# CHAPTER 3: HEREDITY AND VARIATION

**1** The following developments take place in a cell during the process of mitosis (not in the correct order).

P: The cell divides and forms two daughter cells.
Q: Chromosomes thicken and become visible.
R: Each chromosome becomes attached to a spindle at the centromere.
S: A nuclear membrane is formed around the chromosomes at each pole.
T: The chromatids in each chromosome separate and move to opposite poles.

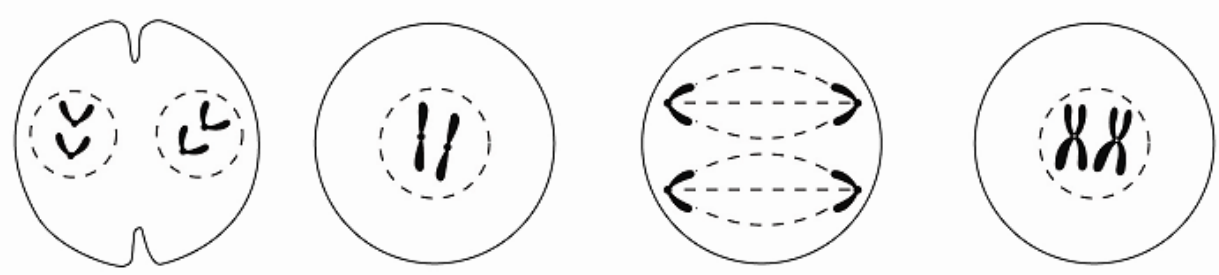
Arrange the developments in the correct sequence.

**A** P → Q → S → T → R
**B** Q → S → R → P → T
**C** Q → R → T → S → P
**D** S → Q → P → T → R

**2** Which of the following cells do not divide by mitosis?

**A** Skin cells
**B** Muscle cells
**C** Reproductive cells
**D** Epithelial cells

**3** The diagram below shows the main stages in the process of mitosis.



P Q R S

Which is the correct sequence?

**A** Q, S, R, P
**B** S, Q, R, P
**C** Q, S, P, R
**D** R, P, S, Q