## **Cornerstone Charters- Science Concept Map**

| K      | 1st Grade    | 2 <sup>nd</sup> Grade | 3 <sup>rd</sup> Grade | 4 <sup>th</sup> Grade | 5 <sup>th</sup> Grade | 6 <sup>th</sup> Grade      | 7 <sup>th</sup> Grade      |
|--------|--------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------------------|----------------------------|
| Senses | Science      | Individual            | Scientific            | Detailed units        | Metric                | Metric                     | Metric                     |
|        | Fair         | science fair          | Method                | of measurement        | measuring             | measuring                  | measuring                  |
|        | Experiment   | projects              |                       |                       | devices               | devices                    | devices                    |
|        | (whole       |                       | Analyze and           | Measurement           | (labeling             | (labeling and              | (labeling and              |
|        | class)       |                       | communicate           | tools                 | and                   | measuring)                 | measuring)                 |
|        |              | Centimeters           | Findings              |                       | measuring)            |                            |                            |
|        | Collecting/t | Liters (just          |                       | Lab equipment         |                       | Lab                        | Lab                        |
|        | racking data | labeling)             | Compare and           |                       | Measurem              | equipment                  | equipment                  |
|        |              |                       | contrast data         | Science               | ent tools             |                            |                            |
|        |              |                       |                       | Fair/Scientific       |                       | Science                    | Science                    |
|        |              |                       | Use data to           | Method                | Lab                   | Fair/Scientific            | Fair/Scientific            |
|        |              |                       | create bar and        |                       | equipment             | Method                     | Method                     |
|        |              |                       | line graphs           | Metric                |                       |                            | _                          |
|        |              |                       | ) (EED) (C            | Measurement           | Science               | Representing               | Representing               |
|        |              |                       | METRIC                |                       | Fair/Scient           | data                       | data                       |
|        |              |                       | -meter,               | Representing          | ific                  |                            |                            |
|        |              |                       | centimeter            | data                  | Method                | Drawing conclusions        | Drawing conclusions        |
|        |              |                       |                       | Drawing               | Metric                |                            |                            |
|        |              |                       |                       | conclusions           | Measurem ent          | Evaluating the strength of | Evaluating the strength of |
|        |              |                       |                       | Evaluating the        |                       | claims using               | claims using               |
|        |              |                       |                       | strength of           | Representi            | data.                      | data.                      |
|        |              |                       |                       | claims using          | ng data               |                            |                            |
|        |              |                       |                       | data.                 | _                     |                            | Scientific                 |
|        |              |                       |                       |                       | Drawing               |                            | notation                   |
|        |              |                       |                       |                       | conclusion            |                            |                            |
|        |              |                       |                       |                       | S                     |                            |                            |
|        |              |                       |                       |                       |                       |                            |                            |
|        |              |                       |                       |                       | Evaluating            |                            |                            |
|        |              |                       |                       |                       | the                   |                            |                            |
|        |              |                       |                       |                       | strength of           |                            |                            |
|        |              |                       |                       |                       | claims                |                            |                            |
|        |              |                       |                       |                       | using data.           |                            |                            |

| ish and ill rees                         | States of Matter  Float and sink  Magnets - attract/repel  Magnetic and nonmagnetic materials | Classificatio n based on physical properties  Sorting mixtures | Force Motion Speed Direction Gravity Light Energy Sound Energy | Properties and Changes in matter Energy                        | Forces and Motion                                   | Kinetic/Potent ial energy  Mechanical system  Radiation/Co nduction/Con vection  Forms of energy (sound, light, etc) | Chemical properties (interactions, pH, flammability, acids, bases)  Reactants, products  Properties and trends of the periodic table  Atoms, molecules, elements  Properties of waves Heat and light interactions |
|--|---|--|--|--|---|--|---|
| ving d nliving ings usic eds to rvive fe | Life cycle - plants  Life cycle - butterfly  Classifying animals                              | Habitats Plant needs Plant life cycle                          | Structures and functions of plants and animals Adaptations     | Organization of living things  Ecosystems  Social Implications | Animal Systems Organisms and living things Heredity | Producers/Co<br>nsumers/Deco<br>mposers<br>Populations/C<br>ommunities/E<br>cosystems                                | Cells Organs, Tissue, organ system Mitosis.   |

| cle  | Habitats,<br>survival,<br>instincts   |  |   |  | and acquired traits  Heredity and Evolution                     | Common relationships between populations (competition, parasitism, etc) Food webs   | Embryos  Photosynthesis.  Carbohydrates, fats, and protein.  Sexual reproduction.  Asexual reproduction.  Heredity   |
|--|---|--|---|--|---|---|--|
| rasons  urth aterials cock, ineral, il  ater cle | Types of weather  Types of clouds  Weather tools  Weather patterns  Water cycle | Properties of water  Bodies of water  Fresh/salt water  Sources of drinking water  States of water  Landforms - surface features | Resources: Natural Renewable Non- renewable Reduce, Reuse, Recycle Human Impact Earth materials Surface Changes | Earth in Time and Space  Earth, Sun, Moon characteristics, movement shape  Fossil Evidence | How did fossils showing evidence of how conditions have changed | Rock cycle Weathering and Erosion, Deposition, Cementation Components of Soil Plate tectonics Layers of Earth Magnets/Com passes/Naviga tion Fossils/Earth Layers | Hydrosphere- Water Cycle Weather Climate  Characteristic s of a cold, warm, occluded, and stationary front.  Frontal boundaries & Jet streams  Watersheds  Elements and compounds that make up |

| <br> |  |  |               |
|------|--|--|---------------|
|      |  |  | atmosphere    |
|      |  |  | Pollution and |
|      |  |  | human impact  |