

請將下列各段譯成中文，並將答案寫在試卷內【非選擇題作答區】，請標明題號

1. Taiwan is one of the best natural laboratories in the world to study the active arc-continent collision processes, and the natural hazards of earthquakes and typhoons are what local people have to face constantly, the research activities on active tectonics and natural hazards have always been very active in Taiwan. (15%)

2. Children of all nations experience weather; and while each child's habitat is unique, many observe flowing streams and rock materials as parts of their daily environment, and they often appreciate the beauty of sunsets, the power of storms, the sparkle of snow crystals in winter, the tranquility of a mountain scene, or the colors of deciduous trees on a bright autumn day. A science curriculum organized around the student's natural environment provides a common subject for study in all cultures. (15%)

3. Taiwan is located at the interface between the world's largest ocean, the Pacific, and the largest continent, the Eurasia. The natural environment of Taiwan is strongly affected by the interplay between the ocean and the land; the everyday life of Taiwanese people is intimately coupled with the ocean. For example, the weather and climate of Taiwan are closely linked to the behavior of air masses from its surrounding seas and adjacent land. Marine products are a major source of food of the people of Taiwan. Any defense strategy of Taiwan must take its surrounding seas into consideration. The advisability of developments along the coasts of Taiwan is influenced by the interactions between the land margin and the seas. In short, the behaviors of the oceans play an important role in the physical as well as the socio-economical well being of the people of Taiwan. Thus, the need to develop a world class oceanographic community in Taiwan is hardly an area that requires any debate. It is a national necessity. (20%)

4. Heat and pressure change igneous and sedimentary rock to metamorphic rock. Over and over, rocks build up and wear away. This building up and wearing away of rock is called the rock cycle. (15%)

5. When a mineral is found in large enough amounts so that it can be mined, the mineral is called an ore. Some ores near the earth's surface can be taken from large open pits. Many metals are removed from ores by smelting. In smelting, the ore is heated with another material at very high temperatures. (20%)

6. In some places, tree trunks were buried under sand, mud, and volcanic ash. After millions of years, some groups of these trunks are still standing. Minerals from the sand, mud, and ash caused the trunks to petrify. (15%)