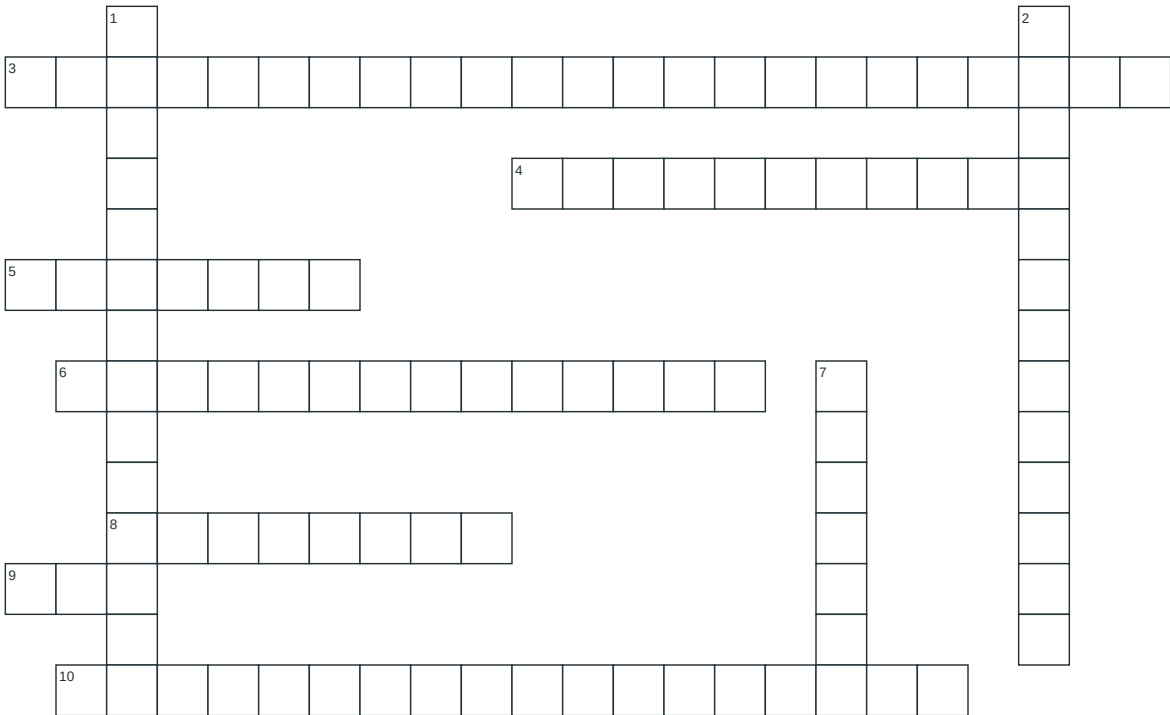


Biotechnology Crossword

Easy | 10 clues | Student Worksheet

Name: _____ Date: _____

Directions: Use the clues to complete the grid. Omit spaces, punctuation, and hyphens.



ACROSS

- 3. Making many copies of a selected DNA region
- 4. Organelle where photosynthesis occurs in plants and algae.
- 5. Small DNA molecule separate from a bacterium’s main chromosome
- 6. DNA molecule assembled from genetic material from different sources
- 8. Cell structure that assembles proteins.
- 9. Molecule that stores hereditary information in most cells

ACROSS (continued)

