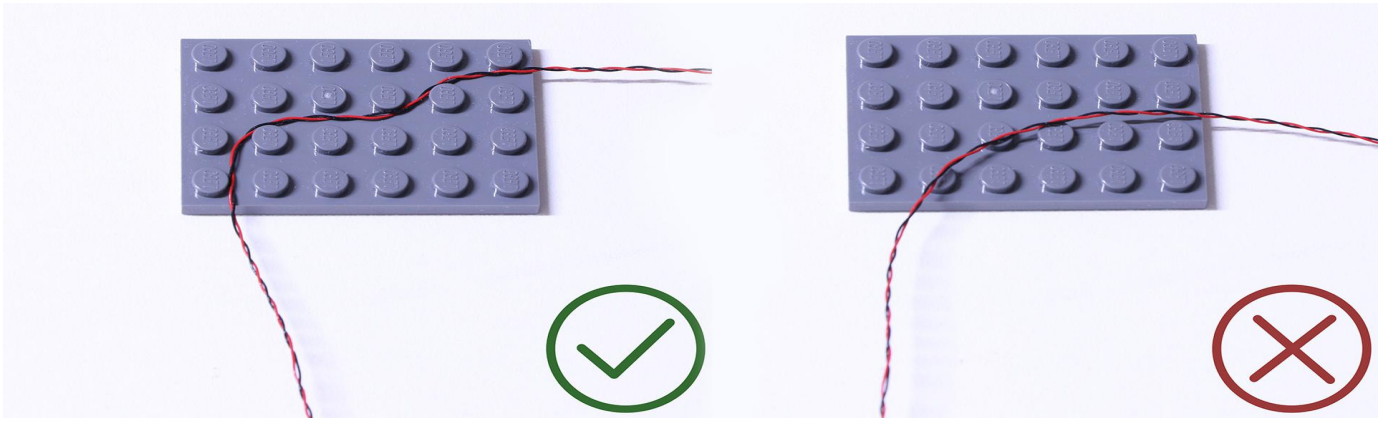
Elsa's Magical Ice Palace #41148 Advanced Version Lighting Kit

Package contents:

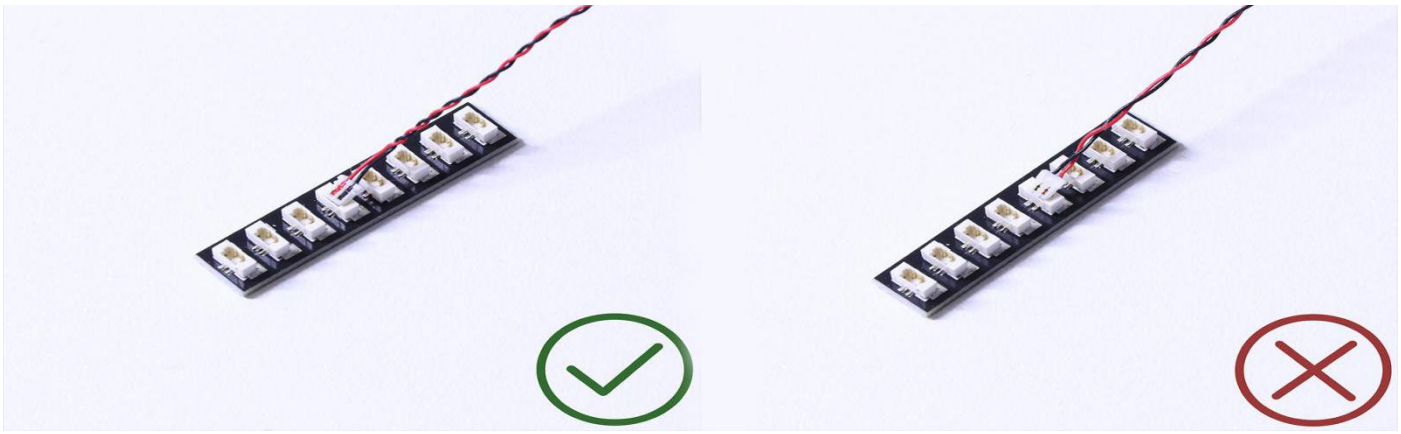
- 5 x 15cm Blue Dot Lights
- 2 x 30cm Blue Dot Lights
- 2 x 15cm White Dot Lights
- 1 x White Strip Light
- 3 x 15cm Connecting Cables
- 2 x 6-port Expansion Boards
- 1 x Flicker Effects Board
- 1 x Multi Colour Light String
- 1 x AA Battery Pack
- Extra LEGO pieces

Note:

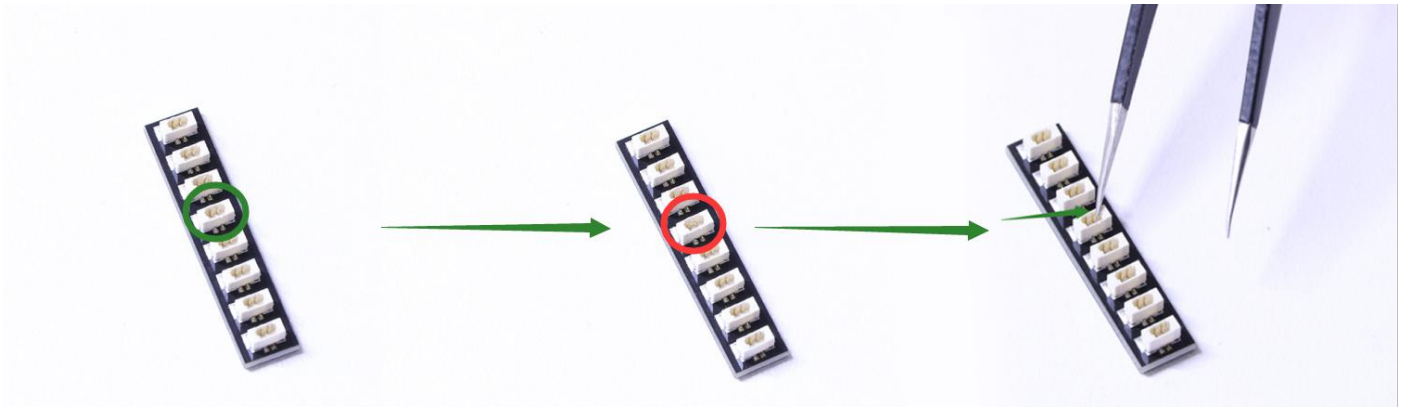
Place wires on the surface or under the LEGO building blocks.
The wire can be place between the building blocks or under the block, but they should be placed between the studs correctly.



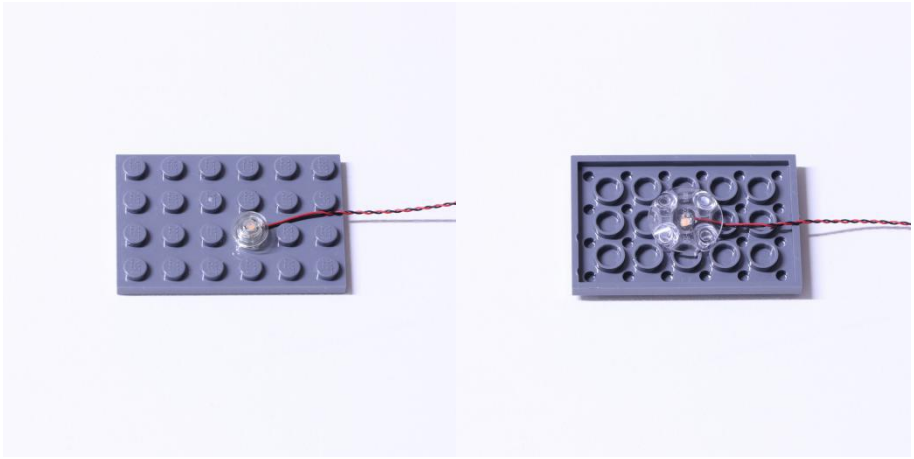
Insert the connectors to the ports.
Be careful when you are operating, there's only one correct way to insert, make sure the expansion board is upward, find the soldered "=" sign on the left of the port. When you are inserting, the side which the wires can be seen should be faced to the "=" sign and if you feel hard to insert, please stop, and don't force it, for that may result in bent pins inside the port or overheating of the expansion board.



At this point, use the tweezers to straighten the bent pins.

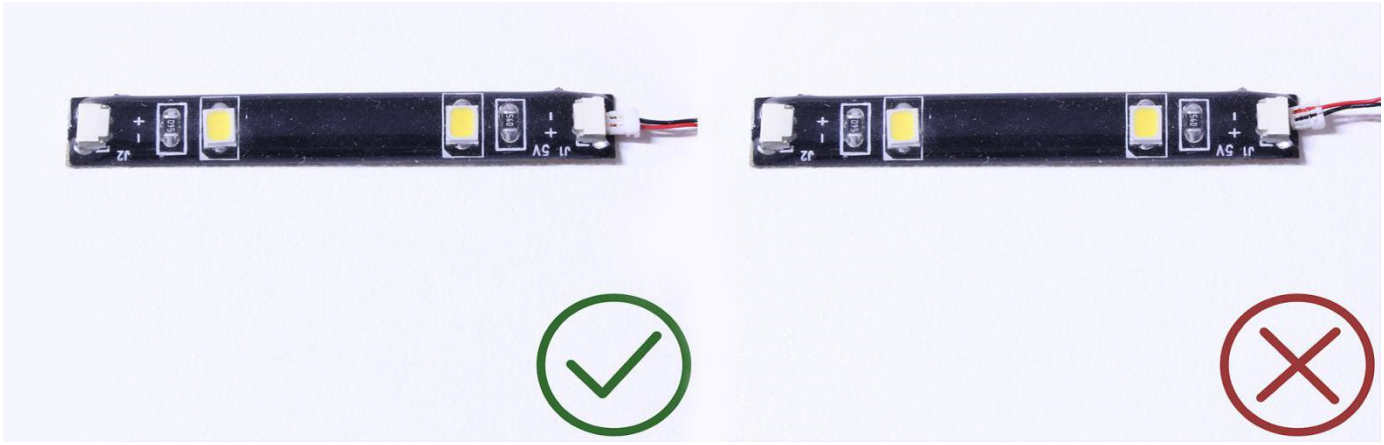


When installing dot lights, make sure they are correctly placed (Yellow LED package is exposed). You can put they either on the top of the studs or between studs.

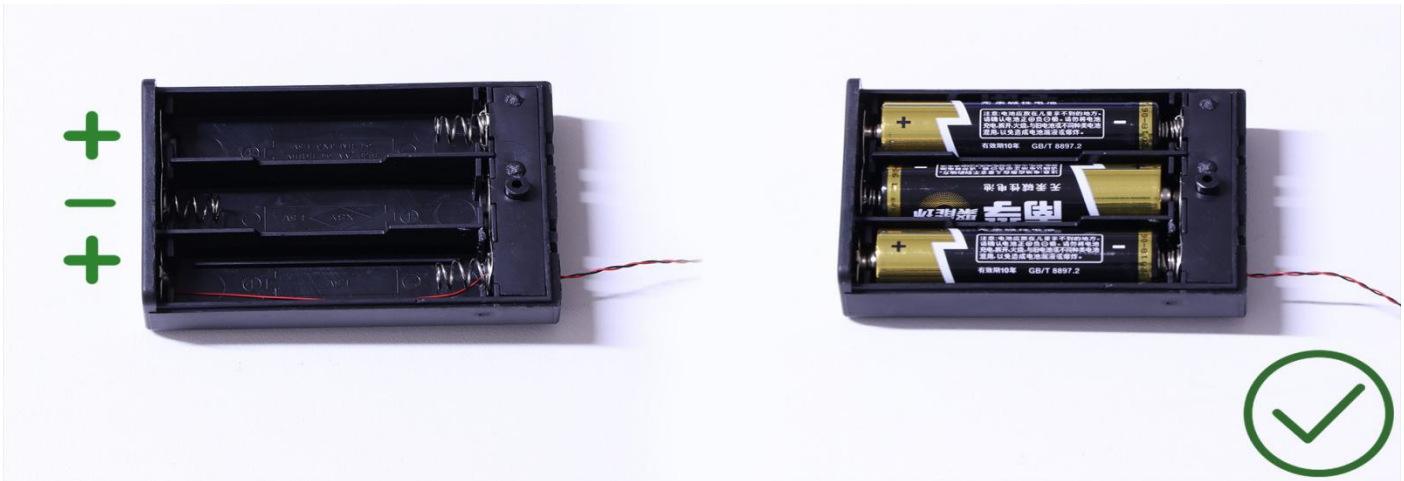


Connecting cable connectors to Strip Lights

Take extra care when inserting connectors to ports on the Strip Lights. Connectors can be inserted only one way. With the Strip Light facing up, ensure the side of the connector with the wires exposed is facing down. If a plug won't fit easily into a port connector, don't force it. Doing so will damage the plug and the connector.



Finally, please pay attention to the positive and negative terminals of the battery when installing the battery case.



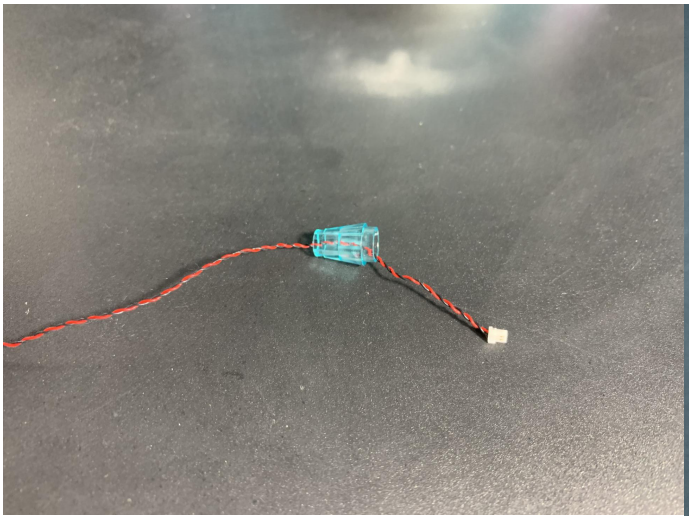
OK, Let’s Begin!

