



# LEGO Ice Skater Snow Globe

I combined electronics with LEGO and craft supplies to bring this ice skater mini fig's world to life.

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## PARTS:

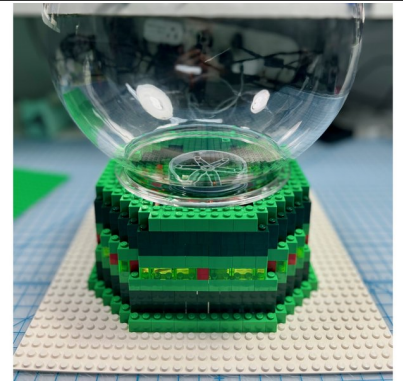
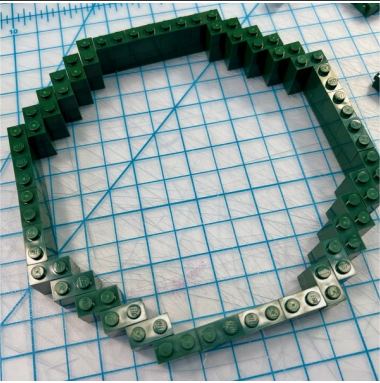
- [micro:bit](#) (1)
- [Crazy Circuits Bit Board](#) (1)
- [Brick Compatible 360 Degree Servo](#) (1)
- [Maker Tape](#) (1)
- [Crazy Circuits Jumbo Pushbutton Chip](#) (1)
- [Addressable RGB LED Strip](#) (1)

## Step 1 — Dream Up A World!



- In this project, I challenged myself to create an interactive world for a minifig character. I fell in love with the ice skater and imagined her skating inside a snow globe!

## Step 2 — Build a LEGO Base



- I built a LEGO base tall enough for the Bit Board to fit inside. I also made sure that the fish tank sat properly on top.

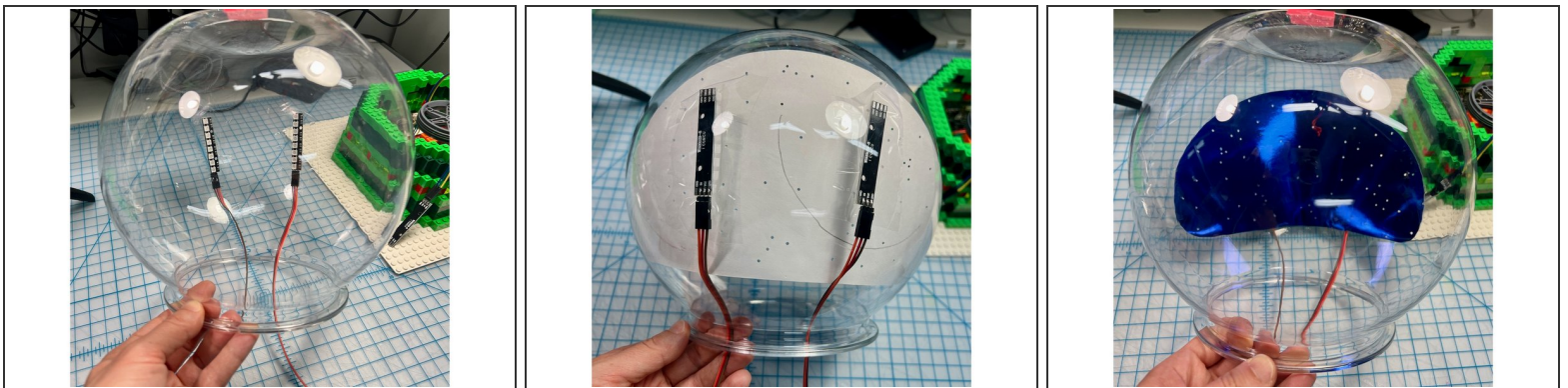


### Step 3 — Make the Motor Mechanism



- I used a continuous rotation servo and a wheel hub to make a place for the magnet to travel on.
- I glued magnets to the wheel and the skater's foot and tested it using a roll of tape as a platform.
- I used the center from a spool of ribbon to create an "ice lake" platform from blue shiny cardstock and a piece of clear acetate on top to look like ice.

### Step 4 — Add the NeoPixels



- I taped NeoPixel sticks to the back and covered them with a layer of shiny blue cardstock that I punched holes out of to give the appearance of many light-up stars.

## Step 5 — Make Mountains and Trees



- I made mountains from black paper painted with glitter Mod Podge.
- I added a layer of clear acetate painted with dots of silver to look like snow.
- I made a treeline with cardstock and green acetate.

