

Life Science

Review Game

Rules

- ▣ Lab Team Tables
- ▣ Table 1 = purple
- ▣ Table 2 = blue
- ▣ Table 3 = green
- ▣ Table 4 = yellow
- ▣ Table 5 = orange
- ▣ Table 6 = pink

Rules cont.

- ▣ Each correct answer worth 1 point
- ▣ Go in seat order 4-1
- ▣ Wait for me to read the majority of the question to buzz in for an answer
- ▣ Extra points within some questions are available

Rules cont.

- ▣ Any outside talking during a round will result in a deduction of points
- ▣ Bonus round = maximum wager up to double of final point count
- ▣ Timed 30 seconds on answer sheet with points wagered and table number

Question #1

▣ What is the basic unit of life?

Question #2

- ▣ What is the function of the stage clips on a microscope?

Question #3

- ▣ What is the magnification power of the eyepiece on a microscope?

Question #4

▣ What is a unicellular organism?

Question #5

▣ What is the function of the cell membrane?

Question #6

▣ How many alleles control each genetic trait?

Question #7

▣ What is a phenotype?

Question #8

- ▣ How does one calculate the total magnification of a microscope?

Question #9

- ▣ What kingdoms of organisms are unicellular organisms?

Question #10

- ▣ What are multicellular organisms?
- ▣ extra point = what kingdoms of organisms are multicellular organisms?

Question #11

▣ What is the function of the mitochondria?

Question #12

- Which of the following cellular organisms are only found in animal cells
- a) cell membrane
- b) cytoplasm
- c) lysosome
- d) mitochondria

Question #13

▣ What is a prokaryotic cell?

Question #14

- ▣ Which of the following statements is part of the cell theory?
- ▣ a) All living and non-living things are made up of cells
- ▣ b) The atom is the basic unit of life
- ▣ c) All cells have a cell wall
- ▣ d) All cells arise from pre-existing cells

Question #15

- ▣ What is the term for cellular division of body (somatic) cells
- ▣ extra point = what is the end result?

Question #16

- ▣ For the function of the cell membrane, what is the **adjective** for describing how only certain molecules can pass in and out of the cell?

Question #17

- Which of the following cell organelles are only found in plant cells?
- a) nucleus
- b) chloroplast
- c) cell membrane
- d) cell wall

Question #18

- ▣ Which cell organelle, found only in plant cells, stores starch as a result of photosynthesis?

Question #19

▣ What is a eukaryotic cell?

Question #20

- ▣ What is the function of the revolving nosepiece on a microscope?

Question #21

- ▣ Which of the following statements best describes the reason for the structural differences between plant and animal cells?
- ▣ a) Plant and animal cells carry out similar life processes
- ▣ b) Different functions within the environment determines their different cellular structures
- ▣ c) Plant cells can only carry out 5 life processes while animal cells carry out all 7
- ▣ d) Plant cells are prokaryotic while animal cells are eukaryotic

Question #22

- ▣ Which kingdoms of organisms contain prokaryotic cellular organisms?

Question #23

- Which of the following are considered functions of life?
- a) movement
- b) producing heat
- c) reproduction
- d) irritability

Question #24

- ▣ How is a dominant allele represented in a genotype?

Question #25

- ▣ What type of allele inheritance is evident when a dominant allele will mask the recessive allele, and the dominant trait will always show unless there are 2 recessive alleles in the genotype?

Question #26

- ▣ Tall (T) is dominant over short (t)
- ▣ % tall?

	T	T
t	Tt	Tt
t	Tt	Tt

Question #27

- ▣ Tall (T) is dominant over short (t)
- ▣ % short?

	t	t
T	Tt	Tt
t	tt	tt

Question #28

- ▣ Blood type inheritance is what type of allele inheritance?

Question #29

▣ What is the function of the nucleus?

Question #30

- ▣ What type of allele inheritance is evident when a heterozygous trait will show a mixture of the 2 homozygous traits to show an intermediate trait?

Question #31

- ▣ Which blood type is considered the universal donor?

Question #32

- ▣ What is the function of the chloroplast?
- ▣ extra point = what does it contain?

Question #33

▣ Rr

▣ What is the term for this genotype?

Question #34

rr

What is the **specific** term for this genotype?

Question #35

▣ What is another term for a hybrid trait?

Question #36

▣ What is a genotype?

Question #37

▣ Where are genes located?

Question #38

▣ What is another term for a purebred trait?

Question #39

- ▣ What type of allele inheritance is evident when a heterozygous trait will show a combination of the 2 homozygous traits and will appear together, but not mixed?

Question #40

- ▣ RW
- ▣ What is the term for this genotype?

Question #41

- ▣ R (red)
- ▣ W (white)
- ▣ RW (pink)
- ▣ % white?

	W	W
R	RW	RW
W	WW	WW

Question #42

- ▣ B (blue)
- ▣ G (green)
- ▣ BG (blue and green) B
- ▣ % blue and green?

	B	G
B	BB	BG
B	BB	BG

Question #43

- ▣ Which blood type is considered the universal recipient?

Question #44

- ▣ What is the function of the endoplasmic reticulum (ER)?
- ▣ extra point = is it found in animal cells or plant cells or both?

Question #45

▣ What is the function of the Golgi Body?

Question #46

- ▣ What is the term for cellular division of the reproductive cells?
- ▣ extra point = what is the end result?

Question #47

▣ What is an acquired trait?

Question #48

▣ What is an inherited trait?

Question #49

- ▣ How many **pairs** of chromosomes do humans have?
- ▣ extra point = how many **individual** chromosomes in total?

Question #50

- ▣ A = Type A
- ▣ B = Type B
- ▣ AB = Type AB
- ▣ O = Type O
- ▣ What is the phenotype for the genotype AO?

Question #51

- ▣ What is the efficient process in which the mitochondria produces energy called?
 - Extra point = what is the inefficient process called?

Question #52

- ▣ What are the raw ingredients for photosynthesis?
 - Bonus point = what are the end results

Question #53

- ▣ What are the raw ingredients for aerobic respiration?
 - Bonus point = what are the end results?

Question #54

- ▣ Explain how the processes of photosynthesis and aerobic respiration work together to sustain life on the planet?

Bonus Question

- ▣ If a dad is homozygous for Type B blood and a mom is heterozygous for Type A blood, is it possible to have a son that has Type O blood?
- ▣ Prove your answer...