**CLADOGRAM CARDS**

Set A

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| Catfish  hannelcat.jpg   * Vertebrate * Has jaw structure * Breathes using gills * No limbs * Lays eggs * Scavenges/searches for food | Kangaroo  angaroo.jpg   * Vertebrate * Breathes using lungs * Four limbs * Live birth from sexual reproduction * Searches/hunts for food * Hair covers body |
| Bullfrog  ull2.jpg   * Vertebrate * Four limbs * Breathes using lungs * Lays eggs from sexual reproduction * Searches/hunts for food | Sea Sponge  ponge.jpg   * Invertebrate * No limbs * “Simple” animal structure * Direct oxygen transfer with water * Passive feeder * Asexual or sexual reproduction |

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| Starfish  tarfish2.jpg   * Invertebrate * No limbs * “Simple” animal structure * Direct oxygen transfer with water * Passive feeder | Lamprey  ea-lamprey.jpg   * Vertebrate * No limbs * Parasite/Active feeder * Jawless |
| Lung fish  ung fish.jpg   * Vertebrate * Has jaw structure * Breathes using lung structure * No limbs * Lays eggs * Searches for food | Pangolin  angolin_05.jpg   * Vertebrate * Breathes using lungs * Keratin scales cover body * Four limbs * Live birth from sexual reproduction * Searches/hunts for food |

Set B

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| *Escherichia coli* (food poisoning)  .coli-ed01.jpg   * Single circular chromosome * Nucleus without membrane * Unicellular * Asexual reproduction * Thrives in normal conditions * Bacillus shape * Domain Bacteria | *Nanoarchaeum equitans*  rzwerg.jpg   * Single circular chromosome * Nucleus without membrane * Asexual reproduction * Unicellular * Thrives in extreme cold conditions * Domain Archaea |
| *Streptococcal pharyngitis* (strep throat)  trep-throat.jpg   * Single circular chromosome * Nucleus without membrane * Asexual reproduction * Unicellular * Thrives in normal conditions * Coccus shape * Domain Bacteria | *Sulfolobus solfataricus* ulfolobus.jpg   * Single circular chromosome * Nucleus without membrane * Asexual reproduction * Unicellular * Thrives in extreme hot conditions * Domain Archaea |

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| Original Basic Life Form   * Unicellular * Small, single circular chromosome * Nucleus without membrane * Asexual reproduction | *Plasmodium falciparum* (malaria)  *lasmodium_falciparum_01.png*   * Unicellular * Asexual reproduction * Membrane-bound organelles * Domain Eukaryota * Does not contain chloroplasts |
| Rhodophyta (Red Algae)  aurencia.jpg   * Multicellular * Sexual reproduction * Membrane-bound organelles * Domain Eukaryota * Contains chloroplasts | *Pediastrum duplex* (Green algae) ediastrum.jpg   * Unicellular colonies * Asexual reproduction * Membrane-bound organelles * Domain Eukaryota * Contains chloroplasts |

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| *Sphagnum flexuosum* (peat moss)  phagnum.flexuosum.jpg   * Multicellular with complex organ systems * Sexual reproduction * Domain Eukaryota * Contains chloroplasts | *Sequoiadendron giganteum* (Giant sequoia)  rizzly_Giant_Mariposa_Grove.jpg   * Multicellular with complex organ systems * Sexual reproduction * Root system for nutrients * Domain Eukaryota * Contains chloroplasts |