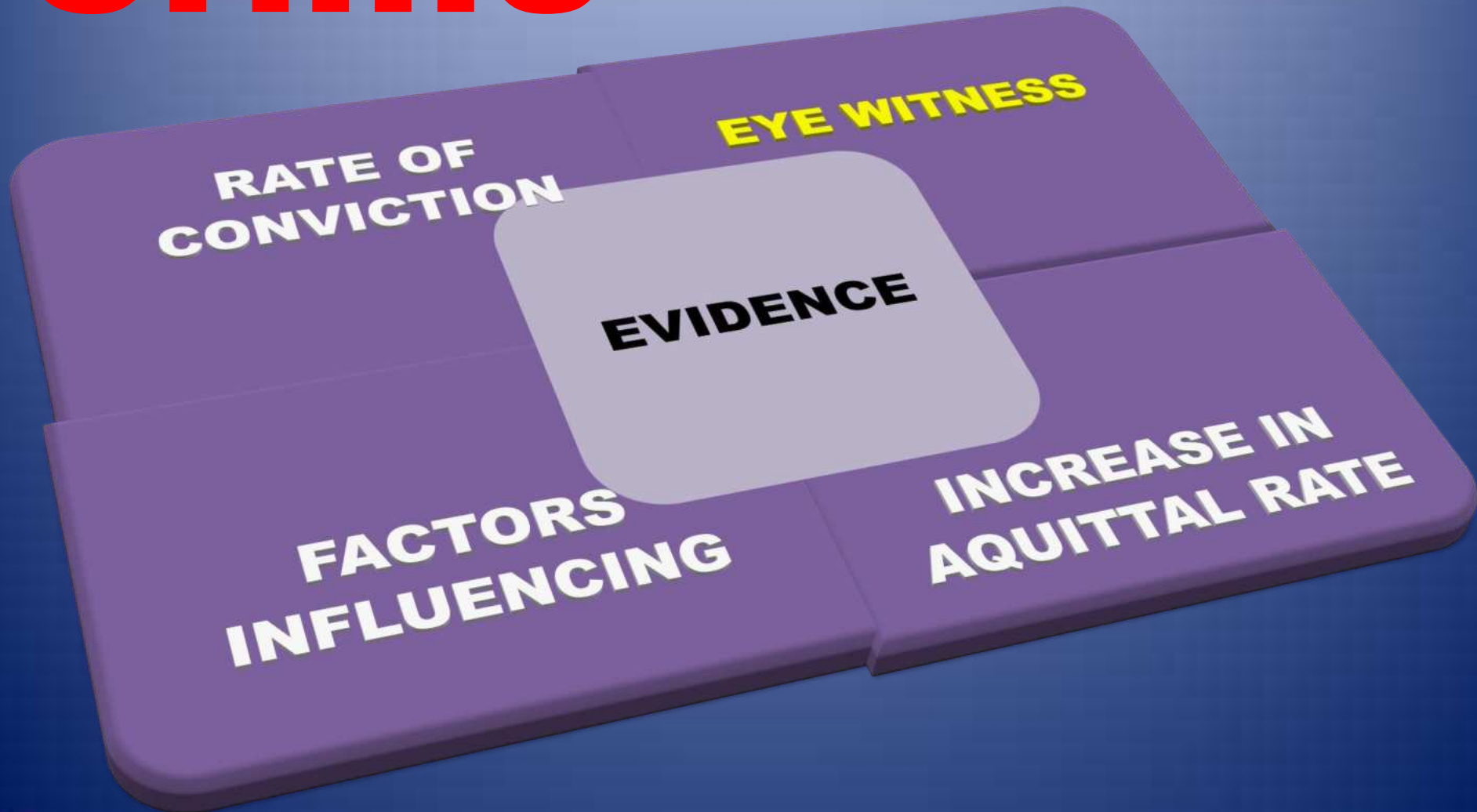
In the absence of the up holder of law
the strong would swallow up the weak



Society can exist only under the shelter of state;
the law and justice of the state is a permanent and
necessary condition of peace, order and civilization

>Dependency
< Conviction

Crime



Eye witness



According to Bentham Witnesses are the “eyes and ears of Justice”

Substantial



Men may lie but Materials may not

LAW OF EXCHANGE OF MATERIALS

Locard Principle



- Every contact leaves a trace
- You take something away and leave something behind every place you go, including a crime scene

"Everywhere you go, you take something with you, and you leave something behind" is the premise behind Locard's theory.

LAW OF EXCHANGE OF MATERIALS



SOC - PHYSICAL EVIDENCE

PHYSICAL EVIDENCE

- ❑ Encompasses any and all objects that can establish that a crime has been committed or can provide a link between a crime and victim or a crime and its perpetrator.
- ❑ Valuable only when its collection is performed correctly

SOC - PHYSICAL EVIDENCE

Crime scenes are never consistent- they are
ALWAYS inconsistent

Can be classified by the location of the crime

Primary crime scene

Secondary crime scene

Defining a Crime Scene

Crime scenes are never consistent- they are
ALWAYS inconsistent

Can be classified by the location of the crime

- Primary crime scene

- Secondary crime scene

Defining a Crime Scene

Other classifications

- Type of Crime

Homicide, robbery, burglary, sexual assault

- By organization or disorganization of Scene

- Criminal behavior associated with Scene

Passive or Active

- Physical Location

Indoor, Outside, Mobile (Vehicle)

PHYSICAL Location

S O C

INDOOR

OUTDOOR

MOBILE



Crime Scene Investigation

Based on the scientific method and the Locard Exchange Principle, logic and forensic techniques involve:

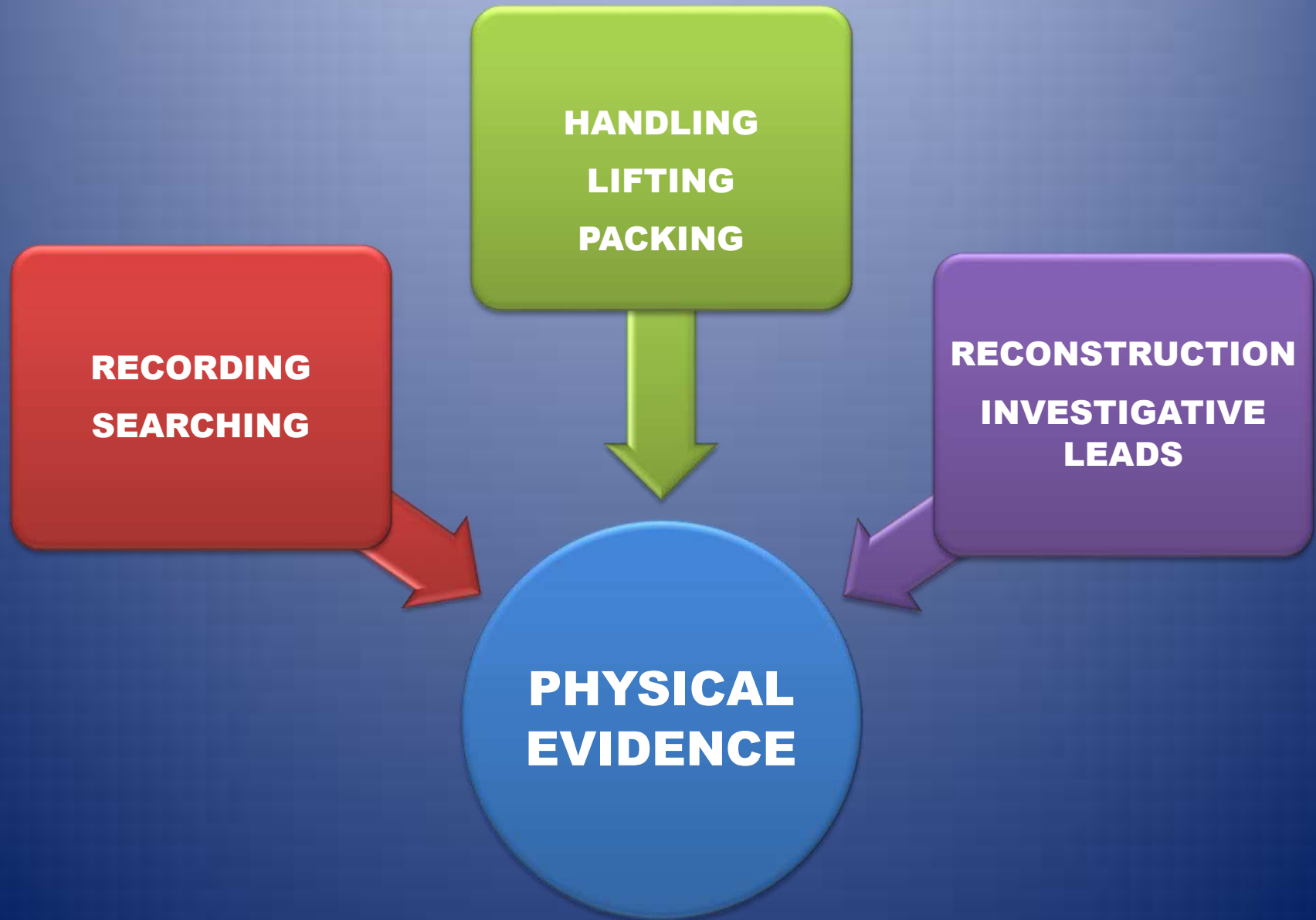
Recognition- scene survey, documentation, collection

Identification- comparison testing

Individualization- evaluation and interpretation

- Reconstruction- reporting and presenting

OBJECTIVES OF CRIME SCENE MANAGEMENT



The Objective of Crime Scene Investigation

Goals are to determine the following

- What happened

- Where did it happen

- When did it happen

- Why did it happen

- Who may have perpetrated these actions

- How was the incident carried out

Crime Scene Processing

8 universal rules exist

- ✓ Safety first
- ✓ Secure and protect the scene
- ✓ Fulfill the basic legal requirements
- ✓ Photograph the scene
- ✓ Identify and mark evidence
- ✓ Collect, label, and package evidence
- ✓ Diagram the scene
- ✓ Write a report

At the Crime Scene

- ✓ The first officer at the crime scene is responsible for securing and protecting the area
- ✓ Must first make sure that if the victim is alive, medics are on their way
- ✓ Must secure the area with crime scene tape or other barriers
- ✓ Must make sure that the evidence does not get compromised
- ✓ Must make sure that witnesses do not leave the crime scene

At the Crime Scene

Has only a limited amount of time to work a crime scene

- Must photograph the crime scene

- Must sketch the crime scene

- Must take notes

- Must collect, document, and package evidence

Photography

- Each crime scene needs to be photographed as completely as possible
- All areas where the crime took place should be photographed at different angles
- Entries and exits must also be photographed at different angles
- It is important to have close-up shots and far-away shots
- Evidence should be photographed with a ruler as a point of reference