Instructions for installing this kit

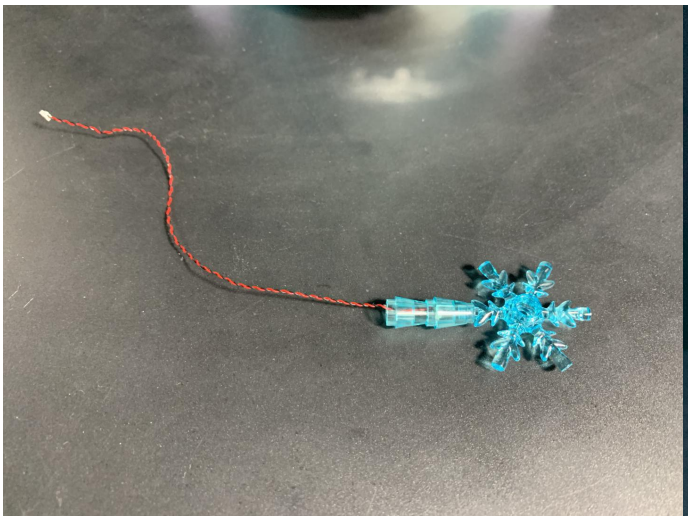
Divide the building into 2 parts. Start from the first part.

Remove the snowflake piece from the top, take a 15cm blue dot light

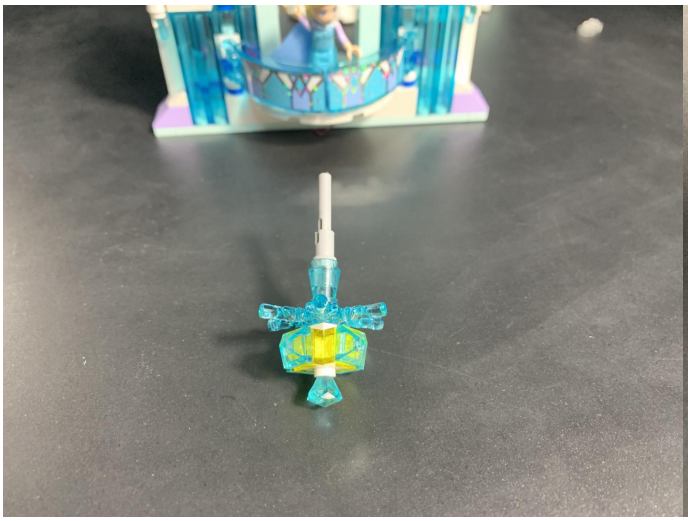
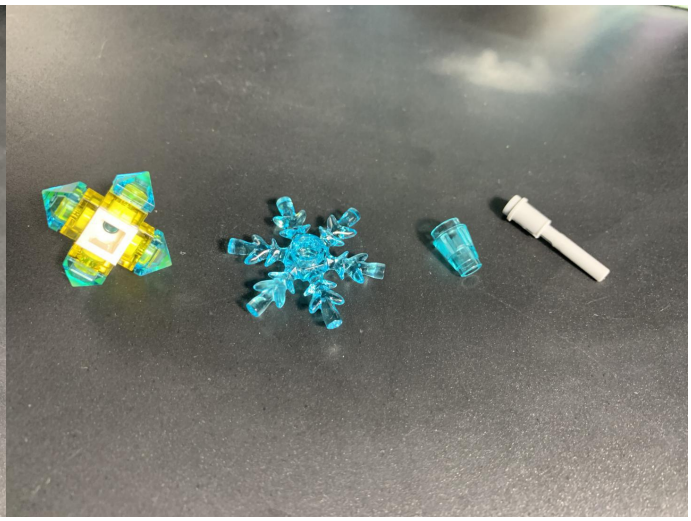
Thread the connector of the light through the blue piece, pull the cable out till the light is facing up



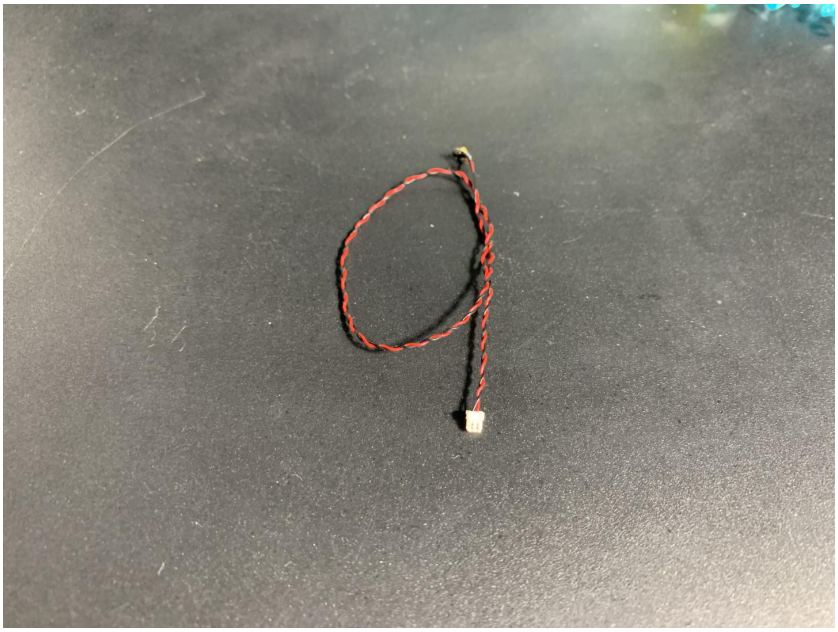

Reconnect the snowflake piece, place the cable behind



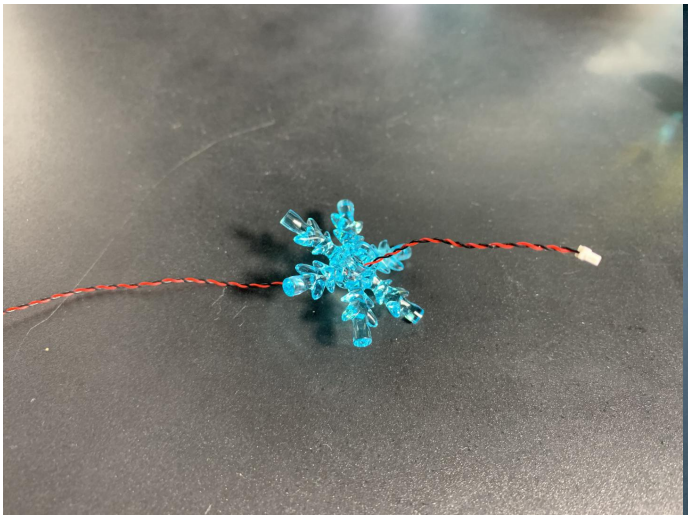

Remove and disassemble the lamp as per below

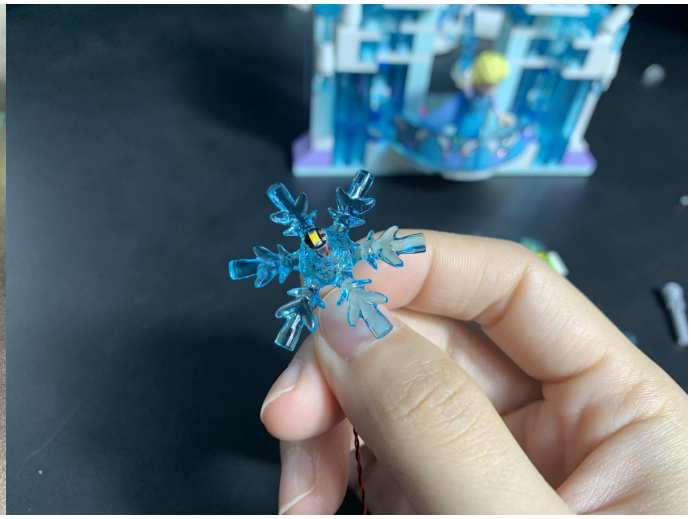



Take a 15cm white dot light

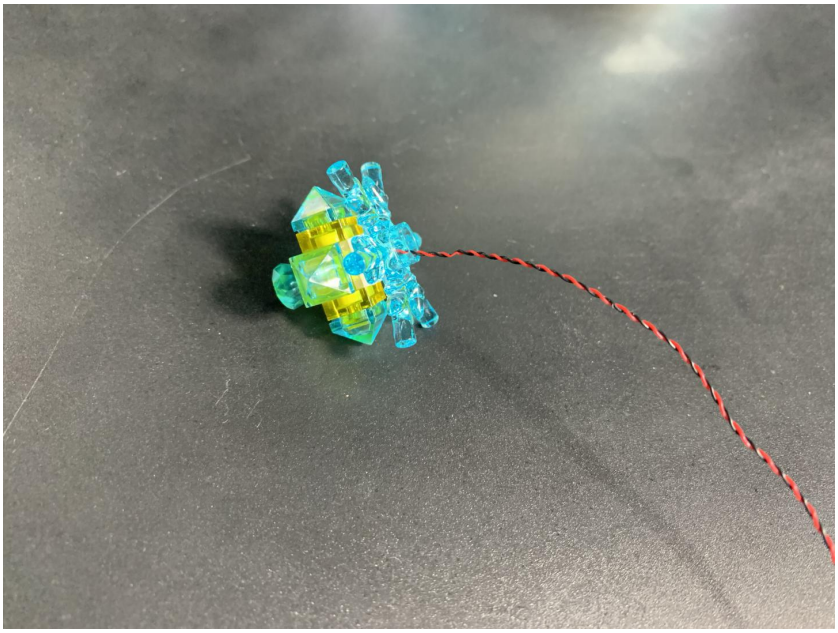


Thread the connector through the snowflake piece, pull till the light is facing up

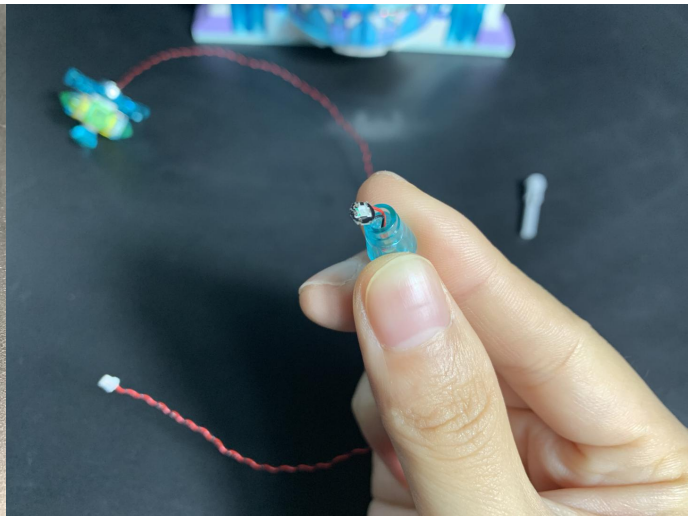




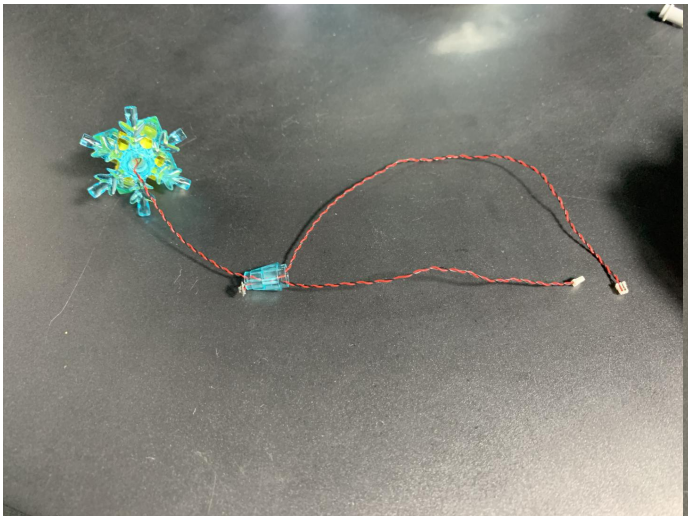
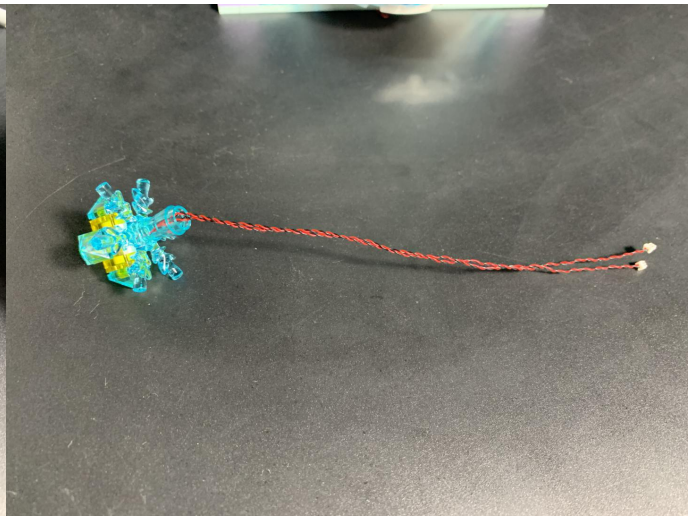
Connect this section as per below



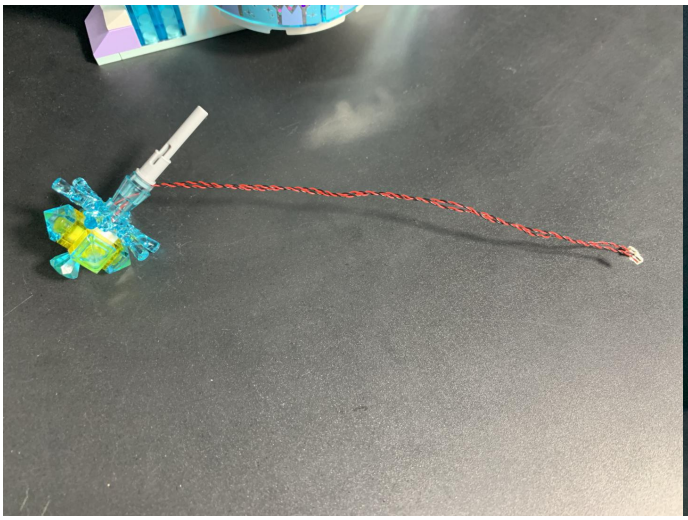
Take another 15cm blue dot light, thread its connector through the following trans blue piece

