



0.10 mol HCl

$$1.2\text{g Mg} \times \frac{\text{mol}}{24.31\text{g}} = \underline{0.049\text{mol}}$$

Flask 1

0.6g Mg

2.4g Mg

$$0.049\text{mol Mg} \times \frac{1\text{mol MgCl}_2}{1\text{mol Mg}} = \underline{0.049\text{mol MgCl}_2}$$

$$0.1\text{mol HCl} \times \frac{1\text{mol MgCl}_2}{2\text{mol HCl}} = \underline{0.050\text{mol HCl}}$$