IMPORTANCE OF HIGH RESOLUTION CAMERAS

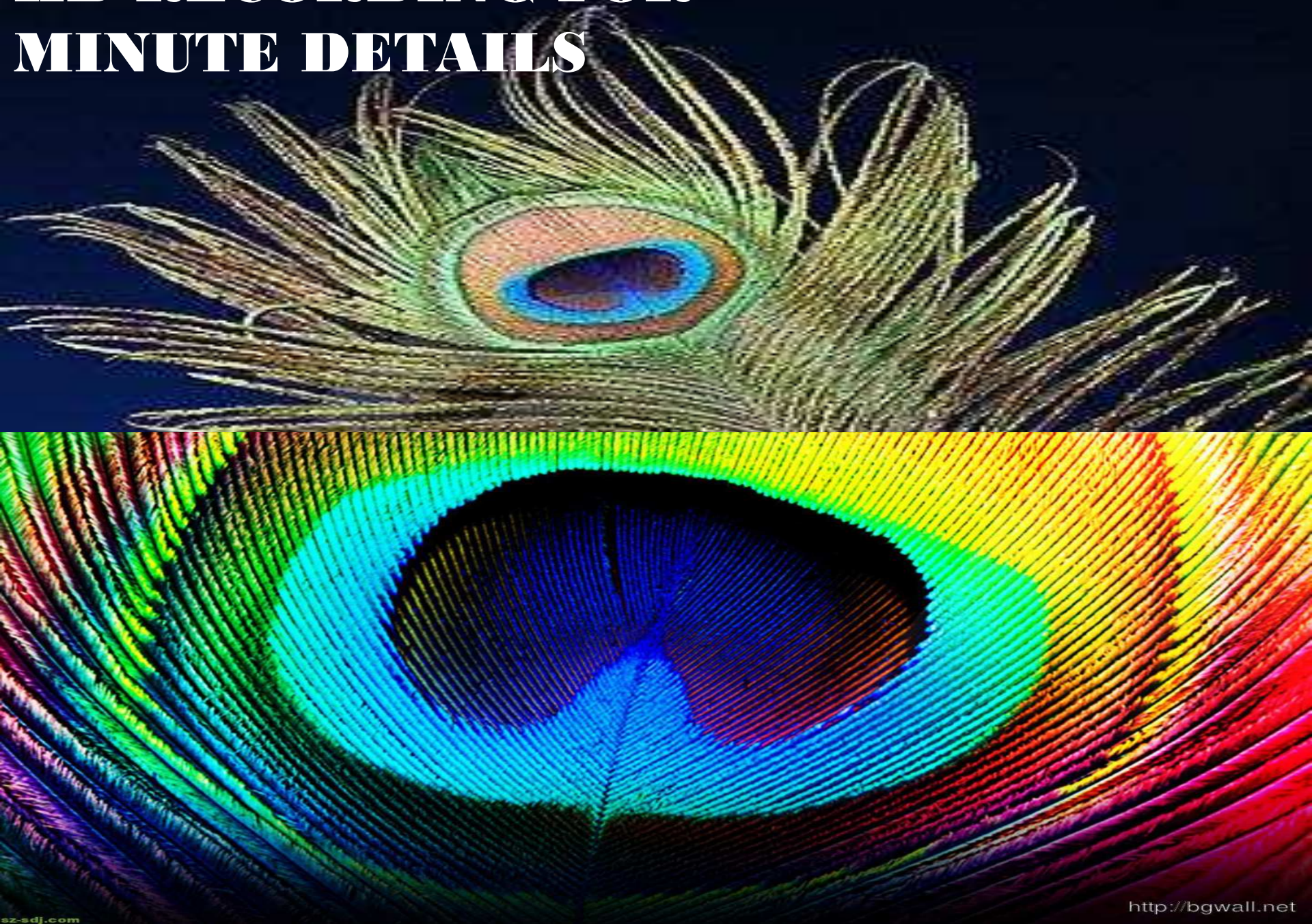


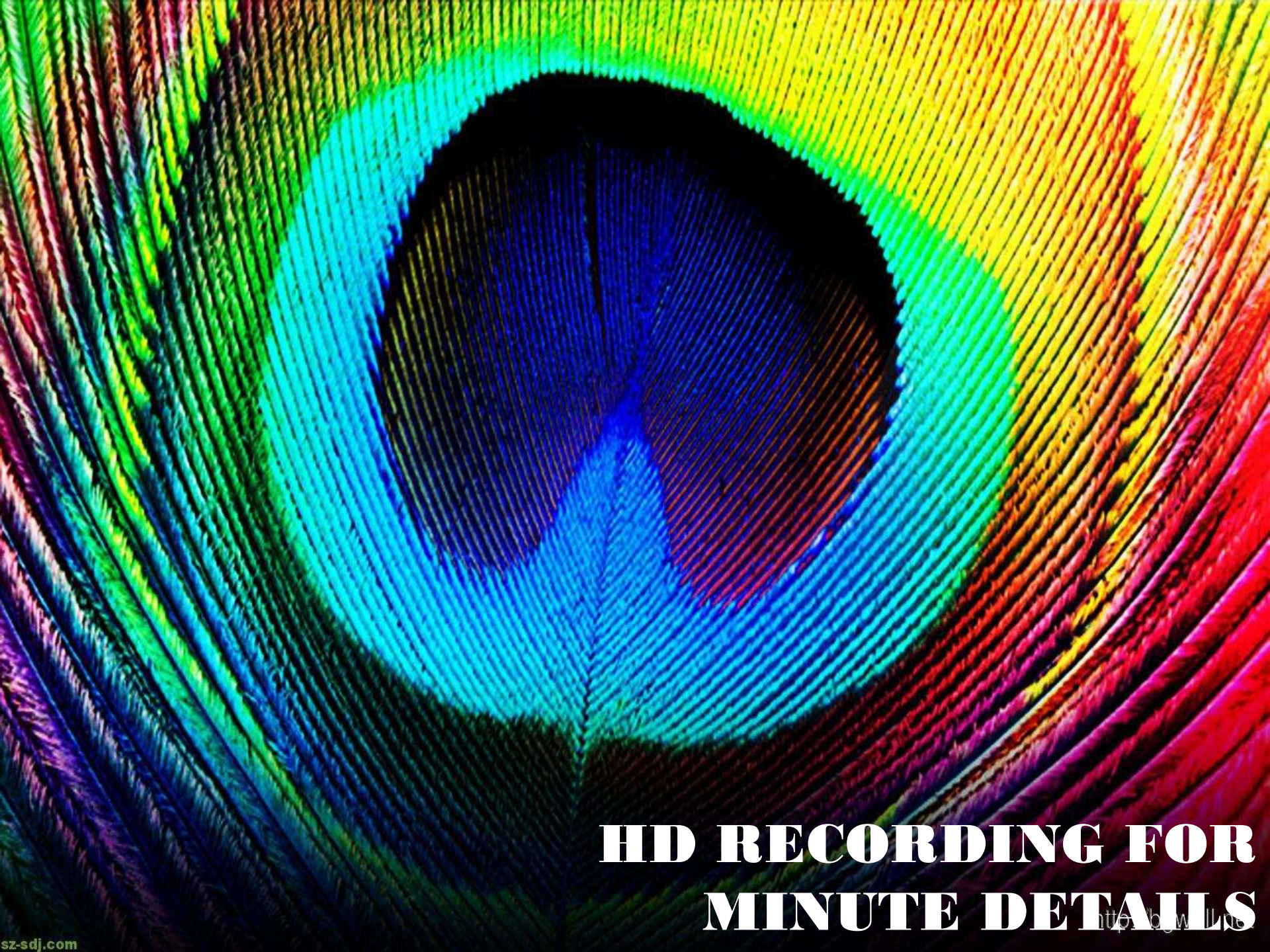


HD RECORDING FOR MINUTE DETAILS



HD RECORDING FOR MINUTE DETAILS





**HD RECORDING FOR
MINUTE DETAILS**



**HD RECORDING FOR
MINUTE DETAILS**

3D LASER SCANNER FOR DOCUMENTATION OF CRIME SCENE



Sketches

- After photographs are taken, the investigator will sketch the crime scene
- 2 types of sketches exist
 - Rough- a draft representation of all essential info and measurements at a crime scene
