Quiz 6.3 – Enthalpy

Name: _____

Question 1 (2 points)

A bomb calorimeter has a calibrated heat capacity of $C_{cal} = 2.673 \dfrac{kJ}{°C}$

$1.25\ g$ of sucrose ($C_{12}H_{22}O_{11}$) are burned in the calorimeter and the temperature rises by $7.71\ °C$

Calculate ΔH_{rxn} for the combustion of sucrose

Question 2 (3 points)

Consider the reaction: $H_2S(g) + 2\,O_2(g) \longrightarrow SO_3(g) + H_2O(l)$ $\qquad \Delta H_{rxn} = -207 \dfrac{kJ}{mol}$

If $5.2\ g$ of H_2S are reacted with excess O_2, how much heat will be released?

My Voice

By Rafael Campo

To cure myself of wanting Cuban songs,
I wrote a Cuban song about the need
For people to suppress their fantasies,
Especially unhealthy ones. The song
Began by making reference to the sea,
Because the sea is like a need so great
And deep it never can be swallowed. Then
The song explores some common myths
About the Cuban people and their folklore:
The story of a little Carib boy
Mistakenly abandoned to the sea;
The legend of a bird who wanted song
So desperately he gave up flight; a queen
Whose strength was greater than a rival king's.
The song goes on about morality,
And then there is a line about the sea,
How deep it is, how many creatures need
Its nourishment, how beautiful it is
To need. The song is ending now, because
I cannot bear to hear it any longer.
I call this song of needful love my voice.