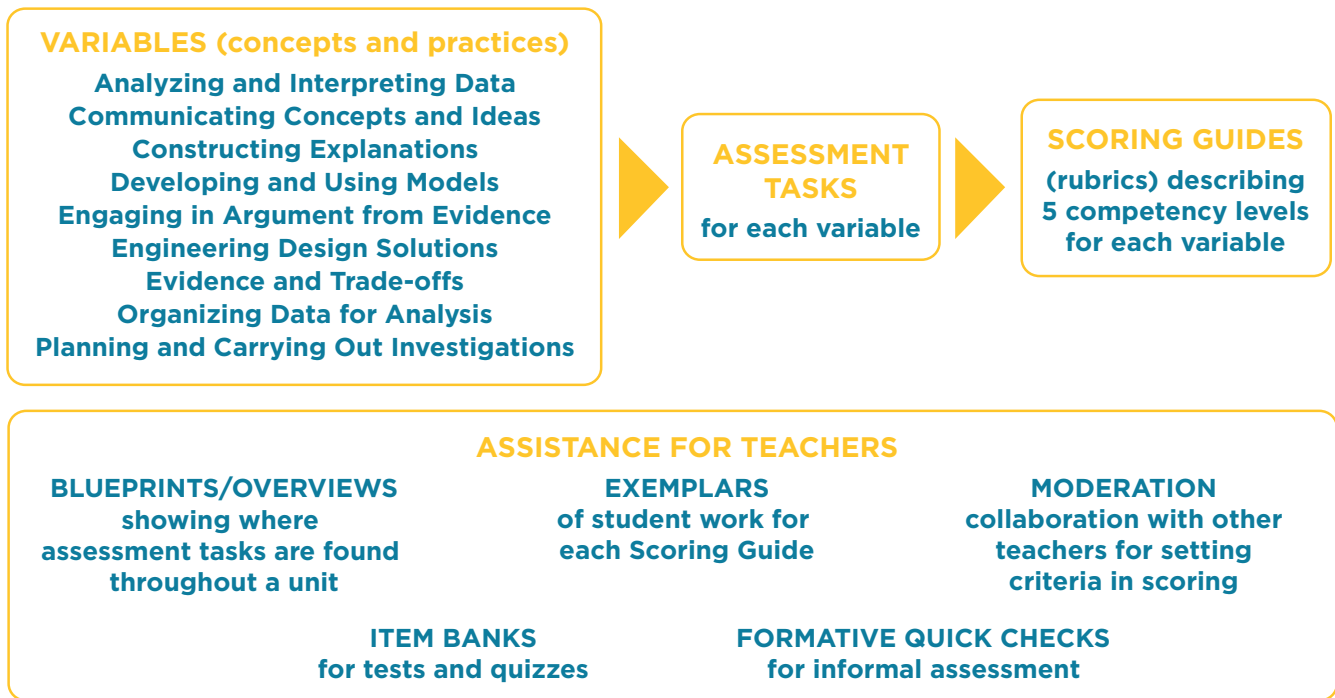


ASSESSMENT SYSTEM

The SEPUP Assessment System is based on the idea that **students benefit from regular opportunities to demonstrate learning through performance *in the context of their work at hand***:

- a group redesigning a structure to prevent erosion may also be evaluated on their understanding of engineering design.
- feedback can be provided to strengthen a student’s argument as she considers additional evidence about fossilized footprints and explains the patterns.

Each unit includes a variety of **assessments embedded within the instruction** to provide consistent, actionable information to the teacher and students with minimal impact on instructional time.



At the core of the SEPUP assessment system are **nine variables**, identified in the diagram above. **Assessment items and tasks** are used to gather evidence of students’ learning within each variable, while **Scoring Guides** and **Exemplars** are provided for interpreting their responses.

