FAMILY CASE FILES · BOOK 2

THE MISSING MEMBER

Teacher & Homeschool Guide

Six detective lessons for ages 10 and up, built on the six cases in the book.

- A lesson plan for every case
- Discussion questions and writing prompts
- Student notes sheet (copy one per student)
- Class tracker
- Where to find every answer in the book

FREE · BY AMIRA FINN

You need one copy of *Family Case Files: The Missing Member* (Book 2). This guide may be copied freely for home, classroom and club use. amirafinn.com

HOW TO USE THIS GUIDE

Each case becomes one lesson of two 40-minute sessions (three where a case is marked 3 sessions), about 13 sessions in all. Students work in groups of four; one book per group is best.

You need	Details
The book	One copy for the teacher; one per group of four is best.
Copies	The book allows you to photocopy the exhibit pages and scratch pages, for home or classroom use (copyright page). Copy every page of this guide freely.
Supplies	Pencils, a small mirror (Case 4), a clock or timer.
Teacher answers	All answers are in the book: Grown-ups cheat sheet with Rookie pages and skills (p. 112), case solutions (pp. 114–125), Quick Case answers (p. 126), exam answers (p. 127). (page list on the last page).

Three ways to play. Rookie (ages 10–11, with a grown-up): read pp. 3–4 together, follow the stops from p. 5, fill the code boxes, name who did it. Standard: do every page, pick an answer, then "Prove it." Master (teens): Standard plus the MASTER boxes, choices covered.

Group roles (groups of four). Map Reader handles maps and measuring. Timekeeper writes every time and date. Code Breaker fills in the code letters. Note Taker writes the proof. Rotate roles each session.

The lesson rhythm. Session 1: read the case opener aloud (5 min); groups work the first exhibits (25 min); each group shares one fact they are sure of (10 min). **Session 2:** finish the exhibits (20 min); complete the suspect board and code word (10 min); each group accuses with ONE piece of proof while the class tries to knock it down (10 min). Read the solution together only after every group has accused, or open the next session with it. **Session 3 (cases marked 3 sessions):** recap sure facts (5 min), final exhibits (20 min), accusations (10 min), read the solution (5 min).

One rule for every lesson: evidence before opinions. A guess only counts when a student can point to the page that proves it.

Standards links (Common Core): RI.5.1 / RI.6.1 cite text evidence · W.5.1 / W.6.1 argument writing · SL.5.1 / SL.6.1 discussion · 5.NF and 6.NS fractions · 6.RP rates · time zones and timetables (Gr 5).

Differentiation and extras. Support: the Rookie route, with the "Stuck? Hint page" pointer on each exhibit read aloud. Stretch: the Master route, then students write a mini-case of their own. Early finishers and warm-ups: Quick Cases (5-minute starters). Assessment: the Detective Exam (pp. 107–108) after the final case.

LESSON PLANS

"During" questions are safe to ask while students work. "After" questions give away the answer: save them for after the solution.

CASE 01

The Photo with a Hole

STARTS P. 5 · 2 SESSIONS · SKILLS: PHOTOS, FINGERPRINT PATTERNS (ARCH, LOOP, WHORL), READING A LOG

Objective: Students sort fingerprints by pattern and use a key board and visit log to narrow who could reach the attic.

Hook (5 min): Have students press a thumb on a pencil-shaded patch and tape it to paper. Sort the class into arches, loops and whorls.

During (safe while solving):

- Which hook on the key board is empty, and what does the tag really tell you?
- Which suspects' fingerprint pattern matches the prints on the dome?
- Who visited after the night check, and who came before it?

After the solution (spoilers):

- Dex was blamed first because of his videos. Why is a loud suspect not always the guilty one?
- How did the crew clear their own names?

Writing prompt: Write the video Dex should post now: a correction that tells viewers what really happened, using only proven facts.

CASE 02

The Midnight Train

STARTS P. 23 · 2 SESSIONS · SKILLS: MAP SCALE, WALKING SPEED AND TIME, READING A TIMELINE OF FRAMES

Objective: Students use a map scale and a walking rate to test whether an alibi is physically possible.

Hook (5 min): Time a student walking the length of the hallway. Ask: "How long would a mile take at that speed?"

During (safe while solving):

- At about 20 minutes a mile, how long is a walk to the water tower and back?
- Does a written note prove when someone was in a room?
- Compare the frames at 11:42 and 11:44. What changed?

After the solution (spoilers):

- Rex had lamp duty that night. How did his job give him cover?
- What one rule would have kept the cash box safe?

Writing prompt: Write the conductor's new checklist for locking the luggage car, with a reason for each step.

CASE 03

The Prize Recipe Swap

STARTS P. 39 · 2 SESSIONS · SKILLS: RECIPE FRACTIONS AND MEASURING SPOONS, COMPARING TYPED DOCUMENTS, TIMING

Objective: Students convert tablespoons to teaspoons to show a recipe was changed, and match a typed card to its typewriter.

