

Match the structure to its job

Name _____

Date _____

Write the name of the structure.

Problem	Answer	Problem	Answer
1. A rigid outer layer made mainly of cellulose fibres		8. Releases usable energy (ATP) from sugars by aerobic respiration	
2. The thin, selectively permeable boundary just inside the wall		9. Membrane channels lined with ribosomes, where proteins are made and folded before being sent on	
3. The watery gel between the membrane and the vacuole, where enzymes carry out many reactions and organelles are suspended		10. Ribosome-free membrane tubes that make lipids, including those for new membranes and plant oils	
4. Holds the chromosomes (DNA) and directs growth and division		11. Very small particles that join amino acids into proteins following instructions in messenger RNA	
5. A dark body inside the nucleus where ribosomal RNA is made and ribosome parts are put together		12. Stacked, flattened sacs that finish, sort and ship proteins and also make polysaccharides used to build the cell walls	
6. Green, lens-shaped organelle containing chlorophyll in stacks of thylakoids (grana)		13. Narrow channels through the cell walls that connect the cytoplasm of neighbouring cells, letting water, nutrients and signals pass directly between them	
7. A large sac of cell sap enclosed by a membrane called the tonoplast			

Notes

Answer key — Match the structure to its job

#	Problem	Answer
1	A rigid outer layer made mainly of cellulose fibres	Cell wall
2	The thin, selectively permeable boundary just inside the wall	Cell membrane
3	The watery gel between the membrane and the vacuole, where enzymes carry out many reactions and organelles are suspended	Cytoplasm
4	Holds the chromosomes (DNA) and directs growth and division	Nucleus
5	A dark body inside the nucleus where ribosomal RNA is made and ribosome parts are put together	Nucleolus
6	Green, lens-shaped organelle containing chlorophyll in stacks of thylakoids (grana)	Chloroplast
7	A large sac of cell sap enclosed by a membrane called the tonoplast	Central vacuole
8	Releases usable energy (ATP) from sugars by aerobic respiration	Mitochondrion
9	Membrane channels lined with ribosomes, where proteins are made and folded before being sent on	Rough endoplasmic reticulum
10	Ribosome-free membrane tubes that make lipids, including those for new membranes and plant oils	Smooth endoplasmic reticulum
11	Very small particles that join amino acids into proteins following instructions in messenger RNA	Ribosomes
12	Stacked, flattened sacs that finish, sort and ship proteins and also make polysaccharides used to build the cell wall	Golgi apparatus
13	Narrow channels through the cell walls that connect the cytoplasm of neighbouring cells, letting water, nutrients and signals pass directly between them	Plasmodesmata

Notes