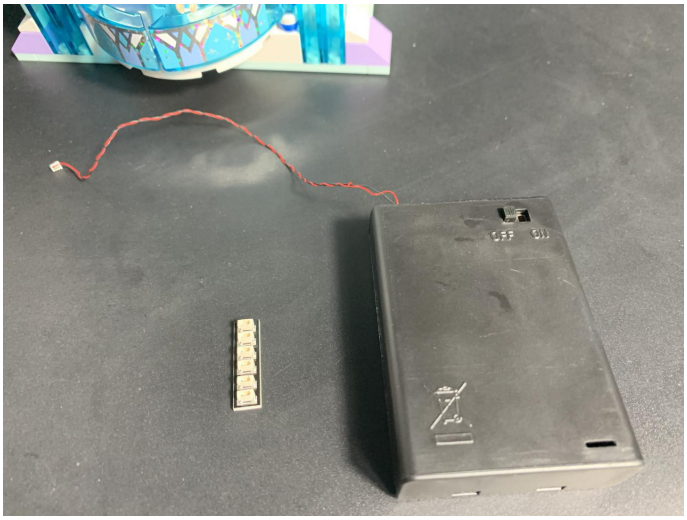
Thread the cable of the white light through the trans blue piece, reconnect the lamp, wind the 2 cables together

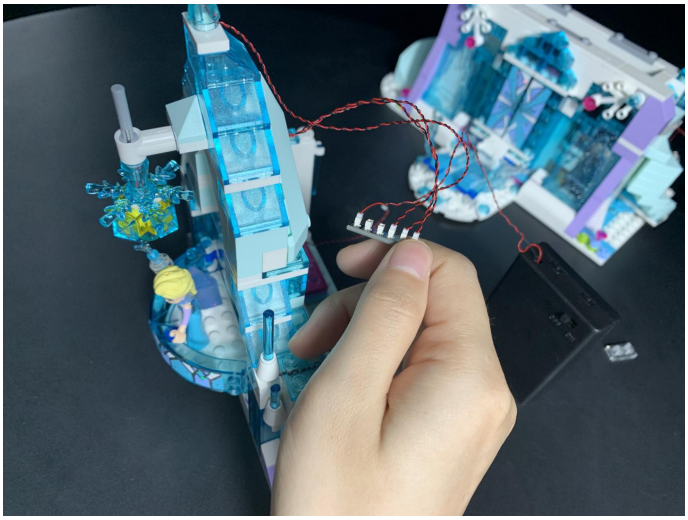



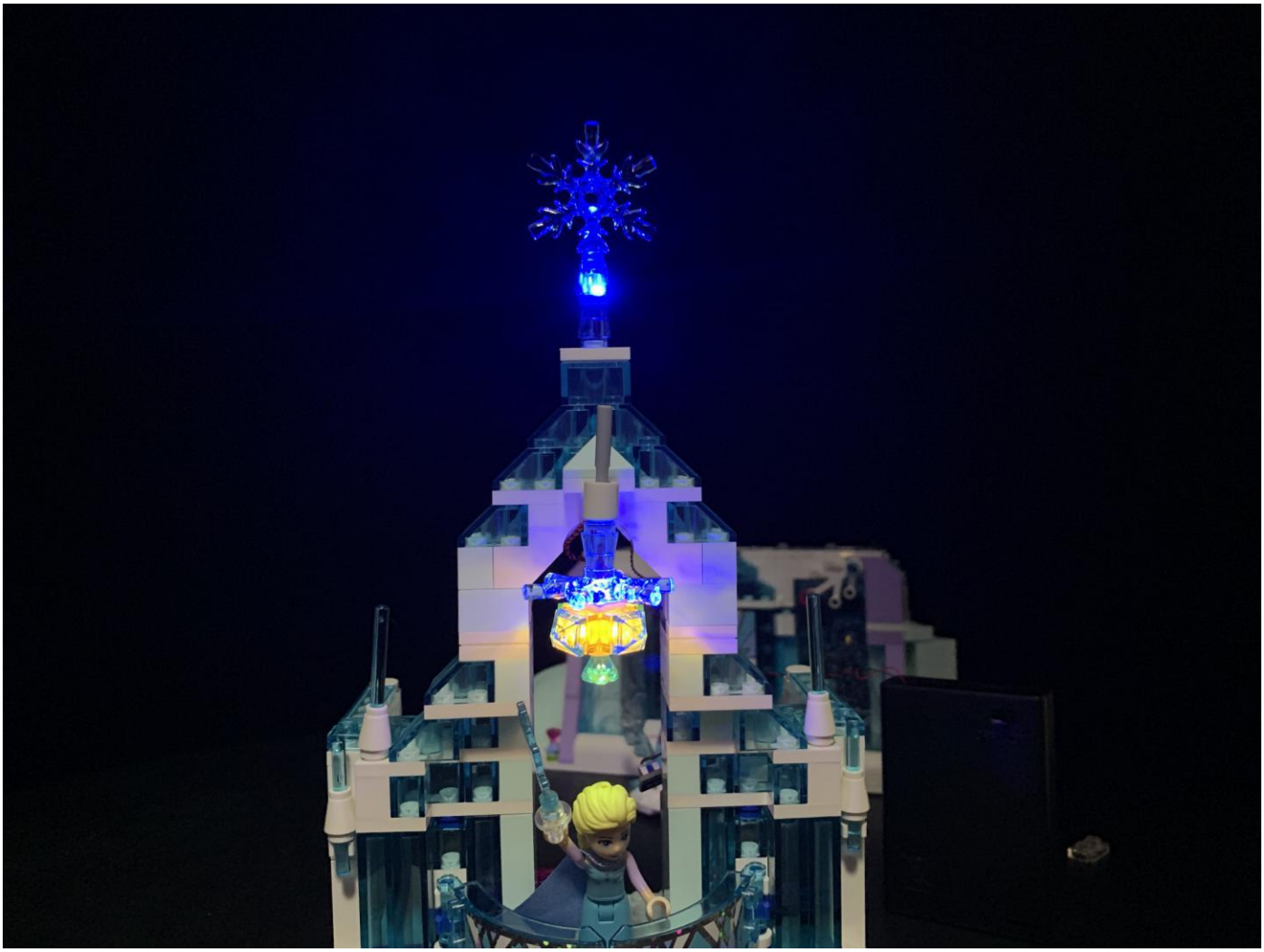
Reconnect the lamp, place the cables behind



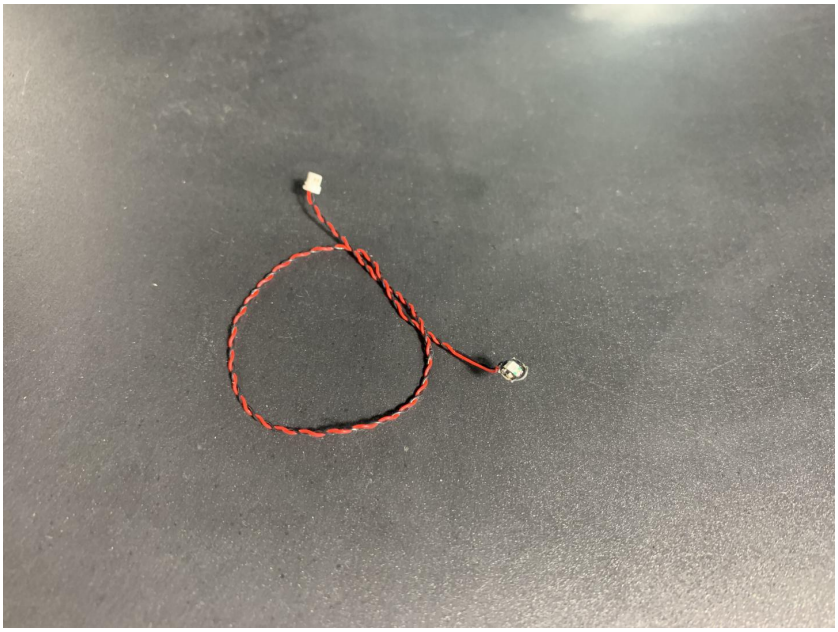

Take a 6-port expansion board, take the battery pack, inserted with batteries, connect the cables of the lights we installed to the expansion board, turn the power on to test the current

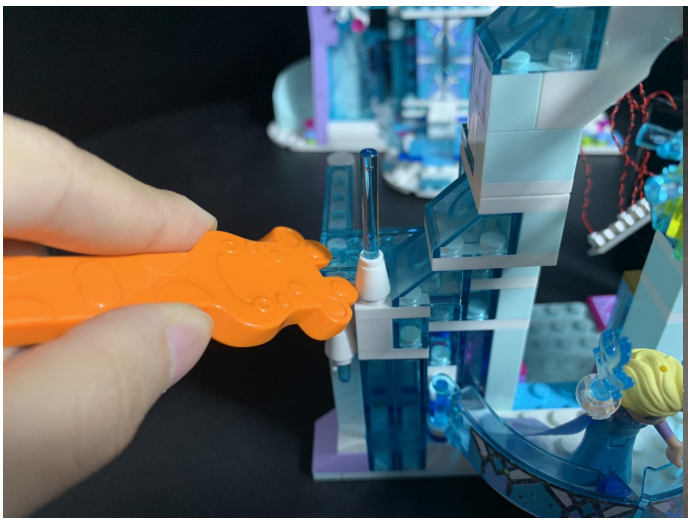


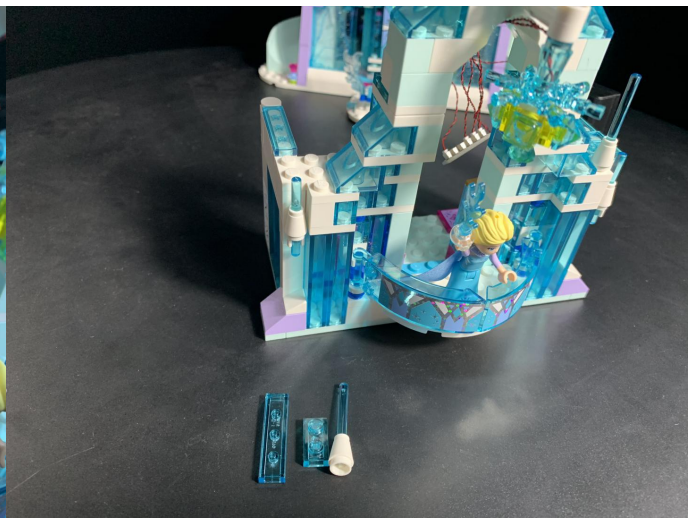




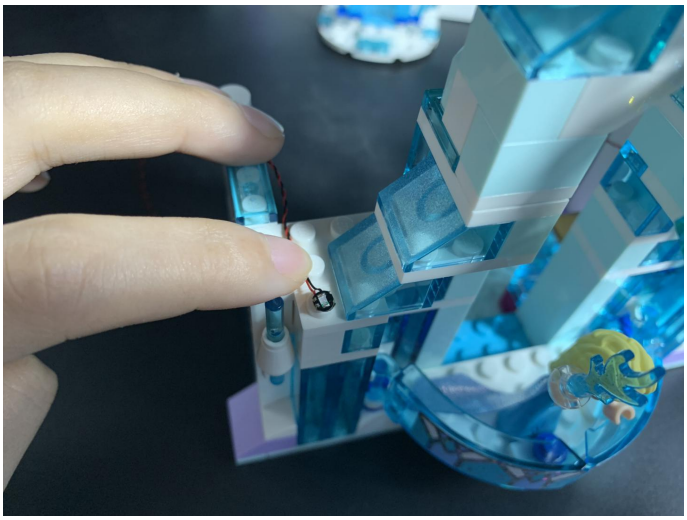
Take a 15cm blue dot light, remove the following pieces

