Fan-Tastic - RCX

Suggested Time

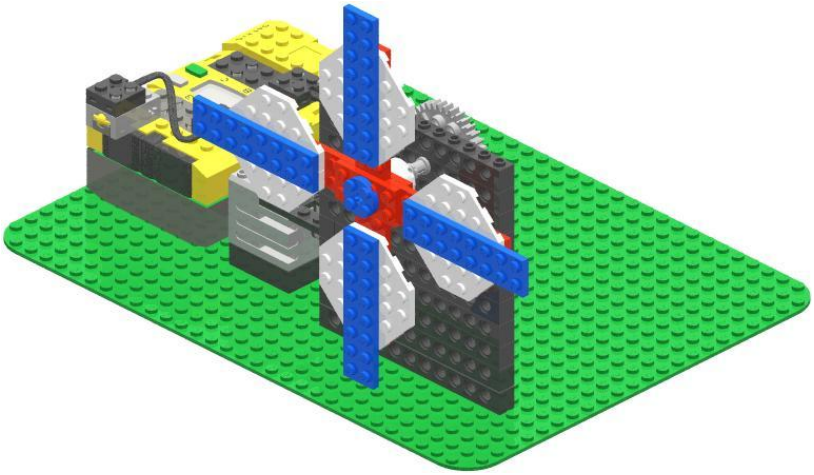
60 minutes

Age

11 - 18

Challenge

In this activity, design and construct and RCX fan with 2 touch sensors and program it to run at variable speeds and have a start/stop function.



Topics

Touch Sensors & Power Levels

Subjects

Math, Engineering & Technology

Programming Themes

Motor Forward, Task Split, Jumps / Lands, Wait for Touch, Power Levels

Related Math & Science Concepts

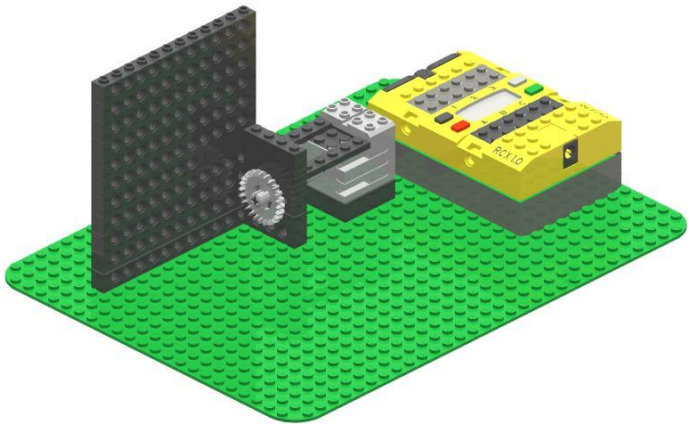
- Gears
- Acceleration
- Velocity

Materials

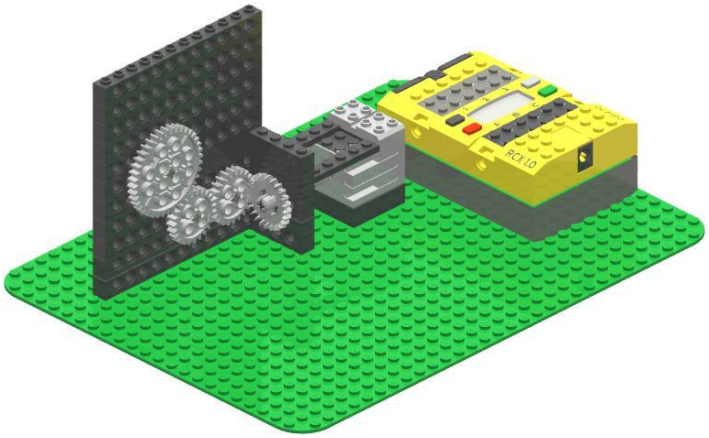
- RCX
- Assortment of LEGO pieces

Building Instructions

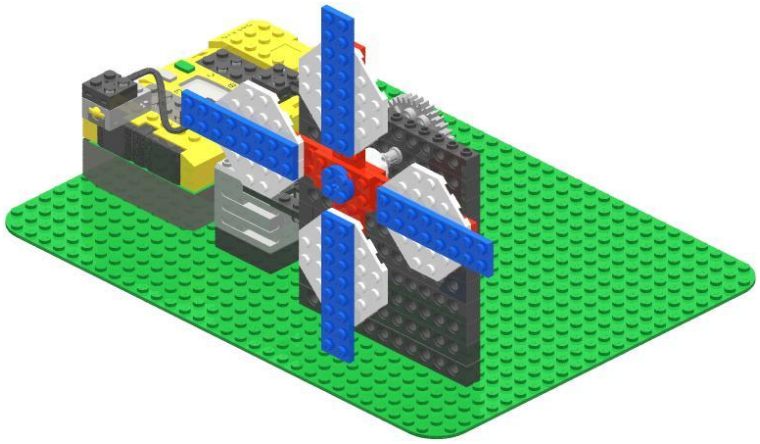
1. Build a base and wall for fan height and gearing.



2. Attach gears using connector pegs.



3. Extend the top gear and attach a set of fan blades. Wire your motor to the RCX and attach a touch sensor.



Programming Instructions

1. Using ROBOLAB INVENTOR 4, use two touch sensors to control fan speed and stop / start functioning. You will need to use a Task Split.