

Name: \_\_\_\_\_

Hour: \_\_\_\_\_

## Balancing Ration Lab

Objective: Compare and contrast the visual and palatable feedstuffs of a ration using a Pearson Square. Student will balance a ration using Pearson Square, create a ration feed mix using cereal, and draw a feed label.

Supplies:

- Corn Flakes (Corn Feed)
- Mini Wheats (Wheat Straw Feed)
- Granola (Oats Feed)
- M&Ms (Granular Molasses Feed)
- Rice Krispy (Wheat Grain Feed)
- Sandwich Baggie
- Index Card
- Colored Pencils
- Scale

1. Balance a ration using the Pearson Square. The ration needs weigh 1300 pounds with 23% protein. Balance the ration using the most cost effective feedstuff.

a)Feed options include:

Feed	Crude Protein	Cost (\$)
Corn	11.7	.32
Wheat Straw	8.9%	.11
Oats	25.9%	.85
Granular Molasses	4.3%	.41
Wheat Grain	14.3%	.57

Show Pearson Square work here:

Feedstuff Used _____	Pounds of Feed #1 _____	Cost of Feed #1 _____	Total Cost of Ration _____
Feedstuff Used _____	Pounds of Feed #2 _____	Cost of Feed #2 _____	Cost Per Lb. of Ration _____

2. Have teacher check Pearson Square work and initial here \_\_\_\_\_

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3. Make a feed package label out of an index card using colored pencils. The label must include the following information:
  - a. Name of feed
  - b. Ingredients
  - c. Feeding Directions
  - d. % Protein
  
4. Convert the pounds of feed into grams. Do this by dividing the pounds of each feed by 100.

Feedstuff Used	Pounds of Feed #1	Grams of Feed #1
Feedstuff Used	Pounds of Feed #2	Grams of Feed #2

5. Mix a feed ration using cereal that matches the ration percentage from the Pearson Square. Cereal feedstuff is:
  - a. Corn Flakes = Corn
  - b. Mini-Wheat = Wheat Straw
  - c. Granola = Oats
  - d. Granular Molasses = M&Ms
  - e. Rice Krispy = Wheat Grain
  
6. Measure out the ration in grams using the assigned cereals for the feedstuff.
  - a. Get a cup
  - b. Place it on the scale and "zero it out"
  - c. Measure correct grams of feedstuff #1
  - d. Dump feedstuff #1 into sandwich baggie
  - e. Measure correct grams of feedstuff #2
  - f. Dump feedstuff #2 into sandwich baggie
  - g. Mix the feedstuff by shaking the bag
  
7. Work with a partner to examine and test the palatability of the balanced feed ration. Have partner close eyes, reach in feedbag, take a small handful, and eat part of the ration. Ask partner the following questions (record answers given):

a) What two feedstuffs are in the ration?

1. \_\_\_\_\_

2. \_\_\_\_\_

b) Define palatability:

\_\_\_\_\_

\_\_\_\_\_

c) Describe the feed ration taste and texture:

\_\_\_\_\_

\_\_\_\_\_

d) Would you consider the ration palatable? \_\_\_\_\_

e) What could be done to improve the feed ration's palatability?

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f) Why is palatability important when feeding animals?

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