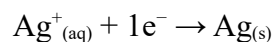
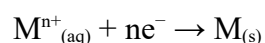


Problema891: Cando se fai pasar certa cantidade de corrente a través dunha disolución de AgNO_3 , depositáanse 2g de prata no cátodo. Cantos gramos de chumbo depositaranse se se fai pasar a mesma cantidade de electricidade a través dun disolución de PbCl_2 ?



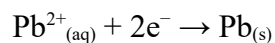
Deducimos a expresión que nos dá a masa depositada nun eléctrodo:



$$\frac{N^\circ \text{ moles de } e^-}{N^\circ \text{ moles M}} = \frac{n}{1} = \frac{\frac{Q}{F}}{\frac{m}{M_m}}$$

$$m = \frac{M_m \cdot Q}{n \cdot F} = \frac{M_m \cdot I \cdot t}{n \cdot 96500}$$

$$Q = \frac{m \cdot n \cdot 96500}{M_m} = \frac{2 \text{ g} \cdot 1 \cdot 96500 \text{ C}}{107,9 \text{ g/mol}} = \underline{1788,7 \text{ C}}$$



$$m = \frac{M_m \cdot Q}{n \cdot F} = \frac{207,2 \text{ g/mol} \cdot 1788,7 \text{ C}}{2 \cdot 96500} = \underline{1,92 \text{ g Pb}}$$