

Proterozoic Eon - Crossword Answers

1. Animal-like protists use this type of nutritional strategy: **Ingestive**
2. Common name for single-celled photosynthetic eukaryotes: **Algae**
3. The type of cell-fission that creates two equal sized daughter cells: **Binary**
4. Another name for a contractile vesicle: **Water Expulsion Vesicle**
5. Number of membranous bilipid layers surrounding the photosynthetic organelle created by secondary endosymbiosis: **Four**
6. This molecular motor travels along actin fiber: **Myosin**
7. This region of the bacterial cell was surrounded by the endomembrane system during the evolution of the first eukaryotes: **Nucleoid**
8. In addition to the mitochondria, this organelle in photosynthetic autotrophs also arose for the first time by a primary endosymbiotic event: **Plastid**
9. Cytoskeleton microtubules are composed of this protein: **Tubulin**
10. Fungal-like protists use this type of nutritional strategy: **Absorptive**
11. The final pH as digestion ends inside a protozoan food vacuole: **Alkaline**
12. All protozoans are **single**-celled organisms.
13. The internal structure of cilia or flagella is referred to as a **Nine plus Two** organization of microtubules.
14. The fusion of male and female gametes produces this: **Zygote**
15. What do gametophytes produce? **Gametes**
16. The higher taxon that includes all protozoans: **Kingdom**
17. Food always enters a ciliate through this cellular structure on the cell surface:
Cytostome
18. One of the advantages of a nuclear envelope surrounding the nucleus is that this part of the Central Dogma is restricted to the cytoplasm: **Translation**

19. This colonial opisthokont cell was ancestral to both animals and fungi: **Choanoflagellate**
20. In the diplontic life cycle, which type of chromosomal complement dominates? **Diploid**
21. A mitochondria is surrounded by an inner and outer membrane; which is bacterial by origin? **Inner**
22. Cell wall polysaccharide in the plant like eukaryotic protists: **Cellulose**
23. Polymerized proteins convert the endoplasm to this during amoeboid movement: **Ectoplasm**
24. Cell wall polymer of the fungal-like eukaryotic protists: **Chitin**
25. The part of the amoeba where the endoplasm is converted to ectoplasm: **Front**
26. a) The contents of this organelle contain the digestive enzyme that will fuse with the food vacuole in protozoans. **Lysosome**
b) This is the first type of cell attacked by the malaria parasite when it first enters the human host: **Liver**
27. Describes the cycle of multiple fission by the malarial parasite inside the human host. **Schizogony**
28. Mitochondrial DNA takes this bacterial shape. **Circle**
29. This type of wave is used by a ciliate when the cilia beat on the surface of their body: **Metachronal**
30. Each of the nine microtubular bundles arranged around the centriole consists of how many microtubules? **Three**
31. In the endosymbiont theory what type of metabolism did the first eukaryote cell have? **Anaerobic**
32. Number of microtubular strands at the center of a centriole: **One**
33. This type of gliding was probably a precursor to movement in the first eukaryote cell: **Cellular**
34. In the plant-like life cycle with alternation of generation what type of cell division results in the production of gametes: **Macronucleus**

35. In protozoa cilia, can fuse into the complex ciliary structures that can even be used for a form of locomotion that resembles cellular walking. **Cirri**
36. Unlike the organization of the genome in bacteria with only one replication point, the **linear** arrangement eukaryote chromosomes allows for multiple replication points.
37. The guiding filament for the myosin motor: **Actin**
38. Protozoa with cilia are given this common name: **Ciliates**
39. Each tubulin molecule is composed of how many proteins? **Two**
40. One of the two ways that flagella beat: **Spiral**
41. All three molecular motors burn this as their fuel to move along their guiding filaments: **ATP**
42. The presence of this compound in the inner wall of the photosynthetic organelle of algae is evidence of the organelles bacterial origins: **Peptidoglycan**
43. Have there ever been cases of malaria in the Ottawa and Eastern Ontario region? **Yes**
44. If during the life cycle haploid cells produced by meiosis do not form gametes the cells are given a different name, what is it? **Spores**