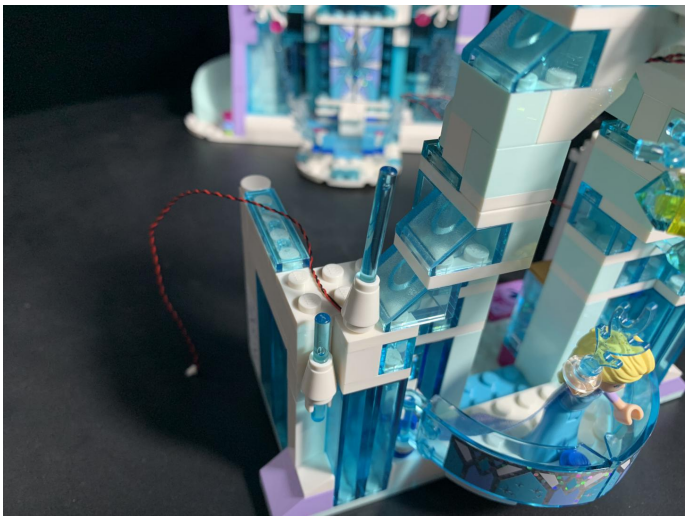


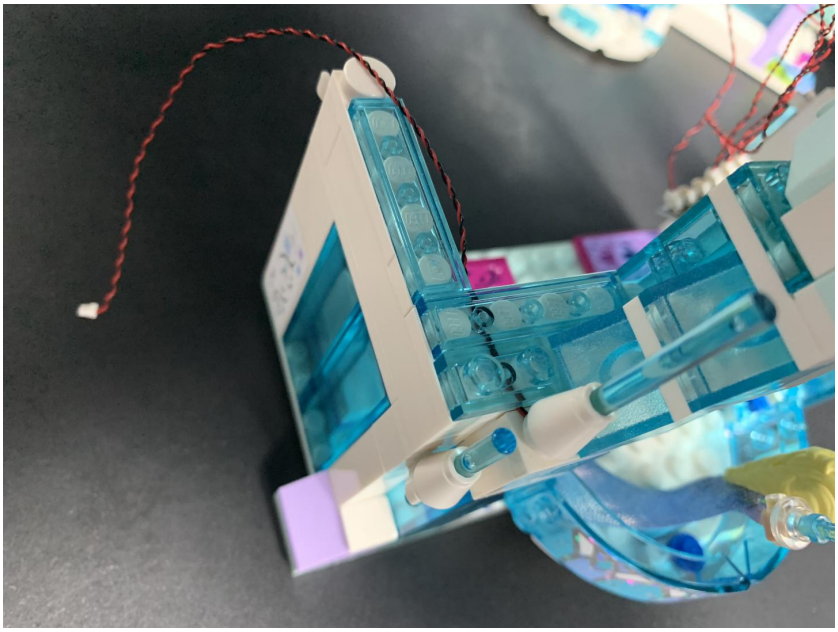




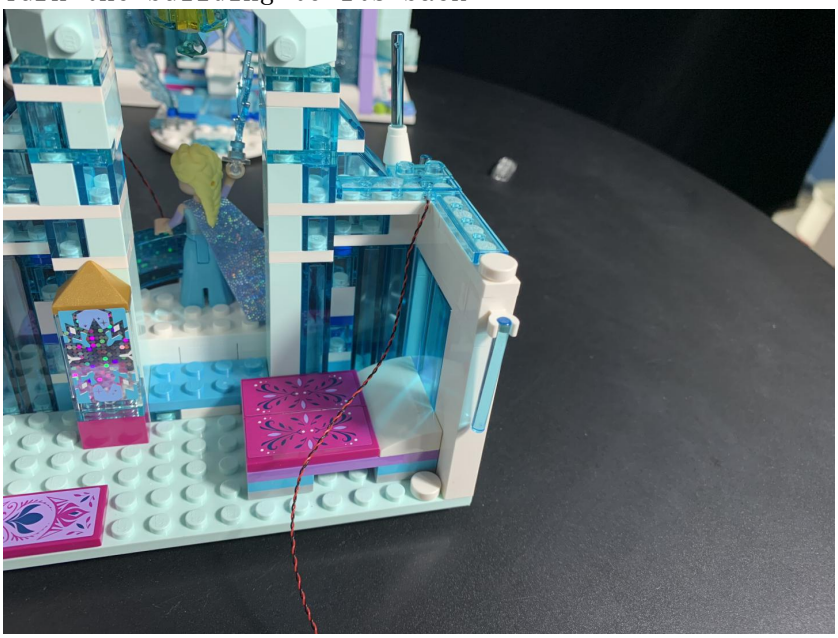
Connect the dot light as per below, hide the cable underneath the baseplate behind



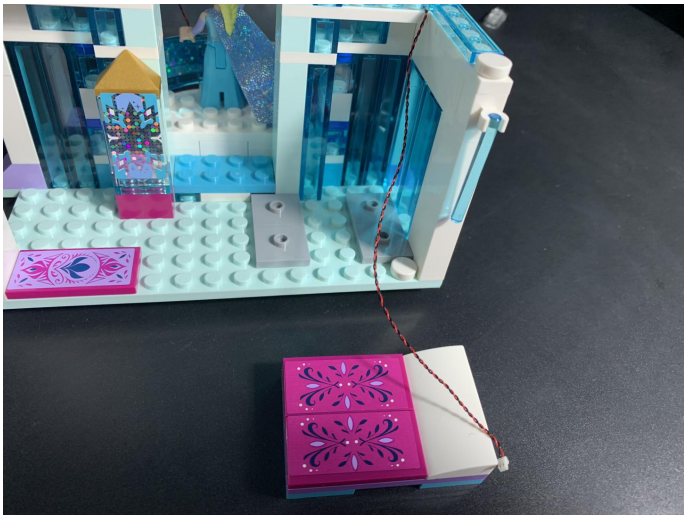


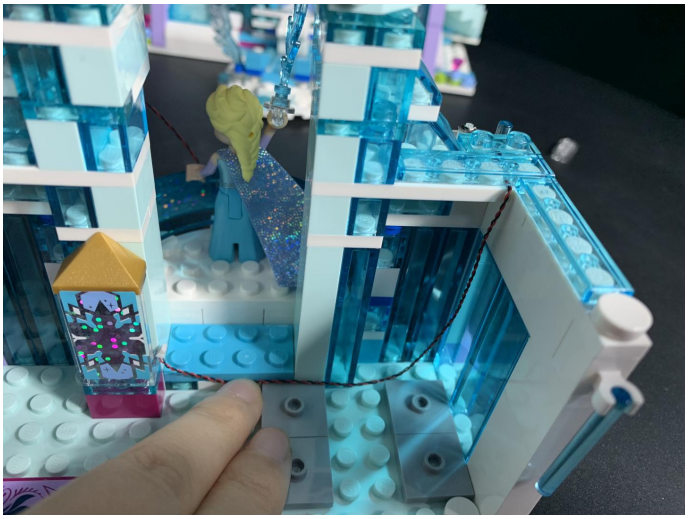


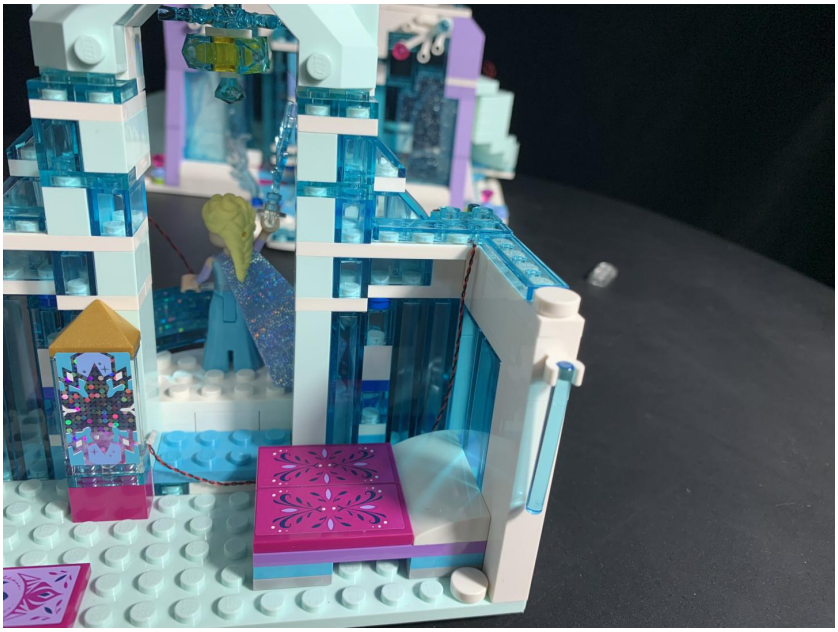
Turn the building to its back



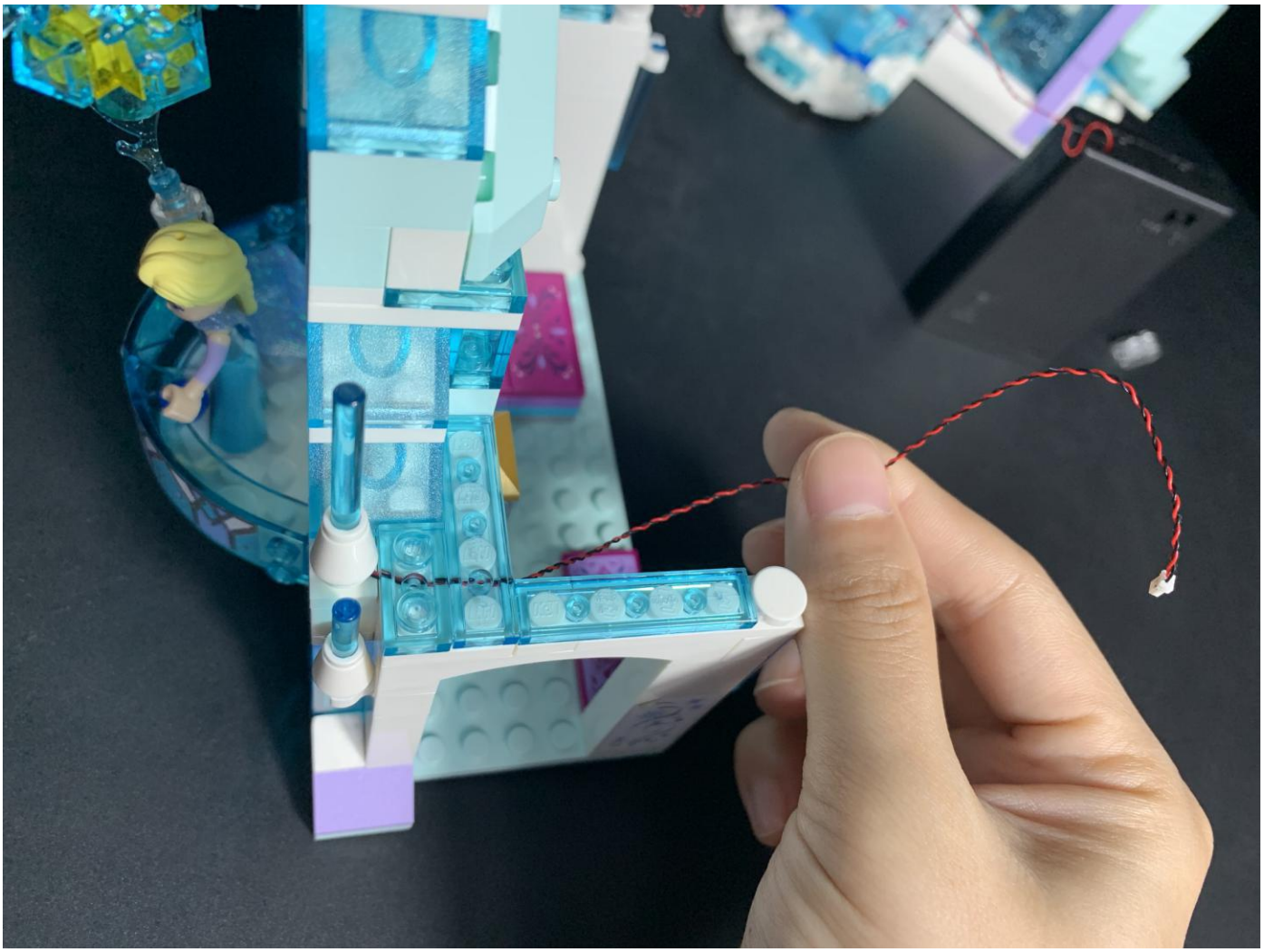
Place the cable as per below to hide it



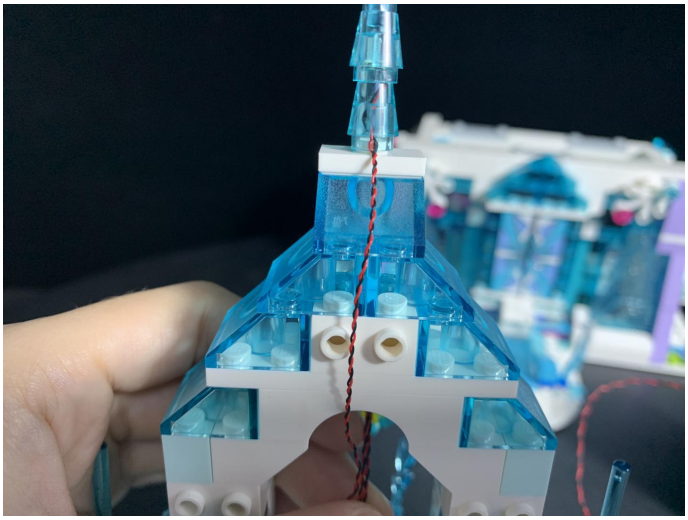


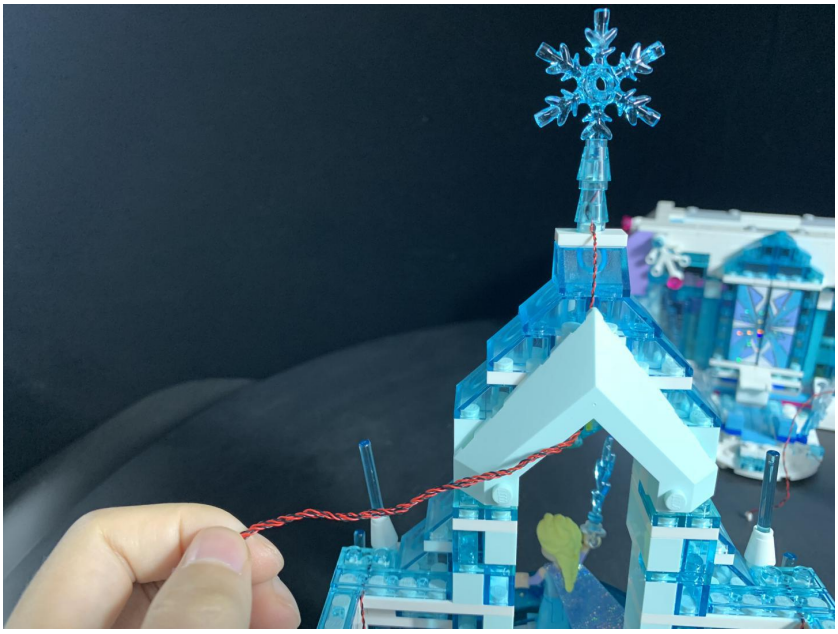


Similarly, connect another 15cm blue dot light to the same position at the other side

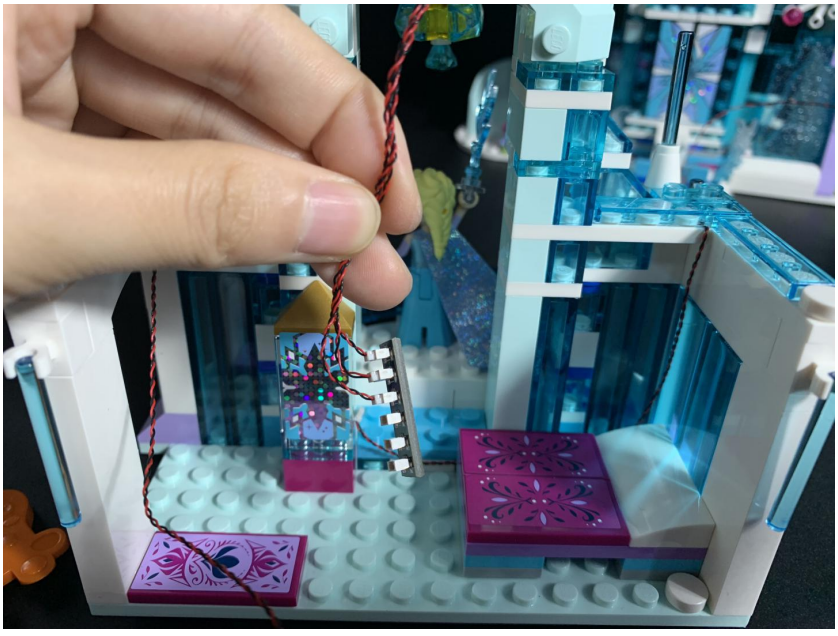


Remove the following piece to hide the cable of the light from the top underneath, twist the cables into a larger one

