# Curriculum Map

<table>
<thead>
<tr>
<th>Month/ Days/W Week</th>
<th>NY Standard(s)</th>
<th>Concepts (Unit/Theme)</th>
<th>Student Objectives the student will… (TSW)</th>
<th>Essential Questions</th>
<th>Assessments</th>
<th>Vocabulary</th>
<th>Resources and Activities</th>
</tr>
</thead>
</table>
| 2 wks              | Standard 1 – Scientific Method: Analysis, Inquiry, Design S1.1a, S1.1b, S1.2a, S1.2c, S1.3, S1.4 | Process Skills | • Perform activities of science  
• Distinguish between observations and inferences  
• Form a hypothesis  
• Make predictions and analyze data | What is science?  
What is the impact of science on our lives?  
What skills do scientists use to learn about the world? | Quizzes and tests  
Laboratory Experiments  
Bell ringers  
Worksheets  
Classroom discussions | Analyze  
Infer  
Predict  
Observe  
Hypothesis | Teacher Made Materials (TMM)  
Power point |
| 6 – 8 wks          | LE Key Idea 1  
LE Key Idea 4  
LE 1.1 a – e  
LE 1.1 g & h  
LE 4.3b  
LE 4.4a | Cells, Tissues, and Organ Systems | • Explain the cell theory  
• Identify the parts of a cell and explain their function  
• Explain the difference between unicellular and multicellular.  
• Explain how cells make more cells  
• Describe the activities of the cell  
• Describe the five levels of organization of living things  
• Explain the process of diffusion  
• Describe the process of mitosis  
• Describe how cells get their energy through cellular respiration | Why is it important for our cells to function correctly? | Quizzes and tests  
Laboratory Experiments  
Bell ringers  
Worksheets  
Class discussions | Unicellular  
Multicellular  
Cell membrane  
Cytoplasm  
Nucleus  
Vacuole  
Mitochondria  
Cell wall  
Chloroplast  
Cell tissue  
Organ  
Organ system  
Cell diffusion  
Cell respiration  
Permeable  
Nonpermeable  
Semipermeable | TMM  
Power point  
Smartboard  
Create a model to illustrate the various steps of mitosis  
Edible cell model  
Elodea sprig/onion to view plant cell  
Diffusion activities  
Video Clips  
BrainPop |
| 6 – 8 wks          | LE Key Idea 2  
LE Key Idea 4  
LE 2.1a-2.1e | Genetics and Reproduction | • Explain the results of Mendel’s experiments, or crosses.  
• Learn what controls the inheritance of traits in organisms  
• Identify dominant and recessive traits  
• Use probability to help explain the results of genetic crosses  
• Describe the role chromosomes play in inheritance  
• Compare genotype and phenotype | How do organisms obtain the traits that they are born with and how will those traits be passed on?  
What can change their genetic makeup?  
Why can an organism have traits that differ from their parent and | Quiz  
Laboratory Experiments  
Tests  
Bell Ringers | Heredity  
Genes  
DNA  
Chromosomes  
Asexual | Complete chart on easy to observe human variations.  
Use Punnett squares to demonstrate inheritance patterns (draw, complete, interpret) |

## Reflection:

________________________________________________________________________________________________________________________________________

________________________________________________________________________________________________________________________________________

