1. Suppose you have a huge box of animal crackers containing a plenty of each of 10 different animals. For the counting questions below, carefully examine their similarities and differences, and then give an answer. The answers are all one of the following.

   A. $P(10,6)$ B. $\binom{10}{6}$ C. 10^6 D. $\binom{15}{9}$

   (a) How many animal parades can you line up containing 6 crackers?

   (b) How many animal parades of 6 crackers can you line up so that the animals appear in alphabetical order?

   (c) How many ways could you line up 6 different animals in alphabetical order?

   (d) How many ways could you line up 6 different animals if they can come in any order?

   (e) How many ways could you give 6 children one animal cracker each?

   (f) How many ways could you give 6 children one animal cracker each so that no two kids get the same animal?

   (g) How many ways could you give out 6 giraffes to 10 kids?

   (h) Write a question about giving animal crackers to kids that has the answer $\binom{10}{6}$.