

Automatic Gate

Applicable Age Group

6+

Activity Objectives

- ☑ Learn gear meshing transmission
- ☑ Learn the basic principle and application of sensors (such as motion sensors)
- ☑ Understand the working principle of induction doors

Activity Description

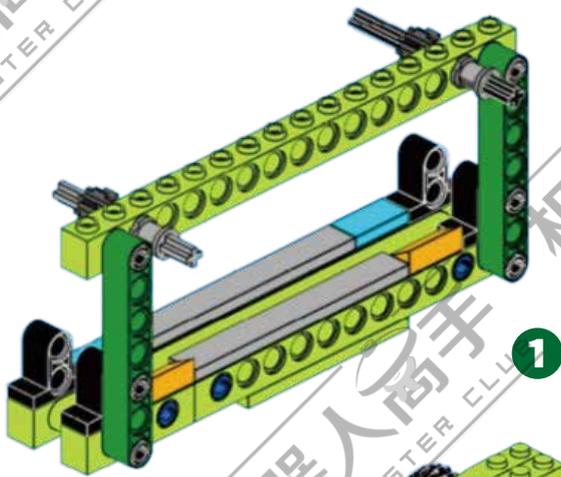
In this course, children will design an intelligent gate based on worm meshing transmission.

STEAM Literacy Development Indicators

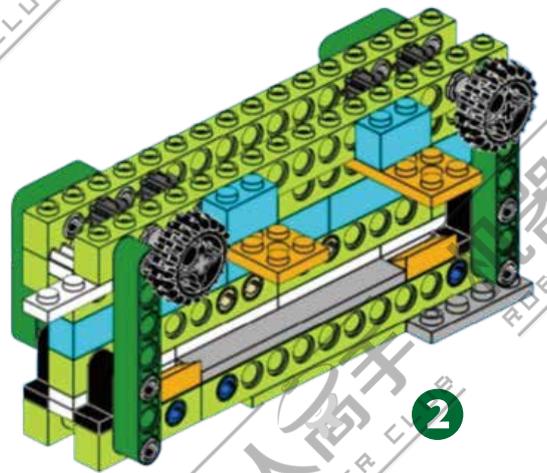
Method Indicator	Situation Introduction & Problem Analysis	Using Worm Meshing to Construct a Gate	Testing Structural Stability and Smoothness	Understanding the Application of Worm Meshing
Curiosity and Imagination	●			
Flexibility and Adaptability		●		
Verbal and Written Communication Skills				
Cross-boundary Cooperation and Exemplary Leadership				
Critical Thinking and Problem-solving Skills			●	
Proactive and Pioneering Spirit				●
Ability to Evaluate and Analyze Information				

Building Block List

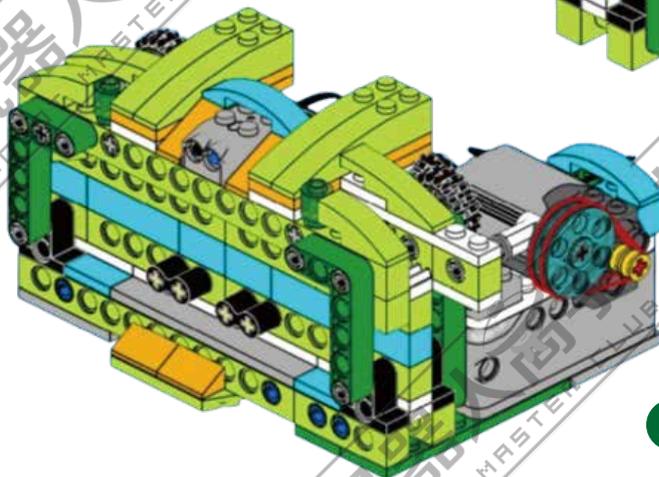
	X 6		X 1		X 1		X 2		X 4		X 4
	X 4		X 2		X 12		X 12		X 2		X 2
	X 4		X 2		X 4		X 2		X 2		X 1
	X 4		X 2		X 4		X 2		X 2		X 1
	X 2		X 2		X 1		X 2		X 2		X 2
	X 2		X 4		X 2		X 2		X 4		X 1
	X 1		X 1		X 3		X 2		X 2		X 2
	X 3		X 2		X 1		X 2		X 2		X 1
	X 2		X 1		X 1		X 2		X 1		X 2
	X 6		X 2		X 2		X 2		X 2		



1



2



3

Construction Steps

Makerzoid(App)-Robot Master(Kit)-Soccer Competition(Set)-10 Newly Updated Programming-2 Automatic Gate