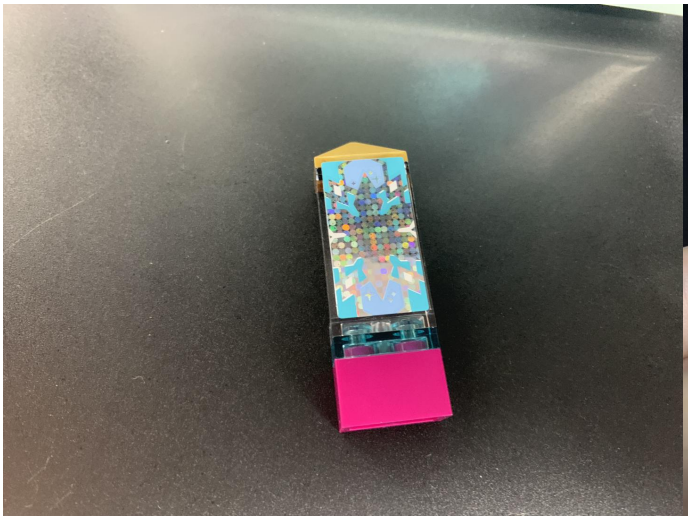
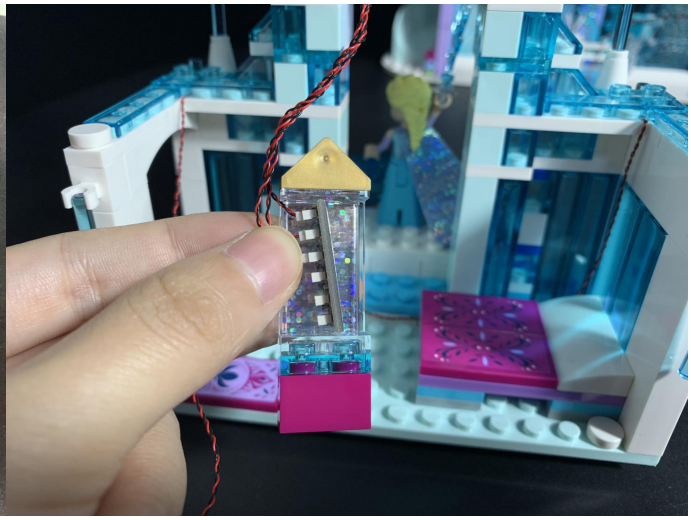




Connect the cables to the 6-port expansion board

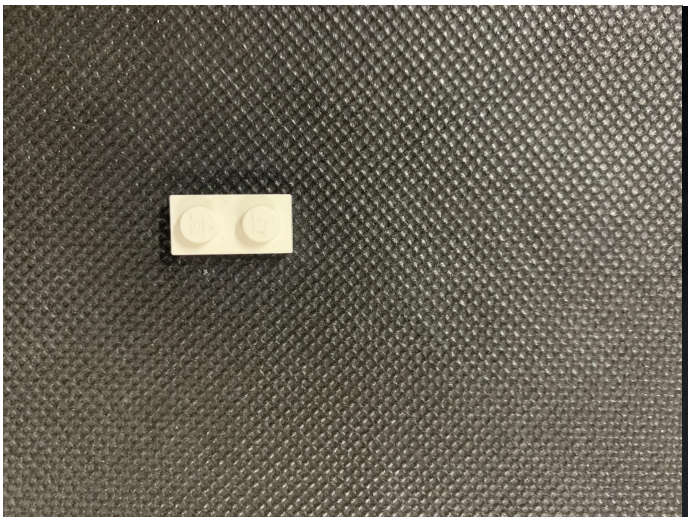
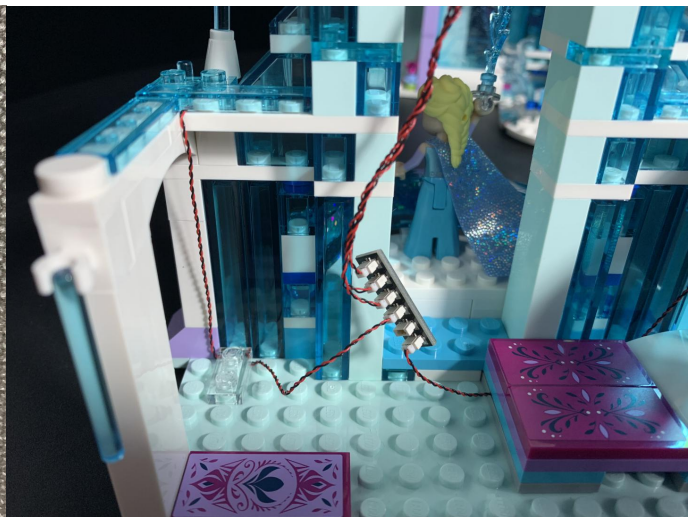


Remove the following pieces, place the expansion board at the space per below

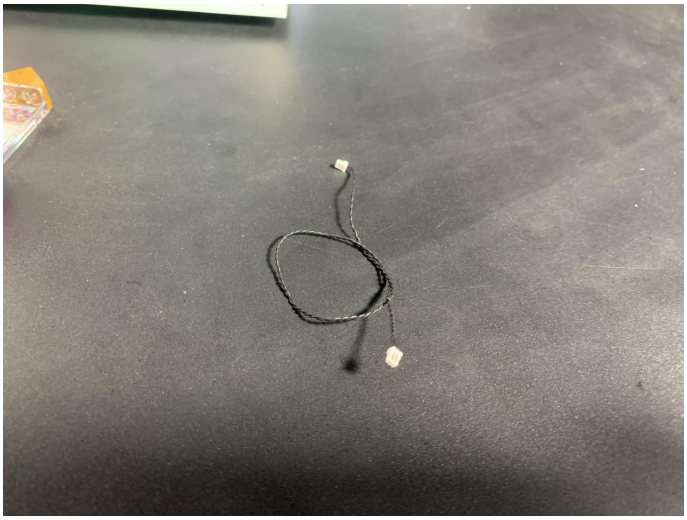



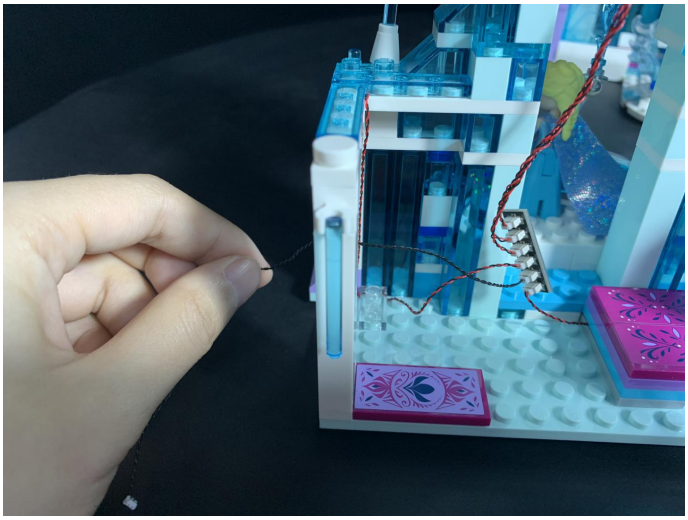
Connect the cable from the right to the lowest port

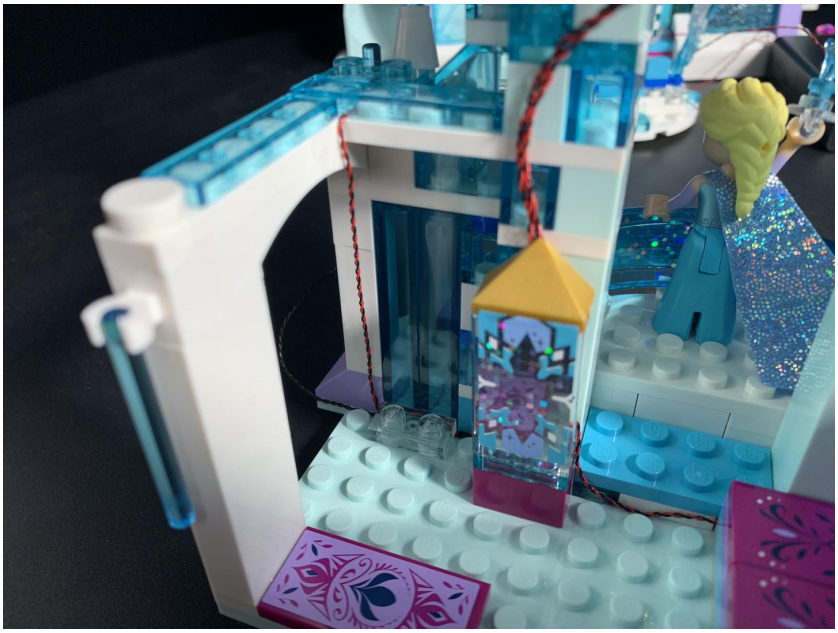
Take a 1x2 white plate（The transparent parts in the figure below are for demonstration purposes only）, connect the cable from the left to the expansion board, secure the cable in place by connecting the trans piece over

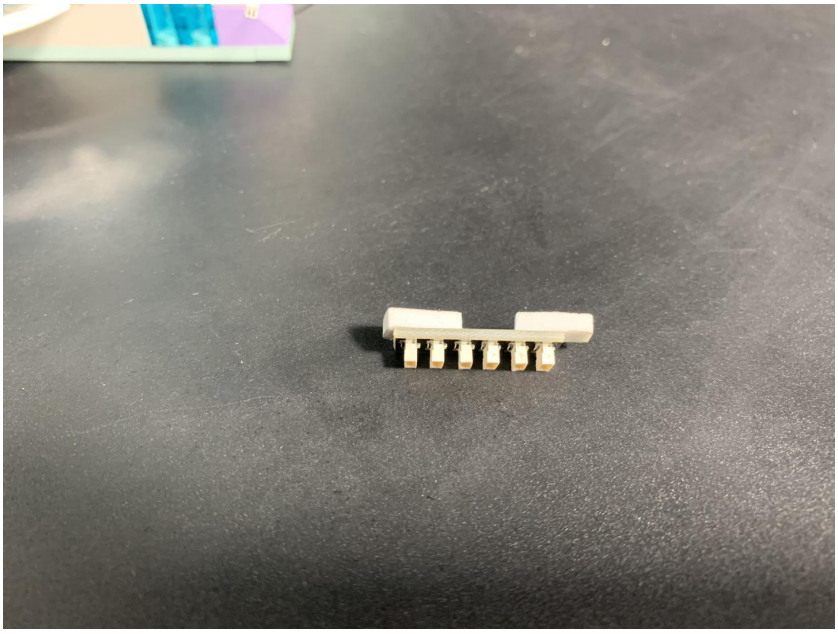
Take a 15cm connecting cable, connect it to the remaining port, secure it in place as we did in the previous step



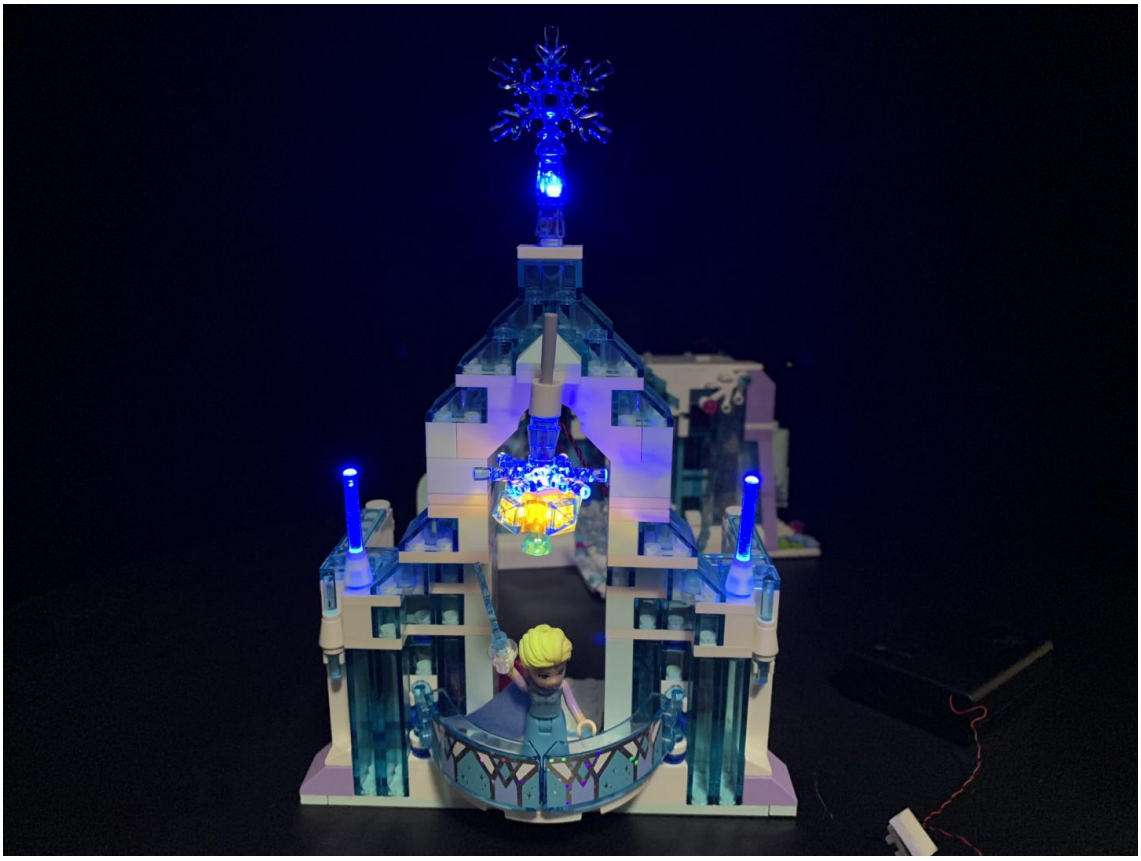




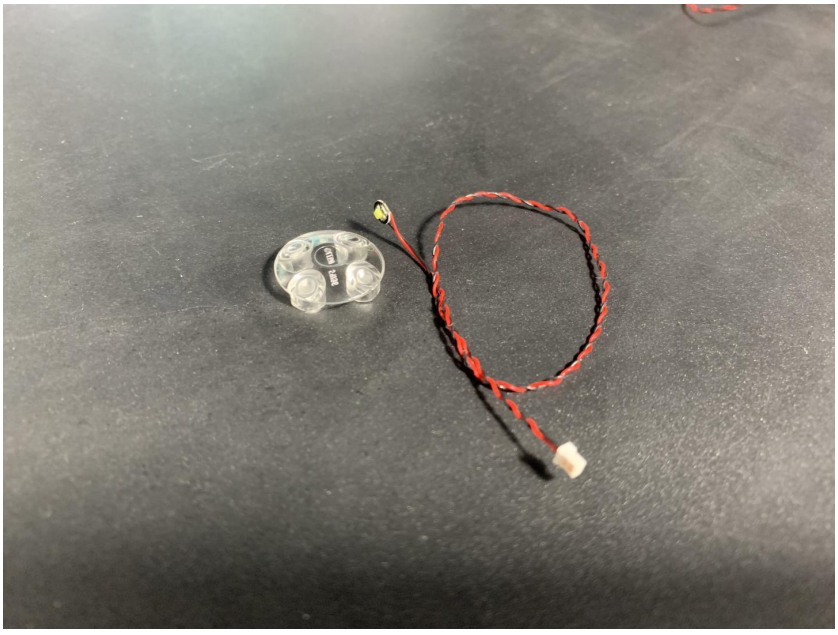
Take another 6-port expansion board, stick 2 adhesive tapes to its back



