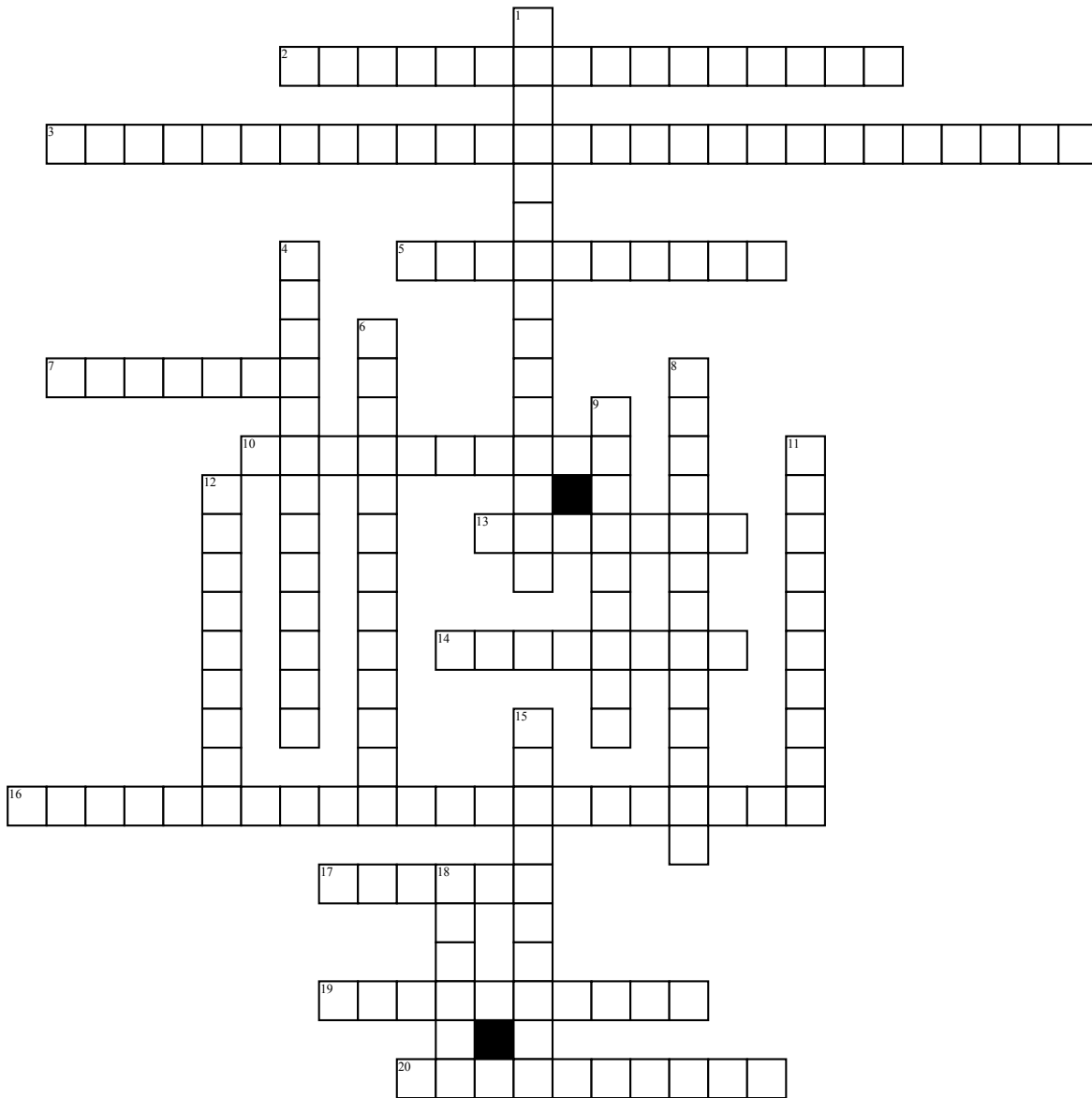


# Mitosis and DNA Replication Crossword



**Across**

- 2. Form during DNA replication because DNA is anti parallel and can only be synthesized in one direction
- 3. The generally accepted method of DNA replication, in which the two strands of the DNA helix separate and free nucleotides pair with the exposed bases on the single chains to form two new DNA molecules, each containing one original and one newly synthesized strand of DNA
- 5. A substance capable of causing cancer in living tissue
- 7. Having a single set of unpaired chromosomes
- 10. An enzyme that synthesizes short RNA sequences called primers
- 13. Containing two complete sets of chromosomes, one from each parent

- 14. An enzyme that bind and may even remodel nucleic acid or nucleic acid protein complexes
  - 16. Signal the cell that it is ready to pass into the next stage of the cell cycle
  - 17. The disease caused by an uncontrolled division of abnormal cells in a part of the body
  - 19. A structural unit of a eukaryotic chromosome, consisting of a length of DNA coiled around a core of histones
  - 20. The period of the cell cycle during which the nucleus is not undergoing division, typically occurring between mitotic or meiotic divisions
- Down**
- 1. One-half of the duplicated chromosome
  - 4. Is replicated continuously in the 3' to 5' direction
  - 6. A type of enzyme that is responsible for forming new copies of DNA, in the form of nucleic acid molecules

- 8. Is replicated discontinuously in short sections
- 9. The series of events that take place in a cell leading to its division and duplication of its DNA
- 11. A threadlike structure of nucleic acids and protein found in the nucleus of most living cells, carrying genetic information in the form of genes
- 12. The material of which the chromosomes of organisms other than bacteria (eukaryotes) are composed. It consists of protein, RNA, and DNA
- 15. The region of a chromosome to which the microtubules of the spindle attach, via the kinetochore, during cell division
- 18. Any of a number of proteins associated with the cycle of cell division that are thought to initiate certain processes of mitosis