CHECK YOUR LEARNING

Suggested Answers

1. Replication of the DNA occurs during the stage of interphase.
2. The cell needs one complete copy of the DNA for each of the daughter cells that will form.
3. Chromosomes are condensed during mitosis, which makes them more visible.
4. Some cells can appear to be between phases because mitosis is a smoothly flowing process. Each phase flows into the next, with no clear breaks between stages.
5. **(a)** A new cell wall begins to form during cytokinesis.
   (b) The membrane of the nucleus dissolves during metaphase.
   (c) Daughter chromosomes begin to separate during anaphase.
   (d) The cell begins to pinch together during cytokinesis.
   (e) Chromosomes are visible in two distinct regions of the cell during telophase.
   (f) The cell grows and copies its DNA during interphase.