**Defining Problems for Engineering**
Can we design an earthquake safe home for areas where wood is scarce?

**Asking Questions for Science**
How can antibiotic use lead to antibiotic resistance in bacteria?

**Developing & Using Models**
How does wave theory help us model the Earth's interior?

**Analyzing & Interpreting Data**
Compare graphs tracking atmospheric CO₂ at Mauna Loa and the South Pole.

**Planning & Carrying Out Investigations**
What is the relationship between wave height and erosion rate?

**Engaging in Argument from Evidence**
Defend statements with data.

**Designing Solutions for Engineering**
Create a solar panel that optimizes output for solar angles at our latitude.

**Constructing Explanations for Science**
Create a diagram illustrating the Greenhouse Effect.

**Using Mathematics & Computational Thinking**
Rate of water in \( \times \) Time
- Rate of water out \( \times \) Time
= Change in lake Volume

**Obtaining, Evaluating, & Communicating Information**
Defend your science project before a judge.