

Carefully read the description of the experiment below. Be prepared to answer the questions that follow the design description as a class quiz.

A 35-day feeding trial with Hubbard broilers (i.e. chickens) was carried out to evaluate the performance, nutrient utilization and organ characteristics of broilers fed *Microdesmis puberula* leaf meal at dietary levels of 0, 10 and 15%, respectively. *Microdesmis puberula* is a browse plant indigenous to Nigeria that is preferred by some ruminants, especially goats. The current study examines its suitability as a feed supplement for chickens.

One hundred and eighty, 5-week-old Hubbard broiler chicks were randomly assigned to 6 m × 8 m cages with 20 birds per cage. Each of the three diets was randomly assigned to 3 cages, giving a total of 60 birds in 3 cages receiving each diet. Feed and water were provided *ad libitum*. Feed intake was recorded daily and the birds were weighed weekly. Other routine poultry management procedures were maintained.



The feeding trial lasted 35 days.

At the end of 35 days a final body weight was determined and recorded for each bird individually. The variable of interest is the final body weight for each chicken at the end of the 35 day experiment.

Answer choices:	(A) percent leaf meal	(B) body weight	(C) chicken
	(D) cage	(E) feeding trials	(F) day

Name _____ **Quiz Number** ____ **Date** ____ / ____ / **2012**

Circle the appropriate letter for each question.

- 1) What is the experimental unit for this experiment? A B C D E F
- 2) What is the sampling unit for this experiment? A B C D E F
- 3) What is the dependent variable for this experiment? A B C D E F
- 4) What is the treatment variable for this experiment? A B C D E F
- 5) If the design is RBD, what are the blocks? A B C D E F NA
- 6) Does it seem more likely that the treatments are fixed or random? (A) fixed (B) random
- 7) What is the treatment arrangement for this experiment? (A) single factor (B) factorial (C) nested
- 8) What is the experimental design? (A) CRD (B) RBD (C) LSD (D) Split-plot (E) Repeated Measures
- 9) The treatment degrees of freedom are _____ .
- 10) The degrees of freedom for the error used for testing treatments are _____ .