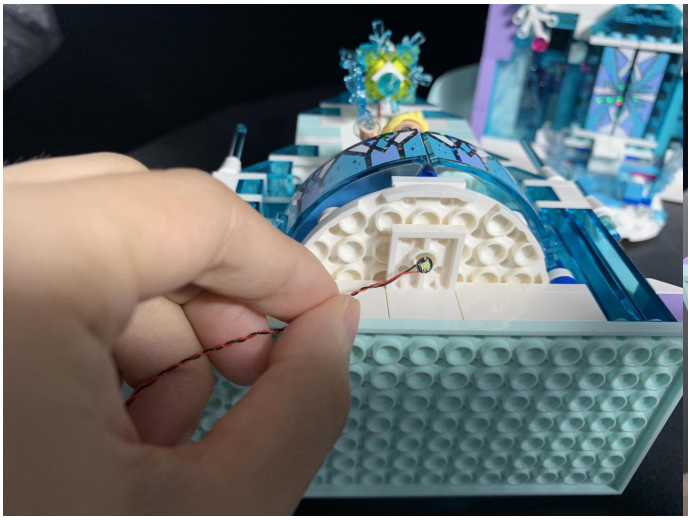
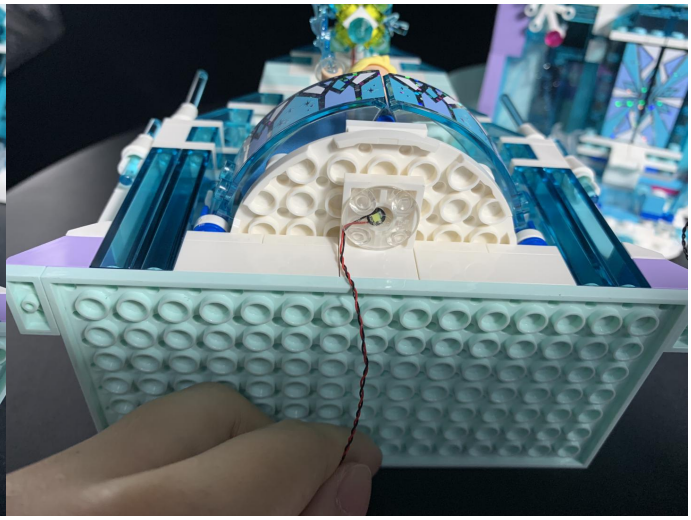
Turn the power on to check if all lights are working OK



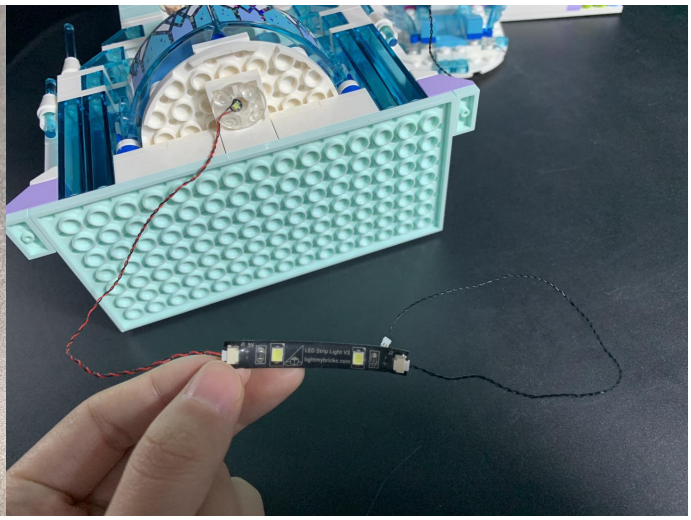
Take a 15cm white dot light, a 2x2 round plate



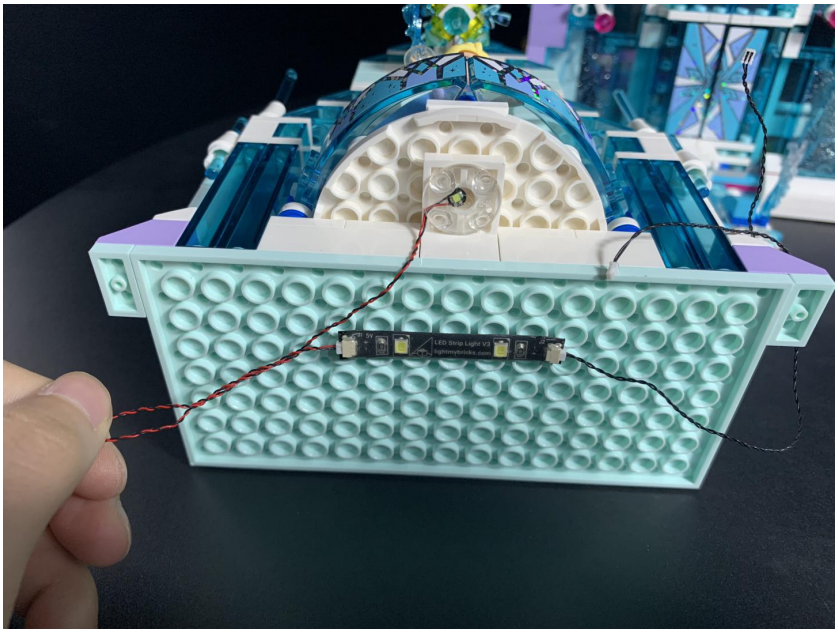
Turn the first part of the building over, secure the light in the following place by connecting the round plate over

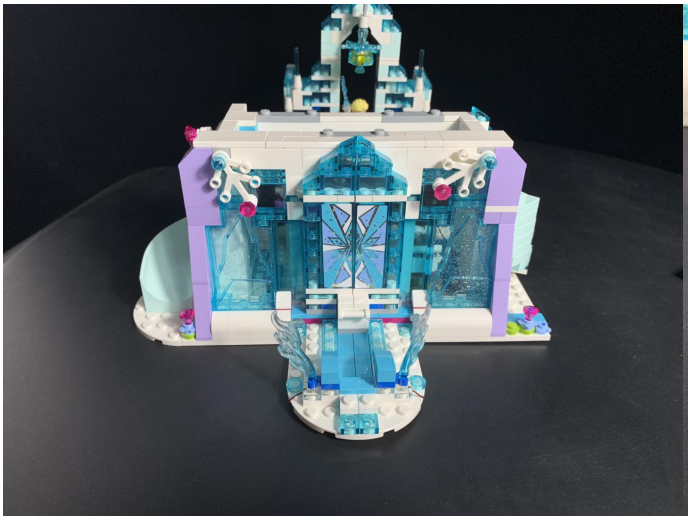
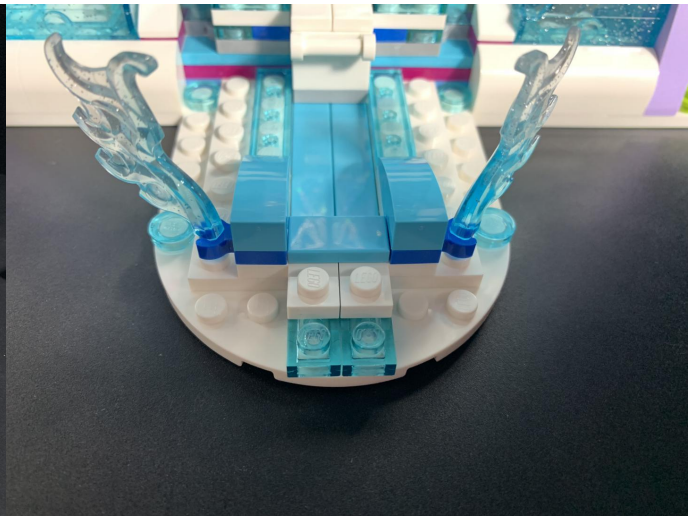
Take a white dot light, a 15cm connecting cable, assemble them together as per below

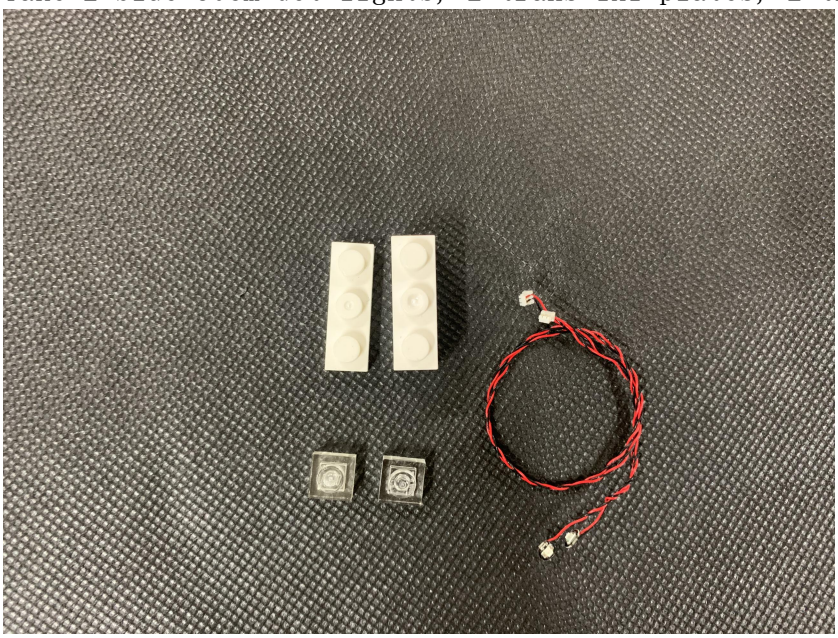
Stick the strip light to the bottom of the baseplate, place the 15cm cable as per below, group the cables together



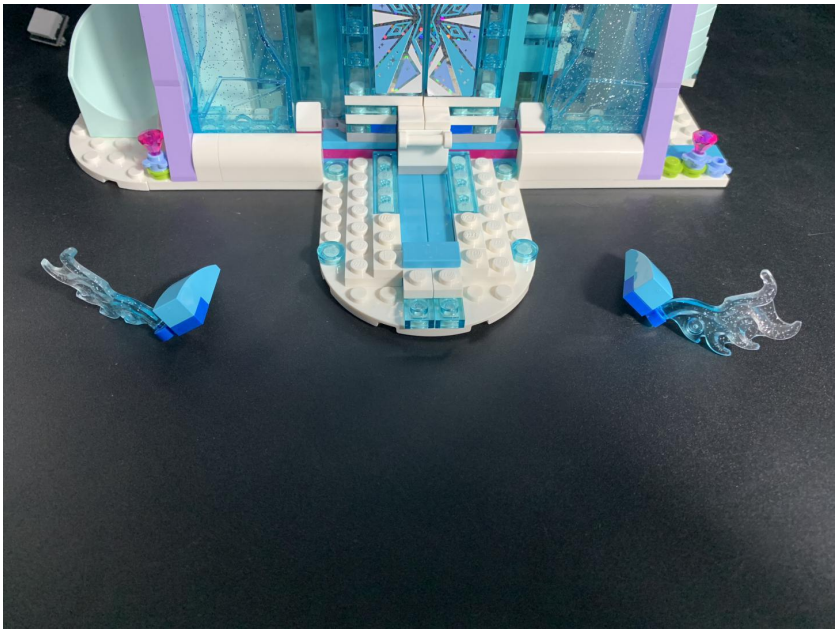
Now, we finished installation for the first part, continue to install lights for the second part, start from the lights in front of the door

