Art

- The children exercised their creativity by designing the roller coaster, considering aspects such as color, theme, and visual appeal.
- They learned about shapes, patterns, and spatial awareness as they constructed the roller coaster using various materials like cardboard, paper, and craft supplies.
- They gained an understanding of proportion and scale as they built the roller coaster to ensure it was functional and visually pleasing.
- They observed real-life examples of art in amusement parks, linking their creation to the art and design world.

English Language Arts

- The activity encouraged storytelling and descriptive writing as the children imagined and described the experience of riding their roller coaster.
- They practiced communication and collaboration skills as they discussed and explained their design ideas to each other.
- They might have researched about roller coasters and theme park structures, enhancing their reading and comprehension skills.
- They developed vocabulary related to the theme park, engineering, and construction as they engaged in creative play and dialogue.

Math

- The children explored measurement, estimation, and basic geometry as they calculated the dimensions and angles of the roller coaster tracks and carriages.
- They practiced addition, subtraction, and multiplication while determining the quantities of materials needed and managing their resources during construction.
- They applied problem-solving and critical thinking skills as they encountered challenges in designing and constructing the roller coaster.
- They learned about force, motion, and gravity as they discussed and observed how roller coasters work.

Science

- The children learned about potential and kinetic energy as they discussed and witnessed the movement of their roller coaster cars along the tracks.
- They explored concepts of engineering, construction, and stability by designing and building the roller coaster within the constraints of available materials.
- They gained an understanding of friction and momentum as they tested and improved the functionality of their roller coaster model.
- They observed the principles of centrifugal force and acceleration as they role-played the experience of riding the roller coaster.

One tip for continued development is to encourage the children to document their roller coaster building process through drawings, photographs, or a written journal. This will help them reflect on their experience and capture their creative ideas, fostering their artistic and literacy skills.

Book Recommendations

- Roller Coaster by Marla Frazee: An amusing and beautifully illustrated book that captures the roller coaster experience, sparking the imagination of young readers.
- The Three Little Pigs: An Architectural Tale by Steven Guarnaccia: This unique twist on a classic story introduces children to architectural concepts and design principles through a familiar narrative.
- The Magic School Bus and the Science Fair Expedition by Joanna Cole: This engaging book

combines science education with adventure, encouraging children to explore scientific concepts in a fun and playful way.