The Role of Chemistry in Everyday Life

Chemistry is often called the "central science" because it connects other natural sciences like biology, physics, and environmental science. Its impact is vast and touches many aspects of our daily routines. One of the most direct examples is in **food preparation**. Every time you cook or bake, chemical reactions are taking place. Heat causes proteins to change shape (denaturation), sugars to caramelize, and baking soda to release gases that make cakes rise. Understanding these processes helps improve cooking techniques and food quality. In **the medical field**, chemistry is crucial for the development of pharmaceuticals. Medicines are formulated based on chemical principles to interact with the body in specific ways. Chemists work to develop new drugs, improve existing ones, and ensure their safety and efficacy. **Cleaning products** are another example of chemistry in action. Soaps and detergents are formulated to break down oils and dirt, while disinfectants kill bacteria and viruses. Without chemistry, the development of such products wouldn’t be possible. In **energy production**, chemistry helps create fuels such as gasoline, diesel, and electricity storage systems like batteries. Advancements in chemistry are also paving the way for cleaner and more sustainable energy sources, like solar panels and hydrogen fuel cells. Furthermore, **environmental protection** relies heavily on chemistry. By studying pollutants and their effects on ecosystems, chemists can devise ways to reduce pollution, clean contaminated environments, and develop biodegradable materials.

In summary, chemistry is deeply embedded in all areas of life, influencing everything from health to household tasks and the environment. It enables us to understand the world at a molecular level, and its applications improve our quality of life in countless ways.

Read the text then answer the following questions :  
1. What is chemistry often referred to as, and why?

2. How does chemistry play a role in food preparation?

3. Why is chemistry important in the development of medicines?

4. What is the role of chemistry in cleaning products?

5. How does chemistry contribute to energy production and sustainability?

6. In what ways does chemistry help in environmental protection?

7. Can you give an example of a chemical reaction that occurs in everyday life?

8. How does chemistry improve the quality of life, according to the text?

9. What are some of the industries mentioned where chemistry plays a crucial role?

10. Why is it important to study chemistry, based on the information in the text?

11. extract from the passage 10 scientifique terminologies related to chemistry then translate them from English to Arabic