

Christmas Tree

Applicable Age Group

6+

Activity Objectives

- Understand knowledge related to Christmas
- Know that the Christmas tree is one of the important elements of Christmas
- Master the application of worm gear boxes

Activity Description

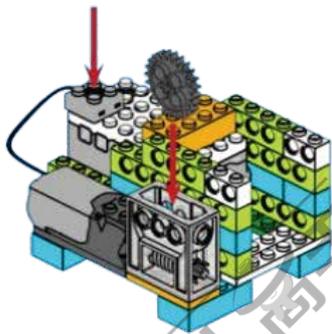
In this course, children will design a mouse trap based on gear acceleration transmission to help people catch mice.

STEAM Literacy Development Indicators

Method Indicator	Situation Introduction & Problem Analysis	Using Worm Gear Boxes to Construct a Christmas Tree	Testing Structural Stability and Smoothness	Understanding the Application of Worm Gear Boxes
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

	X1		X6		X3		X2		X4		X4
	X2		X2		X1		X2		X1		X1
	X4		X2		X1		X1		X4		X2
	X4		X2		X1		X4		X2		X2
	X4		X2		X2		X2		X2		X1
	X2		X4		X2		X2		X2		X1
	X2		X1		X4		X4		X2		X1
	X2		X1		X4		X4		X2		X1
	X4		X1		X2		X4		X2		X4
	X4		X1		X2		X4		X2		X1
	X1										



1



2



3

Construction Steps

Makerzoid(App)-Robot Master(Kit)-Soccer Competition(Set)-5 Electric Engineering-4 Christmas Tree