

**Virtual Lab: The Cell Cycle and Cancer
Metastasis**

1. In which phase of mitosis do each of the following occur?

- Centrioles, spindles and chromosomes move toward opposite sides of the cell nucleus
- Chromosomes condense to form visible chromosomes
- The nuclear membrane dissolves
- Spindle fibers attach to kinetochores in the center of the cell

2. In which phases of mitosis are sister chromatids visible, and attached to each other at the centromere?

Prophase

Table 1: Record your data for the number of cells in each stage of the cell cycle observed in several tissues.

Tissue Type	# of cells in Interphase	# of cells in Prophase	# of cells in Metaphase	# of cells in Anaphase	# of cells in Telophase
Clonal Tissue Sample 1	14	1	2	0	0
Clonal Tissue Sample 2	14	0	2	1	0
Normal Tissue Sample 1	14	0	1	0	1
Normal Tissue Sample 2	14	1	1	0	2
Cancer Tissue Sample 1	17	0	1	2	0
Cancer Tissue Sample 2	14	0	0	1	0