* The Chi-Squared Goodness-of-Fit Test
  + Role of chance in producing deviations between observed and expected values
  + Provides information about how well observed values fit expected values
  + Indicates probability that difference between observed and expected is due to chance
  + Null hypothesis: chance alone is responsible for any deviations between expected and observed
    - If probability is high, do not reject null hypothesis
    - If not, some significant factor produced deviation
  + Determine expected results, then observed results
    - X2 = ∑[(observed - expected)2/expected]
    - Degrees of freedom = n-1 where n = expected phenotypes
    - If P < 0.05, a significant difference exists betwene observed and expected values.