Marble Run Challenge:

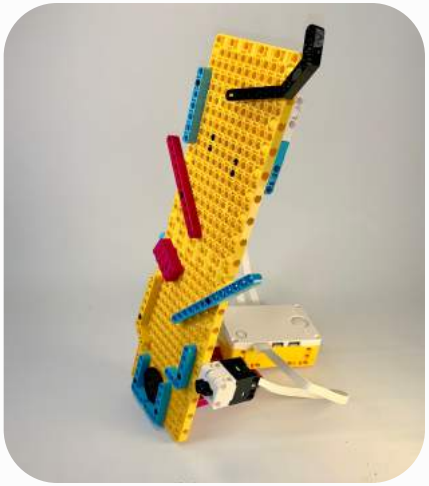
Create a setup that allows you to control the roll of a tire
from the top of a tower to the bottom using motors as valves

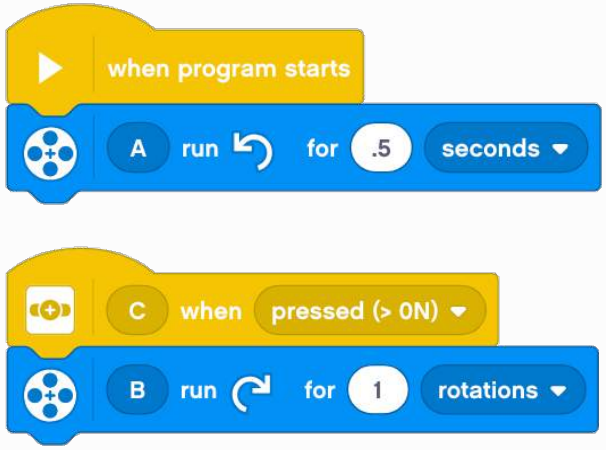
Engineering/Physics Objectives:
Understand controls and momentum

Art Learning Objectives:
Can you add spinning objects and sounds to your design?

SAMPLE IDEA

Feel free to come up with something completely different!

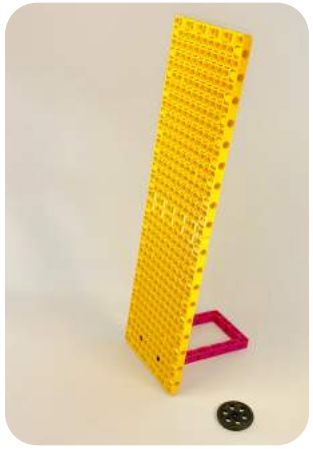




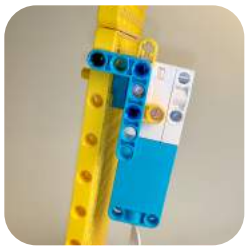
Flip over for more details

BUILD IT

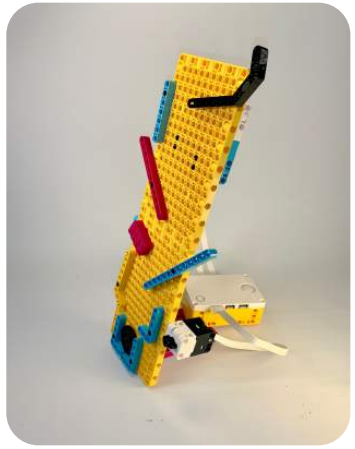
Create a surface for the skinny wheel to roll down



Attach Motors

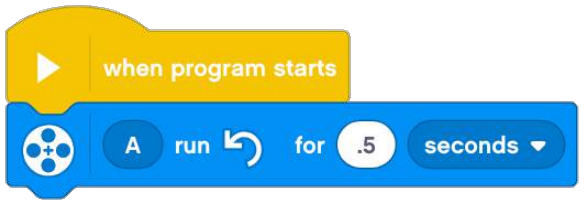


Add obstacles (both permanent and motor controlled)



CODE IT

Control the first motorized piece by turning the motor counterclockwise to start the wheel rolling



When the wheel reaches the second motorized piece, press the touch sensor. This turns the second motor clockwise, allowing the wheel to roll to the bottom