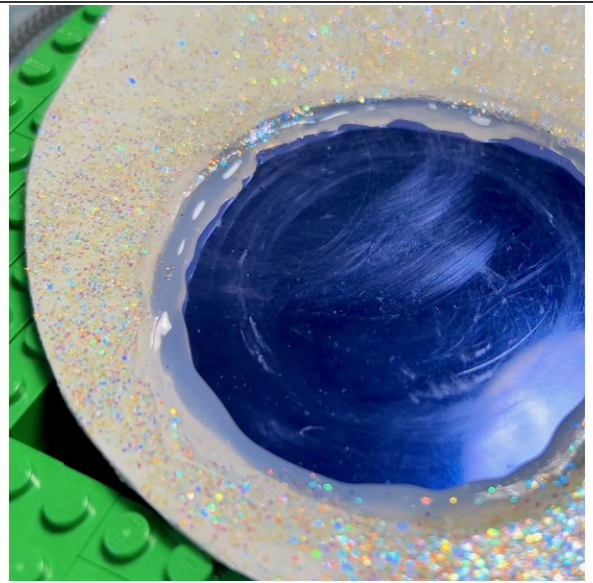
## Step 6 — Make a Cardboard Gingerbread House



- I made a tiny gingerbread house out of cardboard, with the chimney sized to fit the NeoPixels stick.



## Step 7 — Put it all Together



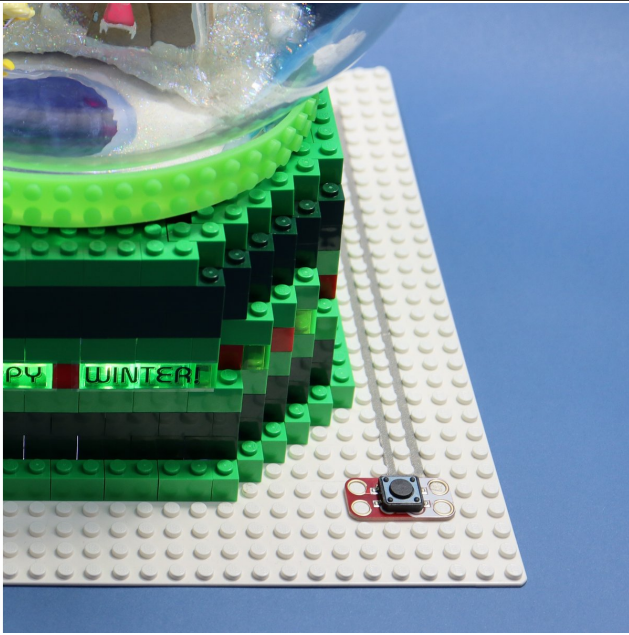
- I glued everything in place with hot glue and covered everything with glitter Mod Podge to look like glittery snow.
- I made an "ice line" over the blue lake with hot glue.

## Step 8 — Add a Sign



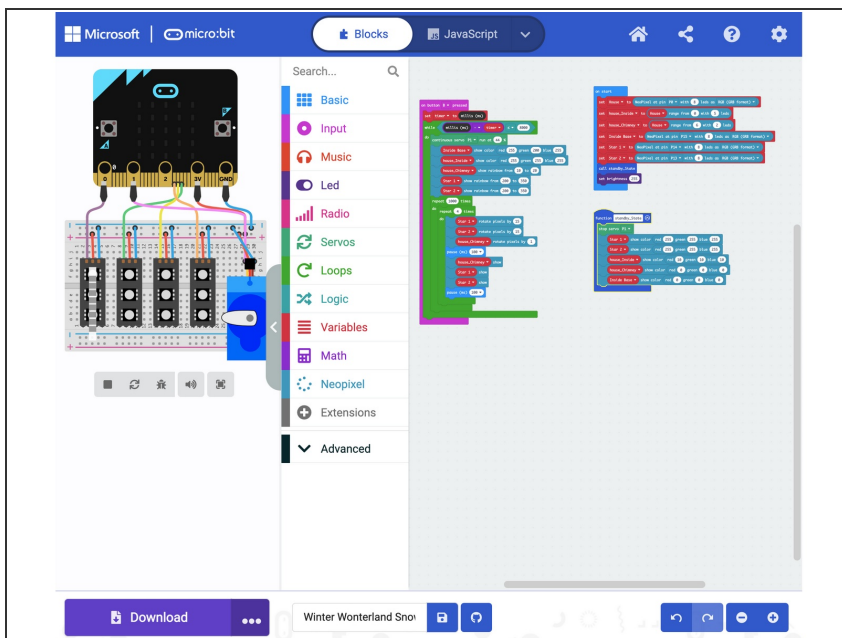
- I used my label maker to make transparent words that I placed over the clear LEGO. There is a NeoPixels stick behind the letters to illuminate them.

## Step 9 — Add a Button



- I added a button so that the whole world could become animated when you press it.

## Step 10 — Upload the Code



- ⚠ If you've never used a micro:bit before you'll want to check out this guide: [Bit Board V1 Setup and Use](https://makecode.microbit.org/_0xP82v1uF...)
- I wrote some code that would trigger the motor and lights when the button was pressed.
- Here is the code for the **Winter Wonerland Snowglobe**:  
[https://makecode.microbit.org/\\_0xP82v1uF...](https://makecode.microbit.org/_0xP82v1uF...)

## Step 11 — Have a Happy Winter!



- Now when you press the button the scene comes to life!
- HAPPY WINTER! We hope this inspires you to make an interactive world for your favorite minifig.