

$$\% \text{ Yield} = \frac{\text{Actual}}{\text{Theo}} \times 100$$

Name: _____ Period: _____

Percent Yield

Calculate the % Yield in each of the following problems. Show all of your work to receive full credit!!!

1. Actual = 24.8 g
Theoretical = 25.0 g
% Yield = _____

2. Actual = 7.2 mol
Theoretical = 8.2 mol
% Yield = _____

3. Theoretical = 187g
Actual = 161g
% Yield = _____

4. A chemistry student makes very precise measurements during an experiment. She already calculated that she should end up with 5.27 grams of her product. After finishing the experiment, she measures her product and gets upset that she only had an 85% yield. How many grams of product did she measure in the lab? (Box your answer.)

$$\frac{85}{100} = \frac{\quad}{5.27}$$

5. Jim is super excited that he correctly used stoichiometry to calculate his theoretical yield of 16.0 grams of product in the lab experiment today. Unfortunately, Jim's lab partner spills some of the reactants, so Jim could only measure 9.5 grams of product when he was done with the experiment. What was Jim's percent yield in the lab?

6. Genius McSmartypants decides he doesn't want to get a bad yield in the lab next week. He knows that perfect is nearly impossible, but he decides to shoot for a 99.9% yield just to show his lab group how precise he can be. He calculates ahead of time exactly how much product he needs to recover from his experiment. If the theoretical calculated yield is supposed to be 48.70 grams of product, how much did Genius calculate that he needs to recover next week?

$$\frac{99.9}{100} = \frac{\quad}{48.70}$$