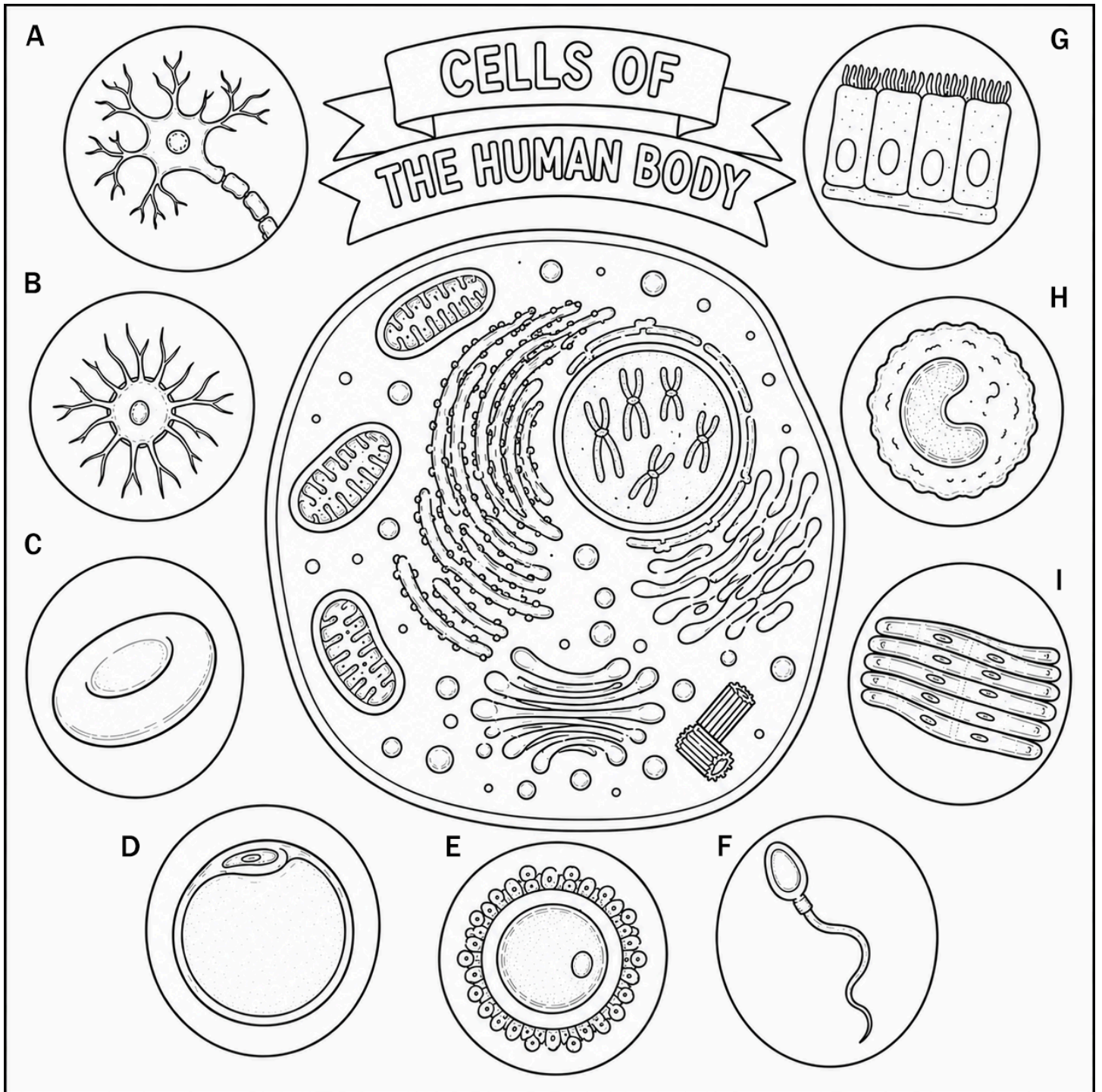


Parts of a Cell - *use your notes or other resources to identify and color each structure*

