Mathletes Problem of the Week #21

A Spelling Problem
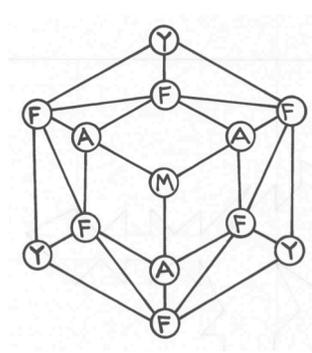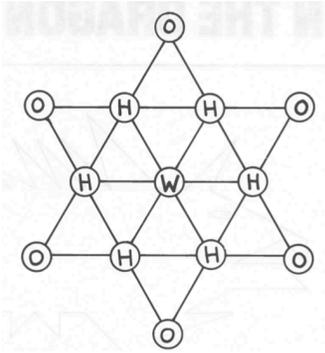
This week we will explore some **counting problems**. These sorts of problems ask how many different possible ways there are to achieve a certain outcome. All of our counting problems will involve spelling out specific words. Have fun!

a) In the star above, if you start at the W in the center and work outwards, in how many ways can you spell WHO?
b) In the hexagon above, if you start at the M and work outwards, in how many ways can you spell MAFFY?
c) In the first grid below, how many paths can you find that spell ROTOR? A path can begin in any R square and can return to a square more than once.
d) In the second grid below, how many paths can you find that spell BANANA? Each path will begin in the B square in the upper left. You may return to a square more than once.

Solutions & Explanations: (Try one or try them all! Record your answers below, on the back or a separate sheet of paper.)

Name _____   **Class** _____

(First and last name, please!)   **Solutions due: May 22nd**