Earth Force Process and NGSS Practices

NGSS Practices

Asking questions and defining problems

Obtaining, evaluating, and communicating information

Constructing explanations and designing solutions

Planning and carrying out investigations

Analyzing and interpreting data

Engaging in argument from evidence

Using mathematics and computational thinking

Developing and using models

STEP 1: DISCOVER
COMMUNITY ENVIRONMENTAL INVENTORY

Planning and carrying out investigations, developing and using models: During the Community Environmental Inventory step, students *plan and carry out investigations* regarding environmental phenomena in their community. This step can also include the *development and use of models*.

STEP 2: DECIDE
ISSUE SELECTION

Analyzing and interpreting data, asking questions and defining problems, using math and computational thinking: As students enter the issue selection phase they *analyze and interpret the data* collected in the inventory stage. Based on the evidence they *ask questions* about the phenomena they observed and *define the problem* they would like to solve.

STEP 3: DISCOVER
POLICY AND COMMUNITY PRACTICE RESEARCH

Obtaining, evaluating, and communicating information: Once an issue has been determined, students *obtain information* about policies and potential solutions, *evaluate* their strengths, and *communicate information* about findings.

STEP 4: DECIDE
GOAL AND STRATEGY SELECTION

Constructing explanations and designing solutions, engaging in an argument from evidence: In this step students *construct an explanation* of the issue and *design a solution*. Students *engage in an argument from evidence* to identify the strengths and weaknesses of their solutions.

STEP 5: ACT
PLANNING AND TAKING CIVIC ACTION

Obtaining, evaluating, and communicating information: In the final steps students must *obtain information* on executing their plan, *evaluate* the outcomes, and *communicate* their plan to their peers and community.