**CELL CONSTRUCTION LAB**

**DIRECTIONS**: Depending on which team you were assigned to, create either the plant or animal cell with the materials provided by your instructor. You must **WORK TOGETHER** to divide up the responsibilities. Each team will **PRESENT THEIR CELL** for a grade at the end of class. **ALL STUDENTS WILL BE RESPONSIBLE FOR KNOWING ALL STRUCTURES/FUNCTIONS** of each cell (grade dependent on this).

***EUKARYOTIC TEAM: PLANT CELL***

|  |  |  |  |
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| **CELL COMPONENT** | **STRUCTURE REPRESENTATION** | **SMALL SUMMARY OF FUNCTION** | **COMPLETED** |
| CELL WALL |  |  |  |
| CELL MEMBRANE |  |  |  |
| NUCLEUS w/ nucleolus |  |  |  |
| LARGE CENTRAL VACUOLE |  |  |  |
| MITOCHONDRIA |  |  |  |
| GOLGI APPARATUS |  |  |  |
| CHLOROPLASTS |  |  |  |
| ENDOPLASMIC RETICULUM (both rough and smooth) |  |  |  |

***EUKARYOTIC TEAM: ANIMAL CELL***

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| **CELL COMPONENT** | **STRUCTURE**  **REPRESENTATION** | **SMALL SUMMARY OF FUNCTION** | **COMPLETED** |
| PLASMA MEMBRANE |  |  |  |
| RIBOSOMES |  |  |  |
| NUCLEUS w/ nucleolus |  |  |  |
| ROUGH ENDOPLASMIC RETICULUM |  |  |  |
| MITOCHONDRIA |  |  |  |
| GOLGI APPARATUS |  |  |  |
| LYSOSOMES |  |  |  |
| SMOOTH ENDOPLASMIC RETICULUM |  |  |  |
| CYTOPLASM |  |  |
| CENTRIOLE |  |  |

***PROKARYOTIC TEAM: BACTERIA (E.coli)***

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| **CELL COMPONENT** | **STRUCTURE REPRESENTATION** | **SMALL SUMMARY OF FUNCTION** | **COMPLETED** |
| CELL WALL |  |  |  |
| CELL MEMBRANE |  |  |  |
| GENETIC MATERIAL |  |  |  |
| RIBOSOMES |  |  |  |
| CYTOPLASM |  |  |  |
| FLAGELLA |  |  |  |

***PROTIST (EURKAYOTIC) TEAM: Paramecium***

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| **CELL COMPONENT** | **STRUCTURE REPRESENTATION** | **SMALL SUMMARY OF FUNCTION** | **COMPLETED** |
| CELL MEMBRANE |  |  |  |
| NUCLEUS |  |  |  |
| CONTRACTILE VACUOLE |  |  |  |
| RIBOSOMES |  |  |  |
| CYTOPLASM |  |  |  |
| CILIA |  |  |  |
| ANAL PORE |  |  |  |
| CELL MOUTH |  |  |  |

***PROTIST (EUKARYOTIC) TEAM: Euglena***

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| **CELL COMPONENT** | **STRUCTURE REPRESENTATION** | **SMALL SUMMARY OF FUNCTION** | **COMPLETED** |
| CELL MEMBRANE |  |  |  |
| NUCLEUS |  |  |  |
| CHROLOPLAST (YEP!!) |  |  |  |
| RIBOSOMES |  |  |  |
| CYTOPLASM |  |  |  |
| FLAGELLA |  |  |  |
| CONTRACTILE VACUOLE |  |  |  |
| EYE SPOT |  |  |  |

***VIRUS: BACTERIOPHAGE***

|  |  |  |  |
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| **VIRUS COMPONENT** | **STRUCTURE REPRESENTATION** | **SMALL SUMMARY OF FUNCTION** | **COMPLETED** |
| CAPSID |  |  |  |
| GENETIC MATERIAL |  |  |  |
| TAIL FIBERS OR GLYCOPROTEINS |  |  |  |
| HOST |  |  |  |
| EXAMPLES OF COMMON BACTERIAPHAGES |  |  |  |

***VIRUS: RETROVIRUS***

|  |  |  |  |
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| **VIRUS COMPONENT** | **STRUCTURE REPRESENTATION** | **SMALL SUMMARY OF FUNCTION** | **COMPLETED** |
| CAPSID |  |  |  |
| GENETIC MATERIAL |  |  |  |
| TAIL FIBERS OR GLYCOPROTEINS |  |  |  |
| HOST |  |  |  |
| EXAMPLES OF COMMON RETROVIRUSES |  |  |  |