

CHAPTER 6	Properties of Strong and Weak Acids and Bases	BLM 6.2.4
ASSESSMENT		

1. Fill in the chart of expected results for acids that all have a concentration of 0.1 mol/L.

Acid	Chemical formula	pH (slightly less than 7 or much less than 7)	Conductivity (high or low)	Reactivity with magnesium metal (high or low)
hydrochloric acid				
ethanoic acid				
boric acid				
hydrofluoric acid				
sulfuric acid				
	HClO ₄ (aq)			
	H ₃ PO ₄ (aq)			
	HBr(aq)			
	H ₂ SO ₃ (aq)			

2. Two different acidic solutions have a concentration of 0.1 mol/L. Solution A conducts electricity extremely well, while solution B conducts very poorly. Which of the solutions will have a lower pH? Explain using a description of what is happening on a molecular level.
3. You have two basic solutions. One has a concentration of 1.0 mol/L and one has a concentration of 0.1 mol/L. You know one is a strong base and one is a weak base. Can you determine which solution is which based on pH? If so, explain how. If not, explain why not.