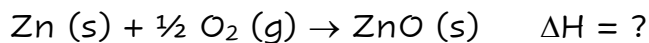
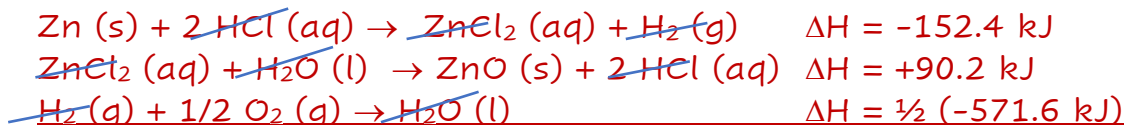
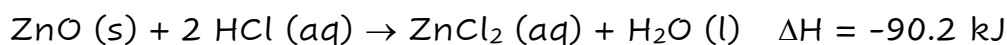
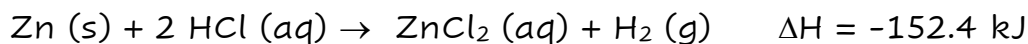


## Hess's Law

1. Calculate  $\Delta H$  for the following reaction



using the following data.

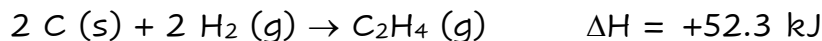
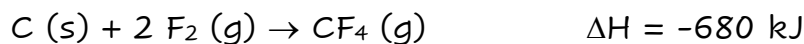
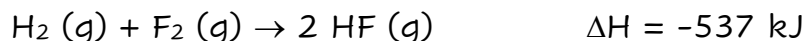


$$\Delta H = -152.4 \text{ kJ} + 90.2 \text{ kJ} + \frac{1}{2} (-571.6 \text{ kJ}) = \mathbf{-347.6 \text{ kJ}}$$

2. Calculate  $\Delta H$  for the following reaction



using the following data.



$$\Delta H = 2 \times (-537 \text{ kJ}) + 2 \times (-680 \text{ kJ}) + 52.3 \text{ kJ} = \mathbf{-2.49 \times 10^3 \text{ kJ}}$$