Unit Test Review

Life Science

Rules:

- Participants buzz in after the majority of the question is read to answer
  - Each correct response results in 1 point

- You may use scrap paper to write down ideas for Punnett squares

Rules Continued:

- Incorrect answer: Same question goes to any other person remaining that did not buzz in before - awarded 1 point
    - Next question will go to another set of lab table representatives

- Outside talking amongst lab tables during a round results in deduction of point

Rules Continued:

- First response - only response (cannot change answer)

Question #1

- What is the specific function of life that deals with getting rid of waste that could be toxic to the organism

Question #2

- Human beings can heal cut skin and mend broken bones. What is this specific function of life?

Question #3

- A layer of cells that all perform a specific function in an organism is called what?

Question #4

- The division and multiplication of body cells is called what?

Question #5

- How do you calculate the total magnification of a compound microscope image?

Question #6

- The nucleus in plant and animal cells contains what?
  - Hint = not an organelle

Question #7

- What are 4 cell organelles that are only found or only functional in plant cells?

Question #8

- What is the function of the mitochondria?

Question #9

- In complete dominance, if the allele for pea plants growing tall (T) is dominant over the allele for plants growing short (t), what are the possible genotype(s) for a small plant?

Question #10

- What is the function of the coarse adjustment knob on a compound microscope?

Question #11

- What is the definition of unicellular?
  - Extra point – what kingdom(s) of organisms are unicellular?

Question #12

- What is a eukaryotic cell?

Question #13

- The division and multiplication of reproductive cells, or gametes, is done through what process?

Question #14

- Where does the majority of the cell's molecular and chemical activity occur?

Question #15

- The phenotype of this allele is only present when the dominant allele is absent.

Question #16

- The specific genes or alleles responsible for a specific trait is called a trait's what?

Question #17

- When 2 purebred traits appear together, but separate (combined) for a heterozygous trait is considered what type of allele inheritance?

Question #18

- The chart that predicts the chances of offspring inheriting a particular trait from their parents is called what?

Question #19

- What kingdom of organisms contain a prokaryotic, unicellular species that can only survive in places devoid of oxygen?

Question #20

- What is the cell organelle that is only found in animal cells?

Question #21

- When the dominant trait always shows in the phenotype, what type of allele inheritance is this?

Question #22

- If round peas in pea plants, represented by R is dominant over wrinkled peas, represented by r, what are the possible genotype(s) for round peas?

Question #23

- For co-dominance, cattle with red hairs (RR) crossed with cattle with white hairs (WW) will create offspring with roan hairs (RW). Construct a Punnett square that demonstrates the possible offspring that will develop from a cross between a cattle with white hairs and a cattle with roan hairs.

Question #24

- From the previous question, what is the percentage of cattle offspring that will develop white hairs?

Question #25

- How many alleles are passed down from **each** parent for each trait?

Question #26

- What is another term for a heterozygous trait?

Question #27

- What is the blueprint for life that determines the specific alleles for each physical trait?

Question #28

- What is the function of the cell wall?

Question #29

- What kingdom of organisms could have both unicellular and multicellular organisms?

Question #30

- When microbes or insects roll into a ball after physical stimuli, what specific function of life is this?

Question #31

- In microscopes, what is the function of the diaphragm?

Question #32

- Who was the scientist that studied allele inheritance in pea plants and is considered the father of modern genetics?

Question #33

- If yellow body color (Y) is dominant to blue body color (y), what would be the phenotype(s) for the genotypes YY and Yy?

Question #34

- Mitosis is responsible for what life function?

Question #35

- What is the product of mitosis?

Question #36

- Meiosis is responsible for what life function?

Question #37

- What is the product of meiosis?

Question #38

- What blood type is considered the universal donor?
  - Extra point – what blood type is considered the universal recipient?

Question #39

- What is/are the possible genotype(s) for Type A blood?

Question #40

- What is/are the possible genotype(s) for Type B blood?

Bonus Question

- Blood type is controlled by what type of allele inheritance?