Make Pig Feed

What will your pig eat?

**Procedure:**

1. Look at the pig feed components listed in the table below. With your partner, discuss how much of each component you think is in a batch of pig feed.

2. Fill in the column labeled “hypothetical” with the amount (in grams) you think is in 20 grams of feed. Remember, the total of all the components should equal 20 grams.

3. Make your feed. Use the measuring boat on each balance to get the ingredients for your feed. Try to get an amount close to your hypothetical, but it does not have to be exact. Record the exact amount (to 0.01 g) of each component in the column labeled “actual”. Mix your feed in the resealable bag. Do remind students that: when balancing for other nutrients, say vitamins and minerals, it is very beneficial to be exact with measurements.

4. Complete the actual column by finding the mass total of the ingredients in your bag.

5. Find the percent by mass of each component and record in the table.

6. Find the mass of each component needed to make one ton (2,000 lbs) of feed. Record in the table.

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| **Feed Components** | **Hypothetical****(240 lb. pig)** | **Actual** **(240lb. pig)** | **Percent by Mass** | **Mass Needed to Make 1 Ton of Feed** |
| Corn Grain – Ground – Fine  |  | 17.8 g | ~89% | 1769.1 lbs |
| Soybean Meal |  | 1.8 g | ~9% | 180.7 lbs |
| Terminal Base |  | .4 g | ~2% | 45 lbs |
| Charger Zyme |  | .01 g (less than one chip) | ~0% | 2 lbs |
| Amino Acids |  | .03 g (less than one chip) | ~0% | 3.2 lbs |
| **TOTAL** | 20.0 grams |  | 100% | 2,000 lbs |