You watch as the last bar dissolves into a puddle of silvery goo with a satisfying hiss. Your plan worked! The cat burglar helps you all up onto the ledge and through the window with ease. You’re careful to step over the pools of metal and acid that are dribbling out the window and down the wall. Once inside, the three of you become shadows rushing down the hallway. Plush carpeting masks the sound of your hurried steps as you dodge strategically placed security cameras. In the next hallway, you all start feeling the wall for the secret door. The cat burglar lets out a quiet cheer as they press a small indentation in the wall and a panel door pops open. The hacker hurries over; it’s their time to prove themself. They have to correctly input all the codes to override the security system and input their looped footage for the security cameras. Since it is a science museum, all the codes are science based. Hopefully you all remember grade 10 chemistry!

Code 1: \_\_\_\_ Fe + \_\_\_\_ AgNO3 → \_\_\_\_ Fe(NO3)2 + \_\_\_\_ Ag

Code 2: \_\_\_\_ Mg(OH)2 + \_\_\_\_ H3PO4 → \_\_\_\_ H2O + \_\_\_\_ Mg3(PO4)2

Code 3: \_\_\_\_ V2O5 + \_\_\_\_ CaS → \_\_\_\_ CaO + \_\_\_\_ V2S5

Code 4: \_\_\_\_ BaCl2 + \_\_\_\_ Na2SO4 → \_\_\_\_ NaCl + \_\_\_\_ BaSO4