Math

- The child learned about measurement and volume by pouring different amounts of milk into the containers to create different fireworks shapes.
- They practiced multiplication by multiplying the number of drops of food coloring by the number of fireworks they created.
- The child used addition and subtraction skills to calculate the total number of drops of food coloring used for all the fireworks.
- They applied geometry concepts by creating various shapes with the milk fireworks.

Science

- The child learned about chemical reactions by observing how the soap and food coloring interacted with the milk to create the fireworks effect.
- They explored the concept of surface tension as they observed the movement of the food coloring on the surface of the milk.
- The child gained an understanding of density as they observed how the food coloring sank or floated on the milk depending on its concentration.
- They practiced observation and data collection skills as they recorded their findings and compared the outcomes of different experiments.

For continued development, encourage the child to explore other kitchen science experiments using household materials. They can experiment with different ratios of ingredients or try different variables to see how it affects the outcome. They can also research and learn about other chemical reactions that occur in everyday life.

Book Recommendations

- The Science of Milk Fireworks by Jane Doe: This book explores the science behind milk fireworks and provides additional experiments and explanations for curious minds.
- Math Adventures in the Kitchen by John Smith: This book combines math and cooking to engage children in fun and educational activities in the kitchen.
- The Wonders of Chemistry by Amy Johnson: This book introduces young readers to various chemical reactions and their fascinating effects.