 - Finished- a precise rendering of the crime scene
- All sketches are drawn to scale
- All sketches have a legend showing where certain items are at the crime scene

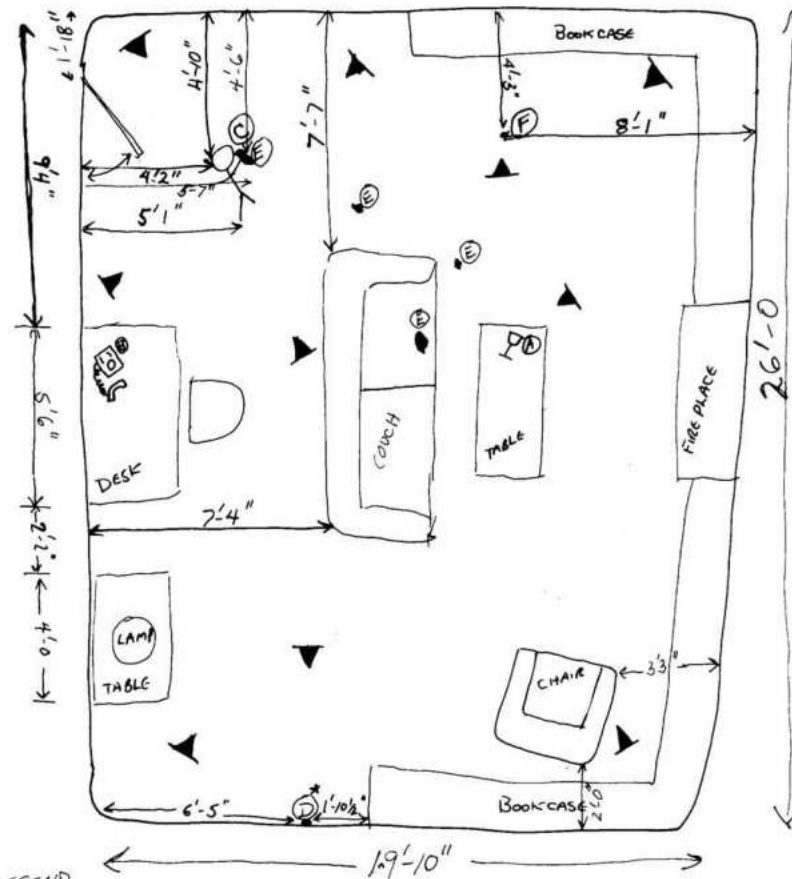
Sketches

- Crime scene sketches require
 - Title or caption
 - Legend of abbreviations
 - Symbols
 - Numbers of letters used
 - Compass designation
 - Scale, if drawn to scale
 - Documentation block with case number, offense type, victim's names, location, date and time, and sketcher's name

