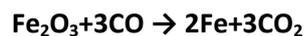


#81369 Chemistry, Other



How many grams of Iron can be produced from 10.50 g of Fe_2O_3 ?

Answer:

$$n(\text{Fe}) = 2 \times n(\text{Fe}_2\text{O}_3)$$

$$n = m/M$$

$$M(\text{Fe}_2\text{O}_3) = 159.8 \text{ g/mol}$$

$$n(\text{Fe}_2\text{O}_3) = 10.50/159.8 = 0.07 \text{ mol}$$

$$n(\text{Fe}) = 2 \times 0.07 = 0.14 \text{ mol}$$

$$m(\text{Fe}) = n \times M$$

$$M(\text{Fe}) = 55.8 \text{ g/mol}$$

$$m(\text{Fe}) = 0.14 \times 55.8 = 7.8 \text{ g}$$

Answer provided by www.AssignmentExpert.com