Prepared By: Susanne Reed 

1/27/2011 2:19:41 PM
<table>
<thead>
<tr>
<th>Month/Days/Week</th>
<th>NY Standard(s)</th>
<th>Concepts (Unit/Theme)</th>
<th>Student Objectives the student will... (TSW)</th>
<th>Essential Questions</th>
<th>Assessments</th>
<th>Vocabulary</th>
<th>Resources and Activities</th>
</tr>
</thead>
</table>
| 3 wks          | LE Key Idea 1; LE Key Idea 5; LE Skills 6 | Classification | - Classify living things according to a student – generated scheme and establish a scheme  
- Recognize how a classification system allows scientists to communicate information  
- Describe how living things are classified into orderly groups  
- Identify the seven major classification groups  
- Explain the characteristics that make | What role does classification of organisms play in the study of the earth’s diverse life form?  
Why is it important to classify living things?  
How do people use classification in their everyday life?  
What does it mean to say | Quizzes and tests  
Laboratory Experiments  
Bell ringers  
Worksheets | Kingdom  
Phylum  
Class  
Order  
Family  
Genus  
Species  
Taxonomy | Power point  
Smartboard  
TMM  
Classify various common objects  
Use a dichotomous key to identify various |
|                | LE 2.2a-c | | - Describe the events that occur during meiosis  
- Explain the relationship between chromosomes and genes  
- Explain the functions of the sex chromosomes  
- Learn how geneticists trace the inheritance of traits through Pedigree charts  
- Explain how asexual reproduction differs from sexual reproduction | siblings?  
What is the importance of genetics in our lives?  
How do the general principles of genetics apply to humans? | Worksheets  
Classroom discussion | Sexual  
Dominance  
Recessive  
Offspring  
Punnett square  
Genotype  
Phenotype  
Pedigree  
Probability  
Genetics  
Pedigree | Create and interpret a pedigree chart  
Explain and demonstrate Gregor Mendel’s experiments with pea plants  
Make a model of meiosis  
TMM  
Powerpoint  
Smart Board  
Mr. Potato Head  
Build a Bug OR Smiley Face genetics  
Video Clips  
Brainpop |

**Reflection:**

________________________________________________________________________________________________________________________________________

________________________________________________________________________________________________________________________________________

Prepared By: Susanne Reed
<table>
<thead>
<tr>
<th>Month/Week</th>
<th>NY Standard(s)</th>
<th>Concepts (Unit/Theme)</th>
<th>Student Objectives TSW</th>
<th>Essential Questions</th>
<th>Assessments</th>
<th>Vocabulary</th>
<th>Resources and Activities</th>
</tr>
</thead>
</table>
| 4 - 6 wks  | General Skills 1,2,3, PS Key Idea 3, PS 3.1h, PS3.1 i, Physical Setting Skills 10,11 | Measurement | - Define density  
- Identify and use instruments and units for measuring length, volume, and mass  
- Buoyancy is determined by comparative densities. | How can you solve a problem in a scientific manner? | Quizzes and tests, Laboratory Experiments, Bell ringers, Worksheets, Classroom discussion | Volume, Mass, Density, Buoyancy, Millimeter, Centimeter, Gram, Triple beam balance | TMM, Powerpoint, Triple Beam Balance activities, Regular/ Irregular Objects Activity, Internet |

| 3 - 4 wks  | Living Environment Skills 1, 2, 3, 4, Microscope | Microscope | - Manipulate a compound microscope to view microscopic objects.  
- Determine the size of a microscopic object, using a compound microscope  
- Prepare a wet mount slide.  
- Use appropriate staining techniques. | | Quizzes and tests, Laboratory Experiments, Bell ringers, Worksheets, Classroom discussion | Eyepiece, nosepiece, Body tube, Aperture, Objective lenses, Stage, Stage clips, Diaphragm, Microscopic | Practice the correct use of the compound microscope, TMM, PowerPoint, Measurement activities, Onion cell activities |