- 10. Method that separates DNA fragments by size using an electric field

DOWN

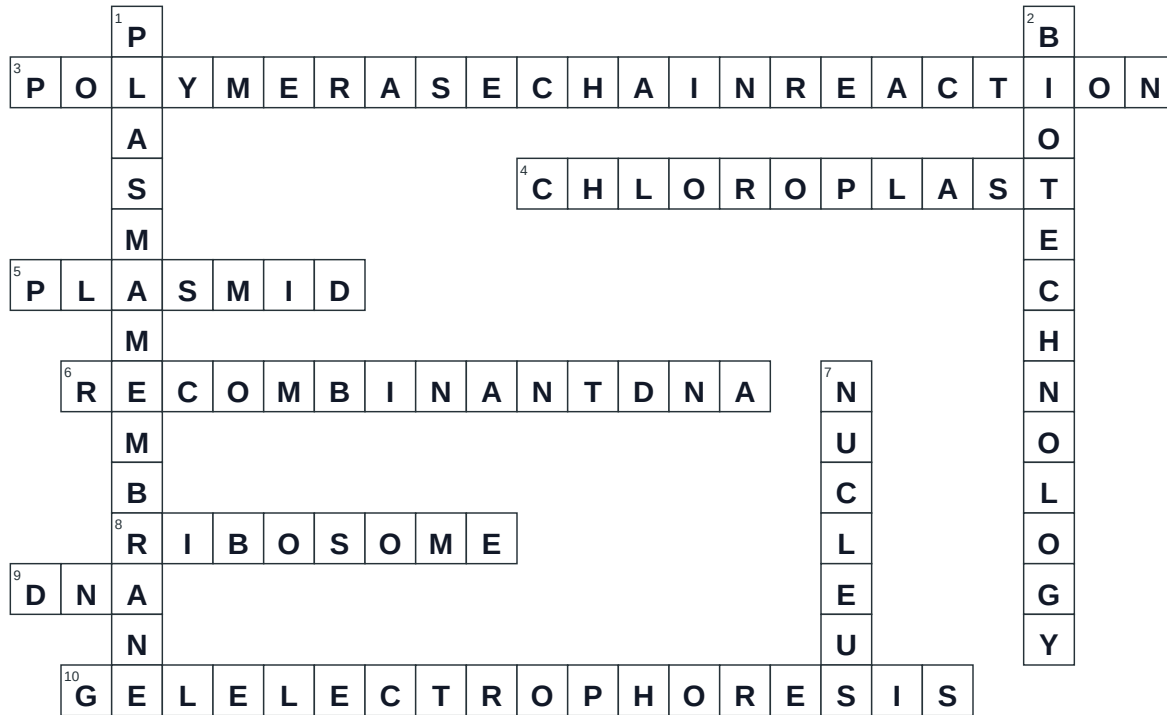
- 1. Boundary that regulates exchange between a cell and its surroundings.
- 2. Use of organisms or biological processes to make useful products
- 7. Membrane-bound organelle that contains most eukaryotic DNA.

Biotechnology Crossword

Easy | 10 clues | Teacher Answer Key

TEACHER ANSWER KEY

Completed grid and numbered answers. Spaces and punctuation are omitted in the grid.



ACROSS

3. Polymerase Chain Reaction
4. Chloroplast
5. Plasmid
6. Recombinant DNA
8. Ribosome
9. DNA

ACROSS (continued)

