

# Marble Superhero

**Applicable Age Group** 5-6 year-old toddlers

- Activity Objectives**
- Investigate the mechanism for launching marbles.
  - Creatively design a game model by comprehensively applying mechanical structures.

**Activity Description** Analyze the gameplay of "Marble Superhero" with the children, and use mechanical structures to creatively build a model of the game, moving the cannon to aim and shoot at targets. During the game, discover that the launching distance of the marble determines whether the target can be hit, thus further investigating the launching device to make the marbles shoot farther and more accurately. This process enhances children's problem-solving skills.

## STEAM Literacy Development Indicators

Indicator	Method	Situation-based introduction: Analyze game principles	Comprehensively apply knowledge to build a game model	Test structural stability	Organize games to enjoy the fun
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

- After connecting the tracked wheels, observe the stability and flexibility of the structure, and adjust the wheel positions promptly.
- The connection points of the long pipes can directly cause the entire structure to tilt; encourage children to adjust as they try different configurations.

 Find these building blocks.



 Use the knowledge you've learned to creatively build a game model.

