



# Introduction to Forensics

# What to Bring to Class

Composition Notebook

Pens and pencils

Folder with a clear plastic insert

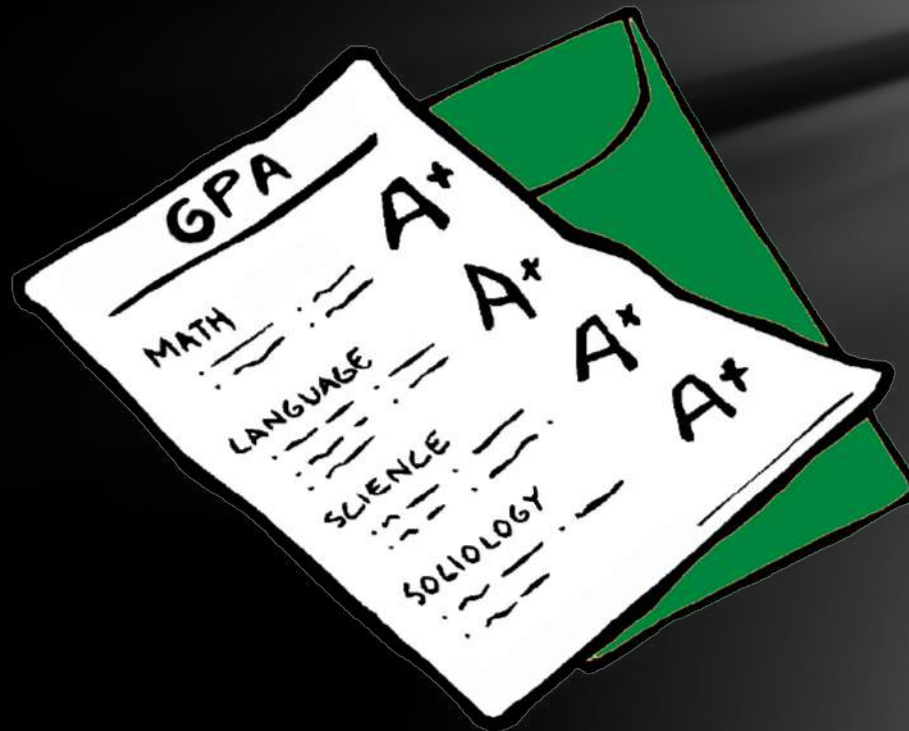
Glue sticks or tape



# Grading Procedure

45% Summative Assessments

15% Formative Assessments



# Daily Routine

- Be in your seat and waiting BEFORE the bell rings
- Complete the Bellringer in your composition notebook
- Await further instruction
- Stay focused and participate in class
- Work until the bell, do not pack up early



# Attendance, Late Work, and Dishonesty

A large portion of your grade in this class will be based on group labs and in class participation. Some of these may be difficult to make up after the fact therefore ATTENDANCE IS KEY.

If you do miss a project you must come in to make it up outside of class time within FIVE SCHOOL DAYS or it will be marked as a ZERO

If you are found to be copying someone else's work, or cheating on an assessment you will receive a ZERO for the assignment.

Brace  
Yourself  
More Rules  
Are  
Coming.





# Backpacks, Food, Drinks and Gum are NOT Allowed in the Science Classroom



Cell Phones are Put Away. Not on  
Tables. Not Used as Calculators.