CRIME SCENE — DO NOT CROSS — CRIME SCENE — DO NOT CROSS

CASE 10-789-96
301 N. CENTRE ST.
OCT. 6, 1996 11:40 PM
HOMICIDE

VICTIM: LESTER W. BROWN
INVESTIGATOR: SGT. L.A. DUFFY
ASST BY: PTL. R.W. HICKS



LEGEND

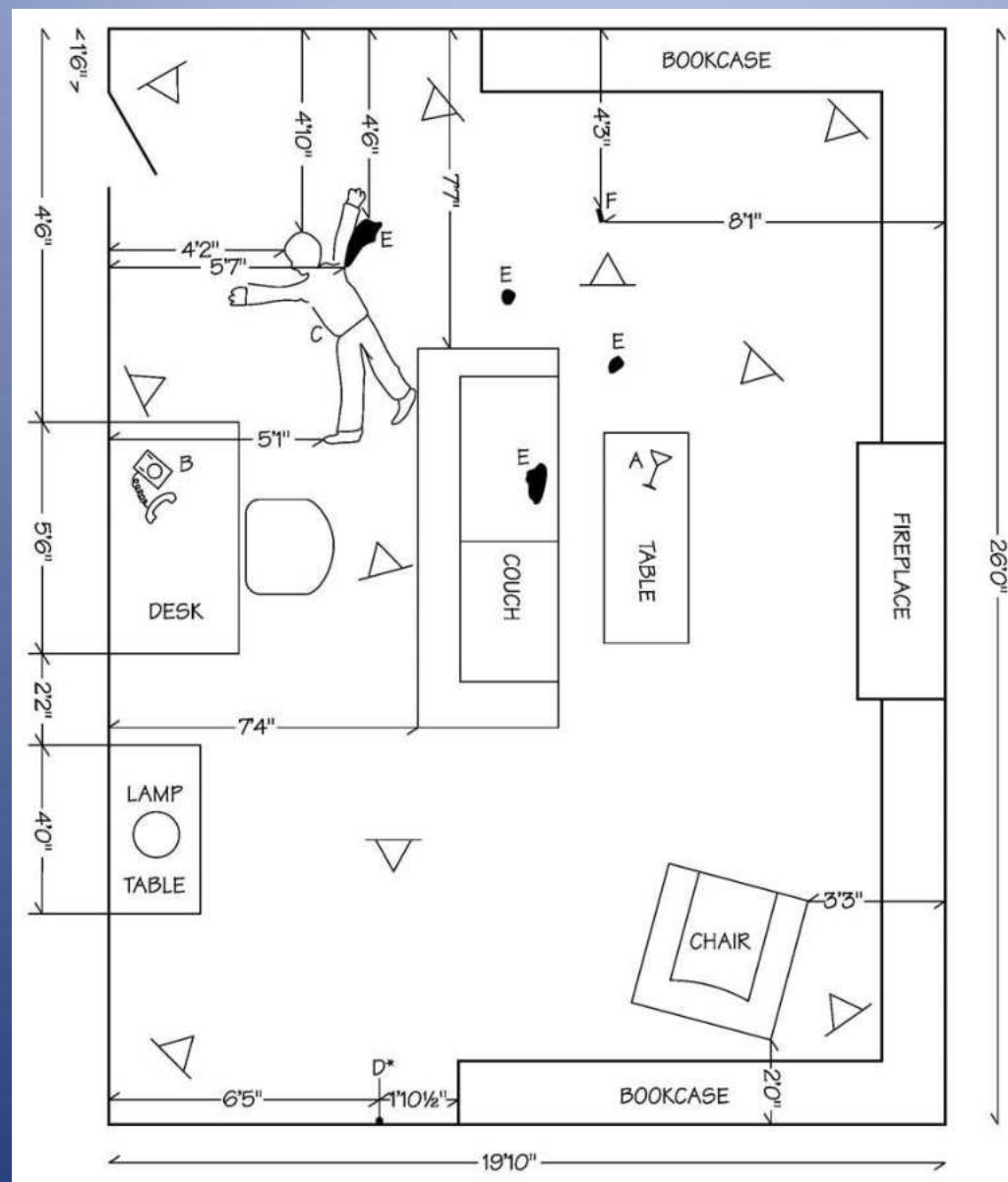
- A = COCKTAIL GLASS
- B = TELEPHONE
- C = VICTIM
- D = BULLET HOLE
- E = BLOOD STAINS
- F = SHELL CASING
- * = CAMERA LOCATIONS

* D 3'-4 3/4" FROM FLOOR

1/4" = 1 FOOT

CRIME SCENE — DO NOT CROSS — CRIME SCENE — DO NOT CROSS

CRIME SCENE — DO NOT CROSS — CRIME SCENE — DO NOT CROSS



CRIME SCENE — DO NOT CROSS — CRIME SCENE — DO NOT CROSS

Notes

- Must be taken throughout processing the Crime Scene
- Should include
 - Date and time of notification and information received
 - Arrival information
 - Scene description
 - Victim description
 - Crime scene team members

Notes

- Must also include a detailed written description of the scene with the location of items of physical evidence recovered
 - Must also identify the time an evidence was discovered, by whom, how and by whom it was packaged and marked, and the disposition of the item after it was collected

Search for Evidence

- Must be thorough and systematic
 - Must make sure not to overlook any pertinent evidence
 - Failure to do so can lead to accusations of negligence or of covering up the evidence

Search for Evidence

- Field evidence technician responsible for conducting search for evidence
 - May also photograph the crime scene
 - Looks for fingerprints, footprints, tool marks, hairs, fibers, etc
 - Must also collect possible carriers of trace evidence