- 1. Plasma Membrane** - outer boundary of the cell; controls what enters and leaves the cell . Color green.
- 2. Cytoplasm** - the jelly-like fluid that fills the cell; where many chemical reactions take place. Leave white.
- 3. Nucleus** - the cell's control center; contains the DNA and directs the cell's activities. Color the **nuclear membrane** black, the **nucleoplasm** light blue, and the **chromosomes** dark blue.
- 4. Nucleolus** - structure inside the nucleus. It produces ribosomes, which are needed to build proteins. Color purple.
- 5. Rough Endoplasmic Reticulum (Rough ER)** - covered with ribosomes; it transports proteins that will be used by the cell or exported outside the cell. Color yellow.
- 6. Smooth Endoplasmic Reticulum (Smooth ER)** - does not have ribosomes; produces lipids. Color dark green.
- 7. Ribosomes** - tiny structures that build proteins. Color orange.
- 8. Golgi Apparatus** - modifies and packages proteins into vesicles for transport. Color GA pink, and the vesicles purple.
- 9. Mitochondria** - the cell's "powerhouses" produce ATP, the energy that powers most cellular activities. Color red.
- 10. Lysosome**- contain digestive enzymes that break down worn-out organelles and waste materials. Color brown.
- 11. Centrioles** - play a role during cell division by helping separate chromosomes. Color blue.

Cell Types

- A. Neuron (Nerve Cell)** - transmit electrical signals throughout the body; communication between brain and other systems. Color orange.
- B. Osteocyte (Bone Cell)** - mature bone cells that maintain bone tissue for the body's support. Color green.
- C. Red Blood Cell** - transport oxygen from the lungs to body tissues. Color red.
- D. Fat Cell (Adipocyte)** - store energy in the form of lipids. Color yellow.
- E. Egg Cell (Ovum)** - female reproductive cell. Color pink.
- F. Sperm Cell** - male reproductive cells. Color blue.
- G. Epithelial Cell** -form protective coverings and linings of the body. Color brown.
- H. White Blood Cell** - part of the immune system. Color gray.
- I. Muscle Cell** - contract to produce voluntary movement. Color purple.



Matching Practice - Parts of the Cell

- | | | | |
|--------------------|--------------|---------------|--------------------|
| A. Plasma Membrane | B. Cytoplasm | C. Nucleus | D. Nucleolus |
| E. Rough ER | F. Smooth ER | G. Ribosomes | H. Golgi Apparatus |
| I. Mitochondria | J. Lysosome | K. Centrioles | L. Chromosomes |

- _____ 1. Contains the cell's DNA and controls the activities of the cell.
- _____ 2. Produces ATP, the energy used to power cellular activities.
- _____ 3. Tiny structures that assemble proteins by joining amino acids together.
- _____ 4. Modifies, sorts, and packages proteins before they are transported.
- _____ 5. Acts as the outer boundary of the cell and controls what enters and leaves.
- _____ 6. Jelly-like material that fills the cell and suspends the organelles.
- _____ 7. Produces ribosomes inside the nucleus.
- _____ 8. Membrane network covered with ribosomes that helps produce and transport proteins.
- _____ 9. Membrane network without ribosomes that produces lipids.
- _____ 10. Contains digestive enzymes that break down waste materials and worn-out organelles.
- _____ 11. Helps organize microtubules and assists in cell division.
- _____ 12. Carry the cell's genetic information in the form of DNA.



Matching Practice - Types of Cells

- | | | | |
|------------------------|--------------------------|--------------------|-------------|
| A. Neuron (Nerve Cell) | B. Osteocyte (Bone Cell) | C. Red Blood Cell | D. Fat Cell |
| E. Egg Cell (Ovum) | F. Sperm Cell | G. Epithelial Cell | |
| H. White Blood Cell | I. Skeletal Muscle Cell | | |

- _____ 1. Carries oxygen from the lungs to body tissues.
- _____ 2. Sends electrical signals throughout the body
- _____ 3. Stores energy in the form of fat and helps insulate and cushion the body.
- _____ 4. Forms the body's protective coverings and lines many organs
- _____ 5. Defends the body against bacteria and viruses
- _____ 6. Contracts to move bones and produce voluntary body movements.
- _____ 7. Maintains bone tissue and helps keep bones strong and healthy.
- _____ 8. Male reproductive cell that swims to fertilize an egg.
- _____ 9. Female reproductive cell that provides nutrients for the developing embryo after fertilization.

