#81369 Chemistry, Other

$Fe_2O_3+3CO \rightarrow 2Fe+3CO_2$
How many grams of Iron can be produced from 10.50 g of Fe_2O_3?

Answer:
n (Fe) = 2 x n (Fe_2O_3)
n = m/M
M (Fe_2O_3) = 159.8 g/mol
n (Fe_2O_3) = 10.50/159.8 = 0.07 mol
n (Fe) = 2 x 0.07 = 0.14 mol

m (Fe) = n x M
M (Fe) = 55.8 g/mol
m (Fe) = 0.14 x 55.8 = 7.8 g

Answer provided by www.AssignmentExpert.com