



Read the text again and for each gap (1-6) choose the word that best fits.

Growing Up...

The stories of The Hanging Gardens of Babylon, one of the seven wonders of the ancient world, tell of a structure with lush green gardens on different levels many metres high. These are long gone, but as our modern consumer society continues to drain the world of its resources, the population rises and food prices soar, a modern-day equivalent may soon be springing up in your neighbourhood!

According to UN statistics, by the year 2050, the population of planet Earth will have risen to over 9 billion and feeding **1** these people will require extra farmland the size of Brazil! Finding this agricultural land will be a **2** challenge, but one that some creative scientists believe they have solved with the idea of vertical farming. The idea is actually very simple. Just as an apartment block has different storeys, a vertical farm will have many different floors growing a variety of fruit and vegetables. On one floor there will be lettuces, on the next floor carrots and on another tomatoes, and so on. The walls will be made of glass to allow in sunlight and instead of soil, the produce will be grown in a solution of nutrients and water.

Dr. Dickson Despommier, a professor at Columbia University, points out that just one 30-storey building could provide food for 10,000 people. "With about 160 of these buildings, you could feed all of New York." He says.

But as **3** as offering a solution to possible food shortages, this idea is environmentally friendly. Often, by the time food **4** on your plate, it will have been travelling for days or even months! Vertical farms, however, will go up in the centre of the city and will be powered by solar and wind power so we'll save on transport costs, burn less fossil fuels and we'll all be eating fresh local produce from the skyscraper next door!

The idea isn't without its problems, though. Crops nearer the glass would get more light which means they would grow quicker than crops farther away. The only whole floor to get **5** sunlight would be the top one.

Possible solutions include having a permanent light source on every floor like the ones we now have in industrial greenhouses. At the moment, the **6** of building and lighting these modern Hanging Gardens of Babylon is far too high, but that doesn't mean we won't be able to do it soon.

Mankind has been farming horizontally for over 15,000 years, but now almost 80% of our farmland is already in use. Isn't it about time we started growing up?



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|----|-------------|-------------|------------|----------------|
| 1. | 1. each | 2. whole | 3. all | 4. every |
| 2. | 1. sincere | 2. true | 3. valid | 4. real |
| 3. | 1. long | 2. well | 3. much | 4. far |
| 4. | 1. arriving | 2. arrives | 3. arrived | 4. will arrive |
| 5. | 1. direct | 2. straight | 3. equal | 4. free |
| 6. | 1. cost | 2. charge | 3. expense | 4. price |