Hook (5 min): Show a teaspoon and a tablespoon. Ask: "How many of the small one fill the big one?"

During (safe while solving):

- How many teaspoons are in 3 tablespoons? How much more salt is that?
- What small detail makes one typed card different from another?
- Who knew the cabinet code, and when was the cabinet open?

After the solution (spoilers):

- Hal left dinner for a few minutes. Why did that NOT make him guilty?
- Nell kept her prize. Why does proving the truth matter even for a pie contest?

Writing prompt: Write the corrected recipe card for Nell's pie and a short note to the café explaining the mix-up.

CASE 04

The Scoreboard That Lied

STARTS P. 57 · 2 SESSIONS · SKILLS: SHADOWS AND DIRECTION, TELLING TIME FROM THE SUN, READING A REFLECTION

Objective: Students use shadow length and direction to estimate the time a photo was taken, and read a mirror image.

Hook (5 min): Take students outside (or use a flashlight and a pencil). Move the light and watch the shadow change length and direction.

During (safe while solving):

- What does a shadow as long as the person tell you about the time of day?
- Which game on the log ended 3–2?
- Use a mirror: what does the reflection in the glass show?

After the solution (spoilers):

- June was suspended because people believed one post. What should the league have checked first?
- Why did the person who posted it want the Hornets to win?

Writing prompt: Write the Gazette's correction, explaining how the photo was proved fake in four sentences or fewer.

CASE 05

The Radio Contest Cheat

STARTS P. 73 · 2 SESSIONS · SKILLS: TIME ZONES, ORDERING EVENTS, READING PRINTED LOGS

Objective: Students convert between time zones to put events in the right order and expose a timing trick.

Hook (5 min): Ask: "If it is 3 PM here and London is 5 hours ahead, what are people in London doing right now?"

During (safe while solving):

- Convert the London time on the email to local time. Was it before or after the contest started?
- When was the sealed envelope actually opened?
- Which machine printed the question, and at what time?

After the solution (spoilers):

- The DJ did use email that evening. Why didn't that make her guilty?
- How would you design a contest that can't be cheated this way?

Writing prompt: Write five rules for a fair radio call-in contest and explain the one that matters most.

CASE 06

The Founder's Vault

STARTS P. 91 · 3 SESSIONS · SKILLS: CIPHERS, TIMETABLES AND TICKETS, EVERY EARLIER SKILL

Before you start: Students need the six postcard letters (codename strip, p. 4) to open the vault.

Objective: Students combine evidence from all six cases, check a travel "alibi" against a timetable, and open the vault cipher.

Hook (5 min): Show a train or bus ticket. Ask: "Does having a ticket prove you made the trip?"

During (safe while solving):

- What time did the clock show in the 1996 photo, and what does it show now?
- Do initials on a tool prove who used it?
- What does a stamp on a ticket prove, and what doesn't it prove?

After the solution (spoilers):

- Anika Kapoor was blamed for 30 years. What do the crew and the Society owe her?
- How did Kestrel use other people to do his work?

Writing prompt: Write the Society's letter to Anika Kapoor: what was found, what was wrong, and an invitation home.

DETECTIVE NOTES

Detective name: _____ Case: _____ Date: _____

Exhibit	One fact I am SURE of (with page number)	Code letter
1		
2		
3		
4		
5		
6		
7		

Code word: ___ ___ ___ ___ ___ ___ ___

Suspect	Why they COULD have done it	Why they COULDN'T (proof + page)

My accusation: _____ did it.

My best proof (page ___):

_____

Something I thought at first that turned out WRONG:

_____

What the evidence does NOT prove:

_____

CLASS TRACKER

Mark ✓ when a group cracks the code word with no hint, or H with a hint. Use the Postcard letters column for the book's running mystery.

Group / student	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Postcard letters	Quick Cases (of 12)	Exam (of 10)

Ranks: Exam ranks (p. 127): 9–10 Master Detective · 7–8 Senior · 5–6 Detective · under 5 Rookie. Students write their rank on the License (p. 109).

WHERE TO FIND THE ANSWERS

Every answer is in the book, with the full reasoning, so this guide points you to the right page instead of repeating it. Each solution page gives the culprit, the code word, the Master answers and "what the evidence does not prove."

Case	Title	Solution in the book
01	The Photo with a Hole	p. 114
02	The Midnight Train	p. 116
03	The Prize Recipe Swap	p. 118
04	The Scoreboard That Lied	p. 120
05	The Radio Contest Cheat	p. 122
06	The Founder's Vault	pp. 124–125

Everything else:

- The codename and vault: Case 6 solution, pp. 124–125
- Quick Case answers: p. 126
- Exam answers and ranks: p. 127
- Rookie pages and skills: cheat sheet, p. 112

Tip: read each solution page yourself before the lesson, so you can nudge groups without giving the answer away.

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