My portfolio includes pieces of work that show **what I can do** using these **science and engineering practices**.

- Asking questions and defining problems
- Developing and using models
- Planning and carrying out investigations
- Analyzing and interpreting data
- Using mathematics and computational thinking
- Constructing explanations and designing solutions
- Engaging in argument from evidence
- Obtaining, evaluating, and communicating information

My portfolio includes pieces of work that show **what I know** about these **disciplinary core ideas**.

- Weather is the condition of Earth’s atmosphere at a given time in a given place. Weather forecasting is probabilistic and is based on atmospheric conditions and climate patterns. (ESS2.D, ESS3.B)
- Climate is the long-term pattern of weather for a specific area; climate factors include latitude, distance from the ocean, ocean currents, and local earth materials. Human activities, such as the release of greenhouse gases from burning fossil fuels, are major factors in Earth’s current climate change. (ESS2.C, ESS2.D, ESS3.D)
- Water continually cycles on Earth. Most of Earth’s water is in the ocean, and Earth’s freshwater is found in many locations, including the atmosphere. Ocean currents are caused primarily by winds, convection of ocean water, and the Coriolis effect. (ESS2.C)
- The Sun’s radiant energy heats Earth. The seasons are a result of Earth’s tilted axis and are caused by the differential intensity of sunlight on different areas of Earth across the year. (ESS1.B)
- As human population increases, humans have increased need for fresh water, which can have negative effects on ecosystems without carefully designed solutions. (ESS3.C, ETS1.A, ETS1.B)

My portfolio includes pieces of work that show **how I think** using these **crosscutting concepts**.

- Patterns
- Cause and effect
- Scale, proportion, and quantity
- Systems and system models
- Energy and matter
- Structure and function
- Stability and change