Math

- Understanding of force and motion as they watch the balls roll down the ramps at different speeds and distances
- Counting and comparing the number of balls that roll down each ramp
- Practice with measurement as they notice the varying heights and lengths of the ramps
- Introduction to basic concepts of angles as they observe how the balls move on the ramps

Science

- Observation and prediction skills when they anticipate how the balls will behave on different ramps
- Understanding of gravity and its effect on the movement of the balls down the ramps
- Exploration of cause and effect relationships as they see how the force applied to the balls affects their movement
- Introduction to basic engineering concepts as they consider how the ramps are constructed and how they influence the ball's behavior

Encourage continued development by providing the child with a variety of ramps and balls to experiment with. You can also introduce simple challenges, such as building the longest ramp or finding ways to make the ball roll faster or slower. Allow the child to use their creativity and problem-solving skills to explore different ways to play with ramps and balls.

Book Recommendations

- <u>Ramps and Rollers</u> by Catherine Veitch: This book introduces young readers to the concept of ramps and how they can be used to make things move.
- <u>Balls: Amazing Fun</u> by Susan Hughes: This book explores the fun and possibilities of playing with different kinds of balls and how they move.
- <u>Motion: Push and Pull, Fast and Slow</u> by Darlene R. Stille: This book introduces the concepts of motion, force, and speed in a simple and engaging way for young children.

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