Search for Evidence

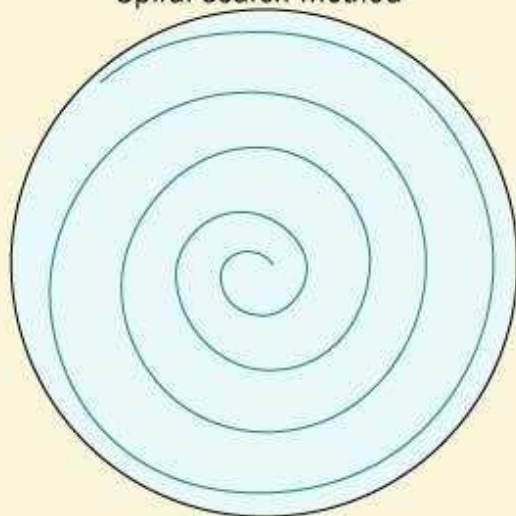
- Evidence must also be collected from the body (if victim died) by the medical examiner
 - Evidence needed includes
 - Victim's clothing
 - Fingernail scrapings
 - Head and pubic hairs
 - Blood
 - Vaginal, anal, and oral swabs (sex crimes)
 - Recovered bullets from the body
 - Hand swabs from shooting victims



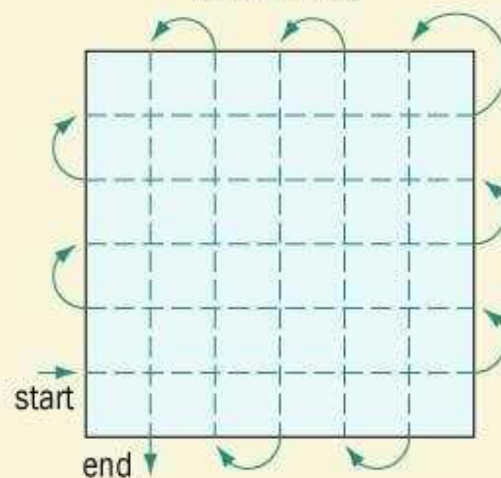
Search for Evidence

- Crime scene is usually searched in segments
 - 4 types of segments exist
 - Spiral search method- Search starts at an outer point and gradually moves toward the center
 - Grid method- Crime scene divided into a grid and each grid segment is searched
 - Strip or line search- Crime scene divided into strips and each strip is searched
 - Quadrant or zone search- Crime scene divided into quadrants and each quadrant is searched

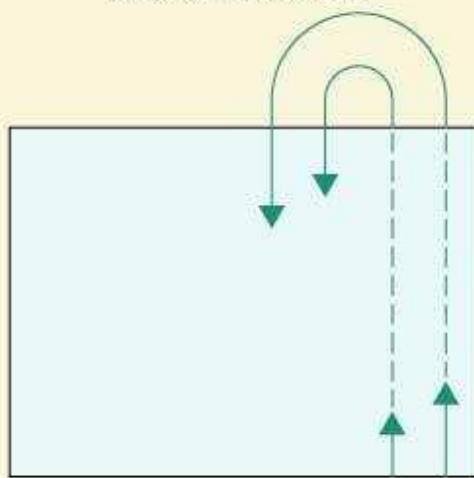
Spiral search method



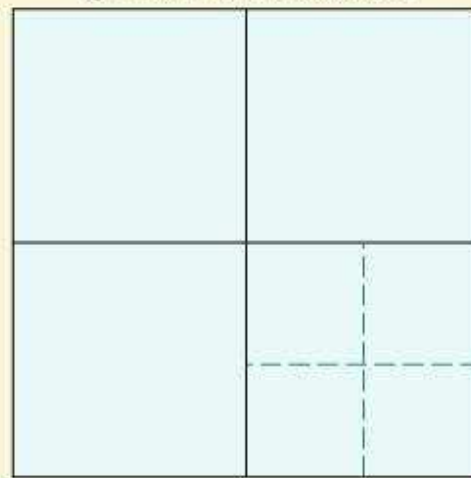
Grid method



Strip or line search



Quadrant or zone search



Collecting and Packaging Evidence

- Must be handled and processed meticulously to make sure that it does not get damaged
 - If damaged or changed, evidence is not admissible in court



Collecting and Packaging Evidence

- Each different item or similar items collected at different locations must be placed in separate containers
 - Prevents damage through contact and prevents cross- contamination
- Forceps and other similar tools may have to be used to pick up small items



Collecting and Packaging Evidence

- Small items may be put in unbreakable plastic pill bottles with pressure lids
 - Great for hairs, glass, fibers, and other small or trace evidence
- Manila envelopes are also good containers for evidence
- Paper bags are excellent containers for large evidence
- Mailing envelopes should NEVER be used to hold evidence

Collecting and Packaging Evidence

- Any evidence that is wet must be air dried before being placed in a container
- Bloodstained evidence should never be stored in an air-tight container
 - Could cause mold growth which damages the evidence

Collecting and Packaging Evidence

- After evidence is collected and packaged, the container it is in must be marked and sealed
- Most items should be packaged in a primary container and then placed in a secondary container
 - Hair is placed in a vial which is then placed inside a paper bag

Chain of Custody

- Is a list of all persons who come in possession of an item of evidence
- Must be established whenever evidence is presented in court
 - The evidence container must be marked for identification
 - The collector's initials should be placed on the seal
 - If evidence is turned over to another person, the transfer must be recorded

Obtaining Reference Samples

- A standard/reference point is physical evidence whose origin is known, such as hair from a suspect that can be compared to a hair found at the crime scene
 - Exists with blood, glass, soil, fibers, paint chips, etc

Medical Examiners

- Is a medical doctor, usually a pathologist
- Is appointed by the governing body of the area
- 400 forensic pathologists exist in the US

Responsibilities of the M.E.

