## Hogwarts<sup>™</sup> Clock Tower - 75948 Lighting Kit

### Package contents:

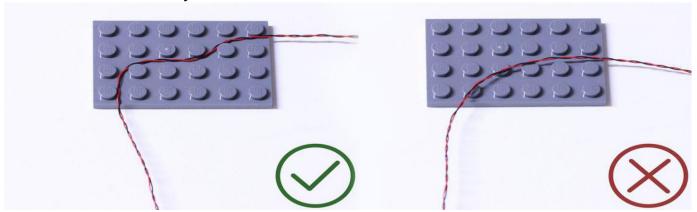
- 3 x 15cm Warm White Dot Light
- 1 x 30cm Warm White Dot Light
- 2 x 15cm Blue Dot Light
- 1 x 15cm Flashing Warm White Dot Light
- 5 x Warm White Strip Lights
- 2 x 5cm Connecting Cables
- 3 x 15cm Connecting Cables
- 2 x 30cm Connecting Cables
- 2 x 6-port Expansion Boards
- 1 x Flicker Effects Boards
- 1 x USB Cable

Extra LEGO pieces

#### Note:

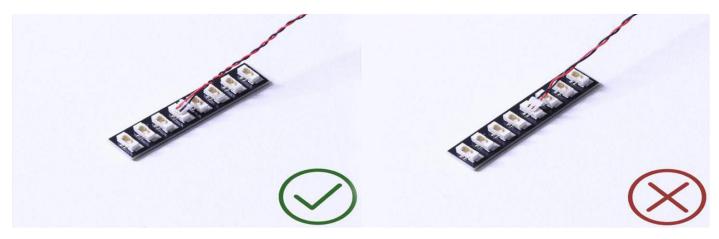
Place wires on the surface or under the LEGO building blocks.

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

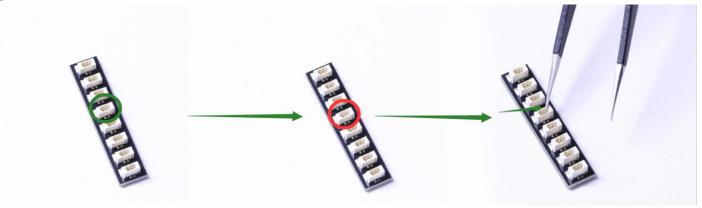


Insert the connectors to the ports.

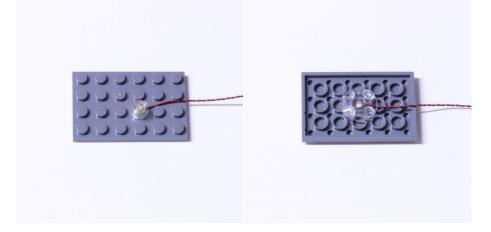
Be careful when you are operating, there's only one correct way to insert, make sure the expansion board is upward, find the soldered "=" sign on the left of the port. When you are inserting, the side which the wires can be seen should be faced to the "=" sign and if you feel hard to insert, please stop, 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.



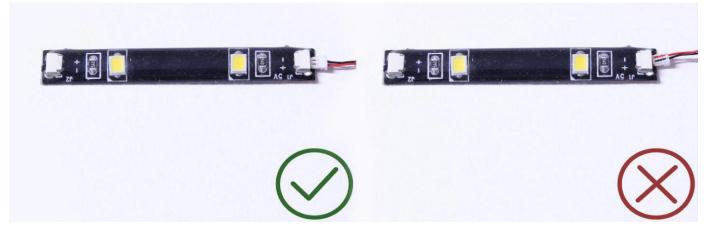
When installing dot lights, make sure they are correctly placed (Yellow LED package is exposed). You can put they either on the top of the studs or between studs.



