# **Core Skills Analysis**

## **Physical Development**

- The child practiced gross motor skills through rolling the bowling ball towards the pins, enhancing body coordination and motor planning.
- Hand-eye coordination was improved as the child aimed to knock down pins with the bowling ball.
- Balance and spatial awareness were developed by adjusting posture and force to control the ball's movement.
- The activity supported muscle strength development in the arms and shoulders due to the controlled push required for rolling.

## Mathematics

- The child was introduced to counting by observing and possibly counting the number of pins knocked down.
- Basic number recognition and one-to-one correspondence skills were engaged when associating the quantity of pins with numbers.
- Understanding of cause and effect was demonstrated by seeing how different rolling efforts affect the number of pins toppled.
- Early concepts of addition and subtraction can be naturally introduced by comparing pins before and after each roll.

## **Social and Emotional Development**

- The child practiced turn-taking skills if playing with others, fostering patience and social interaction.
- They may have experienced excitement or frustration depending on the success of knocking down pins, helping with emotional regulation.
- Encouragement and celebrating successes built confidence and positive reinforcement.
- Engagement in a structured play activity helped develop focus and persistence.

## Tips

To deepen understanding from the bowling activity, encourage the child to explore variations such as changing the distance of the throw to understand force and distance relationships. Integrate simple counting challenges by having the child predict how many pins they think will fall before each roll. Combine the physical activity with story-telling or role-play, such as pretending to be in a bowling tournament, to boost creativity and language skills. Finally, consider introducing concepts of cooperation and friendly competition by playing with family members or peers, focusing on taking turns and celebrating each other's efforts.

## **Book Recommendations**

- <u>Pinny the Penguin Goes Bowling</u> by Lee Harper: A delightful picture book about a penguin learning to bowl, introducing basic concepts of aiming, counting, and having fun.
- <u>Count the Bowling Pins</u> by Anna Silva: An interactive counting book that helps toddlers recognize numbers and practice counting skills through bowling scenarios.
- <u>I Like to Play Bowling!</u> by Katie Davis: Simple and engaging text paired with illustrations to introduce young children to bowling and turn-taking skills.

## **Learning Standards**

• Physical Development: Gross Motor Skills (e.g., PHS3.1 – Demonstrate control and coordination in large muscle movements).

- Mathematics: Number Sense and Number Operations (e.g., MATH3.NS.1 Counting and recognizing numbers up to 10).
- Social Studies: Personal and Social Skills (e.g., SS3.PS.2 Participate in group activities demonstrating cooperation and turn-taking).

# **Try This Next**

- Create a worksheet with pictures of bowling pins numbered 1 to 10 and ask the child to color or circle how many pins fell.
- Set up a mini bowling score chart for the child to mark knocked-down pins after each turn to practice number recognition and simple addition.

## **Growth Beyond Academics**

This bowling activity likely fostered the child's confidence through successful hits while also teaching patience and emotional control during misses. Engaging in this physical group play helps develop social skills such as turn-taking and cooperation, and the focus needed builds persistence and attention span.