- Identify the deceased
- Establish the time and date of death
- Determine a medical cause of death
 - The injury or disease that resulted in the person dying
 - Examples
 - Gunshot, stab wound, heart attack, cancer

Responsibilities of the M.E.

- Classify the manner of death
 - The circumstances in which the cause of death arose
 - Is usually the most difficult to determine
 - 5 types of manner
 - Natural
 - Accidental
 - Suicide
 - Homicide
 - Undetermined

Responsibilities of the M.E.

- Classify the manner of death
 - The circumstances in which the cause of death arose
 - Is usually the most difficult to determine
 - 5 types of manner
 - Natural- death due to disease process
 - Accidental- death by an act that one would expect to survive
 - Suicide- intentional termination of one's own life
 - Homicide- death due to an intentional act by another individual
 - Undetermined- death in which the manner and/or cause cannot be determined

Responsibilities of the M.E.

- Determine the mechanism of death
 - The physiological or biochemical reason that the person died
 - Examples
 - Coronary artery disease- heart attack
 - Cerebral edema- head injuries
 - Hemorrhage- stab wounds
- Notify the next of kin

Crime Scene Safety

- The increasing spread of AIDS and hepatitis B has sensitized the law enforcement community to the potential health hazards that can exist at crime scenes
 - Relatively small chance of police officers getting AIDS or hepatitis

Crime Scene Safety

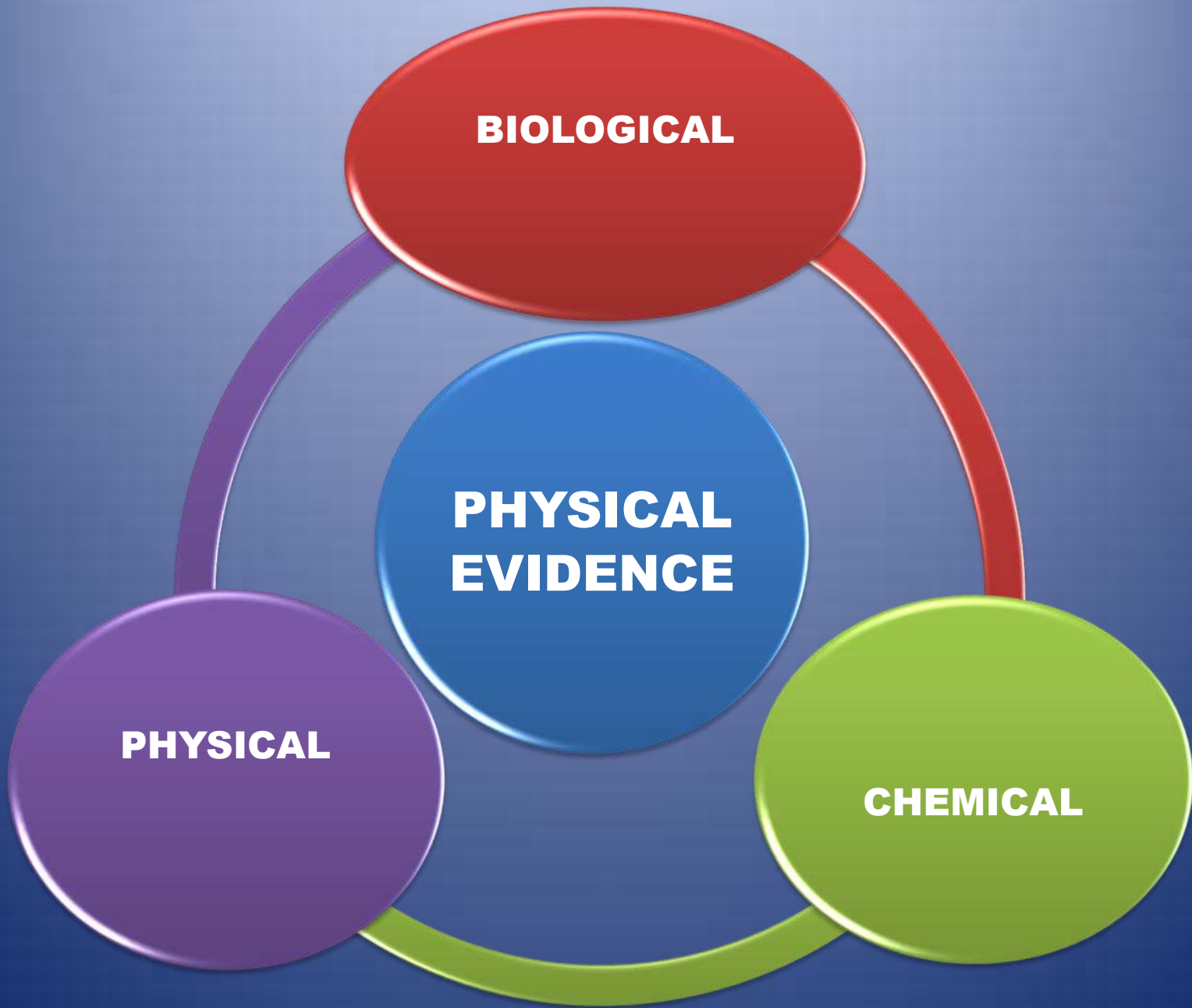


- Guidelines exist to protect investigators at crime scenes
 - Must wear latex gloves and shoe covers
 - Must wear masks when potentially infectious dust or mist is at the crime scene
 - Must be alert to sharp objects
 - Must maintain red biohazard bag for disposal of contaminated materials
 - Must take notes without gloves
 - Must not eat, smoke, or drink at the crime scene
 - Must launder any clothing that may be contaminated

