Electrolysis exam style

1. What is meant by the term electrolysis? 2. What name is given to a negative ion? 3. Suggest a suitable material for the electrodes in electrolysis. 4. Molten aluminium oxide was electrolysed. State what would be observed at each electrode and give the half equations for the reactions occurring. 5. An aqueous solution of magnesium sulfate was electrolysed. State what would be observed at each electrode and give half equations for the reactions occurring.