10. Gel Electrophoresis

DOWN

1. Plasma membrane
2. Biotechnology
7. Nucleus

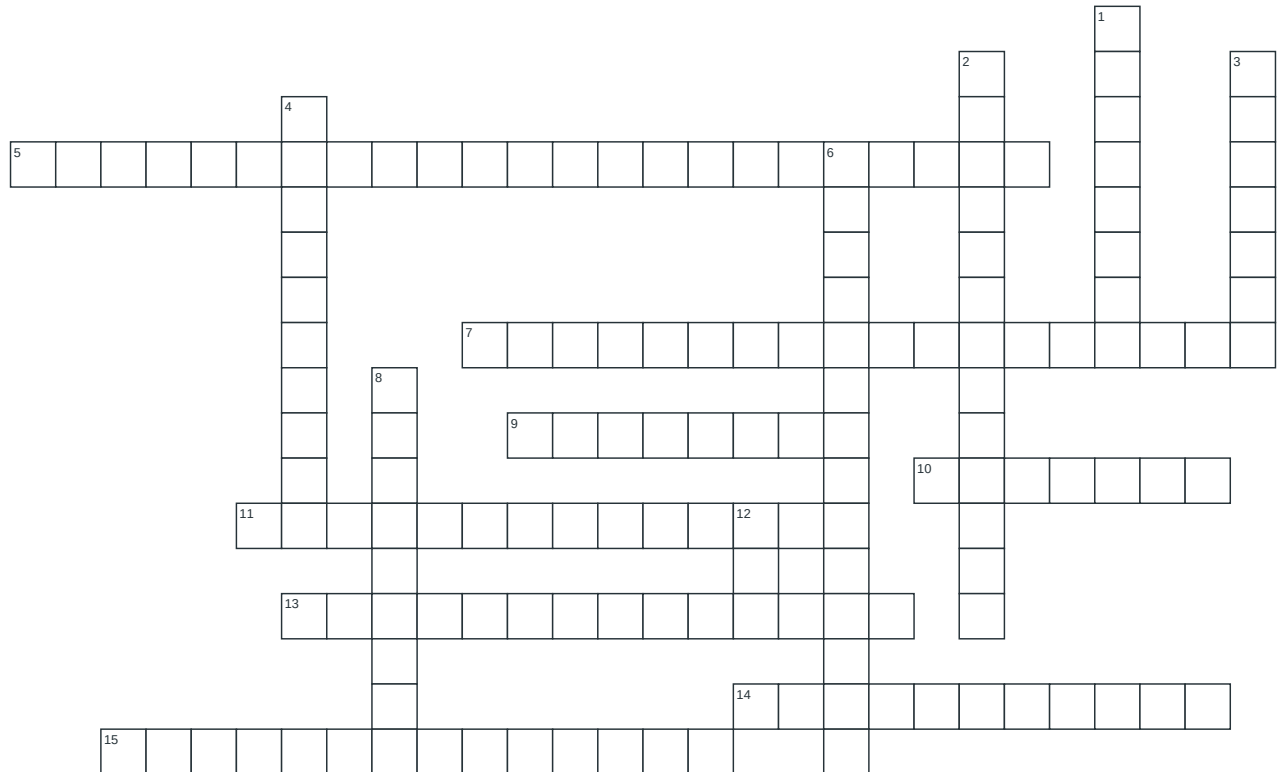
Biotechnology Crossword

Medium | 15 clues | Student Worksheet

Name: _____

Date: _____

Directions: Use the clues to complete the grid. Omit spaces, punctuation, and hyphens.

**ACROSS**

5. Making many copies of a selected DNA region
7. Method that separates DNA fragments by size using an electric field
9. Rigid outer layer that supports many plant, fungal, and bacterial cells.
10. Small DNA molecule separate from a bacterium's main chromosome
11. DNA molecule assembled from genetic material from different sources
13. Organelle that modifies, sorts, and packages many proteins.
14. Organelle where photosynthesis occurs in plants and algae.
15. Boundary that regulates exchange between a cell and its surroundings.

DOWN

1. Cell structure that assembles proteins.
2. Use of organisms or biological processes to make useful products
3. Membrane-bound organelle that contains most eukaryotic DNA.
4. Cell type that lacks a membrane-bound nucleus.
6. Plant-cell compartment that stores water and helps maintain pressure.
8. Cell contents outside the nucleus and inside the plasma membrane.
12. Molecule that stores hereditary information in most cells

Biotechnology Crossword

Medium | 15 clues | Teacher Answer Key

TEACHER ANSWER KEY

Completed grid and numbered answers. Spaces and punctuation are omitted in the grid.



ACROSS

5. Polymerase Chain Reaction
7. Gel Electrophoresis
9. Cell wall
10. Plasmid
11. Recombinant DNA
13. Golgi apparatus
14. Chloroplast
15. Plasma membrane