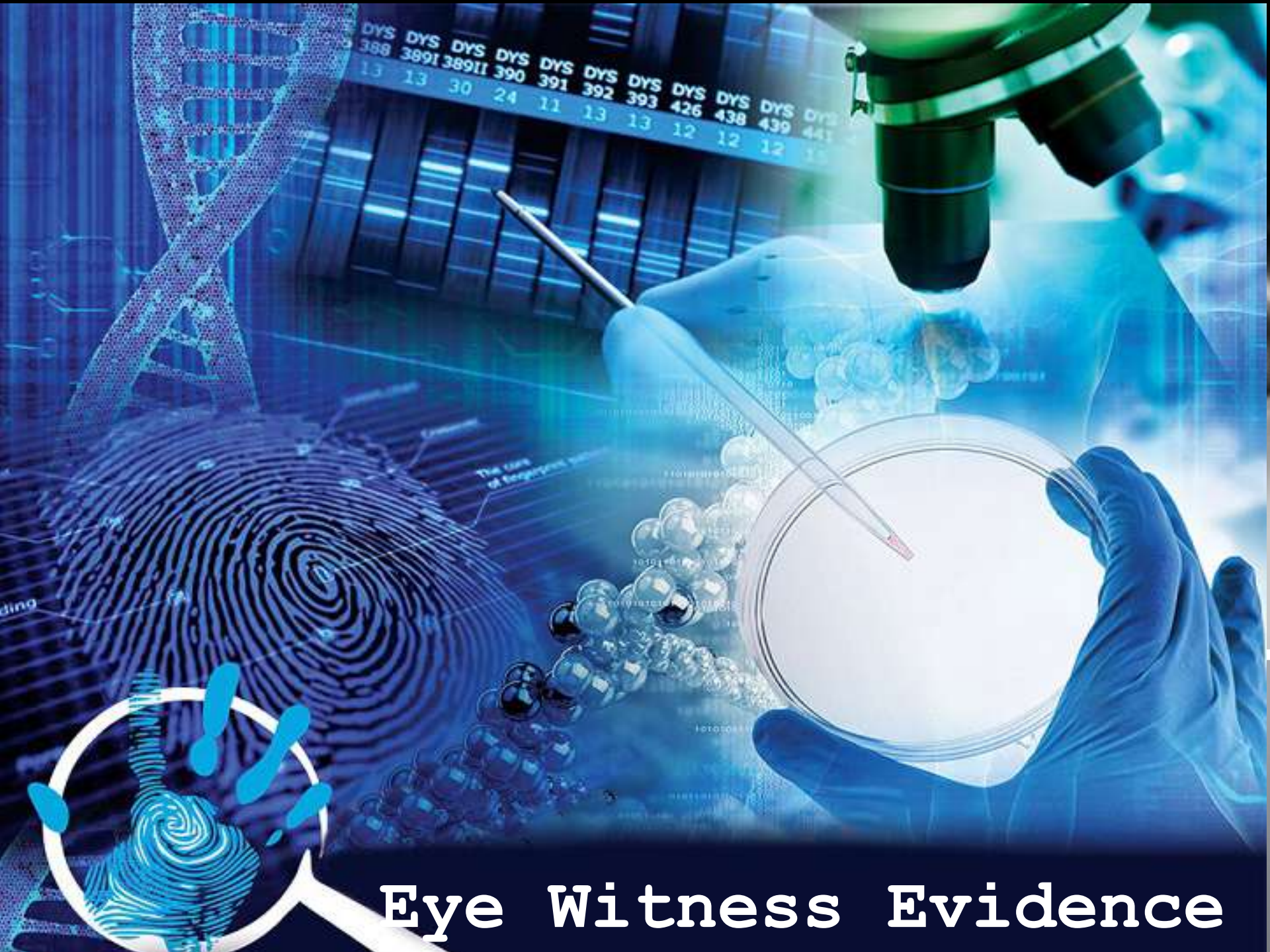
No Games, Shopping, Or Other Homework Unless You Are DONE And Have Permission.



Do Not Interrupt. Stay Focused And  
Allow Those Around You To Focus  
Without Distractions.







DYS	DYS	DYS	DYS	DYS	DYS	DYS	DYS	DYS	DYS	DYS	DYS	DYS	DYS	DYS
388	389I	389II	390	391	392	393	426	438	439	441				
13	13	30	24	11	13	13	12	12	12	15				

Eye Witness Evidence

# Learning Objectives

- ☐ I can define forensics
- ☐ I can make observations of my surroundings
- ☐ I can explain errors in recall



# What is Forensic Science?

The application of scientific principles and techniques to matters of criminal justice especially relating to the collection, examination, and analysis of physical evidence.

Also called criminalistics





# What are Observations?

Information gathered through any of the five senses

Sight, Hearing, Touch, Taste, Smell



Test your skills of observation on the next slide. What do you see?



