Production of Magnesium Oxide

Purpose:

Come up with procedure that reliably produces a stoichiometric amount of magnesium oxide produced from the combustion of magnesium metal.

Materials:

Balance	Bunsen Burners	Ring Clamp
Crucible, various sizes	Striker	Magnesium
Crucible Lids	Clay Triangle	
Tongs	Ring Stand	

What you'll turn in (one per group):

1. Calculation for theoretical yield (mass that you expect to get) of magnesium oxide
2. In a paragraph, describe your calculation completely without using numbers. i.e. molar mass, mass of magnesium, conversion factor, unit cancellation, etc.
3. Calculations of percent yield [(mass obtained / mass expected) * 100] from at least three trials
   a) Between each trial write three ideas about how you plan to improve for the next trial
   b) Circle the idea you choose to use.
4. What reactant limits the amount of magnesium oxide that ends up in the crucible?
5. On the other side of the paper, diagram your final setup with enough explanation to allow someone to duplicate the results of your final trial.

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