



## The Case of the Missing Millionaire

### LEARNING GOAL

We are learning to use the Habits of Mind to gather and analyze evidence from a crime scene, use problem-solving strategies to find a solution, and present our solution through literacy and drama.

### SUCCESS CRITERIA (Habits of Mind)

Thinking Flexibly (Initiative)

- examine the crime scene in a variety of different ways

Thinking Interdependently (Collaboration)

- listen to and build on the ideas of others

Questioning and Posing Problems (Independent Work, Self-Regulation)

- what are all the possible scenarios of what happened

Striving for Accuracy (Self-Regulation)

- support your choices and ideas with solid evidence

Gathering Data Through All Senses (Organization, Independent Work)

- what do you see
- what sounds could have been made during the action of the scene
- feel for texture
- possible smells and tastes

### Managing Impulsivity (Responsibility)

- think laterally, don't jump to conclusions too quickly
- gather evidence slowly and carefully

### Responding with Wonderment and Awe (Initiative)

- school can be fun
- use drama to present their findings

## **LESSONS** (12 50/60 minute lessons)

### **Pre-Teaching (3 - 4 lessons)**

Week of May 30<sup>th</sup> - June 4<sup>th</sup> (in class) - Selection of Lessons to introduce the idea of crime-scene investigation. Select two or three of the pre-teaching suggested activities from pages 12-14

1. **SHARP EYES** - Two lines of students, stand across from a partner, memorize every detail. Partners turn backs to each other and make a small change (ex. Put hair behind ear). See if they can guess the change.
2. **FIND THE CHANGE** - Change something about yourself or the classroom every day and ask students to sleuth out what it is.
3. **MYSTERY STORIES** - Read a mystery story with the class, or a section of one and describe or analyze the crime. (Ex. You be the Juror, 5 minute mysteries, Spot the difference.)
4. **COMPOSITE DRAWING** - Have a visitor in costume come into the class very briefly (and maybe squirt you with a water bottle). After the visitor has left, challenge your students to remember as many details as possible about the person and draw them, in teams or individuals. When they are done drawing, have the visitor return, and compare drawings and details with the real thing. Discuss the difference between evidence and inference. Was that a guess, or do we know.
5. **FOOTPRINT ACTIVITIES**  
Classifying footprints - use old shoes and paint to create sets of footprints  
Find that Print - describe the footprints and see if you can match  
Footprint Concentration - use copies of footprints to make a class-size memory game  
Footprint Mysteries - have students paint feet and do a variety of moves (jump, cartwheel, run backward). Have students guess the moves.

## **Scene of the Crime (2 - 3 lessons)**

### **June 6 (Den)**

- Students discover the scene of the crime - look only. It is best to do this part in silence. Students enter and discover a roped-off crime scene. Tell them that today they will take the first step in trying to solve a made-up mystery. For several days they will play the part of detective collecting evidence and forensic scientists analyzing the evidence in a crime lab. At this point all they know is that the scene is the patio of a two-bedroom, one-bathroom beach house and it is a warm day. More information will come later.

### **June 7 and 8 (Den)**

- Students look for, record, and collect clues.

Students are divided into 8 teams and are assigned one section of the crime scene.

STEP 1 - Students take pictures, make sketches and record what the crime scene looks like before they touch anything. Remind them to keep an open mind, so they won't be fooled. They will have to rely on their pictures as the crime scene will be dismantled afterward.

STEP 2 - Teacher takes one item from the scene of the crime and use it as an example. Ask them to describe. Differentiate between EVIDENCE and INFERENCE. Students should record only what they can directly observe about the clues using 5 senses. Inferring will come later.

STEP 3 - There are 8 sections, each team will examine one section of the crime scene, draw the section, and record details on paper. Be accurate as you will be sharing the evidence. Take pictures of your section.

STEP 4 - Teams sit in an area separate from the crime scene to observe evidence collection. One student at a time enters the crime scene and tries NOT to disturb the evidence. The student picks only one item from their designated section. The team writes down details, observations. Another student enters, puts evidence back, and collects a new piece. This continues. For footprints - they should bring the Suspect Footprint Sheet, and record what they think the suspect was doing (walking, struggling).

STEP 5 - COLA - Teacher picks up cups by rims using gloves so not to disturb any fingerprints. Pour out the cola into the extra cups for Alfredo and Felix. Tell students they will get to do lab tests later on. Put the empty cups into zip-lock bags and place them back on the crime scene.

STEP 6 - INDEX CARDS - Show how to set up index cards. (see page 125)

STEP 7 - CRIME SCENE MAP - take photos and index cards and set up Crime Scene Map (see page 128). During the next they will learn more about the events that

happened at this crime scene, and the suspects involved. The Habits team will dismantle the crime scene and set up the lab stations.

### **The Story (1 lesson)**

#### June 9 (in class)

The suspects are introduced, and their alibis heard. This information is used to re-examine the crime scene clues. Set up the clue board, show them how they will place the clues on sticky notes as they analyze the evidence. Read over page 135/136. This is information that the detective squad has `dug-up` since the last session. Read over the profile for each suspect. Discuss evidence and that some may not be a clue to help solve the crime. Up to them to come up with best answer. Have students place clues on the clue board - discuss and try to agree where they should go - they will probably move later. They may place clues more than once.

CLASSIFY evidence - Hard evidence - looks very incriminating (\*)

Shaky evidence - informative

Unimportant - probably has nothing to do with crime scenes

Complete Crazy Glue fingerprint technique (see page 139)

Crime Lab Stations A (2 lessons)

#### June 9 and June 10 (Den)

- Students, in teams of 2, conduct tests on five pieces of evidence at separate stations, then take a new look at the suspects in light of piece of evidence. They will then move the clues around on the clue board, add, modify, change evidence. Instructions for all of the stations are clear and easy to follow. Before students begin read over page 156-157 as a brief overview. Students record information on data sheets, then as a class transfer to the index cards on the crime scene map. Discuss validity, test results, evidence that may have been planted, etc.

Station 1 - BROWN STAINS - paper chromatography

Station 2 - COLA TEST -pH test

Station 3 - FINGERPRINTS - compare with suspects

Station 4 - SMELLS - cologne

Station 5 - THREADS TEST - burn threads

### **Crime Lab Stations B (2 lessons)**

#### June 13 and 14 (Den)

- Students conduct tests on 5 more pieces of evidence at 5 additional stations, then take another look at the suspects in light of each piece of evidence.

Station 1 - DNA -decoding

Station 2 - MELTED ICE CUBE -pH test

Station 3 -SECRET NOTE -use silly putty to read impressions / compare writing

Station 4 - POWDERS -test with iodine

Station 5 - TAPE LIFT - examine clothing for hairs, threads

### **Solving the Mystery (1 - 3 lessons)**

June 15 to 17 (in class)

- The teacher and students use one of the options to solve the crime. Review difference between evidence and inference. Use page 195 `Who Done It`

Options - Draw a picture, Write a story, courtroom drama, class vote, names on board, act it out.

### **ART EXTRAS**

Butterfly feet

Fingerprint creatures