# Now try to recall...

1. How many people are in the car?

Six

2. Which side of the car was Jackie Kennedy on?

Drivers Side

3. What was John F Kennedy doing with his hands?

Folded resting on the door

4. How many people were riding motorcycles?

Two

5. What color was the woman with the bonnets skirt?

Red

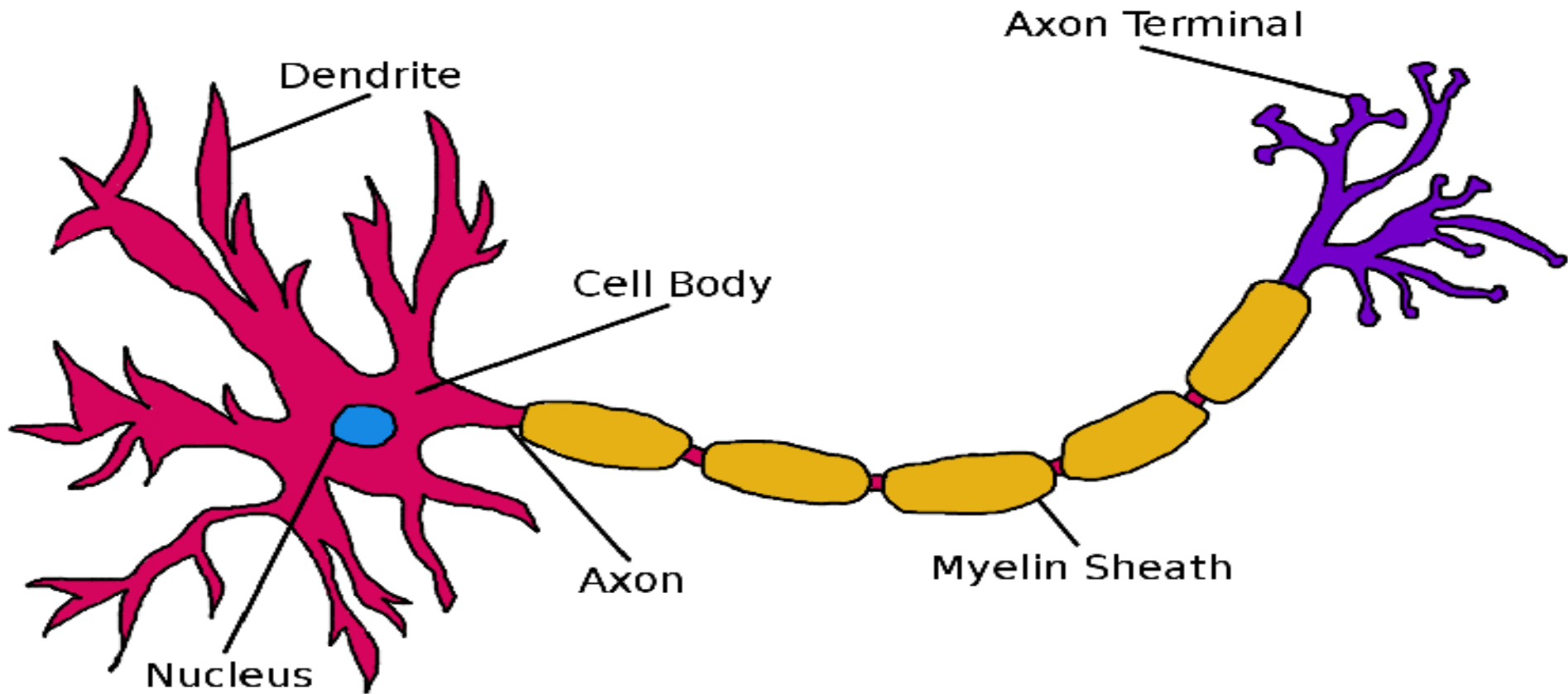
6. What color were the ropes and barricades?

