BAHASA INGGRIS PROFESI

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CHEMISTRY TODAY

To make it simple, chemistry is the study of matters, their properties, their changes, and the energy whi accompany any change of matter ***(1)****. The effects of chemistry, for better or worse, are all around you and with you* ***(2)****. Your body functions by a complicated series of chemical processes, which are only partly understood (* *There are thousands of man-made chemicals to treat the symptoms or even the causes of illness, to eliminate headache, or even to stop the spread of a cancer* ***(4)****.You walk on carpets of synthetic fibers, and the san synthetic fibers are in many kinds of clothing* ***(5)****. You also use household chemicals to clean, polish, and blea* ***(6)****. To feed the expanding population of our earth, agriculture must be expanded and made more efficient* ***(7)****. T discovery of a process to manufacture ammonia cheaply has had a enormous impact on the world, since ammon and its salts are necessary for making fertilizers (8). Since then, chemists have developed herbicides, pesticide and fungicides, without which large-scale production of foodstuffs would simply not be possible* ***(9)****. T continuous development of chemistry we see today is possible as a result of contribution of many chemists, wh devoted their life to this field* ***(10)****. As an example, the American chemist Linus Pauling was awarded the Nob Prize in Chemistry in 1954 for developing new ideas on the bonding of atoms, helping the synthesis of numero chemicals we know today* ***(11)****. In this modern era, we can see that every aspect of live, even politics a international relations, is affected by chemistry* ***(12)****.*

ACTIVITY 2.

Learn the following words and use them in your own sentences.

1. *Chemical* .....
2. *Synthetic* .....
3. *Chemical process* .....
4. *Impact* .....
5. *Expand* .....
6. *Discovery* .....

★★★★★

THE PHASE OF MATTER

The general definition of matter is anything that has mass and occupies space, consists not only of things that we can see and touch, but also such things as air, which we cannot see (1). Matter can exist in three phases, namely solid, liquid, and gas, but several kinds of matter can exist in all three phases, even simultaneously under special conditions (2). A solid consists of particles arranged into a definite and rigid shape that does not change much with temperature (3). A liquid also has a definite volume, but unlike a solid, a liquid does not have a shape of its own (4). The particles making up a liquid may flow to assume the shape of the container (5). A liquid changes volume only to a small extent, although often to a greater extent than a solid (6). In contrast with a solid or liquid, the particles of a gas completely fill any container (7). If the container is not rigid, changes in temperature can lead to large changes in the volume of a gas (8). Another important difference is that gases can be expanded and compressed over enormous ranges of volume (9). This property suggests that the particles of a gas are much more widely separated from one another than the particles of a liquid or solid (10).

Exercise

1. Write the basic properties of solid mentioned in the text.
2. What is special conditions in sentence 3 refer to?.
3. What is the similarity of solid and liquid mentioned in the text?.
4. What is the meaning of compressed mentioned in sentence 10?.
5. What are the differences between gas and solid and liquid mentioned in the text?.

THANK YOU