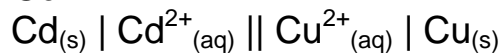


## Electrochemical Cells

Fully *label* each cell, write the *half reactions* and *overall reaction*, and use the *cell voltage* to predict whether the reaction is *spontaneous* or *nonspontaneous*:

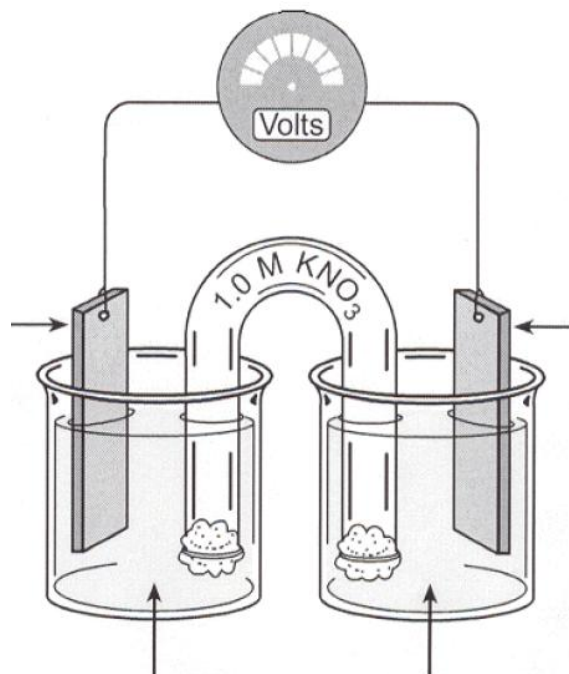
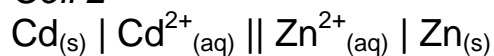
**Cell 1**
 $E^\circ$ 

Oxidation:

Reduction:

Overall:

spontaneous or nonspontaneous

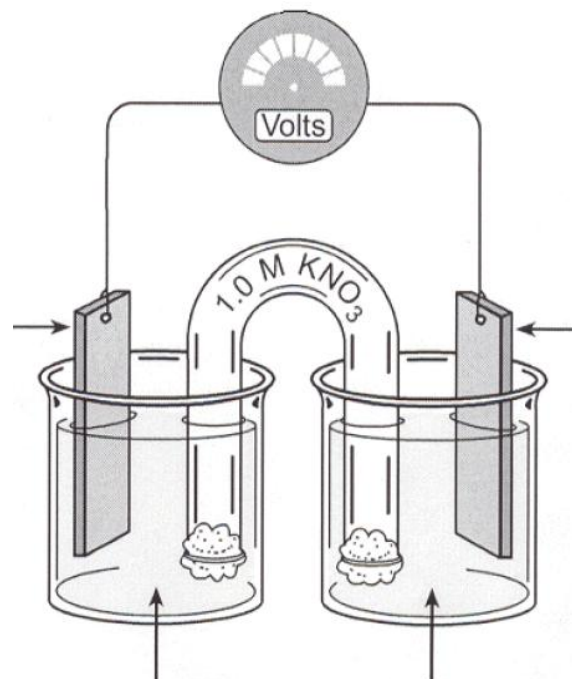
**Cell 2**
 $E^\circ$ 

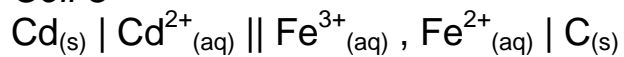
Oxidation:

Reduction:

Overall:

spontaneous or nonspontaneous



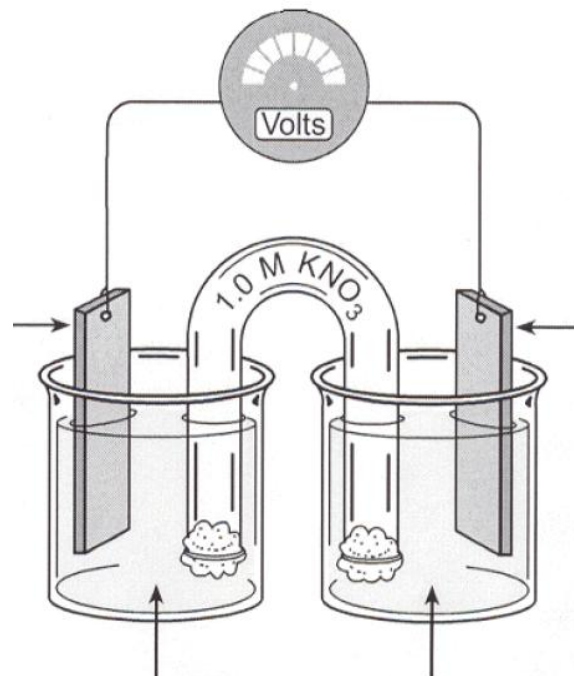
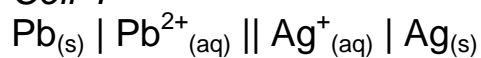
**Cell 3** $E^\circ$ 

Oxidation:

Reduction:

Overall:

spontaneous or nonspontaneous

**Cell 4** $E^\circ$ 

Oxidation:

Reduction:

Overall:

spontaneous or nonspontaneous