These nine variables are used throughout *Issues and Science* so that students may demonstrate a deeper understanding and level of sophistication, not only as one unit progresses, but as they move from unit to unit across grade levels. These assessment tasks, partnered with **quick checks, 3-D formative assessment opportunities**, and unit tools such as **unit overviews, assessment blueprints, learning pathways**, and **item banks**, form the SEPUP assessment system.

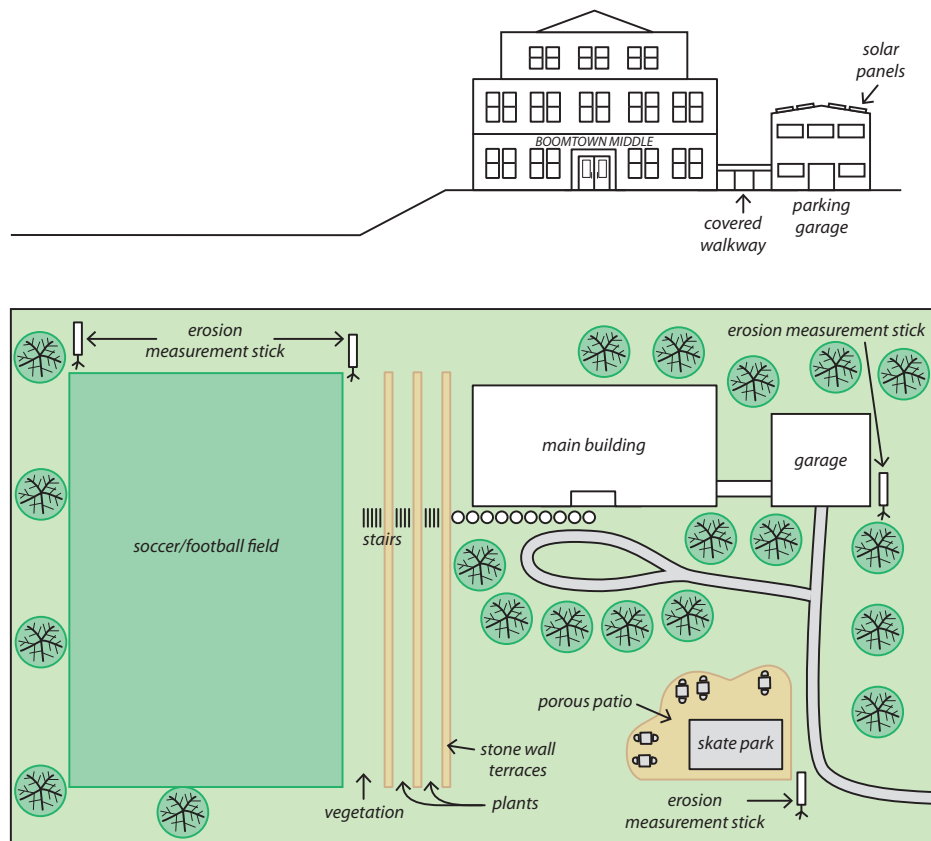
NGSS Learning Pathways (pictured on p. 41) visualize the three dimensional path students take in *Issues and Science* as they work up towards a Performance Expectation (PE). **Summative assessments are embedded** when students reach the PE, as well as formative assessments and quick checks along the way so students and teachers may evaluate their progress at multiple places throughout.

Shown here is the **start of a student response exemplar** where students have been asked to design a new school property, while mitigating the human impact on the environment. These level-4 exemplars are **provided for each assessment task** so teachers know what to expect.

This particular assessment comes at the end of a unit where students have been immersed in this topic and uses the *Communicating Concepts and Ideas* variable and scoring guide.

PROCEDURE STEP 5 LEVEL-4 STUDENT RESPONSE

Boomtown Middle School



We made four preliminary designs and picked the best parts of each one and combined them for the final design. Since building often causes faster erosion, nutrient runoff, displaced sediment deposits, and reduced water quality, we mitigated the human impact with the following design elements:

- *A three-story building instead of one-story to reduce the hard surface area on the ground*