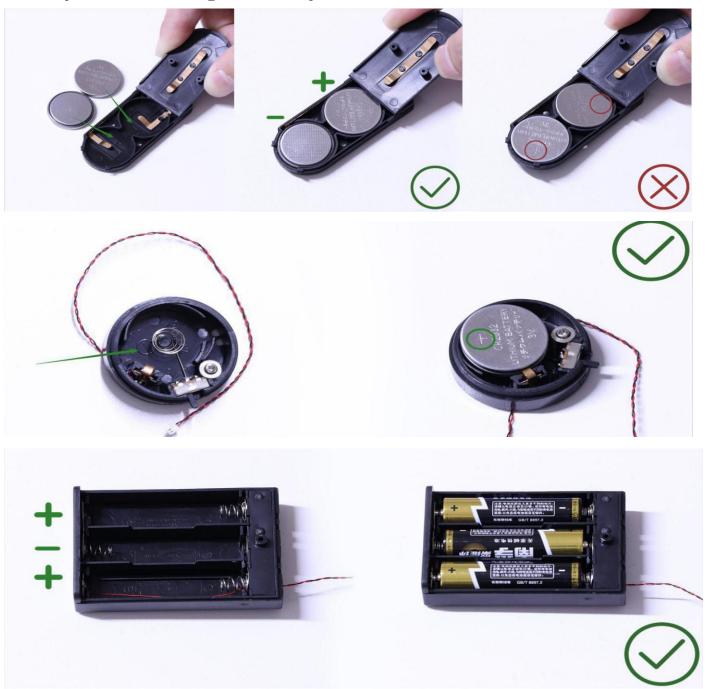
# **Connecting cable connectors to Strip Lights**

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.



## Instructions for installing this kit:

OK, Let's Begin!

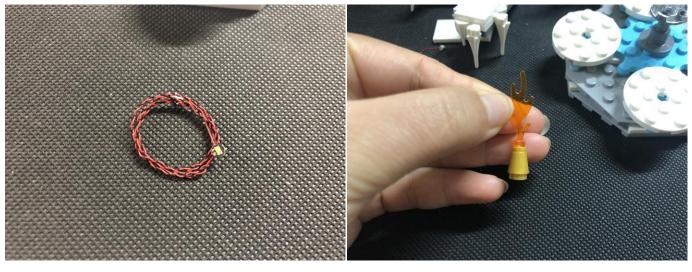
Start from installing lights for the dancing floor at the right side. Separate the dancing floor from the building



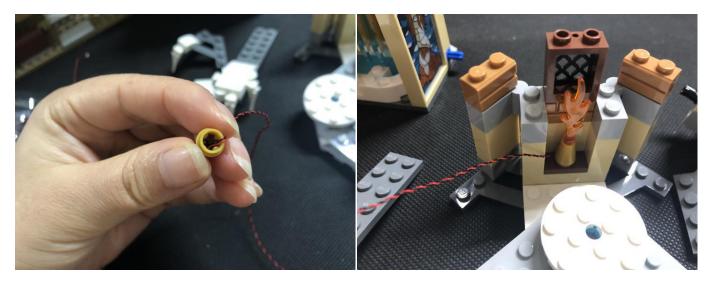
Remove the following pieces



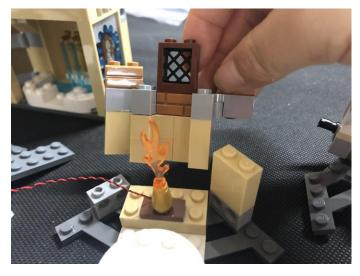
Take a warm white 30cm dot light, remove the flame piece



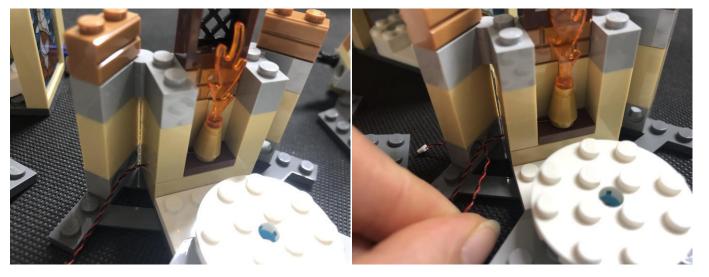
With lighting part facing the flame, place the light inside the following 1x1 round piece, reconnect the flame piece

