



Professor Noah Lott, and his faithful laboratory assistant, Ivana Nowe, were diligently working late one night on a project for the World Health Organization. Prof. Lott had recently been given a grant for 300 billion dollars to develop one vaccine that would immunize the world for all the most dreaded diseases known to mankind. Lott's idea was to make this vaccine available to the world's population at an affordable price to prevent the spread of global biological warfare.

Suddenly, Prof. Lott heard a loud crash out in the hallway. He told Ivana to "stay put" while he went out to investigate. As he stepped out of the lab he was knocked out cold by a blow to the head. When he awoke he returned to the lab only to discover Ms. Nowe and all of his notes gone. He immediately called the police to report the incident. Shortly thereafter detective G. Heesegood, and Officer Gettarest arrive on the scene.

After questioning Professor Lott they came to the conclusion that it was the work of the dastardly Dr. Rick. M. Ortis and his evil

partner Ms. Connie Vore. The pair was known to officials for their pro terrorism tactics. They all agreed if Ortis was able to use Professor Lott's notes and produce the vaccine, he would use it in a plot to dominate the world. Upon conducting a thorough search of the lab they found a note that confirmed their suspicions.



Professor Noah Lott



Assistant Ivana Nowe



Detective G. Heesegood



Officer Getta Rest



Doctor Rick M. Mortis



Ms. Connie Vore

The ransom note read as follows:

**OK LOTT, IF YOU THINK YOU ARE SOOO SMART.  
USE YOUR BRAIN TO FIGURE THIS ONE OUT. IF YOU FAIL YOU  
WILL NEVER SEE YOUR LOVELY ASSISTANT AGAIN!  
BE PREPARED TO PAY!!!  
MORE INFORMATION WILL BE COMING, BUT TIME IS SHORT.  
YOURS TRULY,  
DR. RICK M. ORTIS**

You have received a chart just like the one that was enclosed with the note.

Use the following web sites to complete the missing information in the chart.

[www.periodictable.com](http://www.periodictable.com) - Periodic Table

[www.chemforkids.com](http://www.chemforkids.com) - Chemistry for Kids

[www.chemicalelements.com/show/name.html](http://www.chemicalelements.com/show/name.html) - Chemical Elements

Prof. Lott assured Det. Heesegood that he would cooperate fully and got to work on the chart right away.

Several hours later, Prof. Lott had finished the chart and the three of them were pondering how the information could give them any clue as to where Ms. Nowe was being held and any demands that Ortis was requesting. Then, an envelope mysteriously slid under the door. Heesegood opened it up carefully and this is what it said.

**I HOPE YOUR FINISHED, BECAUSE IF YOUR NOT,  
SHE WILL BE!!!**

**USE THE FOLLOWING CLUES AND THE  
INFORMATION THAT YOU HAVE GATHERED TO  
GET THE TERMS OF HER RELEASE. BRING 100  
BILLION DOLLARS TO THE LOCATION AT 11:53  
P.M. SHARP!!!  
DON'T BE LATE!!!!!!!**

**YOURS TRULY,  
DR. RICK M. ORTIS**

You have received a copy of the enclosed paper that came along with the note; use the following clues for the correct element symbols and your chart to get the location and instructions for Ivana's release.

1. Atomic number is 102
2. Atomic mass is 208.98
3. 4 neutrons
4. 58 protons
5. Sulfur
6. Atomic mass 4.00
7. Atomic number 53
8. 16 electrons
9. Atomic mass 114.82

10. 56 protons
11. Atomic mass 12.011
12. Potassium
13. 8 neutrons
14. Atomic number 9
15. Atomic mass 20.179
16. 42 electrons
17. Atomic number 16
18. Gallium
19. Atomic mass 226.025
20. 32 protons
21. Oxygen
22. Atomic number 7
23. Atomic mass 51.996
24. Atomic number 8
25. 74 electrons
26. 57 protons
27. Atomic number 10
28. Plutonium
29. Atomic mass 168.934
30. 8 electrons
31. Neon
32. Atomic number 39
33. 4 protons
34. 0 neutrons
35. Atomic mass 126.9045
36. Neodymium
37. Atomic number 88
38. Atomic mass 140.12
39. 20 protons
40. Radon
41. 92 electrons
42. Atomic mass 54.938
43. Atomic number 5
44. Erbium
45. 52 electrons
46. Atomic mass 14.0067

Prof. Lott followed the directions and soon discovered the where he was to bring the money and recover Ms. Nowe. Det. Heesegood wanted to stake the area out, but Prof. Lott would not allow it, he said that “he had everything under control.” Prof. Lott followed the instructions to the letter and was able to recover Ivana, Dr. Ortis got neither his notes nor the cash and the police where not involved. How did he do it?

Write an essay about how you think Prof. Lott was able to accomplish getting Ivana back, not using the police and Ortis coming away with nothing but his freedom.

You will be graded as follows:

Up to

30 points for completing the chart

20 points for finishing the instructions

50 points for an essay with a CREATIVE solution, (at least 5 paragraphs).

Remember Prof. Lott is a Chemist.

Credits

All images where found on Google.com