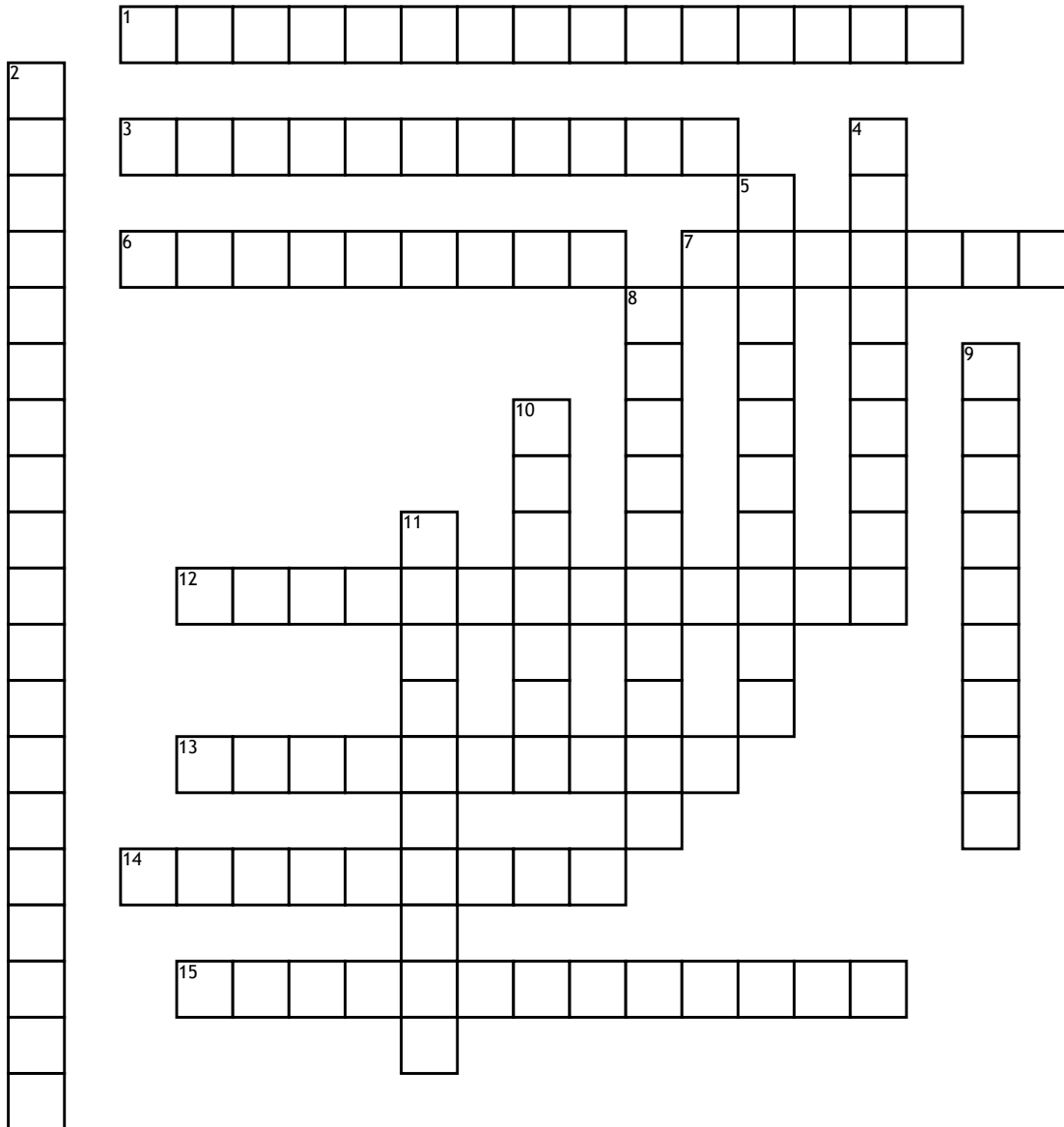


Meiosis



Across

1. Refers to the copy of a chromosomes that results from DNA replication and is still closely linked to its original.

3. One of three protein components of the cytoskeleton. Long, cylindrical structures approximately 25 nanometers in diameter. Extend from the centrosome to all parts of the cell, forming tracks on which organelles can travel within the cell.

6. The first, brief stage of the second meiotic division (meiosis II), during which condensed chromosomes are visible.

7. A type of cellular reproduction that results in the formation of four haploid cells from one diploid cell. Contains two cellular divisions that follow only one round of DNA replication. The type of reproduction that produces germ cells.

12. The second stage of the first meiotic division (meiosis I), during which the nuclear envelope breaks down, allowing microtubule access to chromosomes.

13. The fifth and final stage of the first meiotic division (meiosis I), during which chromosomes arrive at the poles of the cell and begin to recondense.

14. The fourth stage of the first meiotic division (meiosis I), during which maternal and paternal homologous pairs are separated on microtubules.

15. The second stage of the second meiotic division (meiosis II), during which microtubules attach to chromosomes

Down

2. A process in which DNA packaged as a chromosome is broken and fragments are exchanged with another independent chromosome. Occurs during prophase 1 of meiosis.

4. The first stage of the first meiotic division (meiosis I), during which genetic reassortment takes place. Can be very long occupying up to 90% of the entire duration of meiosis.

5. The fifth and final stage of the second meiotic division (meiosis II), during which chromosomes arrive at the poles of the cell, the nuclear envelope begins to reform, and the chromosomes begin to recondense.

8. The third stage of the first meiotic division (meiosis I), during which chromosomes align at the center of the cell by way of microtubule force.

9. The fourth stage of the second meiotic division (meiosis II), during which either maternal or paternal sister chromatids are separated on microtubules.

10. The region of physical linkage between maternal and paternal homologous pairs during genetic reassortment. Marks the location of crossover between two nonsister chromatids.

11. The third stage of the second meiotic division (meiosis II), during which chromosomes align at the center of the cell by way of microtubule force.