Name: Class: Date:

Review for Unit 1 Exam

Exam Dates: **602 & 604**: Wednesday 1/21 **601 & 603**: Thursday 1/22

- This exam will count for the 3rd marking period so students can do corrections.
- All students can create a study guide from the information below for +5.
- Students should refer to Quizzes 1-4 for practice questions (I will not be providing extra questions-students should have enough to work from).
- Review and extra help will be held on Tuesday 1/20 (review in class and Extra help at lunch).

Topic: ***Scientific Inquiry***

Know: qualitative observation, quantitative observation, IV, Levels of IV, DV, CV, Hypothesis, Testable question, repeated trials, line graph, bar graph

Be able to:

- ❑ differentiate between qualitative and quantitative observations
- ❑ identify IV, levels of IV, DV, CV and trials in a given scenario (the IDD)
- ❑ recognize and formulate testable questions and hypotheses
- ❑ make a graph of provided data

Topic: *Calculating Work*

Know: work, force, distance, exert, joules, newtons, meters

Be able to:

- ❑ Solve an equation for work (Work= Force x Distance)

Topic: ***Simple Machines***

Know: lever, pulley, screw, inclined plane, wedge, wheel and axle

Be able to:

- ❑ identify the 6 simple machines
- ❑ explain how a simple machine offers an advantage to its user (choose between lever, pulley, inclined plane)

Up Next…

Unit 2:The Classification of Living Organisms

Essential Questions

A. How can you differentiate between a living organism and a non-living object?
B1. How are the structures within an organism organized?
B2. How can one explain the ways in which cells contribute to the function of living organisms?
C. How do scientists organize living organisms?

Vocab

living, non-living, structure, function, cell, tissue, organ, organ system, organism, animal cell, plant cell, nucleus, vacuole, endoplasmic reticulum, cell membrane, cell wall, golgi apparatus, cytoplasm, lysosome, ribosome, microscopic, organelle, prokaryotic, eukaryotic, dichotomous key

Students will be able to:

- ❑ Differentiate between living organisms and non-living objects
- ❑ Explain how living organisms are organized
- ❑ Explain the structure and function of organelles in a cell
- ❑ Explain how cells contribute to the function of living organisms
- ❑ Classify living organisms using a dichotomous key
- ❑ Advanced Skill-generate a dichotomous key to classify organisms

Resources: NYS Science Textbook (Orange Book) and http://bit.ly/1IEZuN7

Students will continue to engage in Scientific Inquiry

Vocab: qualitative observation, quantitative observation, IV, Levels of IV, DV, CV, Hypothesis, Testable question, repeated trials, line graph, bar graph

Students will continue to:

- ❑ differentiate between qualitative and quantitative observations
- ❑ identify IV, Levels of IV, DV, CV and trials in a given scenario (the IDD)
- ❑ design experiments
- ❑ recognize and formulate testable questions and hypotheses
- ❑ make a graph of provided data

NOTE: Students who show mastery or near mastery of this material will be given the option of Independent Study for Unit 2 (that means 80% or above on the pre-test). These students also have to demonstrate consistent submission of HW and projects on time, the ability to stay on task, and the ability to complete tasks with minimal prompting from the teacher.