

Name answer key

Date \_\_\_\_\_

# THE CELL CYCLE

## WORKSHEET

1. The process by which a cell splits into two daughter cells is called mitosis.
2. DNA wraps itself around proteins called histone, which aid in the tight packing of DNA into chromosomes.
3. Cells spend most of their time in what phase? interphase
4. During cell division, DNA are duplicated before cell division so that each new daughter cell has a complete set.
5. The M phase of the cell cycle includes prophase, metaphase, anaphase, and telophase.
6. The centrioles and centrosomes are produced and duplicate during G2 phase.
7. During which step of interphase are the cell's chromosomes copied? S phase
8. When a cell divides each daughter cell receives its own copy of the parent cell's DNA
9. Explain one advantage of sexual reproduction over asexual reproduction. genetic diversity
10. During prophase, DNA coils up and becomes a visible chromosomes
11. The picture on the right shows a centrosome. What role do centrosomes play in mitosis? Make spindle Fibers in order to pull the chromosomes apart during anaphase
12. Normal humans have 46 chromosomes.
12. Human gametes have a total of 23 chromosomes.