Core Skills Analysis

Science

- The student learned about insulation and the properties of snow as a building material, understanding how snow can trap air and provide warmth.
- Through the construction of an igloo, the student demonstrated an understanding of the shape and design that contribute to structural stability in cold climates.
- The activity introduced concepts of temperature and the physical states of water, as the student observed how snow behaves differently than other construction materials.
- The student engaged in observational skills by noticing the different types of snow and how they affect the construction process.

Mathematics

- The student applied basic geometry by constructing a dome shape, which involves understanding curved surfaces and spatial reasoning.
- Measurements were involved in determining the size of the igloo, allowing the student to practice counting and multiplying dimensions.
- The activity required estimating the amount of snow needed for building, reinforcing addition and subtraction when calculating quantities.
- The student encountered concepts of symmetry while ensuring the igloo was evenly built, fostering a visual sense of balance.

Art

- The igloo construction allowed the student to express creativity through design, tapping into artistic manipulation of natural materials.
- The activity promoted fine motor skills as the student shaped and molded snow blocks, emphasizing tactile creativity.
- The student could also engage in color exploration by observing sunlight reflections on the snow, which introduces the concept of light in art.
- Through building, the student experienced the artistic process of creating something functional yet visually appealing.

Social Studies

- The student learned about indigenous cultures and how they adapt to their environment, specifically exploring the Inuit people's traditional igloo construction.
- This activity provided insight into survival skills in extreme environments, highlighting human ingenuity and resourcefulness.
- The student developed an understanding of how geography and climate influence architectural styles, leading to discussions about cultural diversity.
- By researching the purpose of igloos, the student gained appreciation for historical societal practices and their evolution over time.

Tips

To enhance the child's learning experience, consider introducing a follow-up activity where they research different types of traditional shelters used by various cultures around the world. Encourage them to compare these shelters to the igloo by focusing on the materials used, the environment they are built in, and their purposes. Additionally, using drawings or models to represent these different constructions can foster artistic expression and reinforce the concepts learned in both science and social studies.

Book Recommendations

- [If You Lived With the Inuit](#) by Catherine Thompson: Explore the lives of the Inuit people, including their homes and the way they adapt to the cold Arctic environment.
- [Snowhouse](#) by Jennifer Ward: A visually engaging book that illustrates the process of building an igloo and explores winter habitats.
- [Igloo: A Story of the Inuit](#) by Maryann Cocca-Leffler: This children's book presents a delightful tale about Inuit life and culture, including building and living in igloos.

Learning Standards

- Science: Next Generation Science Standards (NGSS) - 2-ESS2-2: Develop a simple model based on evidence to represent the needs of different animals and plants.
- Mathematics: Common Core State Standards (CCSS) - 3.G.A.1: Understand that shapes in different categories may share attributes and that the shared attributes can define a larger category.
- Art: National Visual Arts Standards - Creating: Generate and conceptualize artistic ideas and work.
- Social Studies: National Council for the Social Studies - D2.Geo.4.3-5: Explain how culture influences the way people interact with the environment.