

## 一、中譯英 (I) 40%

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|-----------|----------|
| 1. 全球暖化現象 | 6. 臭氧層   |
| 2. 海平面上升  | 7. 沙塵暴   |
| 3. 聖嬰現象   | 8. 捷運    |
| 4. 海洋環境   | 9. 新陳代謝率 |
| 5. 酸雨     | 10. 核能   |

## 二、中譯英 (II) 30%

## 偉大的印地安人—西雅圖

美國 1776 年獨立後，歐洲移民不斷湧入，美國東部人口愈來愈多，於是展開了將近百年的西部開拓史，白人靠著精良的武器往西推進，一個接一個的印地安部落被征服了，到了 1850 年代，白人勢力已到達太平洋沿岸。西元 1854 年，美國政府向西雅圖的印地安酋長西雅圖購買土地，酋長說：「你們白人要購買我們的土地，我們無法理解，誰有能力買大地的芬芳與溫暖？何況我們並不擁有土地，你們又怎能出錢來買？我們只是大地的一部分，香花是我們的姊妹，馬、鷹是我們的兄弟，你們白人把大地和藍天都當作商品，我們實在不瞭解。」美國華盛頓州的西雅圖市，就是為了紀念這位偉大的印地安酋長而命名的。

## 三、英譯中 30%

## An Ocean World

Water planets are probably uncommon in the universe, but water itself is not scarce. In the solar system, for example, Jupiter has hundreds of times more water than the Earth does. Astronomers have even located water molecules drifting in free space. But liquid water is unexpected.

Consider the conditions necessary for a large permanent ocean of liquid water to form on a planet. An ocean world must move in a nearly circular orbit around a stable star. The distance of the planet from the star must be just right to provide a temperature environment in which water is liquid. Unlike most stars, a water planet's sun must not be a double or multiple star or the orbital year would have irregular periods of intense heat and cold. The materials that accreted to form the planet must have included both water and substances capable of forming a solid crust. Finally, the planet must be large enough that its gravity will keep the atmosphere and ocean from drifting off into space.

Special conditions were also necessary for the formation of life here. Earth's gravity is strong enough to retain an ocean, but not strong enough to crush the life forms that came from it. The planet's iron core provides a magnetic field that deflects radiation that would otherwise harm the genetic instructions of living things. A single moon provides gentle tides to encourage life forms to leave the ocean and reside on land. The atmosphere is relatively clear, allowing sunlight to penetrate to the surface, but moist enough to form rains and winds that drive air and ocean currents. Further, the upper air contains ozone, which protects against the most harmful ultraviolet rays. This combination is probably exceedingly rare in the galaxy. We should enjoy and protect the water planet we call home.