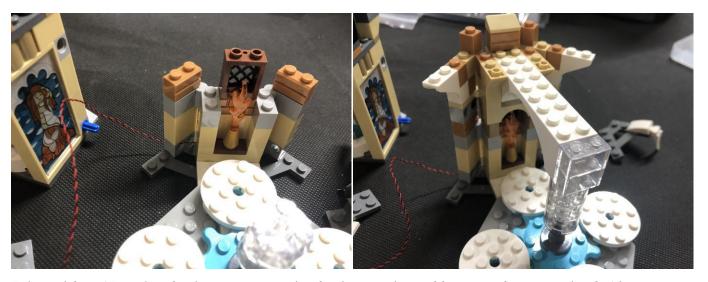


Remove the wall from the back of the flame to hide the cable as per below

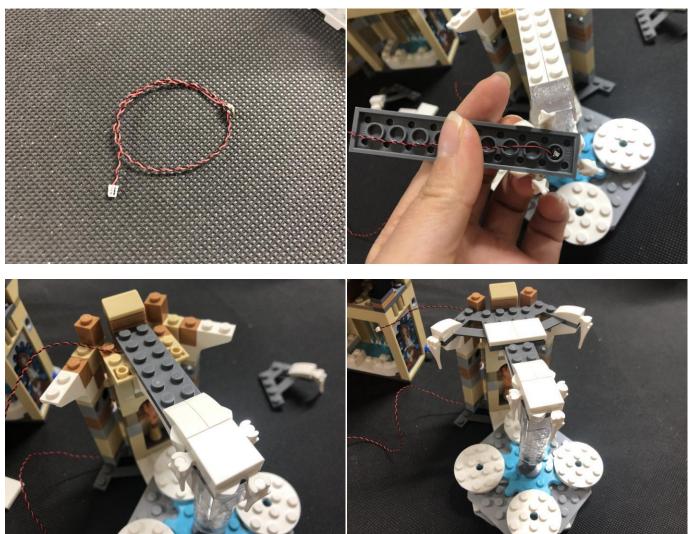


Reconnect the wall, thread the connector through the following gap, reconnect the pieces





Take a blue 15cm dot light, connect the light to the following place at the 2x10 gray piece



Lift the wall to help the cable thread through



Reconnect the dancing floor



Remove the pieces



Place the cable as per below, reconnect the pieces



Lift the following wall to secure the cable



Pull the cable of the dancing floor to the office at the second floor of the building, remove the following wall



Take a warm white strip light, connect the previous cable to it



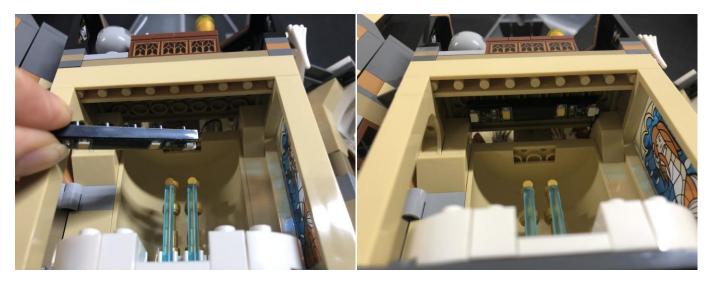
Stick the strip light to the ceiling as per below



Take a warm white strip light, a 5cm connecting cable, a 1x6 plate, assemble them as per below

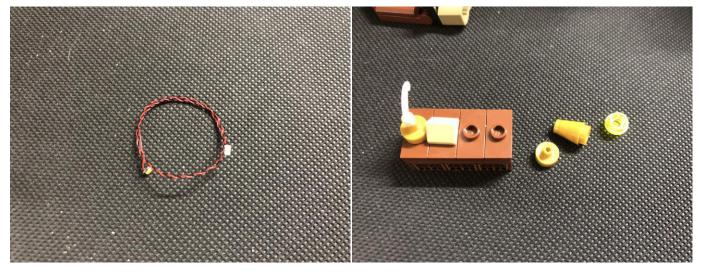


Connect the strip light to the ceiling of the lower floor, pull the cable out from the back and pull it to the office at the second floor

