

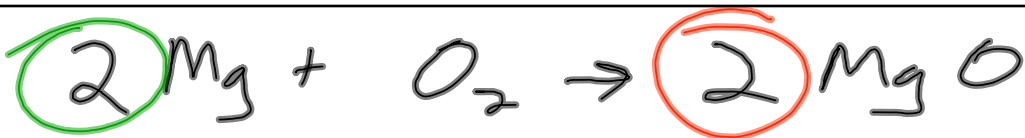
## Mole Ratios



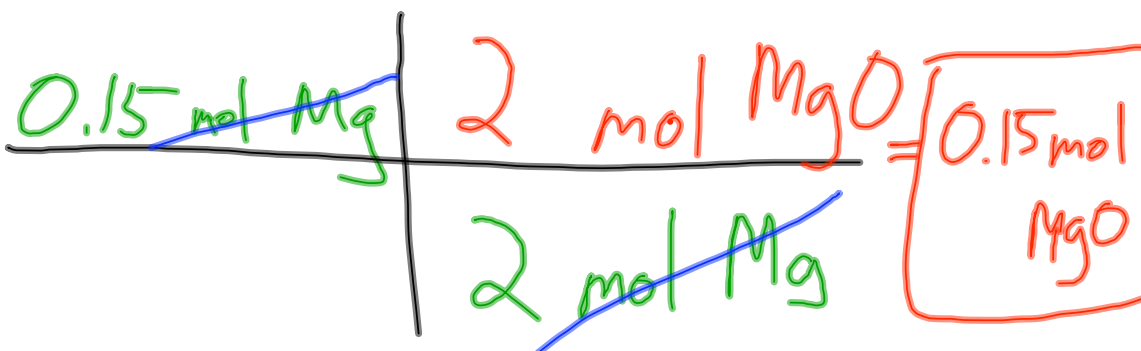
2 atoms Mg    1 molecule O<sub>2</sub>    2 formula units MgO

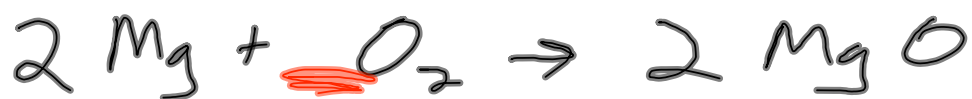


We use mole ratios to convert between different chemicals in the same reaction.



<sup>given</sup>  
0.15 mol Mg = ? mol MgO





given  
 $0.15 \text{ mol Mg} = ? \text{ mol O}_2$

<del>0.15 mol Mg</del>	1 mol O <sub>2</sub>	= 0.075 mol O <sub>2</sub>
<del>2 mol Mg</del>		

### Mole Ratios



2 atoms Mg + 1 molecule O<sub>2</sub> → 2 formula units MgO



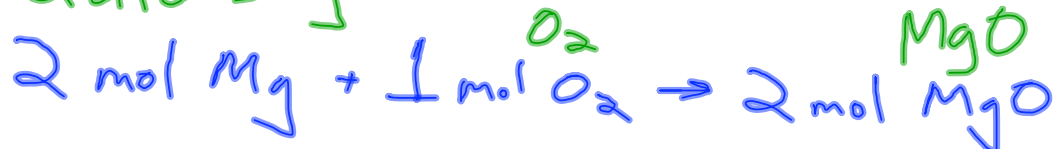
$0.34 \text{ mol Mg} = ? \text{ mol MgO}$

<del>0.34 mol Mg</del>	2 mol MgO	= 0.34 mol MgO
<del>2 mol Mg</del>		

# Mole Ratios



2 atoms Mg + 1 molecule  $\rightarrow$  2 formula units MgO



$$0.34 \text{ mol Mg} = ? \text{ mol MgO}$$



$$0.34 \text{ mol Mg} = ? \text{ mol MgO}$$

$$\frac{0.34 \text{ mol Mg}}{2 \text{ mol Mg}} \times \frac{2 \text{ mol MgO}}{2 \text{ mol Mg}} = 0.34 \text{ mol MgO}$$

$$0.34 \text{ mol Mg} = ? \text{ mol O}_2$$

$$\frac{0.34 \text{ mol Mg}}{2 \text{ mol Mg}} \times \frac{1 \text{ mol O}_2}{2 \text{ mol Mg}} = 0.17 \text{ mol O}_2$$

$$0.34 \text{ mol Mg} \times \frac{\text{mol O}_2}{\text{mol Mg}}$$

mole ratio!

## Mole Ratios

