Explain why, in galvanic cells, the cathode is positive?	Galvanic cells spontaneously produce electricity. The negative electrode acquires electrons that are lost from metal atoms as they become positive ions. This is oxidation (LEO). Thus, the negative electrode is the anode (the anode, by definition is the site of oxidation). If the negative electrode is the anode, then the positive electrode must be the cathode.
Diagram the Zn-Cu galvanic cell. List all important aspects of the cell.	$A^{-} = anion movement in salt bridgeC^{+} = cation movement in salt bridge$
What is a salt bridge? What is its function?	A salt bridge is a connection between the two half cells of a galvanic cell. It contains ions (e.g. K^+ and NO_3^-). The ions are essential to the function of the galvanic cell. As the half-cell ions decrease or build up, the ions of the salt bridge move into the half-cells to maintain electric neutrality.

Define cell potential.	The maximum emf (electrical force in volts) of a galvanic cell.
How can cell potential be increased?	By increasing the concentration of ions in half-cells, changing the
-	composition of electrodes, or by connecting half-cells in series.
How can the direction of electron	By referring to a chart of standard reduction potentials.
flow between half-cells be	
predicted?	
What is meant by reduction	The tendency of a half-cell to attract electrons (i.e. the tendency to
potential?	be reduced).
What is meant by standard reduction	The reduction potential of a half-cell under standard conditions
potential? How is it symbolized?	(25°C, 1 atm, and ions at a concentration of 1 <i>M</i>). Symbol: E°
Why can't standard reduction	Half-cells do not conduct electricity until combined with another
potentials be measured? How is this	half-cell. Thus, standard reduction potentials are expressed
problem overcome?	relative to a reference electrode (the hydrogen/platinum electrode).
Give the half reaction for the	$2\mathrm{H}^{+}(\mathrm{aq}) + 2\mathrm{e}^{-} \leftrightarrow \mathrm{H}_{2}(\mathrm{g})$
hydrogen reference electrode.	
>What is the significance of \leftrightarrow	The reaction could proceed in either direction, depending on
	whether the reaction is oxidation or reduction. Note: it does not
	mean that an equilibrium exists.
What is a cell potential? Give its	A cell potential is the potential difference between two half-cells.
symbol.	In other words, it is the magnitude of difference between standard
	reduction potentials. Symbol: E°_{cell}
Give the equation for calculating cell	$E^{\circ}_{\text{cell}} = (E^{\circ} \text{ of reduction}) - (E^{\circ} \text{ of oxidation})$
potential.	
> What is an easy way to remember	$E^{\circ}_{\text{cell}} = (\text{larger } E^{\circ}) - (\text{smaller } E^{\circ})$
this equation?	In other words, E°_{cell} is always positive.