

A CHALLENGE: PERMUTATIONS

- 1) There are 11 chairs in a row. In how many ways can 5 people be seated if they sit in consecutive seats?**

- 2) There are 5 different red books, 3 different blue books, and 3 different yellow books. How many ways can they be arranged on a shelf if the same colored books are kept together?**

- 3) If all the letters in the word BARRIER are rearranged find the number arrangements beginning with exactly one R.**
(meaning no words have RR to start)

- 4) Eight boys are to be arranged in a row. Two boys are not allowed to sit together nor are they allowed to sit at either end of the row. How many ways can this be done?**

- 5) How many 4-digit numbers greater than 5364 are possible using the digits 1,2,3,5,7,8?**