

Gear Shifting Fan

Applicable Age Group 6+

Activity Objectives

- ☑ Analyze the fan structure and understand the functions and types of each part
- ☑ Understand what gears are and flexibly use gear acceleration and deceleration

Activity Description

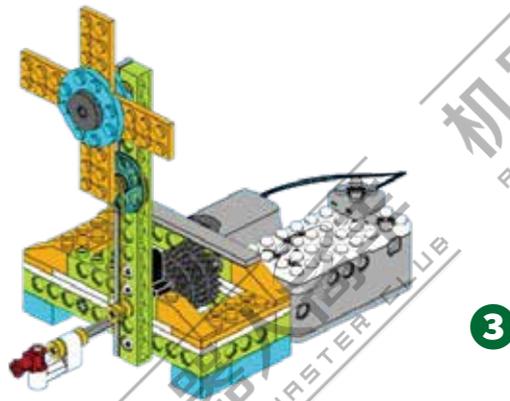
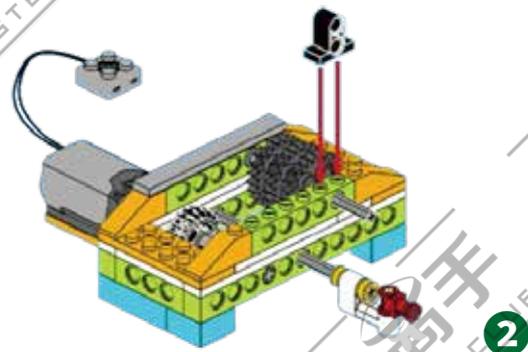
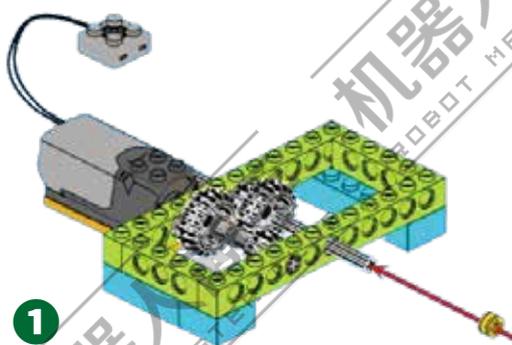
In this course, children will design a variable-speed fan. The wind speed changes with the continuous adjustment of gear positions.

STEAM Literacy Development Indicators

Indicator	Situation Introduction & Problem Analysis	Using Gears to Construct a Variable-Speed Fan	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 2		X 2		X 3		X 1
	X 2		X 3		X 1		X 2
	X 2		X 1		X 1		X 1
	X 2		X 1		X 1		X 1
	X 4		X 1		X 2		X 1
	X 3		X 1		X 2		X 1
	X 2		X 1		X 2		X 2
	X 2		X 5		X 11		
	X 2		X 2		X 4		
	X 2		X 7		X 3		



Construction Steps

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