

Text: Stored Energy

In a laboratory, chemistry students put some water into a beaker. They found the temperature of the water to be 19 degree Celsius. Then they added pellets of sodium hydroxide to the water. To speed up the reaction, they stirred the pellets, causing them to break into sodium and hydroxide ions. When they were all dissolved, the students measured the temperature of the water again and found it to be 22 degree Celsius. They thus learned that there is energy stored in the chemical bounds of sodium hydroxide. The breaking of those bounds resulted in the release of energy (3 degree Celsius of heat), causing the temperature of the water to rise.

Source: Unknown

I. Comprehension: Answer the following questions from the text. (2.5pts)

1. What caused the sodium hydroxide to break?
2. What activity speeds up the reaction?
3. What caused the release of energy?
4. What caused the temperature of the water to rise?
5. Where did the chemistry students carry out their experiment?

II. Linguistic Competence**A. Put the verbs in parenthesis in the correct tense. (5pts)**

1. Zara (to study) English for 10 years now.
2. The student of EMIG (to have) an English programme yet.
3. Aisha (to buy) Mr. Ali's Rav4 last week.
4. She (to work) in an oil company next week.
5. Look! Kabore (to love) driving fast.

B. Put these words in the correct order so as to get a meaningful sentence. 5pts

1. useful/for/an/is/combustion/element/oxygen
2. device/a/sound/microphone/that/is/amplifies/a
3. uranium/in/nuclear reactors/an/is/ element/used
4. environment/pollution/serious/people/problem/is/our/a/know/to/that
5. all/we/carbon/find/organic molecules/in

C. Combine the two sentences using one of the following connectors: *so, too, either or neither*. (2.5pts)

1. I can't find my book. My brother can't find his book.
2. I don't like fish. My sister doesn't like fish.
3. Augustin is a student at EMIG. Maazou is a student at EMIG.
4. Kaka likes playing football. Salim likes playing football.
5. I am not an engineer. My uncle is not an engineer.

III. Writing: In the field of physical sciences, scientists have one thing in common: the way they study and solve problems using the scientific method. The steps in the scientific method are as follows: **Problem; Hypothesis; Experimentation; Results and Conclusion**. Bearing the above information in mind, write a short paragraph about the scientific method. (5pts)