Name: _____ Date: _____ S#: _____

TRIMESTER I Study Guide for Final Exam on 11/05/18 and 11/06/18

TOPIC: Qualitative and Quantitative Data Analysis (page/s _____)
http://www.batty4science.com/7th-grade-science-blog/monday-91018-qualitative-vs-quantitative-observational-data

- Qualitative Observations/Data: _____
- Quantitative Observations/Data: _____

TOPIC: Observation, Inference, and Prediction (page/s _____)
http://www.batty4science.com/7th-grade-science-blog/monday-91718-observation-inference-and-predictions

- Observation: _____
- Inference: _____
- Prediction: _____

TOPIC: Albert Einstein's Mystery Bag Observation Experiment (page/s _____)
http://www.batty4science.com/7th-grade-science-blog/wednesday-101018-pre-lab-for-investigation-4-albert-einsteins-mystery-bag-observation-experiment and

- Albert Einstein (14 March 1879 - 18 April 1955) was a German born Jewish _____ _____. He is famous for his groundbreaking special _____ ___ _____ as well as his famous equation, _____, which asserted that _____ could be turned into _____ . Even though Einstein won the _____ _____ for Physics in _____, he was targeted for _____ by the _____ just because he was _____. In 1935 Einstein decided to remain in the _____ _____ and applied for _____ which was granted in _____. Einstein chose the USA because of his appreciation of the _____ in American culture. He believed that individuals were encouraged to be more _____, a trait he valued from his own early education.

TOPIC: NGSS CCC #2 - Cause and Effect (page/s _____)
http://www.batty4science.com/7th-grade-science-blog/friday-100518-ngss-ccc-2-cause-and-effect

- All of the exciting _____ _____ around us are happening because something is _____ them to happen. To put it simply, every _____ you see is essentially an _____ that occurred because of a _____. There are _____ _____ of _____ and _____ conditions. The five different conditions are _____, _____, _____, _____, and _____.
- When you _____ a _____ it might just be at the very beginning _____. The _____ of this _____ may not present itself just yet. _____ the _____ of an event can be useful in _____.
- Sometimes when _____ a _____, the _____ itself may have already happened; you may just be simply seeing its _____. _____ the _____ of a phenomenon can be useful in _____.
- When explaining a cause/effect _____, word choice is important. Some examples of CAUSE words are: _____ _____ _____ _____ _____ _____ _____ While some examples of EFFECT words are: _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____.

TOPIC: NGSS CCC #5 - Energy and Matter (page/s _____)
http://www.batty4science.com/7th-grade-science-blog/tuesday-100918-ngss-ccc-5-energy-and-matter

- _____ is everywhere. In fact, if you stop and look _____, it is _____ to see anything where _____ ____ _____ _____! Before _____ the _____ energy plays in the _____ _____, it is important to identify the _____ _____. The different types of energy are: _____ _____ _____ _____ _____ _____ _____ _____ _____ _____.
- _____ is also found all around us. It takes up _____, has _____, and has an _____ _____. The types of _____ are: _____ _____ _____ _____
- Energy _____ from one _____ to _____. As it _____, it may _____ into a different _____ of energy. This is necessary for _____ to _____ and operate smoothly.
- Matter on our planet is _____ over and _____ again. Matter is never _____ or _____ form nothing. For example, _____ is a very important _____ that is found everywhere. It is found in our _____, used by _____, and released by _____ _____ (This is known as the Carbon Cycle). Energy constantly _____ in and _____ of the _____

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_____. Humans and _____ _____have a major _____ on the _____ of _____ in the _____ _____.

- Mass is the _____ of _____ in an _____; we _____ mass in _____ and _____. Q: So, what is the difference between _____ and _____? A: _____ _____

TOPIC: Scientific Method (page/s _____)
http://www.batty4science.com/7th-grade-science-blog/thursday-100418-scientific-method-reading

- Observation: _____
- Inference: _____
- Objective: _____
- Subjective: _____
- Hypothesis: _____
- Independent Variable: _____
- Dependent Variable: _____
- Controls: _____
- Steps of the Scientific Method: 1) _____, 2) _____, 3) _____, 4) _____, 5) _____, 6) _____, and 7) _____.
- MAKE SURE you have a neat and clean model of the Scientific Method Process Flow-Chart in your ISN!

TOPIC: Compound Light Microscope (page/s _____)
http://www.batty4science.com/7th-grade-science-blog/thursday-102518-i5-microscopy-lab-pre-lab

- Low Objective: _____
- Middle Objective: _____
- High Objective: _____
- Iris Diaphragm: _____
- Coarse Adjustment Knob: _____
- Fine Adjustment Knob: _____
- Eyepiece: _____
- Revolving Nosepiece: _____
- Stage: _____
- Zaccharius and Hans Janssen: _____ _____
- Anton Von Leeuwenhoek: _____ _____
- Robert Hooke: _____ _____

TOPIC: Graphing (page/s _____)
http://www.batty4science.com/7th-grade-science-blog/tuesday-103018-late-work-submission-individual-student-reports-and-graphing-practice

- Pie Chart: _____
- Line Graph: _____
- Bar Graph: _____
- Double Bar Graph: _____
- Multi Bar Graph: _____
- Each type of GRAPH/Chart requires a _____, _____ to identify the _____ used, a _____ Or _____, and a _____ _____, that shows the data that is used to construct the chart or graph. Your _____ what you are showing in the graph. Whenever you _____ _____, it's important to _____, whether it's the __ and __ _____, the bars on a graph, or a _____ _____. If you are constructing a line or bar graph, be sure to _____ the graph with the appropriate _____ and in the right _____. You'll need a _____ or a _____ showing what all of this stuff means. What _____ did you use for _____? Did you use different _____

to _____ different _____? Last but not least, you must have a _____ _____ that shows how you made this _____.