Science Process

Required Elements:

- □□□□□ 5 Content Elements
- □□ 2 Historical Experiments
 - □ 1 Science Literacy
 - □ 1 Studying Life
 - □ 1 Review Guide
 - ☐ Check Point Quiz
 - ☐ Unit Assessment

Unit Standards:

- Make Observations
- Ask Questions
- Conduct Research
- Collect and Analyze Data
- Form A Conclusion

The content elements should be completed prior to the scheduled checkpoint quiz



Content Elements

Complete all 5 Content Elements. 5 Points Each.

- ☐ Step One: Forming a hypothesis. Explore the chemistry of water. Practice writing hypothesis statements
- ☐ Step Two: Design an experiment. Test the effect of temperature on glow sticks. Evaluate student experiments
- ☐ Step Three: Collecting Data. Why do termites follow pen lines? Design an experiment and collect data on termite behaviors.
- ☐ Step Four: Graphic Representation. Review graphing strategies while analyzing data sets.
- ☐ Step Five: Summarizing data. Use data to support your conclusions.

Historical Experiments

Choose 2 options to complete. 5 Points Each.

- ☐ Marshmallow Lab See how scientists researched the link between delayed gratification and success.
- ☐ Enriched and Challenged Explore how brain science has linked longevity to crossword puzzles.
- ☐ Disproving Spontaneous Generation —
 Analyze the famous experiments of Francesco
 Redi and Louis Pasteur

Science Literacy

Complete 1 Science Literacy to complete.
10 Points.

- ☐ Research a current scientific study of your choice
- ☐ Mythbusters Analyze an episode of Mythbusters.
- ☐ Science World Read and analyze a current Science World magazine Article.

Studying Life

Complete 1 Science Literacy to complete. 5 Points.

- ☐ Is It Alive? Observe and describe the characteristics of living things.
- ☐ Alien Encounter Create an alien as you identify the key characteristics of living things
- ☐ Animal Life Video Identify key living characteristics through animal behavior.

Review

10 Points

□ Review Study Guide

In today's world, you can "Google" basically everything. Have you ever wondered where all that information comes from? Knowledge comes from applying scientific reasoning to everyday questions. In this unit you will learn to apply this process to some everyday situations. Later, you wil use this skill to analyze biological questions and create a knowledge base for yourself.

| Name:Block: |
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August 2015

Unit One: Science Process

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|--------|-------------------------------------|--|--|---|---|----------|
| | | | | | | 1 |
| 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 9 | First Day of School | Warm Up Introductions – First day presentation Syllabus Day! | Warm Up Unit Menu Step One – Hypothesis | Warm Up Review Step Two – Variables and Experiment Design | Uarm Up Review Step Three – Collecting Data | 15 |
| 16 | Uarm Up Review Step Four – Graphing | Warm Up Review Step Five Analysis | Warm Up Check Point Quiz Scientific Literacy | Warm Up Review Studying Life | Warm Up Practice Quiz Review | 22 |
| 23 | 24 Unit Test | 25 | 26 | 27 | 28 | 29 |
| 30 | 31 | | | | | |