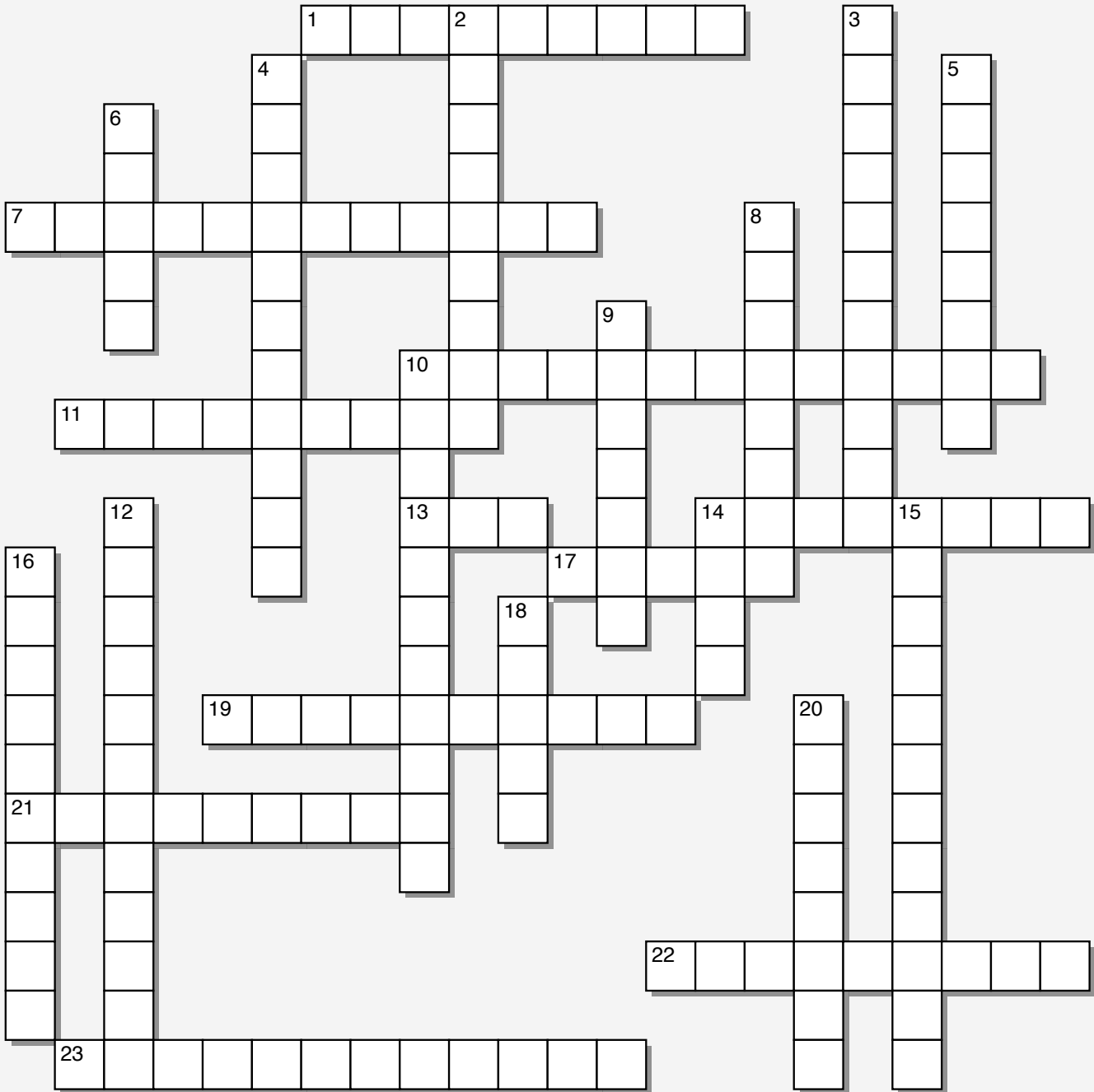


Cell Parts Crossword



Across

1. Dark-staining body within the nucleus; site of r-RNA synthesis and the assembly of 40S and 60S ribosomal subunits.

Down

2. Organelles containing a variety of hydrolytic enzymes (hydrolases); these "digest" food materials within eukaryotic cells.

Across

7. Membranous organelles containing ccc-DNA and 70S ribosomes; their thylakoids synthesize ATP by means of photophosphorylation.
10. Material forming the rigid portions of bacterial cell walls; not made by Archaea or eukaryotic cells.
11. Made up of r-RNA and protein, these are the site of protein synthesis in all types of cells.
13. Contractile vacuoles pump water _____ of cells when they undergo systole.
14. Small, extrachromosomal loops of DNA containing genes considered not essential to cell function under most circumstances.
17. Hair-like appendages used for swimming, or can form tufts (cirri) used for walking and jumping.
19. Reservoir of stored food that aids attachment and provides protection; is a major component of biofilms.
21. Occurs in polymers within metachromatic granules.
22. Protoplasm surrounded by the cell membrane; located outside the nuclear envelope of eukaryotic cells.
23. Prokaryotic inclusions containing enzymes involved in fixing carbon.

Down

3. Thick-walled cells containing enzymes used for nitrogen fixing; these are made by cyanobacteria.
4. The smooth _____ reticulum is involved in storage, transport and the synthesis of lipids.
5. Numerous hair-like appendages made by bacteria and used for attachment to various surfaces.
6. Membranous complex involved in storage, transport, sorting, packaging, polysaccharide synthesis and the assembly of complex molecules.
8. Eukaryotic _____ contain microtubules, are surrounded by membrane and "whip", while those of bacteria contain flagellins, are attached to the cell membrane and rotate.
9. Microtubule associated proteins able to "walk" along protofilaments and carry particles to new locations within cells.
10. Organelles able to catabolize long chain fatty acids and toxins; their catalase enzymes break down hydrogen peroxide.
12. Membranous organelles containing ccc-DNA and 70S ribosomes; their cristae synthesize ATP by means of oxidative phosphorylation.
14. Single, hair-like structures used by bacteria to attach cells together in preparation for gene transfer.
15. Made of tubulin proteins; found within cilia, flagella and centrioles.
16. Dormant structures containing high levels of DNA and dipicolinic acid; these help populations of *Bacillus* survive harsh conditions.
18. Material found within the cell walls of diatoms and in the external skeletons of protozoa called radiolarians.
20. Nuclear region of a prokaryotic cell; contains DNA, but is not surrounded by a nuclear envelope.