

Rail-Gate

Applicable Age Group

6+

Activity Objectives

- ✓ Learn the use and characteristics of worm gear boxes
- ✓ Understand various types of doors in life and express them in multiple forms
- ✓ Learn the application of quadrilaterals

Activity Description

In this course, children will design a rail-gate.

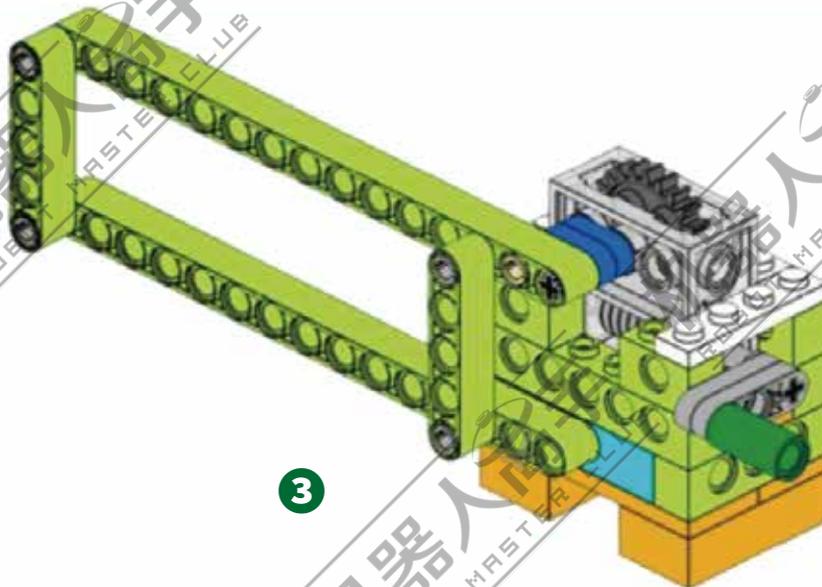
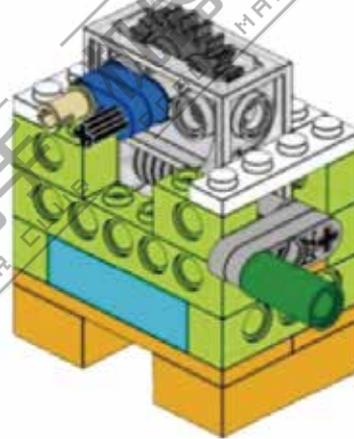
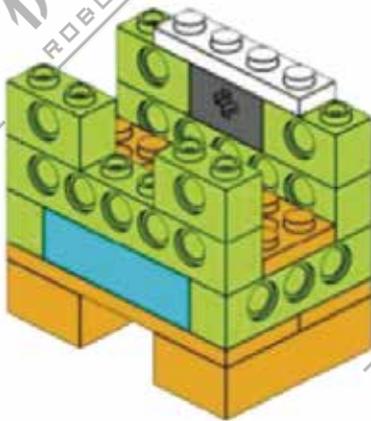


STEAM Literacy Development Indicators

Indicator	Method	Situation Introduction & Problem Analysis	Using Gears to Construct a Quadrilateral Rail-Gate	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 1		X 2		X 2
	X 4		X 1		X 1		X 2
	X 3		X 1		X 2		X 1
	X 1		X 1		X 2		
	X 2		X 4		X 1		
	X 2		X 2		X 4		



Construction Steps

Makerzoid(App)-Robot Master(Kit)-Soccer Competition(Set)-2 Basic-48 Rail-Gate