

# Limiting reagents

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### Lab about limiting reagents

ZnO:

6.01g before 4.10g after 1. Mass of ZnO used:

$$6.11g - 4.10g = 2.01g$$

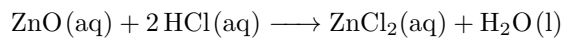
2. Molar mass of ZnO:

$$65.38g/mol + 15.99g/mol = 81.38g/mol$$

3. How many moles of zinc reacted with the HCl?

$$2.01g \div 81.38g/mol = 0.0246mol$$

4. Balance the equation for this experiment



5. Find the number of moles of HCl in

$$\text{HCl} = 1.01g/mol + 35.45g/mol = 36.46g/mol$$

$$\text{HCl} = 20 \div 36.46g/mol = 0.549mol$$

6. Find the number of moles of HCl in

$$\text{HCl} = 0.549mol * 50 = 27.45mol$$