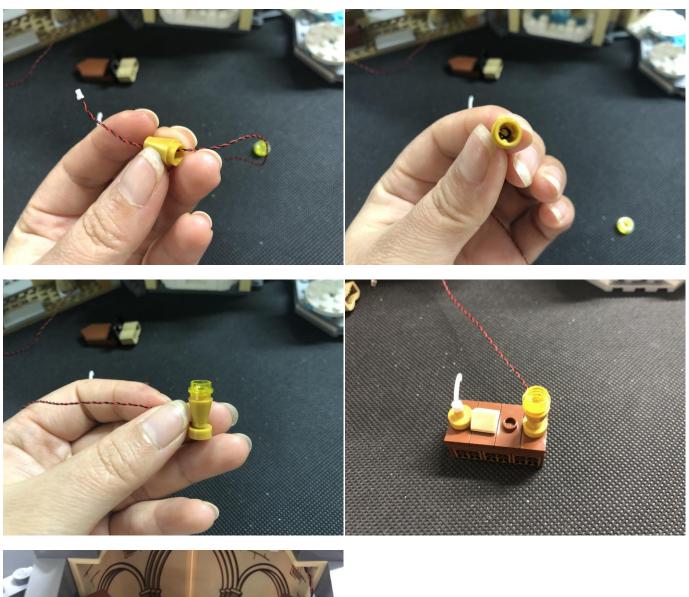




Take a flashing 15cm dot light, connect it to the lamp at the desk. Remove the following pieces

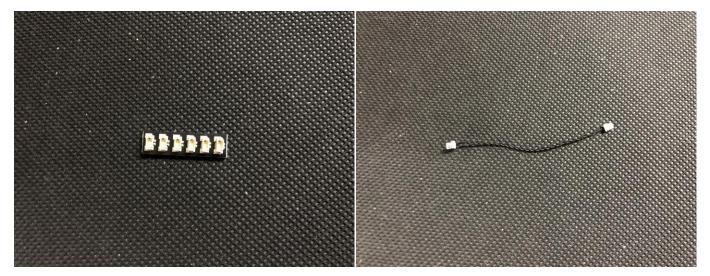


Thread the connector through the 1x1 round brick as per below, pull the cable out, reconnect the pieces





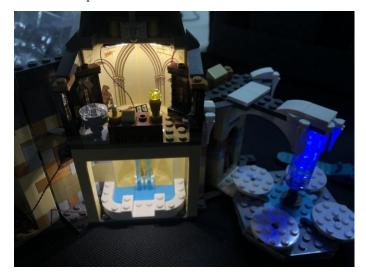
Take a 6-port expansion board, a 5cm connecting cable



Connect the 5cm connecting cable to the strip light at the ceiling, connect the other end to the 6-port expansion board, connect the cables of the lights from the ceiling and the dancing floor to the expansion board



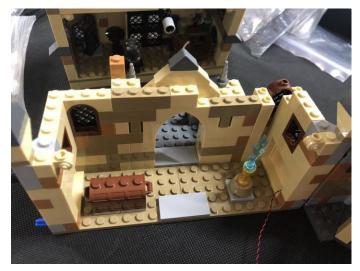
Turn the power on to test the current



Remove the chair to secure the cable, stick the expansion board to the following place with the adhesive squares, reconnect the chair



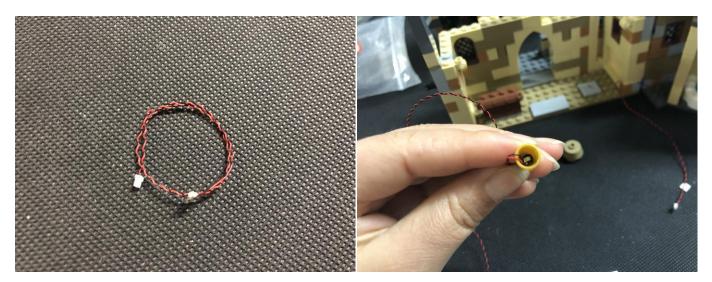
Move onto installing lights for the bell tower, remove the top 2 floors



Remove the following pieces



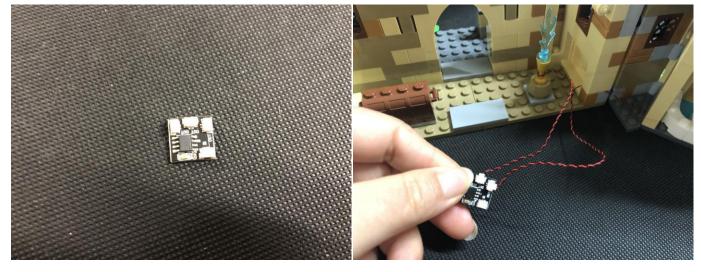
Take a 15cm blue dot light, with lighting part facing up, connect it to the yellow piece



