

THEMED SCHOOL FIELD TRIPS

CRIME SCENE INVESTIGATION





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In the Age of Ice galleries on the first floor of the Indiana State Museum, there seems to have been a few crimes! Locate the Ice Age animal dioramas. An **observation** is something that you observe using your 5 senses (although please don't lick the dioramas!), while an *inference* is something that you conclude using your observations.

Dire wolf and peccary diorama:

Record your **observations** about the scene: _____

_____.

Record your *inferences* about the scene: _____

_____.

Q: What happened here? Discuss with your group what happened in this scene.

Mastodon in the ice:

Record your **observations** about the scene: _____

_____.

Record your *inferences* about the scene: _____

_____.

Q: What happened to the mastodon? Discuss with your group what happened in this scene. Continue to use your **observation** and *inference* skills as you look around the museum. What other "crimes" can you observe?



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Handwriting Analysis Part One

Before the field trip, have each student sign their name on a piece of paper. Save the signatures for later use in Handwriting Analysis Part 2. Then, explain the basics of handwriting analysis to students. To expand the activity, write a letter or diary entry for the students to analyze with the following characteristics. It may be helpful to exaggerate the characteristics so they are easier to spot. One important skill for crime scene investigators is handwriting analysis. As an investigator, you might have to analyze handwriting to determine if a check is a forgery, or to determine the author of a letter or diary.

Twelve Basic Characteristics for Handwriting Analysis

1. Line Quality - Do the letters flow, or are they written with very intent strokes?
2. Spacing - What is the average space between words and letters?
3. Size Ratio of Letters- Are the letters consistent in height, width, and size?
4. Pen Lifting- Does the author lift his/her pen to stop writing a word and start a new word?
5. Connecting Strokes- How are capital letters connected to lower case letters?
6. Beginning/ Ending Strokes- Where does the letter begin and end on a page?
7. Unusual Letter Formation- Are any letters written with unusual slants or angles? Are some letters printed rather than written in cursive?
8. Pen Pressure- How much pressure is applied on upward and downward strokes?
9. Slant- Do letters slant to the left or right? If the slant is pronounced, a protractor may be used to determine the degree.
10. Baseline Habits- Does the author write on the line, or does the writing go above or below the line?
11. Fancy writing habits- Are there any unusual curls, loops, or unique styles?
12. Placement of diacritics- How does the author cross the t's or dot the i's?



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Handwriting Analysis Part Two

Have each student “forge” a sample check. Break students into 2 or 3 groups, about 10 students per group. Each group will be examining 2 or 3 forged checks, comparing the check to the student signatures from Handwriting Analysis Part One. Students should look for the 12 characteristics learned earlier in the week, either on their own or using the Handwriting Analysis Worksheet. The goal is for the students to identify the check forgers.

JOHN AND JANE DOE	1234
	DATE _____
PAY TO THE ORDER OF _____	\$ <input type="text"/>
_____	_____ DOLLARS  THIS IS NOT A CHECK
MEMO _____	_____