

# Crane



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

- Activity Objectives**
- ☑ Recognize the function and structure of pulleys.
  - ☑ Learn about the types and uses of pulleys, and be able to briefly describe the working principle of pulleys.
  - ☑ Understand how fixed pulleys change the direction of force.

**Activity Description** Cultivate children's hands-on ability and spatial imagination. Through building the pulley structure, exercise their fine motor skills and hand-eye coordination. Improve children's logical thinking ability and problem-solving ability, allowing them to learn how to build according to needs and adjust and optimize design schemes in practice.

## STEAM Literacy Development Indicators

Method Indicator	Situation-based introduction: Understand the structure of a crane	Build a crane using pulleys	Test the stability and smoothness of the structure	Organize games to strengthen functions
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

- During the building process, children may encounter problems such as unstable pulley fixation or insufficient boom length. Encourage them to think and try to solve problems by themselves, or seek help from adult coaches and peers.
- Encourage children to evaluate each other's works, learn from others' strengths and point out areas for improvement.

