Core Skills Analysis

Science

- Understanding of basic physics concepts like balance and stability as the child figured out how to construct a bridge over the puddle.
- Application of engineering principles such as load distribution and material strength when choosing how to build the bridge.
- Observation skills honed through examining the puddle area for the best location and structure for the bridge.
- Critical thinking skills developed as the child problem-solved and decided the best way to prevent the bridge from collapsing.

Tips

Encourage your child to experiment with different bridge designs using various materials such as paper, popsicle sticks, or even Lego blocks. This can help them understand how different structures impact stability. Additionally, discuss the importance of testing the bridges to see how much weight they can hold and how different designs affect their performance. Spark their curiosity by introducing them to real-life bridges and the engineering marvels behind them.

Book Recommendations

- <u>Rosie Revere, Engineer</u> by Andrea Beaty: This book encourages children to embrace their creativity and problem-solving skills, much like the child building a bridge over the puddle.
- <u>Iggy Peck, Architect</u> by Andrea Beaty: Follow Iggy, a young architect, as he discovers his passion for building and problem-solving, inspiring children to explore their own creativity.
- <u>The Three Little Pigs</u> by Various Authors: A classic tale that can be related to bridge-building activities; it introduces concepts of structure and stability in a fun and engaging way for young readers.