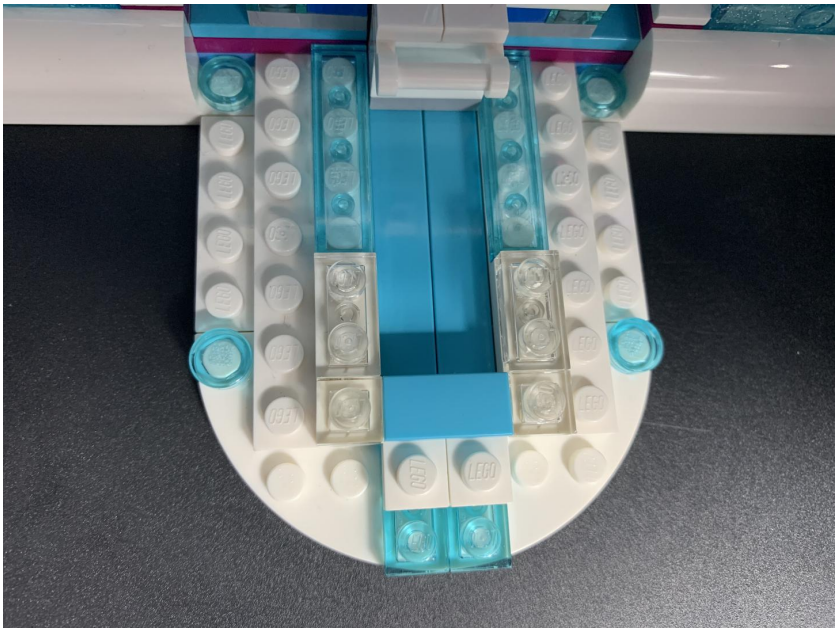
Take 2 blue 30cm dot lights, 2 trans 1x1 plates, 2 trans 1x3 plates



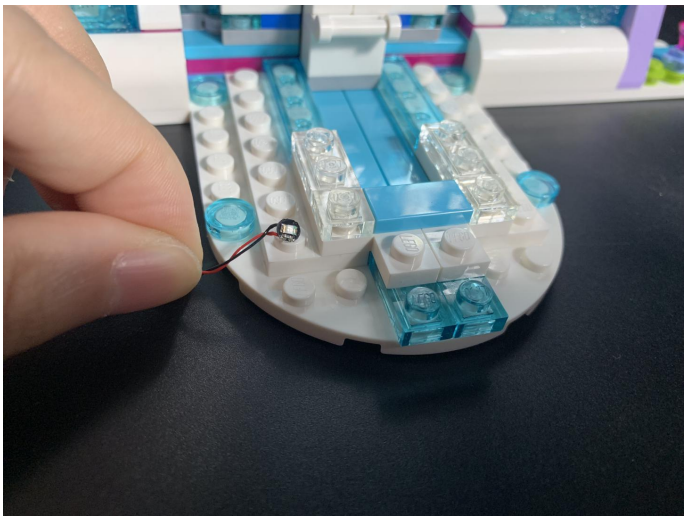
Disconnect the following pieces

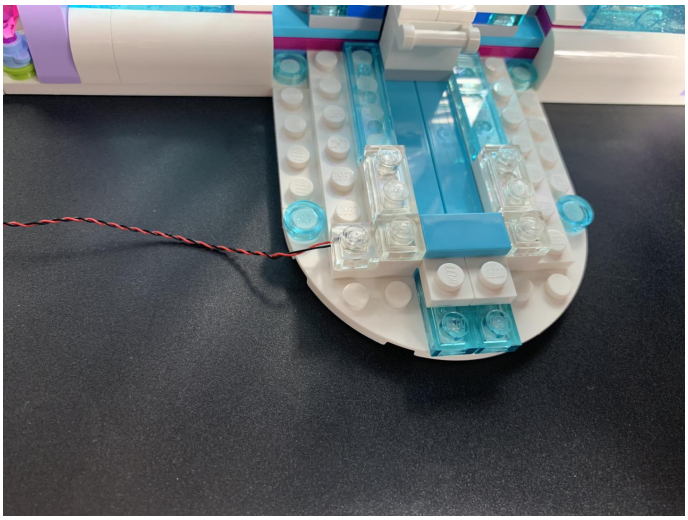


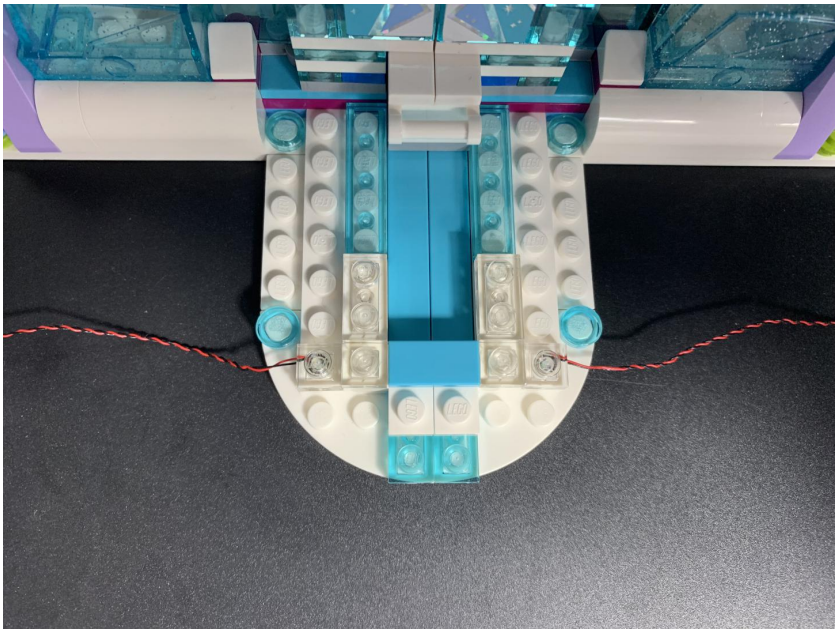
Connect the trans pieces as per below （The transparent parts in the figure below are for demonstration purposes only）



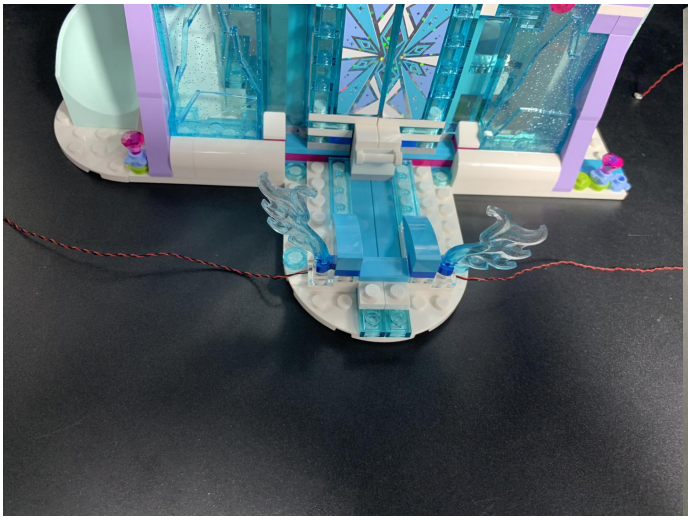
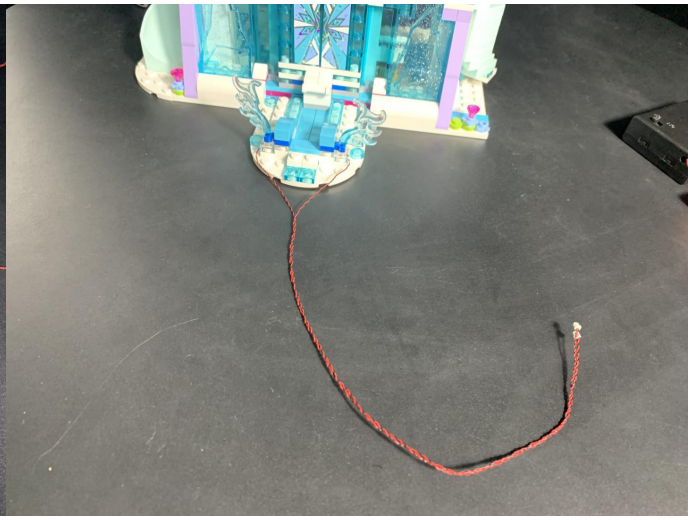
Install the 2 blue 30cm dot lights to the following places



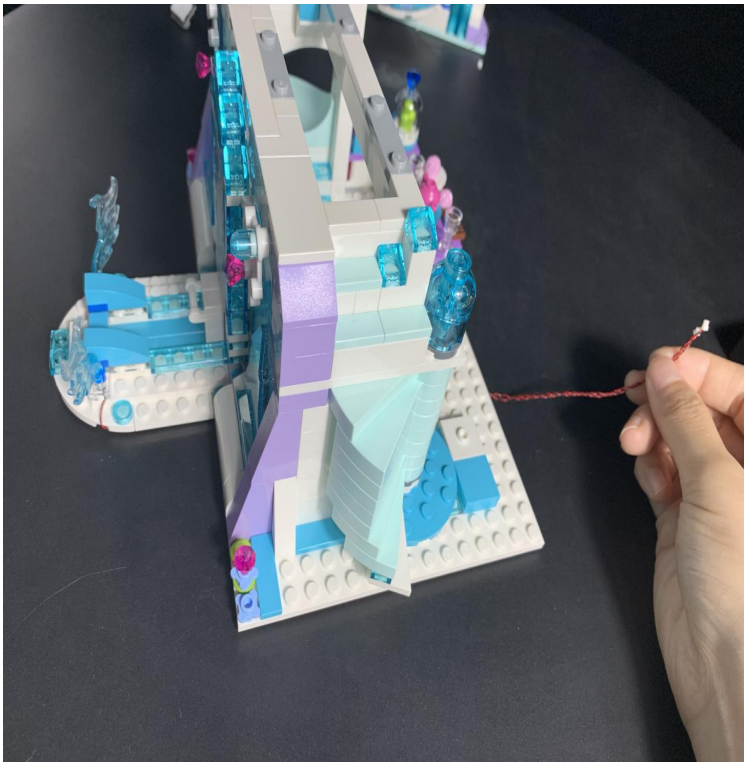




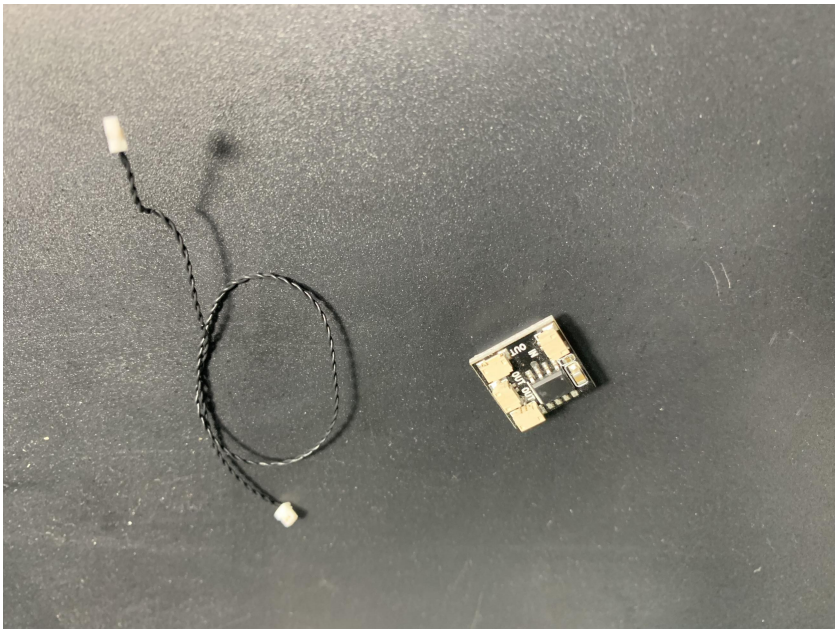
Reconnect the pieces we removed before, twist the 2 cables together

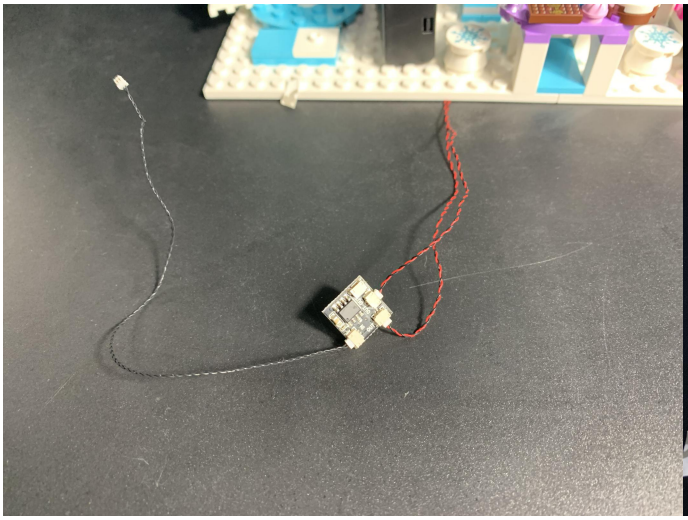
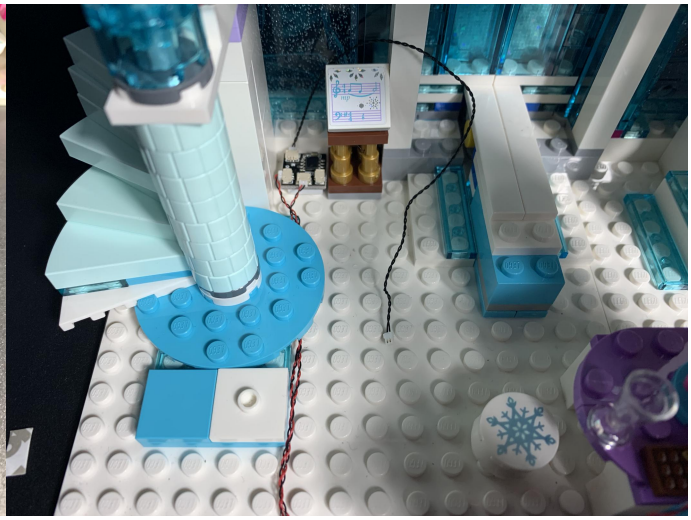
Lift the second part to thread the cables through the space underneath to the back



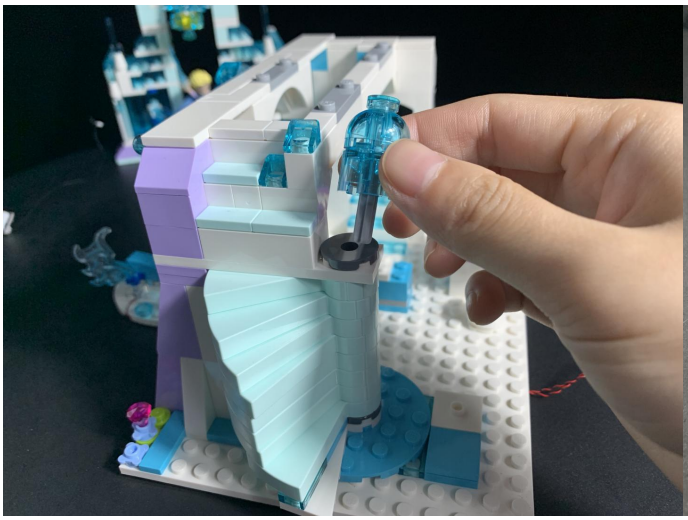
Take a 15cm connecting cable, a Flicker Effects Board



