**North East School Division**



**Unpacking Outcomes**

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| **Harvesting the Outcome** | **BIG IDEAS** |
| **SM3.1 Investigate properties of material and methods of joinery used in structures.** | **How did Pig #3 survive the wolf?****How does it fit together?****How can I make it work?** |
| **Outcome** (circle the verb and underline the nouns or noun phrases)  |
| **Investigate** → properties of materials**Investigate** → methods of joinery used in structures |
| **KNOW BEFORE UNIT** | **KNOW AFTER UNIT** | **UNDERSTAND** | **BE ABLE TO DO** |
| - the scientific process- how to conduct a simple experiment | - how to strengthen materials- appropriate methods of joinery- steps involved in developing and carrying out a plan to build a structure- the purpose of different structures | - that all structures have a purpose- materials can be strengthened by adding layers, tying, gluing, triangulation, cross-bracing, changing shape)- the importance of using recycled materials in construction- the importance of using tools safely- some materials are more appropriate for a structure based on the materials properties- similar and dissimilar materials can be joined in many ways | - examine the properties of materials used in structures- compare the properties of materials used today and historically- sort materials based on the physical properties of strength, texture, color, flexibility, and durability- analyze how materials are joined and identify the most appropriate methods of joinery- use appropriate tools to cut, sew, make holes and assemble materials- assess the suitability of various materials for constructing structures- examine the suitability of using recycled materials in constructing structures |
|  Vocabulary:- joinery- materials- predictions- variable | - structure- physical properties- texture- durability |
| **Essential Questions** |
| **What is the purpose of a structure?****How do I select the appropriate materials for a structure?****What are appropriate methods of joinery for a structure?****How can recycled materials be used in constructing structures?****How can I strengthen materials?****What differences and similarities do you see in materials used today and historically?** |