DOWN

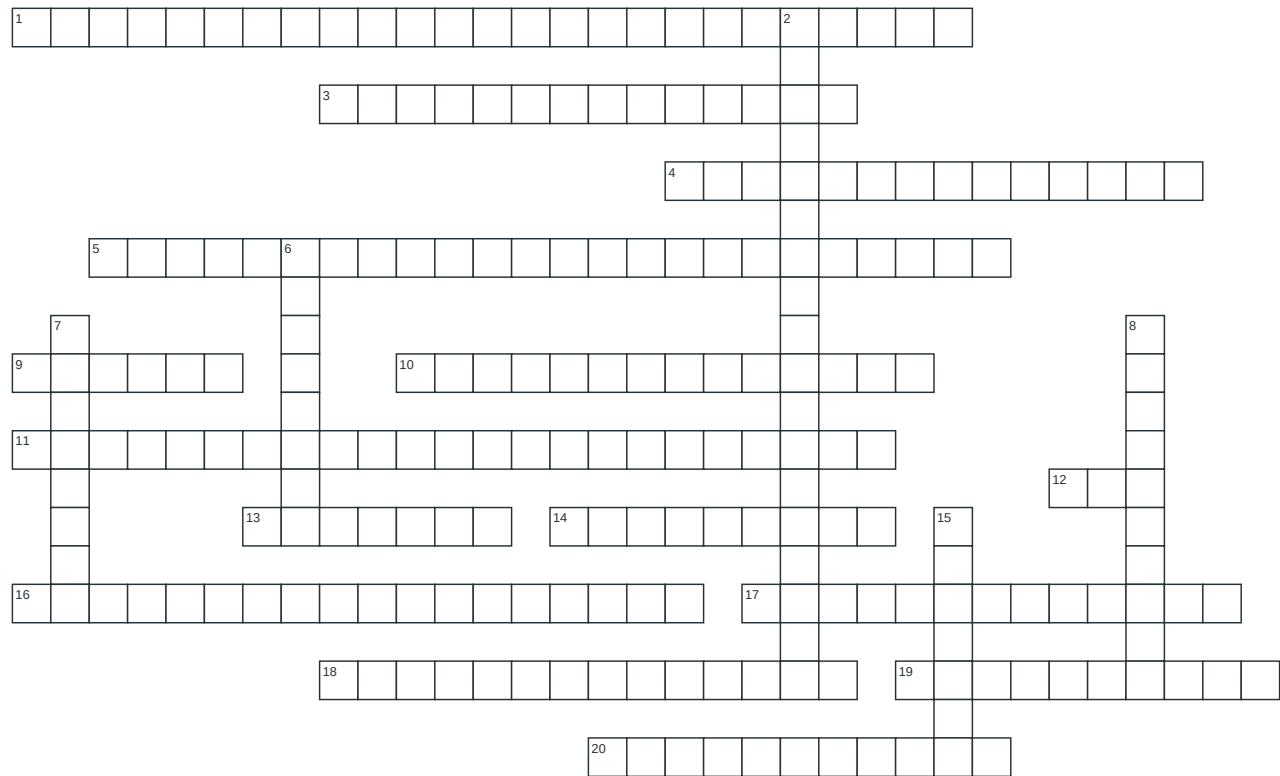
1. Ribosome
2. Biotechnology
3. Nucleus
4. Prokaryote
6. Central vacuole
8. Cytoplasm
12. DNA

Biotechnology Crossword

Hard | 20 clues | Student Worksheet

Name: _____ Date: _____

Directions: Use the clues to complete the grid. Omit spaces, punctuation, and hyphens.



ACROSS

- 1. Membrane network with attached ribosomes that helps process proteins.
- 3. Plant-cell compartment that stores water and helps maintain pressure.
- 4. Boundary that regulates exchange between a cell and its surroundings.
- 5. Relationship between a cell's exchange surface and its internal volume.
- 9. Group of similar cells and associated material performing related functions.
- 10. Organelle that modifies, sorts, and packages many proteins.
- 11. Making many copies of a selected DNA region
- 12. Molecule that stores hereditary information in most cells
- 13. Small DNA molecule separate from a bacterium's main chromosome
- 14. Cell contents outside the nucleus and inside the plasma membrane.

ACROSS (continued)

- 16. Method that separates DNA fragments by size using an electric field
- 17. Use of organisms or biological processes to make useful products
- 18. DNA molecule assembled from genetic material from different sources
- 19. States that living things are made of cells and that cells come from existing cells.
- 20. Organelle where photosynthesis occurs in plants and algae.

