Name of Exhibit: Big Blue Blocks

Description: The big foam blocks can be used to build large structures. Includes cylindrical blocks to facilitate extra stability for taller structures. Use cylindrical to build moving parts. Blocks can be used to construct experiments about geological history, motion, mass, change, speed, gravity, force, etc. Also, features blocks and balls to make ball runs.

For all ages.

MN SCIENCE Grad Stand/Strand/Sub-strand: Number####:

2P 1.1.1.1, 2P 2.2.1.1,
4E 3.2.1.1,
5P 1.1.1.1, 5P 3.2.1.1
6E 3.2.1.1, 6E 4.1.1.1
7L 2.1.1.2
8P 1.2.1.2

Grade Level(s): Kindergarten through 8th Grades

Content Area(s): Earth and Space Science

Learning Target(s):

1. I can investigate why an item I observe is in motion.
2. I can ask and pose answers to questions by conducting investigations on how things move.
3. I can investigate the effects of objects of different and the same mass on each other.
4. I can make a model to help explain how things change over time.
5. I can make a model that shows how differences in mass and speed can change outcomes.
6. I can show how the speed of an item is related to the amount of energy that object has.
7. I can model how different rock strata can show how things have changed over time.
8. I can model how different processes change the earth slowly and more rapidly.
9. I can analyze data and model how life forms have changed over time.
10. I can demonstrate that a change in an object's motion depends on the forces and mass of an object.

Essential Question(s):

1. How and why do things move?
2. How do objects of different masses affect each other?
3. How can I show why things have changed over time?
4. How do mass and speed affect results of interactions between objects?
5. How do I measure how much energy is in an object traveling at different speeds?
6. How can I show how things have changed over time throughout history?
7. What are the different processes that change the earth?
8. How do I show how some earth processes change the earth slowly and others more quickly?
9. How can I demonstrate the relationship between the forces exerted and the mass of an object will help determine its motion.

Key Vocabulary in Demo: Blocks, Energy, Features, Mass, Motion, Speed, Stability, Structure

Prerequisite Terms: Change, Difference, Exert, Force, Observation, Pattern, Process, Similarity, Model, Relationship