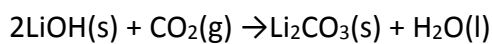


## Answer on Question #63895 - Chemistry – General Chemistry

How many grams of carbon dioxide can be absorbed by 5.00 g of lithium hydroxide?

**Solution.**



$$M(\text{LiOH}) = 7 + 16 + 1 = 24 \text{ g/mol}; M(\text{CO}_2) = 12 + 2 \times 16 = 44 \text{ g/mol}$$

$$2 \text{ mol LiOH} - 1 \text{ mol CO}_2$$

$$(2 \times 24) \text{ g LiOH} - 44 \text{ g CO}_2$$

$$5.00 \text{ g LiOH} - x \text{ g CO}_2$$

$$x = 5 \times 44 / 48 = 4.58 \text{ g CO}_2$$

**Answer:**  $m(\text{CO}_2) = 4.58 \text{ g}$