CREATING A NATURE CENTER

Next Generation Science Standard Tie-ins

OBSERVE | MEASURE | INFER | CONCLUDE | COMPARE | DRAW | WRITE

A classroom nature center encourages exploration and has ever rotating collections, which provides nearly limitless connections to NGSS and Common Core. Below are some NGSS tie-ins across all grade levels that can be used even with the smallest nature centers.

K-2-ETS1-1&2, 2-LS2-1&2, 3-LS4-3&4, 4-PS4-3, 3-5-ETS1-2&3, MS-LS1-4&6, MS-ESS3-3, HS-LS4-4,5 &6, HS-ESS3-6

• Science and Engineering Practices:

- \Rightarrow Use observations to describe patterns in the natural world in order to answer scientific questions
- \Rightarrow Make observations (firsthand or from media) to collect data which can be used to make comparisons.
- \Rightarrow Use tools and materials provided to design a device that solves a specific problem.
- ⇒ Read grade-appropriate texts and use media to obtain scientific information to determine patterns in the natural world.

• Crosscutting Concepts:

- \Rightarrow Patterns in the natural and human designed world can be observed and used as evidence
- \Rightarrow Simple tests can be designed to gather evidence to support or refute student ideas about causes.
- \Rightarrow Phenomena that can be observed at one scale may not be observable at another scale
- ⇒ Empirical evidence is required to differentiate between cause and correlation and make claims about specific causes and effects

• Disciplinary Core Ideas:

- ⇒ Different properties are suited to different purposes. A great variety of objects can be built up from a small set of pieces.
- ⇒ Designs can be conveyed through sketches, drawings, or physical models. These representations are useful in communicating ideas for a problem's solutions to other people.
- \Rightarrow Different solutions need to be tested in order to determine which of them best solves the problem, given the criteria and the constraints
- ⇒ Changes in the physical environment, whether naturally occurring or human induced, have thus contributed to the expansion of some species, the emergence of new distinct species as populations diverge under different conditions, and the decline-and sometimes the extinction-of some species.