Name _____   Date _____

Permutations and Combinations - Matching Worksheet

Match the word problems to their answers. Write the letter of the answer that matches the problem.

_____ 1. How many different ways can you have 1st, 2nd, 3rd, and 4thin a race with 10 runners?   a. 12

_____ 2. How many different combinations of management can there be to fill the positions of manager, sectary and advisor of a company knowing that there are 12 eligible candidates?   b. 30

_____ 3. How many different words can we make using the letters S, H, A and L? This assumes every combination possible is a word.   c. 72

_____ 4. Robin has 5 different pairs of shoes that match with 6 different pair of socks. How many shoes -and- socks combinations can he make if he selects one pair of shoes and one pair of socks?   d. 5040

_____ 5. Ginny has 6 water colors (red, green, blue, yellow, black and orange). In how many different orders can the different water color appear?   e. 40320

_____ 6. How many different sandwiches can be made with 6 packets of bread, 4 packets of cheese, and 3 packets of potato if one choice is selected from each category?   f. 720

_____ 7. How many 2-digit numbers can you make using the digits 1, 2, 3 and 4 without repeating the digits?   g. 24

_____ 8. Eva has 8 glasses of water. In how many different orders can the glasses of water be arranged?   h. 1320