EXPLORE-IT-ALL® SCIENCE CENTER

Science Standards for the Building Bridges Program

Maryland Voluntary State Curriculum for Science, Skills and Processes

Constructing Knowledge

A1a. Support investigative findings with data found in books, articles, and databases, and identify the sources used and expect other to do the same.

A1e. Follow directions carefully and keep accurate records of one's work in order to compare data gathered.

Applying Evidence and Reasoning

B1a. Develop explanations using knowledge possessed and evidence from observations, reliable print resources and investigations.

B1b. Offer reasons for their findings and consider reasons suggested by others.

B1c. Review different explanation for the same set of observations and make more observations to resolve the differences.

Communication Scientific Information

C1c. Submit work to the critique of others, which involves discussing findings, posing questions, and challenging statements to clarify ideas.

C1d. Construct and share reasonable explanations for questions asked.

C1e. Recognize that doing science involves many different kinds of work and engages men and women of all ages and backgrounds.

Technology

D1b. Realize that there is no perfect design and that usually some features have to be sacrificed to get others, for example, designs that are best in one respect (safety or ease of use) may be inferior in other ways (cost or appearance).

D1c. Identify factors that must be considered in any technological design – cost, safety, environment impact, and what will happen if the solution fails.

D2a. Realize that in something that consists of many parts, the parts usually influence on another.

D2b. Explain that something may not work as well (or at all) if a part is missing, broken, worn out, mismatched, or misconnected.

D3a. Explain that a model is a simplified imitation of something and that a model's value lies in suggesting how the thing modeled works.

D3b. Investigate and describe that seeing how a model works after changes are made to it may suggest how the real thing would work if the same were done to it.

D3c. Explain the models…can be used to represent objects, events, and processes in the real world, although such representation can never be exact in every detail.

D3d. Realize that one way to make sense of something is to think how it is like something more familiar.