Forklift

Applicable Age Group 6+

Activity Objectives

- ☑ Recognize the structure, types and characteristics of forklifts
- ☑ Learn the rack and pinion transmission and its characteristics
- ☑ Master the application of vertical and horizontal gear transmission

Activity Description In this course, a forklift is completed based on the rack and pinion structure.

STEAM Literacy Development Indicators

Method / Indicator	Situation Introduction & Problem Analysis	Using Gears and Racks to Construct a Forklift	Testing Structural Stability and Smoothness	Understanding the Application of Gears
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				

Building Block List

X 3	X 2	X 1	X 1
X 2	X 4	X 2	X 2
X 4	X 1	X 4	X 2
X 1	X 1	X 4	X 1
X 4	X 1	X 1	X 2
X 2	X 1	X 3	X 4
X 2	X 15	X 2	X 4
X 2	X 4	X 2	X 1
X 4	X 4	X 1	X 1

Construction Steps

Makerzoid(App)-Robot Master(Kit)-Soccer Competition(Set)-5 Electric Engineering-6 Gear Shifting Fan