PHYSICAL EVIDENCE

SOC PHYSICAL EVIDENCE





INFRASTRUCTURE AT DIVISIONS

OFFICE ACCOMODATION

17 DIVISIONS
New DIVISIONS
UNDER CONSTN

FULLY FURNISHED
DESKTOP/LAPTOP/TAB

DEDICATED BRANDED
FOUR WHEELER

HUMAN RESOURCES

HIGHLY QUALIFIED
POST GRADUATES IN
SCIENCES
50 CSOs

17 PHOTOGRAPHERS
17 VIDEOGRAPHERS
34 SPOs

34 DRIVERS FOR
DEDICATED VEHICLE

SCIENTIFIC GADGETS

LATEST KITS
INCLUDING
CONSUMABLES

ADVANCED
EQUIPMENT
FOR PROCESSING

DETECTORS FOR
PRELIMINARY
TESTING TO PROVIDE
LEADS

DIVISIONAL CLUES

APPARELS

**SPECIALLY DESIGNED
APPRON**

CLUES LOGO CAP

UV FACE SHIELD

MOUTH MASKS

TOOLS

**MAGNIFIERS
VERNIER CALIPERS
COMPASS**

**SEARCH LIGHT
TIGER UV
FLEX O POD/ MINI O POD**

**DNA SAMPLE
BODY FLUID
NARCOTIC TEST KITS**

**ADVANCED EQUIPMENTS,
RUVIS,XCAT,VSC
POLYGRAPH**

COMMUNICATION TOOLS

-VHF SET

-CUG SIM

-TAB

-ALL IN-1-PRINTERS

-EVIDENCE INDICATORS

**-EVIDENCE TAMPER PROOF
STICKERS**

-SEALING MACHINE

-AIR DRYER

-POLYTHENE ROLL

**-STERILE PAPER
ENVELOPS**

-STERILE GAUZE CLOTH

-STERILE COTTON ROLLS

-FIPFETS& TIPS

-SET OF MAGNIFIERS

-A3 SHEETS FOR DRAWING

**-SURFACE & SUNKEN FOOT
PRINTS COLLECTION KITS**

CLUES



OBJECTIVES



Launch of ClueS Teams in Hyderabad City



Launch of divisional Clues



CLUES HYDERABAD



CLUES HYDERABAD



CLUES HYDERABAD



CLUES HYDERABAD



CLUES HYDERABAD



CLUES



OBJECTIVES



- Every cont
- You take s
- something i
- including a

"Everywhere you go, y

defend

Hydraba
SCENI

Training on HLP & Letter of Advise



Applications of X CAT



Applications of X CAT



NDPS ACT



Applications of X CAT



Clues teams- Cases



SUPER BAZAR
 M. J. N. N. M., BELOW HITT
 55460045 55460045
 Our web site: www.superbazar.com
 APGST NO: 01/08/2013/01-02
 TYN NO: 55420 1407

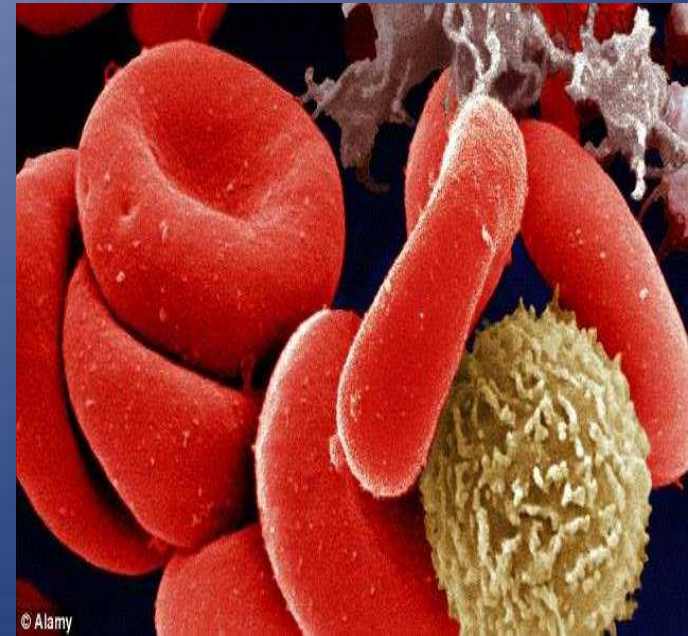
Pgs No. 1000154
 Date: 13/10/2013 Time: 2:35:46

Description	Qty	Rate	Amount
SURF EXCEL B	2	15.00	30.00
PEPSO OIL CO	2	56.00	108.00
PEPSO WHITE	1	69.00	69.00
SURF EXCEL B	1	94.00	94.00
WASH SOAP	1	5.00	5.00
VIN DROPS	1	22.00	22.00
HEAD SHOWER	5	3.00	15.00
TOTAL			RS 343.00
Tendered - CASH		RS	500.00
Change - CASH		RS	157.00

ttsuperbazarhyd@gmail



Clues - Equipment



Clues teams Equipment



RECONSTRUCTION OF SOC



Clues teams- Cases



Clues Team- Equipment



Clues Team- Equipment



Clues Team- Equipment



Clues Hyderabad City

ASHISH



RITU

ASHISH



RITU









THANQ...

