| Big Idea: | |
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| Inquiry Questions | |
| Science:  Technology/Engineering:  Mathematics:  Social Studies: | |
| Content Area | Grade Level Standards |
| Science |  |
| Technology & Engineering |  |
| Mathematics |  |
| Social Studies |  |
| ELA |  |

| Science Process Standards | Standards for Mathematical Practice |
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| Science Process Standards  *Nature of Science*  Make predictions and formulate testable questions.  Design a fair test.  Plan and carry out investigations—often over a period of several lessons—as a class, in small groups or independently.  Perform investigations using appropriate tools and technologies that will extend the senses.  Use measurement skills and apply appropriate units when collecting data.  Test predictions with multiple trials.  Keep accurate records in a notebook during investigations and communicate findings to others using graphs, charts, maps and models through oral and written reports.  Identify simple patterns in data and propose explanations to account for the patterns.  Compare the results of an investigation with the prediction.  *Design Process*  Identify a need or problem to be solved.  Brainstorm potential solutions.  Document the design throughout the entire design process.  Select a solution to the need or problem.  Select the most appropriate materials to develop a solution that will meet the need.  Create the solution through a prototype.  Test and evaluate how well the solution meets the goal.  Evaluate and test the design using measurement. | Mathematical Practices  MP.1. Make sense of problems and persevere in solving them.  MP.2. Reason abstractly and quantitatively.  MP. 3 Construct viable arguments and critique the reasoning of others.  MP.4. Model with mathematics.  MP.5. Use appropriate tools strategically.  MP.6. Attend to precision.  MP.7 Look for and make use of structure.  MP. 8 Look for and express regularity in repeated reasoning. |

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| **Plan of Work** | |
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| Common Misconceptions | |
| What misconceptions might students have with these ideas? | |
| Suggested Activities | |
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| Suggested Vocabulary |  |
| Resources |  |
| Assessment | |
| Type of Assessment | Example |
| Observation |  |
| Oral Questioning |  |
| Exit Slip |  |
| Journal |  |
| Graphic Organizers |  |
| Self-Assessment |  |
| Writing Prompt |  |
| Presentation |  |
| Electronic media |  |
| Think Pair Share |  |
| Whiteboards |  |
| Experiment/projects |  |
| Quiz |  |
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