Disciplinary Core Ideas:
- Develop robust understanding of key STEM concepts and relationships

### Scientific Practices
- Identify a scientific question or hypothesis
  - Analyze background information on the question or hypothesis
- Engage in scientific thinking
  - Identify key variables in a system and develop an understanding of their relationships
  - Collect and analyze data to test hypothesis or answer question
  - Understand and explain uncertainty in data and assumptions in analysis
  - Assess credibility and implications of the data and/or methods
  - Work collaboratively to develop and evaluate evidence-based models of underlying phenomena

### Engineering Practices
- Explore a societal need or applied science/mathematics problem
  - Research the problem and its challenges
  - Analyze current context in which the societal need or problem exists
- Engage in engineering thinking
  - Explore the mathematical and scientific tools to address challenges
  - Identify key variables in a system and develop an understanding of their relationships
  - Work collaboratively to generate/explore multiple divergent solutions to a design problem
  - Conduct experiments and/or analysis to systematically evaluate the performance of design alternatives
  - Continuously redesign/iterate solution based on evaluation

### Communicate STEM Ideas
- Communicate ideas in oral, written and/or graphical form
- Critically assess the credibility of information from a variety of sources
- Develop facility in communicating STEM ideas to a diverse audience

### Societal Applications of STEM
- Recognize and understand relevance of STEM issues to society
- Incorporate STEM understanding and resources into social, economic, personal or political decisions

### Attitudes Towards STEM
- Appreciate the creativity and excitement of the STEM enterprise
- Connect the work of STEM professionals to everyday life
- Demonstrate confidence in learning/applying STEM concepts
- Exhibit interest in continued learning of STEM ideas