

For questions 1- 8, read the text below and decide which answer (A, B, C or D) best fits each gap.

### THE MICROSCOPE (C1 Advanced)

An important invention in the development of science and medicine was the microscope. It was (1) ... the principle that light could be (2) ... or bent, by a glass lens. It was soon discovered that tiny objects could be magnified (3) ... size when viewed through a glass lens that had been ground and polished in a specific (4)... . Although the principle was known to the Chinese as early as 1000 A.D, it was not until the 13th and 14th centuries in Europe (5) ... it was put to practical use in the form of eyeglasses. In Europe the first microscope was invented by brothers Zacharias and Hans Janssen, two Dutch eyeglass-makers, around 1590. They built a "compound" microscope, so called because of its two lenses. The most significant development and use of the microscope during this period, however, belongs to another Dutch optician, Antonie van Leeuwenhoek (1632-1723). Born in Delft, Holland, he became skilled at (6) ... very sharp and accurate magnifying lenses. Some of his single-lens microscopes were able to magnify up the three hundred times (7) ... size, and around 1660 he began serious study using these instruments. He was the first to discover bacteria and other microscopic organisms, calling these tiny creatures "animalcules". (8) ... to this discovery, very small creatures such as fleas and maggots were thought to "spontaneously generate" from a single source, such as rotting meat in the case of maggots.

|   |           |            |          |             |
|---|-----------|------------|----------|-------------|
| 1 | based at  | based upon | based by | based in    |
| 2 | retracted | retorted   | retraced | refracted   |
| 3 | in        | with       | on       | by          |
| 4 | fashion   | character  | manner   | procedure   |
| 5 | then      | when       | than     | that        |
| 6 | rubbing   | scraping   | grinding | granting    |
| 7 | present   | current    | actual   | substantial |
| 8 | Owing     | According  | Prior    | Due         |