

## LIFE SCIENCE THIRD QUARTER EXAM STUDY GUIDE - 2016 MR. GALLOWAY

FILE = *LS-3rd-Quarter-Exam-2016-GUIDE* LINKS to all past material are on the webpage & Its Learning)

**THE EXAM IS ALL REVIEW, SO WE WILL REVIEW DURING THE DAYS BEFORE THE EXAM.**



**METRIC MATH (SYSTEM INTERNATIONAL) also see the old video tutorials, notes, etc., linked on the webpage if needed**

- **(BEST Tutorial) [Intro: Metric system/conversion \(14 min\)](#)**

- know why the metric system is easier to use than our system, and the other big reason scientists use it
- know the categories of measurement and base unit used for each (weight/mass = gram, temp = celcius, time = second, etc.)
- know the metric slider and be able to put on it the prefixes at the top and the amounts they represent at the bottom
- be able to use the slider to convert from one unit to another like: 22 mm =   ?   km, or 1L =   ?   dl, etc.
- be able to compare which amounts are <, >, or = like 552m   ?   .552 km, 1 grams   ?   100 mg, etc.

**MICROBIOLOGY Chs 6-7 also see the old notes, etc., linked on the webpage if needed**

**CHAPTER 6 CLASSIFICATION, VIRUSES & BACTERIA:**

- know the 7 levels of classification and memory phrase I made up to remind you (kingdom, phylum, etc.) (Kings, Place, Crowns, etc.)
- you might find it helpful to read **WORKSHEETS** discussions for Chs 6 and 7, linked and downloadable on IT'S LEARNING.
- know the SIX KINGDOMS (Archaeobacteria, Eubacteria, Protist, Fungi, Plants, Animals) from Chapter 6 and the major characteristics of each one. (For example: what kingdom (s) include ONLY prokaryotes, which kingdom (s) include heterotrophs, etc.)
- Why are bacteria called prokaryotes instead of eukaryotes?
- What are the types of bacterial reproduction?
- Why are viruses considered to be NON-living, even though they do multiply?
- Compare the size of virus particles to cells.
- What is the difference between an active and a hidden virus?

**CHAPTER 7 PROTISTS & FUNGI:**

- Remember, I reduced the Ch 7 notes to this two page outline for your study guide ([PDF](#)) ([DOC](#)). It's only section 1 & 2 of Ch 7.
- know the main characteristics of creatures in the Kingdom Protist, the "Odds & Ends", or "Junk Drawer" Kingdom
- Creatures created by our Creator, God, come in all sizes, shapes, and colors. The kingdom, "Protists", covers many "Kinds" of creatures, that don't fit in other kingdoms. All protists are eukaryotes. Some are unicellular, others are multicellular like giant sea weed algae that is over 100 meters long. Some are heterotrophs, others are autotrophs, and some are both.

**PLANTS Chs 8-9 also see the old notes, etc., linked on the webpage if needed**

**CHAPTER 8 SEEDLESS PLANTS:**

- Know what the following are: Bog, Cuticle, Gamete, Hydroponics, Tissue, Vacular tissue, Vascular vs. Nonvascular plant, Seed-less plants and what they use for reproduction instead of seeds,

**CHAPTER 9 SEED PLANTS:**

- phloem vs. xylem vascular tissue, pollination vs. fertilization vs. germination, gymnosperms vs. angiosperms
- be able to label the parts of a flower on a diagram
- know what the difference between the male parts and the female parts, know what female part fruit comes from

**A FEW MAJOR CONCEPTS YOUR SHOULD KNOW FOR ANY QUIZ OR TEST ALL YEAR:**

- a living cell is the smallest thing we call "alive". It is the basic unit of life. Genetic information is the basis for life.
  - spell DNA correctly, DNA genes are **information** and info always comes from a living **intelligence** NOT non-living chemicals
  - mutations are errors in DNA information that do not add new info to make for new parts as macroevotionists claim
  - over time mutations are a loss of information causing loss of parts or process and eventually death in individuals & populations
  - all biological PARTS involved in PROCESSES for important PURPOSES, built and run by DNA
  - the FORM (shape) of every part and process is designed for an important FUNCTION
- Microevolution is true, BUT merely the natural selecting and loss of existing genes for adaptation. It merely produces variations within "KINDS" of creatures, NOT new kinds. Dogs to dogs. Macroevolution is a false belief in many unseen magical mystery mechanism for their theory:
- nothing somehow exploded (bang) & produced everything, non-living chemicals made life, mutations made new info and parts to turn microbes into mice and then men, etc.....

