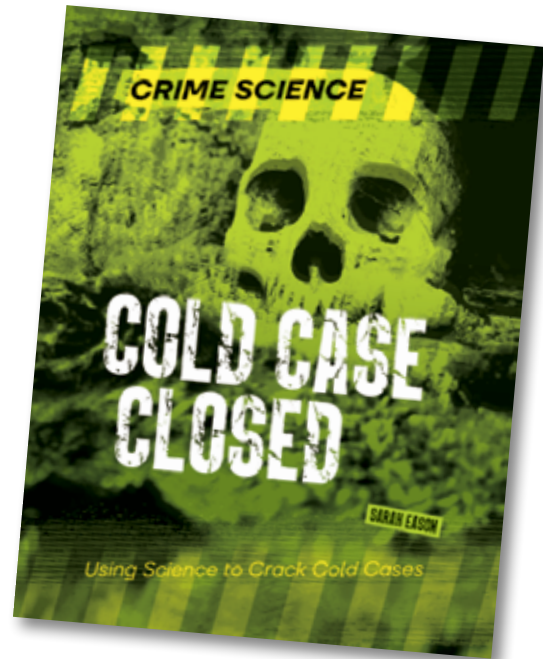


CRIME SCIENCE

COLD CASE CLOSED

Using Science to Crack Cold Cases



TEACHING MATERIALS

SYNOPSIS

Uncover the science behind solving crime! In this exciting exploration of the criminal world, readers will discover how the latest science and technology is used to crack cold cases, from trace analysis and DNA testing to bloodstain analysis and ballistic fingerprinting.

- 48 pages • 7.25 x 9.25 • Ages: 10–13 • Reading Level: Grade 6
- Interest Level: Grades 5-8 • Library-Bound: 978-1-915153-85-2
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QUESTIONS FOR CLASS DISCUSSION, WRITING, AND RESEARCH

Points for Discussion

- Since 1980, there have been more than 185,000 unsolved murder cases. Do you think it is important to solve cold cases? Why do you say so? Do you think there should be a time limit to how long cold cases stay open? Why?
- Why are crime scene photographs so vital to an investigation? Why do you think it is important for police departments to digitize old crime scene photographs? How could these photos help solve cold cases?



- Virtual autopsies could revolutionize how this procedure is performed. Do you think it's better for scientists to study a dead body in the flesh or virtually? What do you think are the advantages and disadvantages of each method?
- After reading *Crime Science: Using Science to Crack Cold Cases*, which career in crime science interests you? What do you need to do to embark on this career?



Writing Exercises

- Read page 25 of *Crime Science: Using Science to Crack Cold Cases*. Now, imagine you are a journalist working at a local newspaper. Write an article explaining how trace evidence helped solve the case of the murdered Lisk sisters. You may need to do more research to complete the task.
- The Federal Bureau of Investigation (FBI) maintains the Combined DNA Index System (CODIS). Do you think it is right and just for a sample everyone's DNA to be stored in such a database or just the DNA of criminals? Why do you say so? Do you think the need to solve cases outweighs a person's right to privacy? Write a letter to the government to voice your opinion.
- Write a paragraph to explain what you understand by ballistics and how ballistics is used to solve crimes. How have ballistic studies changed over time and become more important to solving crimes?

Research Projects

- Find out more about the how the case of Melissa Highsmith, who went missing in 1971, was solved.
- Modern crime science relies a lot on CODIS to match criminals to crime scenes. Find out more about CODIS. Research a cold case that was solved thanks to CODIS.
- Using pages 8 and 9 of *Crime Science: Using Science to Crack Cold Cases* as your starting point. Do some research into how the collection of fingerprints has evolved over time.
- Blood leaves a pattern that can help investigators solve crimes but there are other types of pattern evidence too, including tool marks. Find out more about tool marks and how these patterns can help identify the tools used in crimes.