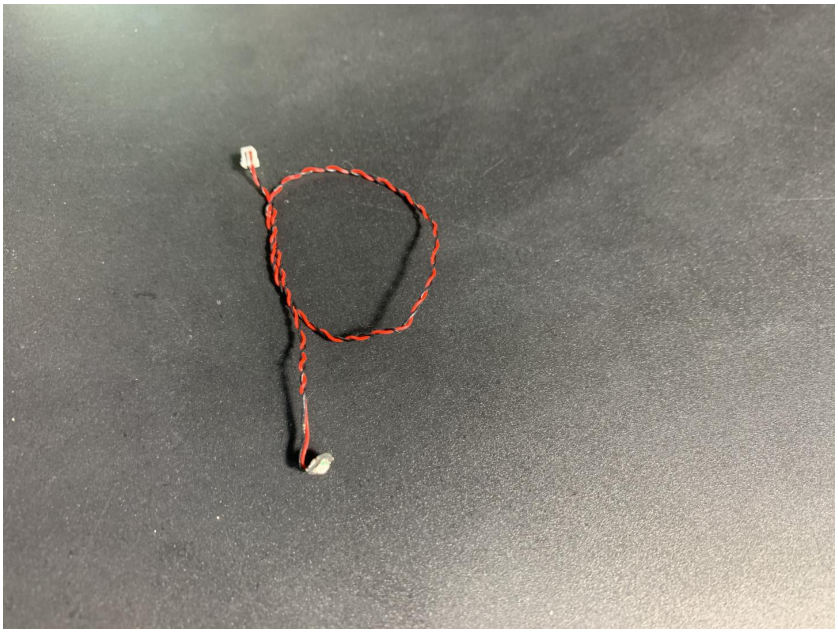
Assemble them as per below, connect the 15cm connecting cable to its output port (the side with only one port), secure the Flicker Effects Board in place by using the adhesive squares

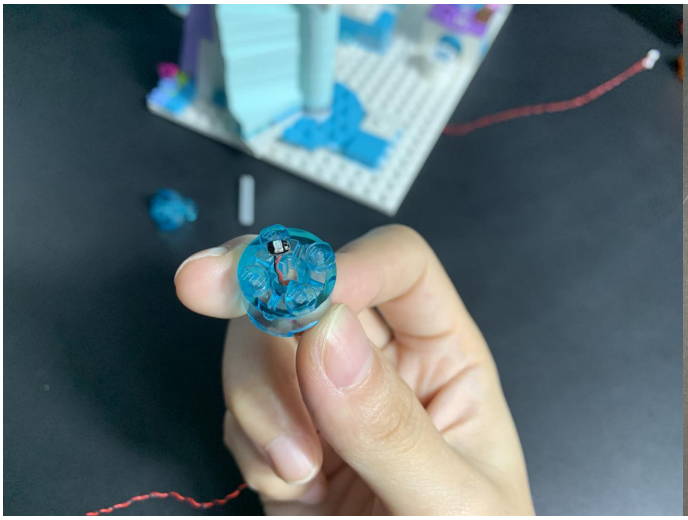
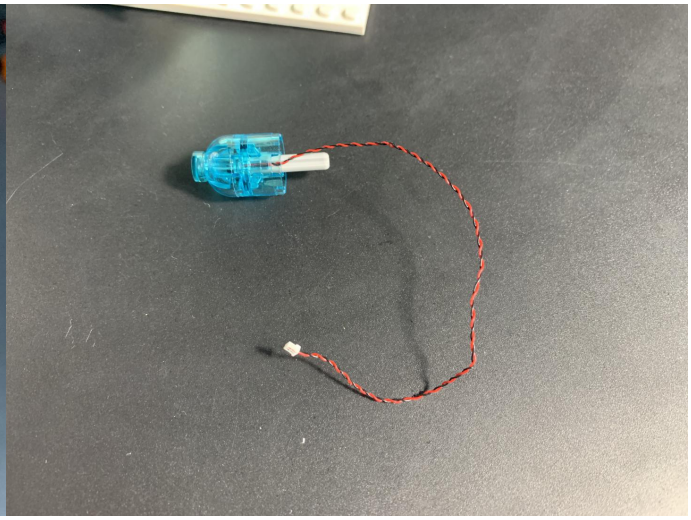
Disconnect the following piece and disassemble it as per below




Take a 15cm blue dot light

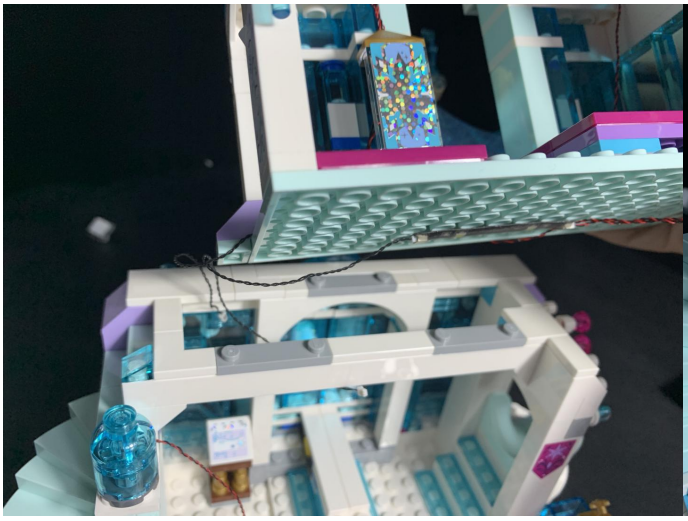
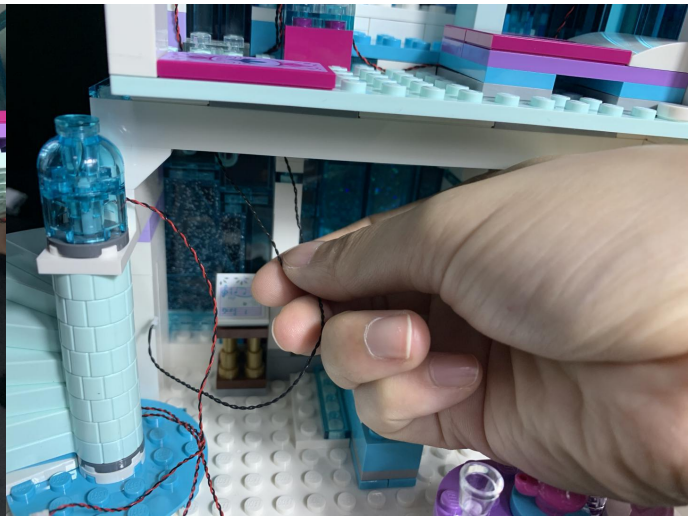


Connect it to the piece as per below

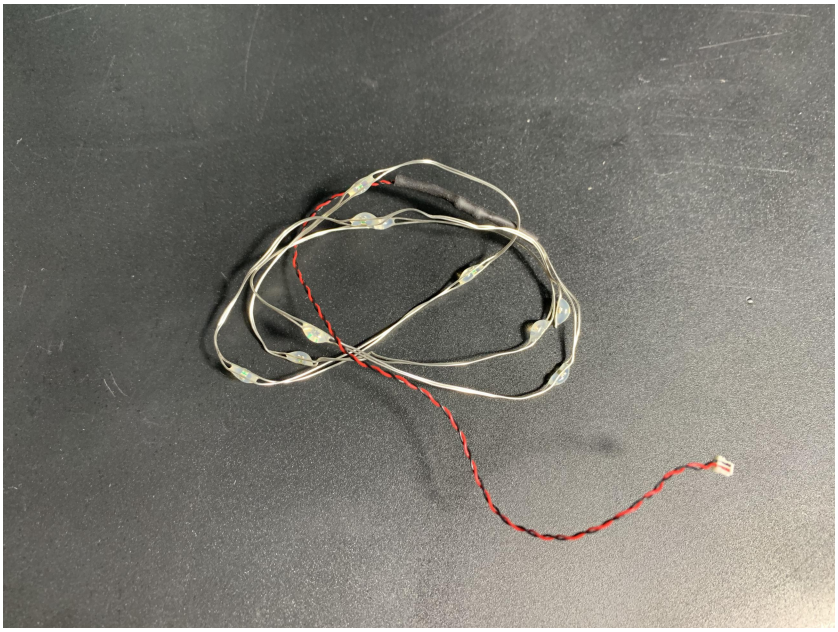



Reconnect the piece back, make sure the cable is facing inside of the room

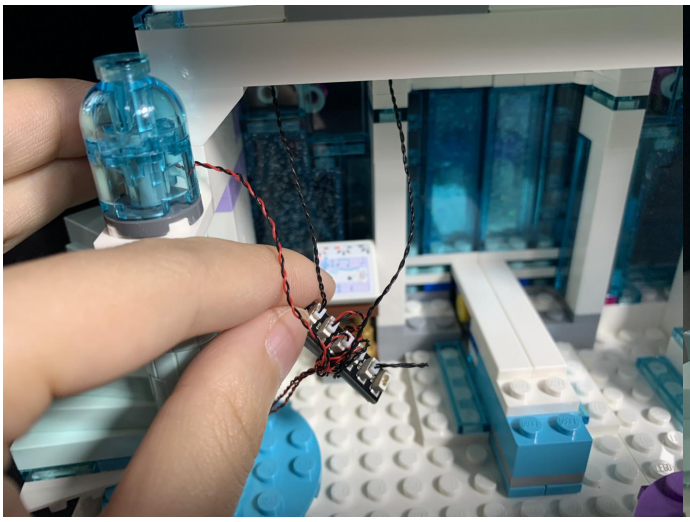
Reconnect the 2 parts, pull the two 15cm connecting cables from the first part down to the room below

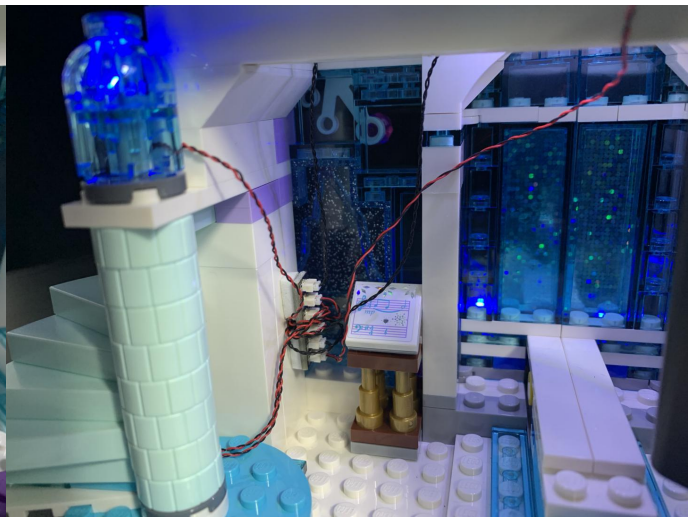



Take a Multi Colour Light String, connect it to the second 6-port expansion board



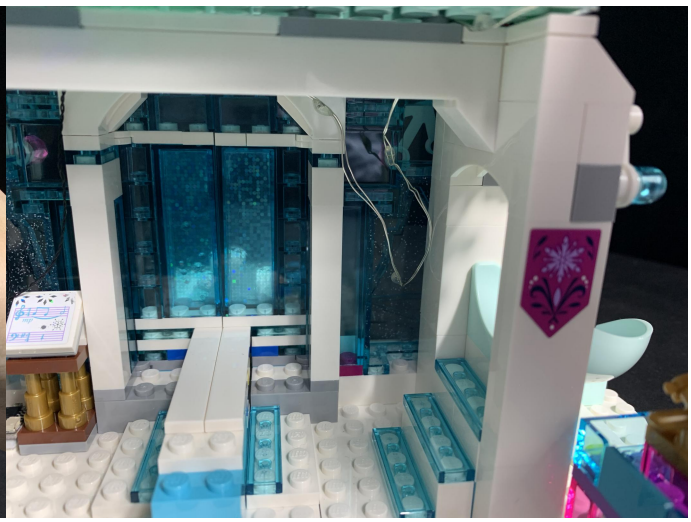
Connect all cables from inside of the room to the 6-port expansion board, tuck excess cables around the expansion board, connect the expansion board to the battery pack, place it at the following place



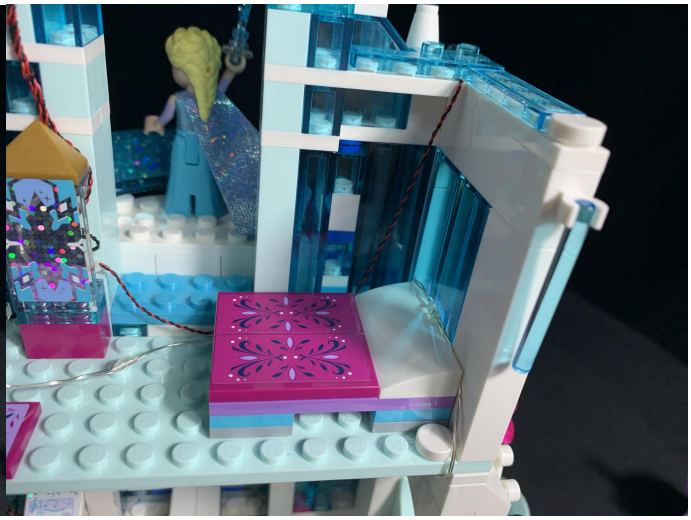


Take a 1x2 plate, pull the Multi Colour Light String along the left side all the way to the ceiling, secure it in place by connecting the trans plate over

Pull the cable toward the right, lift the first floor, pull the cable to the second floor, leave part of the string near the window as per below



Pull the cable to the second floor and press it underneath the bed, leave the lights outside

Pull the remaining string toward the left to the window

Place the battery pack at the following position. This completes installation of this LED Lighting Kit.

Turn the power on and ENJOY!