Archean Eon - Crossword Answers

1. During reproductive transformation bacteria incorporate DNA from this location into their own. Sometimes it works: **Extracellular**

2. The distinction between the different Domains was first identified using the sequence of nucleotides in this macromolecular polymer: **rRNA**

3. The gram negative bacteria have a bilayer of this compound as their outermost layer: **Lipid**

4. Changes and mutations are expressed immediately in bacteria because of this structure of the genome: **Haploid**

5. Viroids were first discovered in these organisms: **Plants**

6. Pathogenicity of Gram-negative bacteria is often associated with this membrane layer of bacterial cell wall: **Outer**

7. Autotrophs get their carbon from this compound: **Carbon Dioxide**

8. The little hairs found on the surface of some bacteria are important for making cell to cell connections during conjugation: **Pilli**

9. Viroids provide support for this hypothesis for the first replicating catalytic macromolecules: **RNA World**

10. The D variant of this disease was the first example of a animal viroid: **Hepatitis**

11. Inclusion of DNA from outside of the bacterial cell into the genome is this type of bacterial reproduction: **Transformation**

12. Virus particles surrounded by a bilipid plasma membrane are of this type: **Enveloped**

13. These bacteria ultimately produced the oxygen environment we live in today: **Cyanobacteria**

14. The domain that doesn't include prokaryotes: **Eukarya**

15. Organisms that live in and use oxygen in the respiratory processes: **Aerobic**

16. This form of bacterial diversity is best seen in the different choices of electron acceptors used in respiration: **Metabolic**

17. a)Viruses often have alphanumeric designations in the case of H1N1 for example what type of molecules do the H and N refer to: **Protein**
    b) Bacteria that get carbon from organic sources and energy from light: **Photoheterotrophs**

18. Bacteria often survive harsh conditions by forming theses protective structures. In this form they can survive almost anything: **Endospores**

19. The product of binary fission is two of these cells: **Daughter**

20. Number of different modified sugars that are found in peptidoglycan: **Two**

21. All bacteria have this number of chromosomes: **One**

22. Photoautotrophs use this light particle as a source of energy to synthesize organic compounds: **Photon**

23. These membrane bound intracellular structures common in eukaryote cells are missing in bacteria: **Organelles**

24. Simple bacterial cell duplication: **Binary Fission**

25. These proteins change the direction that the bacterial flagellum rotates: **Switch**

26. Term for the feeding strategy of all bacterial types that use carbon in an organic form to make a build complex molecules: **Heterotrophic**

27. Enveloped viruses may exit from the host cell by cell rupture or this process: **Budding**

28. The reinforcing material in the bacterial cell wall consists of long chains of polysaccharide and side chains made of this material: **Peptide**

29. Chemical state of a compound that has gained an electron: **Reduced**

30. Halophile bacteria love this: **Salt**

31. This geological eon occurred from 3.8 Ma ago until 2,500 Mya and ends when oxygen first appears in the earth's atmosphere: **Archean**

32. This anchors the bacterial flagellum to the shaft of the biological motor underneath: **Hook**

33. Protein coat of a virus: **Capsid**

34. The r in rRNA: **Ribosomal**

35. These infectious agents contain no nucleic acids: **Prions**

36. During this stage of the viral life cycle hundreds if not thousands of new viral particles are released: **Lytic**

37. One of the first things a virus entering host does is to destroy this material: **DNA**

38. If a bacterium gets its high energy electrons from minerals or inorganic chemical elements you will see this as a part of the name describing their metabolism: **Litho**

39. a) These "extreme" bacteria can survive both very high and very low temperatures: **Thermophiles**
    b) Number of domains that the living world is divided into: **Three**

40. The number of amino acids in the peptide part of bacterial peptidoglycan: **Four**

41. For the bacterial reproduction by transduction you need the help of this type of virus: **Bacteriophage**

42. The energy source for creating the concentration gradient across the bacterial cell membrane that fuels the bacterial molecular motor: **ATP**

43. Swamp gas, natural gas, and bovine flatulence all have this Achaean produced gas in common: **Methane**

44. Abundant bacterial cytoplasmic inclusion involved in protein production: **Ribosomes**

45. This additional circular piece of DNA is found in some bacterial cells: **Plasmid**