

## **Station 5: Short Response Practice**

Look at each question and student response. Think about what is missing from the student's answer and rewrite your own correct response to the question.

### **Example 1:**

Question: Explain, in terms of electronegativity differences, why a C-O bond is more polar than a C-H bond.

Student response: More polar means the bond is stronger so C-O is a stronger bond.

### **Example 2:**

Question: Explain, in terms of protons and neutrons, why I-127 and I-131 are different isotopes of iodine.

Student Response: These two isotopes have different numbers of neutrons.

### **Example 3:**

Question: Explain, in terms of activation energy, why the catalyzed reaction occurs at a faster rate

Student response: The catalyzed reaction has a lower potential energy than a normal reaction.

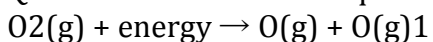
### **Example 4:**

Question: Compare the entropy of 30. grams of solid KNO<sub>3</sub> at 20.°C with the entropy of 30. Grams of KNO<sub>3</sub> dissolved in 100. grams of water at 20.°C

Student response: The entropy of the solid is greater than the liquid because solids are more random.

### **Example 5:**

Question: The balanced equation below represents a reaction.



Explain, in terms of bonds, why energy is absorbed during this reaction.

Student response: Energy is absorbed in this reaction because it needs energy.

### **Example 6:**

Question: Explain, in terms of electrons, the change in radius when a sodium atom becomes a sodium ion.

Student response: The when an atom becomes an ion, it loses or gains electrons.