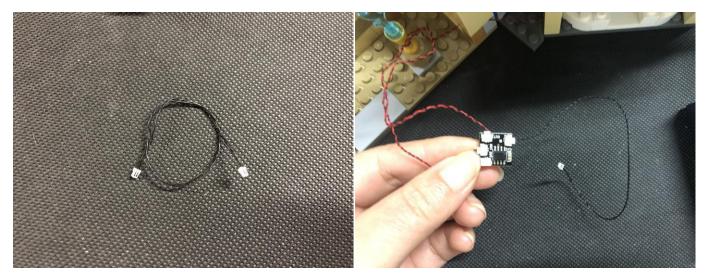
Reconnect the torch



**Take a** Flicker Effects Boards, connect the flame from the dancing floor and the torch to the Flicker Effects Boards



Take a 15cm connecting cable, connect it to the output port of the Flicker Effects Boards, connect the other end to the expansion board at the office





Remove the following pieces to hide the cables



Reconnect the pieces, stick the Flicker Effects Boards to the following place with the adhesive squares



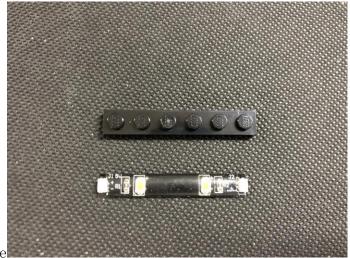
Take a 15cm connecting cable, connect it to the expansion board at the office, pull it to the bell tower. Hide the cable as we did



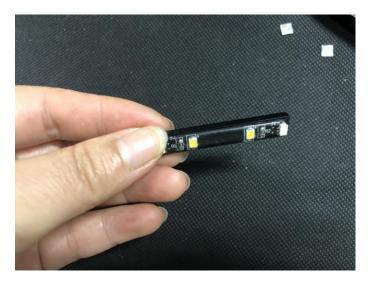
before



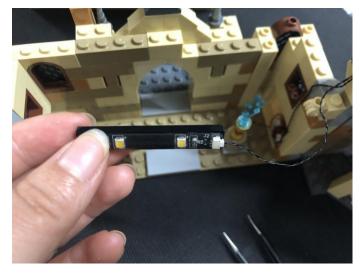
Take a warm white strip light, a 1x6 plate, stick the strip light to the



plate



Pull the cable from the office and connect it to the right port of the strip light



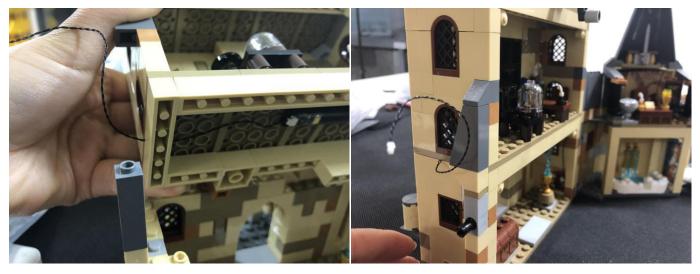
Take a 30cm connecting cable, connect it to the left port of the strip light. Stick the strip light to the ceiling of the first



floor



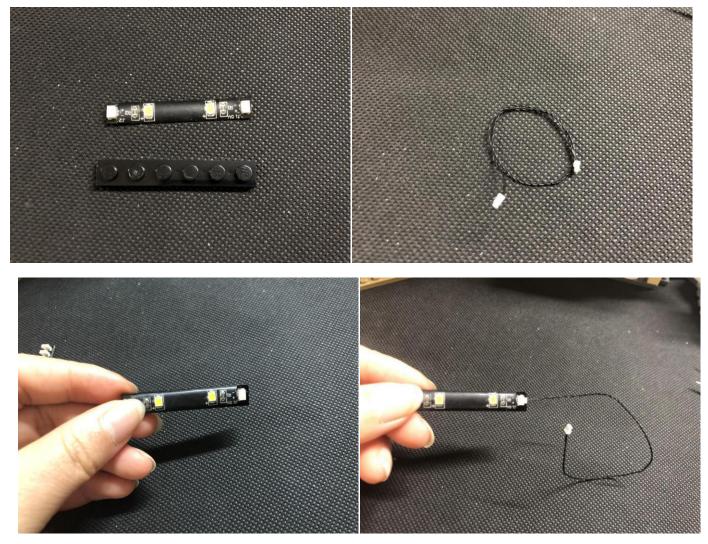
Secure the cable with the following plate, pull the cable out, reconnect the floor