There were no ropes or barricades

# How did you do?

# How is memory stored?

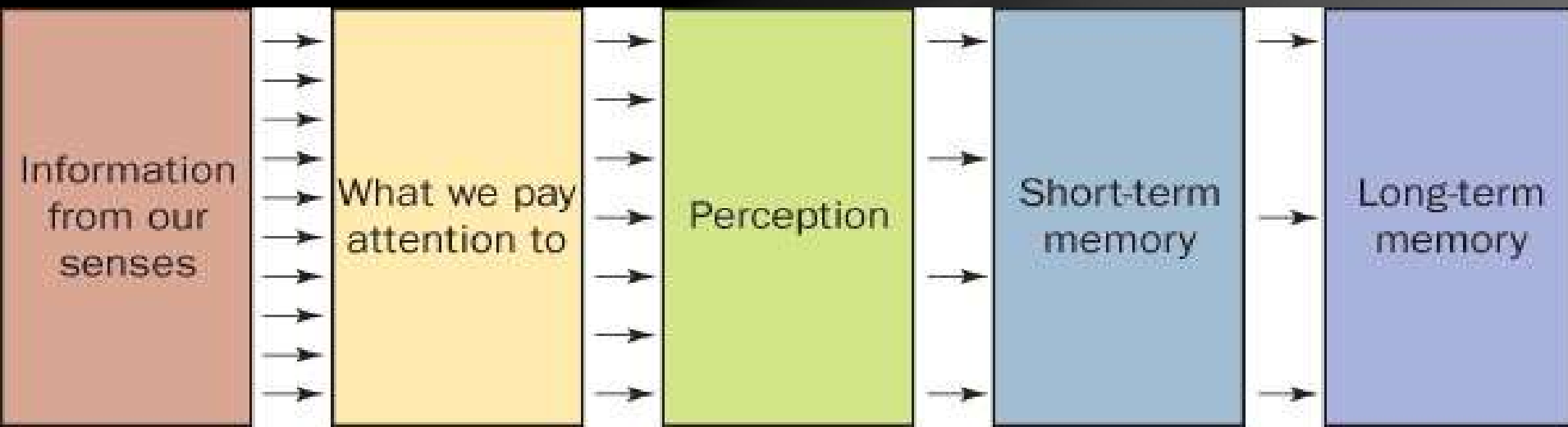
Information is stored in the brain by cells called neurons



# Why are there errors in recollection?

At each step in the brains information processing information is lost and/or modified.

Recall is also influenced emotional state, personal beliefs, location, proximity to others, what was going on around them, and how much time has passed.





# How to be a Good Observer

Observe systematically

- Start at one part of a crime scene and run your eyes slowly over every space
- Look carefully at details of each piece of evidence
- Do not assume that later on you will be able to remember everything

# How to be a Good Observer

Turn off filters

- Do not pay attention to only what you think is important.
- On a crime scene you will not know what will turn out to be important.
- Make a conscious effort to pay attention to all the details in your surroundings

# How to be a Good Observer

Collect Information first, interpret data later

- Look for patterns and make connections
- More information yields better interpretations
- Prejudices exist everywhere, eyewitness accounts, your own thinking processes

# How to be a Good Observer

Documentation,

Documentation,

Documentation

- Write down and photograph as much information as possible
- Be aware that memory is faulty
- Remember that our brains tend to fill in gaps in our perceptions

# Brain Games

<https://www.youtube.com/watch?v=RWO2UQ4MW7U&fbclid=IwAR3y8xbzF9K8qdNAzacmAbt1qFOnRQzisPUzU57F7SEjQNFrQkmTKO7DtWg>



# Physical Evidence



# Learning Objectives

- ☐ I can explain Locard's Principle of Exchange
- ☐ I can classify types of evidence
- ☐ I can follow the seven S's of Crime Scene Investigation

# Locard's Exchange Principle - 1910

- Developed by Edmund Locard, the director of the very first crime lab in existence, located in Lyon, France.
- When a person comes in contact with an object or another person, a cross-transfer of physical material can occur.
- The *intensity*, *duration*, and *nature* of the entities and contact determine the extent of the transfer.



