**Cell Cycle and Mitosis Vocabulary Matching**

Write the letter of the correct vocabulary word with its matching definition on the line.

\_\_\_\_\_\_\_ First and longest phase of mitosis; chromatin coils into visible chromosomes; the nuclear envelope disappears; spindles form

\_\_\_\_\_\_\_ Shortest phase of mitosis; chromosomes move to the center of the cell; chromatids are attached by centromeres

\_\_\_\_\_\_\_ Centromeres split and sister chromatid are pulled apart

\_\_\_\_\_\_\_ Final phase of mitosis; nuclear envelope begins to reappear; spindles break down; chromosomes unwind

\_\_\_\_\_\_\_ The cell spends most of its time in this phase; period of growth and DNA synthesis

\_\_\_\_\_\_\_ Division of the nuclear material; two new daughter cells form identical to the parent cell

\_\_\_\_\_\_\_ Division of the cytoplasm

\_\_\_\_\_\_\_ Highly condensed form of DNA wrapped around proteins; only seen during cell division

\_\_\_\_\_\_\_ DNA is found as this loose, uncondensed state during interphase

\_\_\_\_\_\_\_ Structures found in animal cells that produce spindles; they move to opposite poles during prophase

\_\_\_\_\_\_\_ Cell structure that joins two sister chromatids of a duplicated chromosome

\_\_\_\_\_\_\_ Cell structures composed of microtubule fibers; pull apart sister chromatids during anaphase

\_\_\_\_\_\_\_ Identical halves of a duplicated chromosome; held together by a centromere

\_\_\_\_\_\_\_ Genetically identical cells; the result of cell division

1. anaphase
2. centriole
3. centromere
4. chromatid
5. chromatin
6. chromosome
7. cytokinesis
8. daughter cells
9. interphase
10. metaphase
11. mitosis
12. prophase
13. spindle
14. telophase