Thread the cable to the inside from the window at the second floor



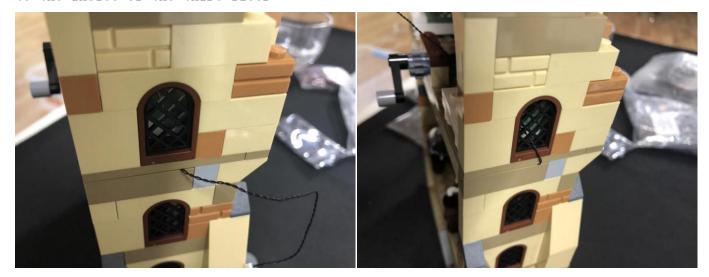
Take a warm white strip light, a 1x6 plate, a 30cm connecting cable, assemble them as per below



Connect the cable from the first floor to the left port of the strip light. Stick the strip light to the ceiling of the second floor

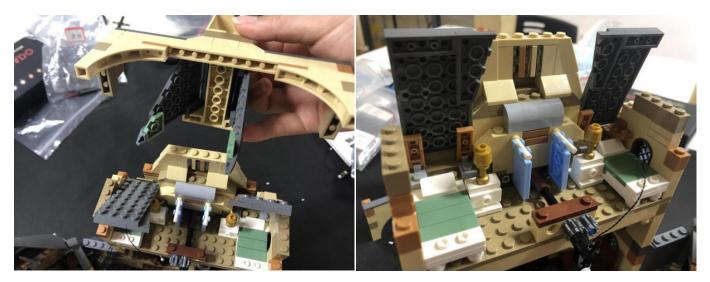


Lift the wall to pull the cable out from the right side, thread the cable through the window to the inside of the third floor





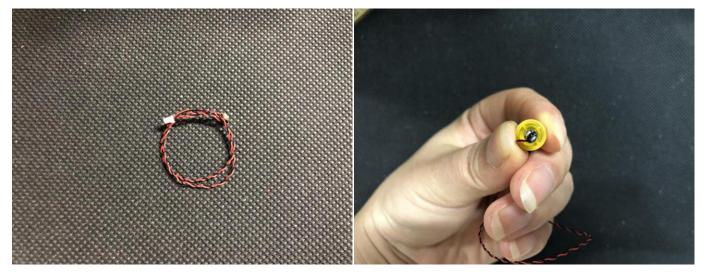
Remove the roof of the third floor

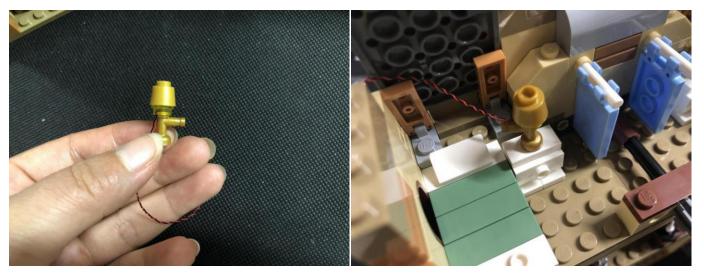


Continue to install light for the bedside lamp, remove the following pieces

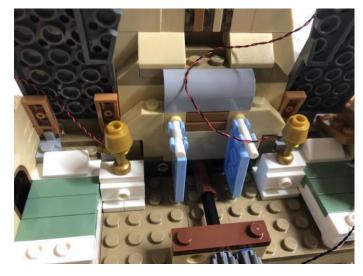


Take a warm white 15cm dot light, with lighting part facing down, reconnect the lamp



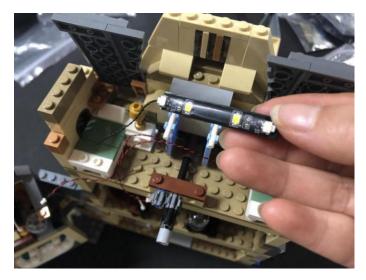


Take another warm white 15cm dot light, repeat the steps above to install anther beside lamp

