Games

- The child observed how the Newton's Cradle demonstrated the concept of conservation of momentum, as the balls transferred kinetic energy from one to another without losing any momentum.
- By watching the movement of the balls, the child could understand the principle of equal and opposite reactions as each action (ball hitting) had an equal and opposite reaction (ball on the other end moving).
- Through this activity, the child likely developed an appreciation for cause and effect, seeing how the initial action of releasing one ball resulted in a chain reaction of movement in the other balls.

Encourage the child to experiment with different numbers of balls in the Newton's Cradle or to vary the materials of the balls to explore how these changes affect the movement and interaction of the balls. They can also try to predict the behavior of the balls before testing their hypotheses.

Book Recommendations

- <u>The Way Things Work Now</u> by David Macaulay: This book provides a fun and educational look at how machines and inventions work, including explanations on concepts like momentum and energy transfer.
- <u>Awesome Science Experiments for Kids</u> by Crystal Chatterton: This book offers engaging experiments that can further deepen the child's understanding of physics concepts through hands-on activities.

If you click on these links and make a purchase, we may receive a small commission.