

# Enthalpy Calorimetry

## Chem Worksheet 16-4

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Name \_\_\_\_\_

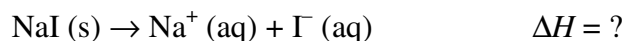
1. When a 12.8-g sample of KCl dissolves in 75.0 g of water in a calorimeter, the temperature drops from 31.0°C to 21.6°C. Calculate  $\Delta H$  for the process



2. What is the final temperature of the solution formed when 0.75 g of  $\text{KMnO}_4$  is added to 85.5 g of water at 13.2 °C in a calorimeter?



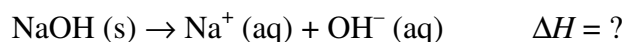
3. When a 25.7-g sample of NaI dissolves in 80.0 g of water in a calorimeter, the temperature rises from 20.5°C to 24.4°C. Calculate  $\Delta H$  for the process



4. What is the final temperature of the solution formed when 1.45 g of KOH is added to 42.8 g of water at 17.2 °C in a calorimeter?



5. When a 16.9-g sample of NaOH dissolves in 70.0 g of water in a calorimeter, the temperature rises from 22.4°C to 86.6°C. Calculate  $\Delta H$  for the process



6. What is the final temperature of the solution formed when 1.52 g of NaOH is added to 35.5 g of water at 20.1 °C in a calorimeter?



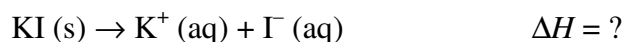
7. When a 19.2-g sample of KCN dissolves in 65.0 g of water in a calorimeter, the temperature drops from 28.1°C to 15.4°C. Calculate  $\Delta H$  for the process



8. What is the final temperature of the solution formed when 6.85 g of  $\text{Ba(OH)}_2$  is added to 15.5 g of water at 17.1 °C in a calorimeter?



9. When a 28.7-g sample of KI is dissolved in 60.0 g of water in a calorimeter, the temperature drops from 27.2°C to 13.2°C. Calculate  $\Delta H$  for the process



10. What is the final temperature of the solution formed when 1.05 g of  $\text{NH}_4\text{Cl}$  is added to 18.5 g of water at 24.7 °C in a calorimeter?