DOWN

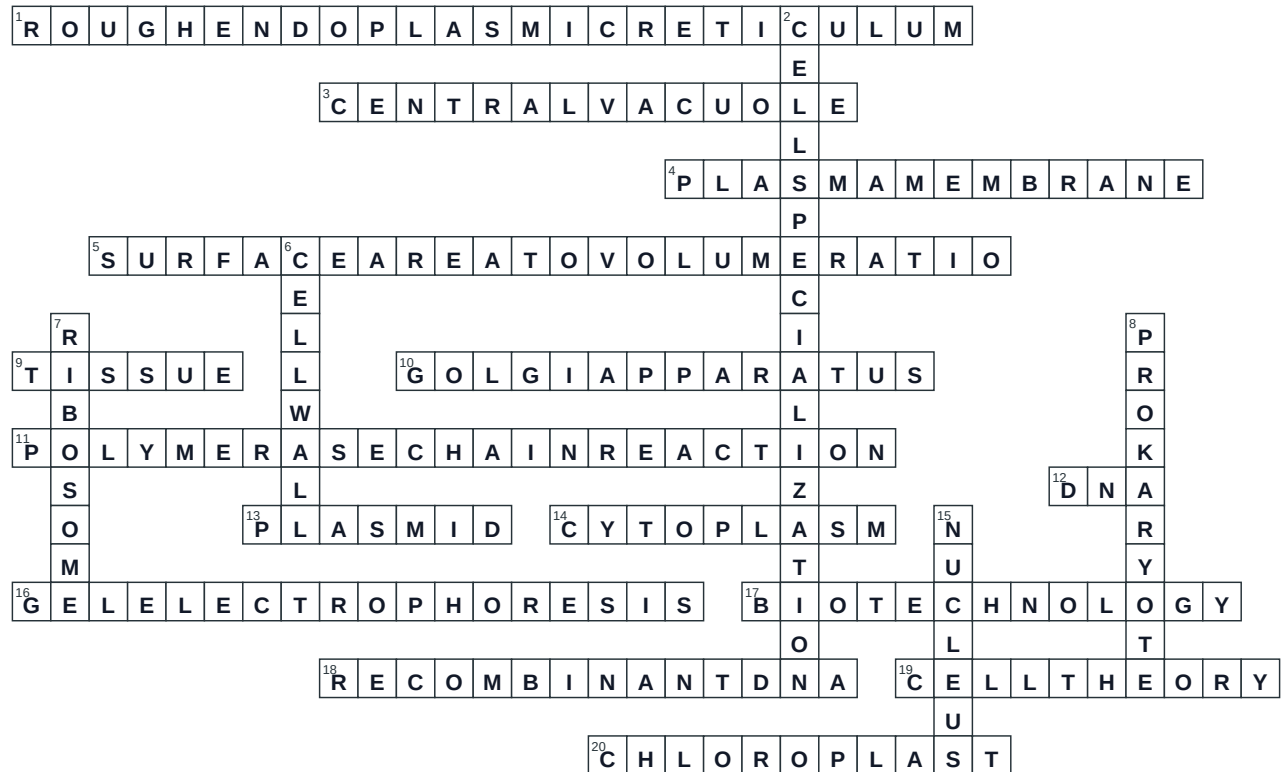
- 2. Process by which cells develop structures suited to particular functions.
- 6. Rigid outer layer that supports many plant, fungal, and bacterial cells.
- 7. Cell structure that assembles proteins.
- 8. Cell type that lacks a membrane-bound nucleus.
- 15. Membrane-bound organelle that contains most eukaryotic DNA.

Biotechnology Crossword

Hard | 20 clues | Teacher Answer Key

TEACHER ANSWER KEY

Completed grid and numbered answers. Spaces and punctuation are omitted in the grid.



ACROSS

1. Rough endoplasmic reticulum
3. Central vacuole
4. Plasma membrane
5. Surface area-to-volume ratio
9. Tissue
10. Golgi apparatus
11. Polymerase Chain Reaction
12. DNA
13. Plasmid
14. Cytoplasm
16. Gel Electrophoresis

ACROSS (continued)

17. Biotechnology
18. Recombinant DNA
19. Cell theory
20. Chloroplast

DOWN

2. Cell specialization
6. Cell wall
7. Ribosome
8. Prokaryote
15. Nucleus