**Balancing Worksheet From The Future - KEY**

On February 14, 2023, Mr. Guch was writing a balancing equations worksheet. Bored with the whole process and finding that he was just writing the same equations that he’d written a million times, he got the idea to use an artificial intelligence program to write the sheet for him. Typing “10 equations for balancing” into the ChatGPT prompt, he was given ten unbalanced equations for his worksheet.

Unfortunately, the equations were, in many cases, unbalanceable. In most of the few cases that could be balanced, the equations were so difficult that they weren’t really appropriate to give for practice. As a result, Mr. Guch threw out the problems given to him by ChatGPT and just wrote another ten equations on his own. These are those ten equations.

1. 2 H2 + 1 O2 → 2 H2O
2. 2 Na + 1 Br2 → 2 NaBr
3. 1 Fe + 2 HBr → 1 FeBr2 + 1 H2
4. 1 C3H8 + 5 O2 → 3 CO2 + 4 H2O
5. 1 Mg + 2 HI → 1 MgI2 + 1 H2
6. 2 NH4OH+ 1 H2SO4 → 1 (NH4)2SO4 + 2 H2O
7. 2 KBrO3 → 2 KBr + 3 O2
8. 1 C2H4 + 3 O2 → 2 CO2 + 2 H2O
9. 1 Pb(NO3)2 + 2 KI → 1 PbI2 + 2 KNO3
10. 1 NaHCO3 + 1 HF → 1 NaF + 1 CO2 + 1 H2O