**North East School Division**



**Unpacking Outcomes**

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| **Harvesting the Outcome** | | | **BIG IDEAS** | |
| **SM3.2 Assess the function and characteristics of strong, stable and balanced natural and human-built structures.** | | | **What is it made of?**  **How can I make it better?** | |
| **Outcome** (circle the verb and underline the nouns or noun phrases) | | | | |
| **Assess** → the function of strong, stable and balanced natural and human-built structures.  **Assess** → the characteristics of strong, stable, and balanced natural and human-built structures. | | | | |
| **KNOW BEFORE UNIT** | **KNOW AFTER UNIT** | **UNDERSTAND** | | **BE ABLE TO DO** |
| - the scientific process  - how to conduct a simple experiment  - how to compare  - how to sort  - appropriate materials for structures  - methods of joinery | - characteristics and functions of natural structures  - characteristics and functions of human-built structures  - characteristics that contribute to the strength, stability and balance of structures | - many human-built structures are modeled after natural structures  - analyze the function of natural and human-built structures  - analyze how 2D and 3D objects provide strength, stability and balance  - the significance of historical structures  - the importance of safety procedures and rules while constructing structures | | - compare and classify the characteristics of solid, frame and shell structures  - compare characteristics of different types of shelters  - analyze how shape contributes to the stability and balance of structures  - develop and carry out a plan to construct a simple structure that meets specified criteria based on strength, stability and function  - estimate measurements for materials required for construction  - follows safety procedures and rules for construction  - illustrate the construction process for a simple structure |
| Vocabulary:  - structure  - variable  - function  - natural  -human-built | - stability  - balance  - solid  -frame  -shell |
| **Essential Questions** | | | | |
| **What resemblances in design and function do you see between human-built and natural structures?**  **What is the significance of historical structures?**  **How has construction changed throughout history?**  **How do common shapes contribute to balance and stability?**  **Why are safety procedures and rules important when constructing structures?** | | | | |