Little Ball Runs Fast

Applicable Age Group 3-4 year-old toddlers

Activity Objectives

☑ Understand straight pipes, curved pipes, and their connection methods.

☑ Explore the movement of the little ball, as well as changes in its direction and speed.

Activity Description

Connect straight pipes or curved pipes with children, then let the little ball move through the pipes and observe the whole process. Observe changes in the ball's movement direction and speed, and figure out how to change its direction and speed. If you want the little ball to "run fast", you should increase the number of straight pipes. During this process, explore the influence of gravity and friction on the ball's speed.

STEAM素质培养指标

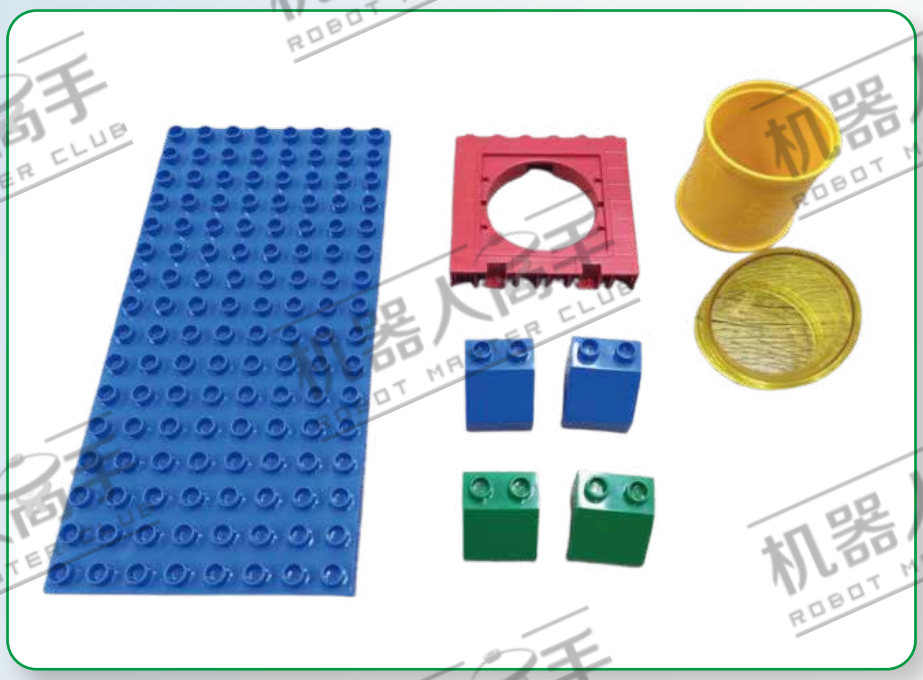
Indicator \ Method	Game-based introduction: observe the movement of small balls	Build a pipeline structure	Operate and observe the movement of small balls in the pipeline	Expand knowledge for further exploration
Curiosity and Imagination	●			
Flexibility and Adaptability		●		
Verbal and Written Communication Skills			●	
Cross-boundary Cooperation and Exemplary Leadership				
Critical Thinking and Problem-solving Skills				
Proactive and Pioneering Spirit				●
Ability to Evaluate and Analyze Information				

Interactive Tips

- For children at this stage, it is only necessary to observe phenomena and continuously reinforce them—there is no need to explore the principles behind the phenomena.
- This is the first time children use pipe blocks in this activity. Adult instructors should first demonstrate, or provide pipe blocks for children to recognize and figure out how to connect them.

- Children have observed that the ball runs faster when placed at a certain height. Therefore, to make the ball run faster, the pipes need to be fixed at a position with a certain height during construction.
- When connecting the pipes, it is necessary to align the interfaces accurately. Remind children to carefully observe the size characteristics of the interfaces.

Find These Building Blocks



Connect Straight and Curved Pipes, and Build a Bracket with a Certain Height