

- 30** Readings of the count rate produced by a radioactive source are measured as the source becomes warmer.

The readings of the count rate are taken over a length of time, which is much longer than the half-life of the source.

What implies that radioactive decay is random and spontaneous?

|          | random                     | spontaneous                |
|----------|----------------------------|----------------------------|
| <b>A</b> | readings fluctuate         | activity decreases         |
| <b>B</b> | readings fluctuate         | half-life remains the same |
| <b>C</b> | half-life remains the same | activity decreases         |
| <b>D</b> | half-life remains the same | readings fluctuate         |

