Topic B: Building with a Variety of Materials Unit Plan

Grade 3 Science

**Overview:** Students use a variety of tools and simple techniques to build things for specific purposes. Their tasks may require that a bridge be built between two desks, a model lookout tower be constructed, or a water contain be made, all from available materials. Through these projects, students learn the value of safety and good workmanship and that different materials and designs can be used to obtain the same result. They learn that working together on a common task is easier when ideas and materials are shared.

**Rationale**

**Objectives & Goals**

*GLO’s*:

3-6 Use, safely, a variety of tools, techniques and materials in construction activities

3-7 Construct structures, using a verity of materials and designs, and compare the effectiveness of the various materials and designs for their intended purposes

*SLO’s*:

1. Using a variety of materials and techniques, design, construct and test structures that are intended to:
   1. Support objects
   2. Span gaps
   3. Serve as containers
   4. Serve as models of particular living things, objects or buildings.
2. Select appropriate materials for use in construction tasks, and explain the choice of materials. Students should demonstrate familiarity with a variety of materials, such as papers, woods, plastics, clay and metals.
3. Select tools that are suitable to particular tasks and materials, and use them safely and effectively.
4. Understand and use a variety of methods to join or fasten materials.
5. Identify the intended purpose and use of structures to be built, and explain how knowing the intended purpose and use helps guide decisions regarding materials and design.
6. Understand that simple designs are often as effective as more complex ones, as well as being easier and cheaper to build, and illustrate this understand with a practical example.
7. Recognize the importance of good workmanship, and demonstrate growth toward good workmanship
8. Maintain and store materials and tools safely and properly.
9. Apply skills of listening, speaking and cooperative decision making in working with other students on a construction project.

**Unit Overview – Calendar**

**Resources/Materials**

Culminating – Mystery Box Challenge

**Learning Activities & Instructional Strategies**

**Unit Assessment Plan**