# Types of Evidence

## Direct Evidence

- First hand observations

## Circumstantial Evidence

- Indirect evidence that may imply but not prove what happened

## Individual Evidence

- Narrows identity to a single person or thing

## Class Evidence

- Narrows identity to a group of persons or things

# Seven S's of Crime Scene Investigation

## 1. Secure the Scene

Responsibility of First Responders

Assess safety of the people

Prevent evidence loss or contamination





# Seven S's of Crime Scene Investigation

## 2. Separate the Witnesses

Reliability depends on them not talking to each other



# Seven S's of Crime Scene Investigation

## 3. Scan the Scene

Forensic examiners determine where photos should be taken

Assign a primary and secondary scene

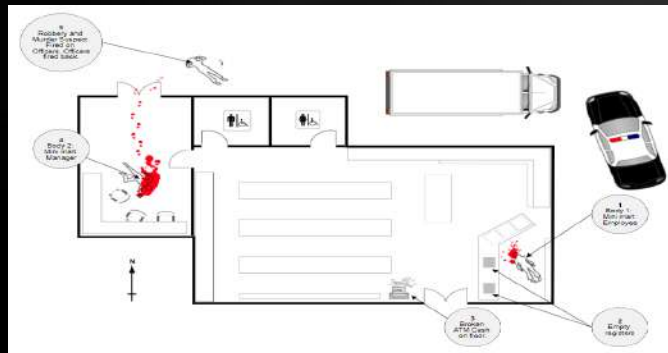


# Seven S's of Crime Scene Investigation

## 4. See the Scene

Crime Scene Examiner takes photographs the scene and evidence including scale and location





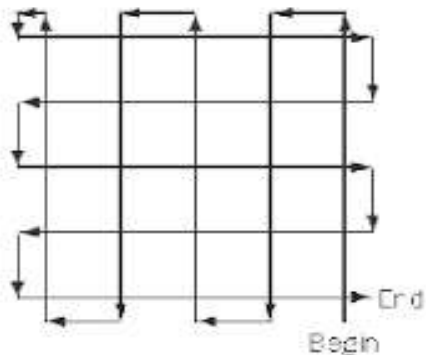
# Seven S's of Crime Scene Investigation

## 6. Search for Evidence

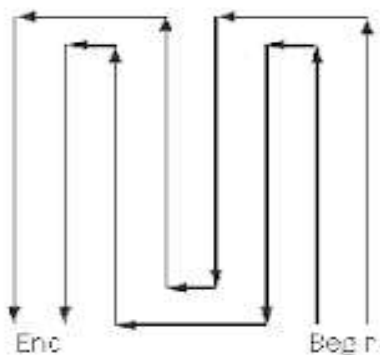
Systematically search the area for evidence.

May use a grid, linear, quadrant, or spiral pattern

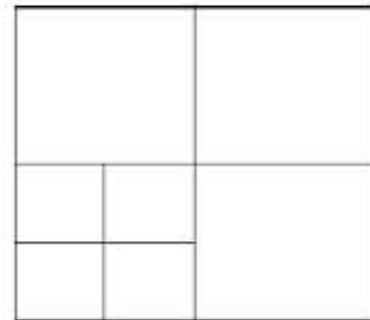
Mark, photograph, and sketch evidence found



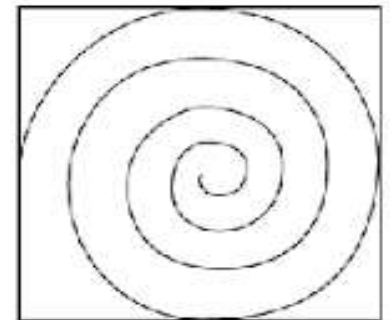
Grid



Linear



Quadrant or Zone



Spiral

# Seven S's of Crime Scene Investigation

## 7. Secure and Collect Evidence

Collect, dry, wrap in paper, and store evidence found  
Attach an evidence log and a chain of custody document to the container.





# The 4<sup>th</sup> Amendment

The right of the people to be secure in their persons, houses, papers, and effects against unreasonable searches and seizures shall not be violated, and no warrants shall issue but upon probable cause, supported by oath or affirmation, and particularly describing the place to be searched and the persons or things to be seized.