

HOW TO SOLVE HEISTOGRAMS: THE M.O.M. METHOD

Atlas Salta is a world-famous heistologist. That means he's an expert in heists of all types. Even though he's only 12 years old, he has solved hundreds of heists thanks to M.O.M.

Yeah, he thinks he has the most fantastic mother in the world. But that's not what he means in this case. M.O.M. is what he calls his simple, logical method for solving heists. It stands for:

Mean, **O**ppportunity, **M**otive

It's the same method that police all over the world use to solve crimes, but boiled down into a simple, straightforward three steps.

When Atlas arrives at the scene of a heist, he asks the police for their list of suspects and as many details about each suspect as they have available. He then applies M.O.M. to narrow down the suspects one by one until he has his crook.

Typically, he begins with **Means**. That refers to each suspect's tools, resources, and general ability to pull off the heist.

Let's say there are five suspects: A, B, C, D, and E.

And let's say the police have identified four means or tools that they think could have been used for the heist. We'll call those hammer, gum chewing (a sure sign of criminal activity!), cunning, and the ability to hold one's breath for a long time (for an underwater heist, of course).

Atlas then creates a grid where he puts all the suspects along the top and all the Means along the left side. Then using what he knows about each suspect and additional clues provided by the police, he begins to match each suspect to their means.

Let's say that he knows from the clues and evidence that suspect C does indeed own a hammer. Atlas then puts a checkmark in the top row, middle box corresponding to C and Hammer. Once he knows suspect C has a hammer, that's enough evidence to keep C in the suspect pool. So Atlas can put X's in the other boxes of column C for the other Means.

	A	B	C	D	E
HAMMER	✗	✗	✓	✗	✗
GUM CHEWING			✗		
CUNNING			✗		
HOLDING BREATH			✗		
RESULT					

Also, since each Means can only belong to one suspect, he can put X's in the rest of the Hammer row beneath the other suspects.

Atlas then continues to work through the clues and evidence until the white squares in his grid are completely filled. Then as a last step, he checks each column. If there is a checkmark anywhere in that column, he adds a checkmark to the blue Result square at the bottom.

	A	B	C	D	E
HAMMER	✗	✗	✓	✗	✗
GUM CHEWING	✗	✗	✗	✗	✓
CUNNING	✗	✓	✗	✗	✗
HOLDING BREATH	✓	✗	✗	✗	✗
RESULT	✓	✓	✓	✗	✓

That means the suspect remains in the suspect pool for the next round. If a suspect has only X's in his or her column, then that

suspect is removed for the next round. So based on this result, Suspect D is released from suspicion and free to go.

Atlas then repeats this same process for next two steps of M.O.M.—**Opportunity** and **Motive**. With each step, he removes ONE suspect. The only difference is that the Motive step doesn't have a Result row because the final suspect identified in that step is the culprit!

Here's what that looks like below. Let's say Atlas suspects this particular heist is motivated by Money. That means Suspect C below is the one who committed the heist because the evidence and clues point to that being this suspect's motive.

	A	B	C
MONEY	✗	✗	✓
PRIDE	✗	✓	✗
FUN & GAMES	✓	✗	✗

And that's it! You'll apply this framework to investigate each heist and identify the guilty party. It won't always be easy, but with practice you'll soon be ready to join Atlas as he travels around the world solving heists as the next famous heistologist!