**Reflection:**

________________________________________________________________________

Prepared By: Susanne Reed 1/27/2011 2:19:41 PM
<table>
<thead>
<tr>
<th>Month/Week</th>
<th>NY Standard(s)</th>
<th>Concepts (Unit/Theme)</th>
<th>Student Objectives the student will... (TSW)</th>
<th>Essential Questions</th>
<th>Assessments</th>
<th>Vocabulary</th>
<th>Resources and Activities</th>
</tr>
</thead>
</table>
| 1 wk       | LE Key idea 1  
LE Key idea 5  
LE Key idea 6  
LE 5.1g     | The Processes of Life | • List the characteristics of living things  
• Apply the characteristics of living things to determine if something is alive or not  
• Identify the needs of living things  
• Explain how the sun is the primary source of energy for all living things  
• Explain why organisms need food, water, air, and living space | What is life? | Quizzes and tests  
Laboratory Experiments  
Bell ringers  
Worksheets  
Classroom discussion | Stimulus  
Reproduction  
Unicellular  
Multicellular  
Producer  
Decomposer  
Adaptation  
Organism | TMM  
Powerpoint  
Video Clip  
BrainPop |
| 4-6 wks    | PS Key idea 2  
PS 2.1 a  
PS 2.2 a  
PS 2.2 b  
PS 2.2 d  
PS 2.2 e  
PS 2.2 f | Earthquakes | • Explain the Continental Drift Theory  
• Explain the process of Sea Floor Spreading  
• Identify and describe the layers of the Earth  
• Explain how scientists know about the structure of the Earth’s interior  
• Explain the Theory of Plate Tectonics  
• Describe the forces thought to move tectonic plates  
• Describe the three types of tectonic plate boundaries | How do plate boundaries affect the Earth?  
Why is it important to study earth science? | Quizzes and tests  
Laboratory Experiments  
Bell ringers  
Worksheets  
Classroom discussion | Crust  
Core  
Mantle  
Lithosphere  
Inner core  
Outer core  
Tectonic plate  
Convergent boundary  
Divergent boundary  
Transform boundary  
Subduction  
Convection currents  
Rift valley | TMM  
Powerpoint  
Video Clips  
BrainPop  
Pangaea Map  
Sea Floor Spreading map |

Reflection:

Prepared By: Susanne Reed

1/27/2011 2:19:41 PM
# Curriculum Map

**Grade:** 6  
**Subject:** Science

<table>
<thead>
<tr>
<th>Month/Week</th>
<th>NY Standard(s)</th>
<th>Concepts (Unit/Theme)</th>
<th>Student Objectives (TSW)</th>
<th>Essential Questions</th>
<th>Assessments</th>
<th>Vocabulary</th>
<th>Resources and Activities</th>
</tr>
</thead>
</table>
| 2 wks      | PS Key Idea 2  | Earthquake Destruction & Measuring | • Determine the four factors that influence the amount of damage caused by an earthquake  
• Describe the types of damage caused by earthquakes  
• Demonstrate how a seismograph measures an earthquake’s strength  
• Explain how the Richter scale is used to indicate earthquake magnitude | Why is it important to stay safe during/after an earthquake? | Quizzes and tests  
Laboratory Experiments  
Bell ringers  
Worksheets  
Classroom discussion | Tsunami  
Seismograph magnitude | TMM  
Powerpoint  
Create a safety poster or pamphlet  
Video Clips  
BrainPop |
| 2 wks      | PS Key Idea 3  | Properties of Matter | • Identify the differences among solids, liquids, and gases  
• Draw diagrams illustrating these differences  
• Identify six types of phase changes  
• Describe the flow of energy during a phase change  
• Give real life examples of phase changes | How does matter and energy interact? | Quizzes and tests  
Laboratory Experiments  
Bell ringers  
Worksheets  
Classroom discussion | Solid  
Liquid  
Gas  
Phase  
Molecule  
Boiling  
Freezing  
Evaporating  
Condensing  
Subliming | TMM  
Powerpoint  
Teacher demonstrations – air freshener, ice, boiling water  
Video Clips  
BrainPop |

**Reflection:**

---

**Prepared By:** Susanne Reed  
**Date:** 1/27/2011 2:19:41 PM
## Curriculum Map

<table>
<thead>
<tr>
<th>Month/Days/Week</th>
<th>NY Standard(s)</th>
<th>Concepts (Unit/Theme)</th>
<th>Student Objectives student will... (TSW)</th>
<th>The</th>
<th>Essential Questions</th>
<th>Assessments</th>
<th>Vocabulary</th>
<th>Resources and Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Reflection:

________________________________________________________________________________________________________________________________________
________________________________________________________________________________________________________________________________________

Prepared By: Susanne Reed

1/27/2011 2:19:41 PM
### Curriculum Map

<table>
<thead>
<tr>
<th>Month/Days/Week</th>
<th>NY Standard(s)</th>
<th>Concepts (Unit/Theme)</th>
<th>Student Objectives student will... (TSW)</th>
<th>The</th>
<th>Essential Questions</th>
<th>Assessments</th>
<th>Vocabulary</th>
<th>Resources and Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Reflection:**

________________________________________________________________________________________________________________________________________

________________________________________________________________________________________________________________________________________

Prepared By: Susanne Reed

1/27/2011 2:19:41 PM