Directions: Match each term with its correct definition (Note: They are grouped into groups of 10 or less terms, look for the lines separating the groups)

\_\_\_\_1. Anaphase A. the ordered sequence of events that a cell passes through between

one cell division and the next

\_\_\_\_2. Binary Fission B. a structure formed during plant-cell cytokinesis by Golgi vesicles

fusing at the metaphase plate; will ultimately lead to formation of a cell wall to separate the two daughter cells

\_\_\_\_3. Cell Cycle C. a tubulin-like protein component of the prokaryotic cytoskeleton that

is important in prokaryotic cytokinesis (name origin: Filamenting temperature-sensitive mutant Z)

\_\_\_\_4. Cell Cycle D. the process of prokaryotic cell division

Checkpoints

\_\_\_\_5. Cell Plate E. a paired rod-like structure constructed of microtubules at the center

of each animal cell centrosome

\_\_\_\_6. Centriole F. describes a cell, nucleus, or organism containing two sets of

chromosomes (2n)

\_\_\_\_7. Cleavage Furrow G. the stage of mitosis during which sister chromatids are separated

from each other

\_\_\_\_8. Cytokinesis H. mechanisms that monitor the preparedness of a eukaryotic cell to

advance through the various cell cycle stages

\_\_\_\_9. Diploid I. a constriction formed by the actin ring during animal-cell cytokinesis

that leads to cytoplasmic division

\_\_\_\_10. FtsZ J. the division of the cytoplasm following mitosis to form two daughter

cells

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\_\_\_\_11. G0 Phase A. (also, first gap) a cell-cycle phase; first phase of interphase centered

on cell growth during mitosis

\_\_\_\_12. G1 Phase B. chromosomes of the same length with genes in the same location;

diploid organisms have pairs of homologous chromosomes, and the members of each pair come from different parents

\_\_\_\_13. G2 Phase C. a protein structure in the centromere of each sister chromatid that

attracts and binds spindle microtubules during prometaphase

\_\_\_\_14. Gamete D. (also, second gap) a cell-cycle phase; third phase of interphase where

the cell undergoes the final preparations for mitosis

\_\_\_\_15. Gene E. the period of the cell cycle leading up to mitosis; includes G1, S, and

G2 phases; the interim between two consecutive cell divisions

\_\_\_\_16. Genome F. a cell-cycle phase distinct from the G1 phase of interphase; a cell in

G0 is not preparing to divide

\_\_\_\_17. Haploid G. the physical and functional unit of heredity; a sequence of DNA that

codes for a specific peptide or RNA molecule

\_\_\_\_18. Homologous H. the entire genetic complement (DNA) of an organism

Chromosomes

\_\_\_\_19. Interphase I. describes a cell, nucleus, or organism containing one set of

chromosomes (n)

\_\_\_\_20. Kinetochore J. a haploid reproductive cell or sex cell (sperm or egg)

\_\_\_\_21. Locus A. the stage of mitosis during which chromosomes are lined up at the

metaphase plate

\_\_\_\_22. Metaphase B. the period of the cell cycle at which the duplicated chromosomes are

separated into identical nuclei; includes prophase, prometaphase, metaphase, anaphase, and telophase

\_\_\_\_23. Metaphase Plate C. the microtubule apparatus that orchestrates the movement of

chromosomes during mitosis

\_\_\_\_24. Mitosis D. the stage of mitosis during which mitotic spindle fibers attach to

kinetochores

\_\_\_\_25. Mitotic Phase E. the stage of mitosis during which chromosomes condense and the

mitotic spindle begins to form

\_\_\_\_26. Mitotic Spindle F. the position of a gene on a chromosome

\_\_\_\_27. Oncogene G. the period of the cell cycle when duplicated chromosomes are

distributed into two nuclei and the cytoplasmic contents are divided; includes mitosis and cytokinesis

\_\_\_\_28. Origin H. the region of the prokaryotic chromosome at which replication

begins

\_\_\_\_29. Prometaphase I. the equatorial plane midway between two poles of a cell where the

chromosomes align during metaphase

\_\_\_\_30. Prophase J. a mutated version of a proto-oncogene, which allows for uncontrolled

progression of the cell cycle, or uncontrolled cell reproduction

\_\_\_\_31. Proto-oncogene A. describes a cell that is performing normal cell functions and has not

initiated preparations for cell division

\_\_\_\_32. Quiescent B. a wall formed between bacterial daughter cells as a precursor to cell

separation

\_\_\_\_33. S phase C. the stage of mitosis during which chromosomes arrive at opposite

poles, decondense, and are surrounded by new nuclear envelopes

\_\_\_\_34. Septum D. a gene that codes for regulator proteins that prevent the cell from

undergoing uncontrolled division

\_\_\_\_35. Telophase E. a normal gene that controls cell division by regulating the cell cycle

that becomes an oncogene if it is mutated

\_\_\_\_36. Tumor Suppressor F. the second, or synthesis phase, of interphase during which DNA

Gene replication occurs