

It was a dark and stormy afternoon at our school. Seventh grade students were returning from lunch. Mr. G sat on his stool with a fresh stain of spaghetti sauce on his shirt.

“Mmmmm, what a delicious lunch I just had!” Mr. G exclaimed. “I’m completely stuffed. How was school lunch today?” His students looked at him like he was crazy.

Suddenly, Ms. K knocked at the door. She whispered to Ms. S, “Has anyone seen Ms. C’s lunch? She had spaghetti and meatballs, but it seems to have gone missing.”

Ms. S thought for a moment, going back in her memory to think if she had seen anything. She turned to Mr. G and asked, “Mr. G, did you see anything? I think you were in Ms. C’s room just before lunch started.”

Mr. G widened his eyes a little and quickly said, “no.” He stood up quickly, knocking his lunch box off of the table. When it hit the floor, a sandwich and an apple rolled out. Mr. G scanned the room, then asked the students, “Does anyone know anything about Ms. C’s missing lunch?”

## The Case of the Missing Meatballs

# Scientific Explanations

- Claim
  - ▣ Answers the question
- Evidence
  - ▣ Facts, observations, and data
  - ▣ At least three pieces
  - ▣ Specific and relevant
- Reasoning
  - ▣ Explain why the evidence supports your claim

# The Case of the Missing Meatballs

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- Claim:
  - Mr. G stole Ms. Cs lunch!!

# The Case of the Missing Meatballs

- Evidence:
  - Spaghetti sauce stain
  - Mr. G says he is full
  - Mr. G was in Ms. C's room at the beginning of lunch
  - Mr. G's lunch box still had a sandwich and an apple in it

# The Case of the Missing Meatballs

- Reasoning:
  - ▣ Mr. G says he is full, but he didn't eat the lunch he packed.
  - ▣ He has a spaghetti sauce stain on his shirt, and Ms. C's lunch was spaghetti and meatballs.
  - ▣ Mr. G was in Ms. C's room at the start of lunch time, when her lunch was stolen.

# The Case of the Missing Meatballs

## Response #1:

Mr. G stole Ms. C's lunch! He has a spaghetti sauce stain on his shirt. He says he is full. He was in Ms. C's room when her lunch was stolen!! And his lunch is still in his lunch box. So he took it!!!

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Where's the Reasoning??

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## Response #2:

Mr. G stole Ms. C's lunch! He has a spaghetti sauce stain on his shirt. Ms. C's lunch was spaghetti and meatballs, which matches the stain, so Mr. G must've eaten it!

# The Case of the Missing Meatballs

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Is this enough evidence??

# The Case of the Missing Meatballs

## Response #3:

Mr. G stole Ms. C's lunch! He has a spaghetti sauce stain on his shirt. He says he is full. He was in Ms. C's room at the start of lunch time, and his lunch is still in his lunch box. He was in her room when her lunch was taken, and his stain matches the spaghetti and meatballs. He said he was full, so he must have eaten something, but he still has his sandwich and apple in his lunch bag! Clearly, he stole and ate Ms. C's lunch.

# The Case of the Missing Meatballs

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