

Ball Conveying Device

Applicable Age Group 5-6 year-old toddlers

- Activity Objectives**
- ☑ Analyze functional requirements and creatively design engineering structures.
 - ☑ Improve creative and comprehensive problem-solving abilities.

Activity Description This is a game device design activity. We will hold ball games and need to design a ball conveying device. To make the device time-saving and labor-saving, children will use imagination and analysis to identify functional requirements, conduct targeted discussions, and finally summarize and propose creative solutions.

STEAM Literacy Development Indicators

Method Indicator	Situation-based introduction: Analyze functional requirements	Creatively design a ball-transporting device	Test stability and accuracy	Combine works to upgrade the game
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

- This activity involves comprehensive application of knowledge and creative construction. Children can give full play to their ideas—their construction concepts can be bold and imaginative, as long as the device can realize its function.
- The design may use lever structures learned before. Levers can be upgraded or modified, with the ultimate goal of completing the task.
- Lever structures have fulcrums and force arms. They can be used directly or modified/ upgraded, as long as they can realize the ball conveying function.

- Since this is a game device design, it is necessary to test the structural stability and ball conveying accuracy multiple times.

Find These Blocks



Creatively Build a Ball Conveying Device (Which Can Be a Modified or Upgraded Lever)

