

Name: \_\_\_\_\_

Date: \_\_\_\_\_

# Mitosis and Meiosis Worksheets

- 1) Which phase of the cell cycle is the longest? **interphase**
- 2) The attachment site on chromosomes for spindle fibers, and the attachment site of the sister chromatids is called the **centromere**.
- 3) If the  $n$  number of chromosomes of a species is 60, the  $2n$  number is: **120**
- 4) Cells need a **large** / small surface area to volume ratio to survive. (circle one)
- 5) Once a chromosome has been replicated during interphase, it now consists of two **sister chromatids**
- 6) Human somatic cells have **46** chromosomes
- 7) Cancer is **uncontrolled cell growth**.
- 8) How many stages are in mitosis? **4 - PMAT** (5 if you include **prometaphase**)
- 9) Chromosomes are duplicated during which stage of interphase? **S-phase**
- 10) Cells can avoid DNA overload by **dividing**.
- 11) Replication is when **DNA is copied**.
- 12) If the  $2n$  number of chromosomes of a species is 50, you would expect the gametes of the species to have **25** chromosomes.
- 13) What is the relationship between the number of chromosomes in a daughter cell and a parent cell in mitosis? **#'s are the same**
- 14) In controlled cell growth, cells stop dividing when they come into contact with **other cells**.
- 15) How many chromosomes does a human cell have just before it begins mitosis? **46**