

**40** A bacterial pathogen produces a protein that acts as a toxin. This toxin is harmful to humans.

People can be vaccinated to protect them from the effects of this pathogen.

Which statement describes the sequences of events that occur in a vaccinated person to protect them from the effects of this pathogen?

- A** Memory cells divide by mitosis and then differentiate into macrophages that engulf and digest the toxin.
- B** Memory cells divide by mitosis and then differentiate into plasma cells that produce antibodies to bind to the toxin.
- C** Macrophages divide by mitosis and then differentiate into memory cells that engulf and digest the toxin.
- D** Plasma cells divide by mitosis and then differentiate into memory cells that produce antibodies to bind to the toxin.