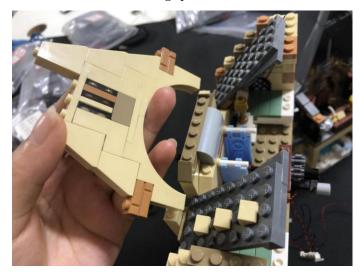


Take a warm white strip light, a  $15 \, \mathrm{cm}$  connecting cable, connect the connecting cable to the strip light

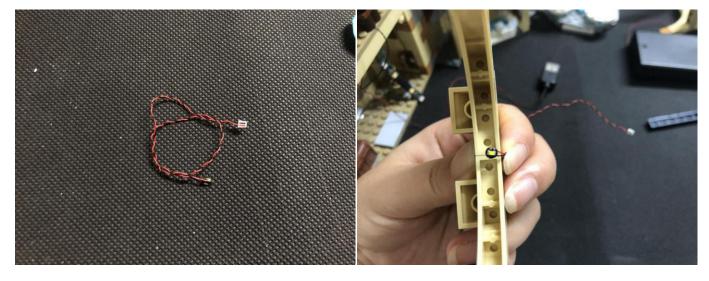




Remove the following pieces



Take a warm white  $15 \, \mathrm{cm}$  dot light, with lighting part facing down, secure the cable by reconnecting the pieces we removed before

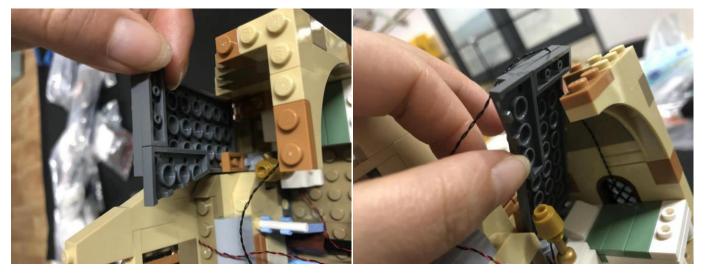




Stick the strip light to the beam at the roof



Remove the following gray piece to secure the cable from the second floor at the right side, secure the other cable with the gray slope piece. Thread the 2 cables as per below

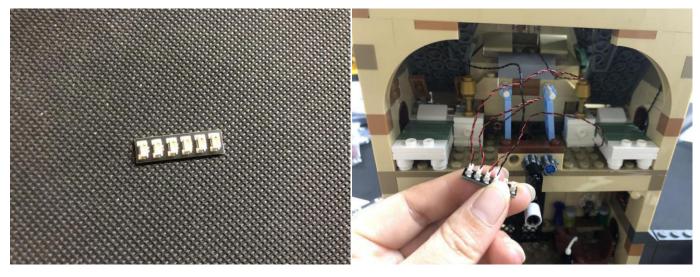




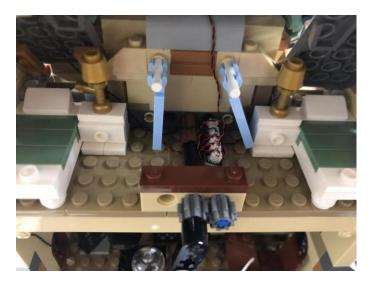
Reconnect the roof



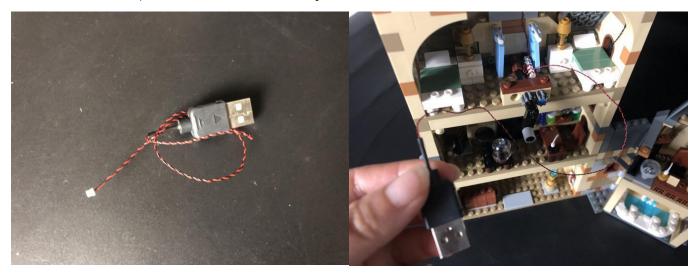
Take a 6-port expansion board, connect all the cables of the lights to it



Tuck excess cables, stick the expansion board to the following place



Take a USB cable, connect it to the expansion board



This completes installation of this LED Lighting Kit.



ENJOY!