# Hogwarts™ Astronomy Tower #Lego Light Kit for 75969

Thank you for choosing Vonado lighting products. We are committed to LEGO product study and lighting development, and we're always trying our best to provide LEGO fans with the best products and the best installation ideas.

Must be careful observation, imagination can be infinitely.

We provide basic parts to support your imagination.

DO IT YOURSELF .that's what LEGO is .

As always, Lego has been adhering to the DIY philosophy from product selection, research and development to sales. Consumers buy the parts, you will assemble them by yourself, and you can experience every step from picking up the first piece to installing the last one. Besides, LEGO has different answers for the installation form and method of each part. Vonado lighting also does not want to kill your unlimited creativity, we will try our best to make products with high variability, high playability and unlimited play. If you have any dissatisfaction or your own ideas on the parts such as the color of the lights, the length of the cables, the installation position of the product, and the final effects of each module, you can make your own arrangement, and we will cooperate with you to replace or repurchase. LETS MOVE!

### Package contents:

- 1 x 15cm White Dot Light
- 2 x 30cm Warm White Dot Lights
- 3 x 15cm Warm White Dot Lights
- 4 x 15cm Head Lights
- 1 x 15cm Multi Colour Flashing Light
- 3 x Warm White Strip Lights
- 1 x 30cm Connecting Cable
- 4 x 15cm Connecting Cables
- 3 x 6-port Expansion Boards
- 1 x USB Cable

#### Extra pieces

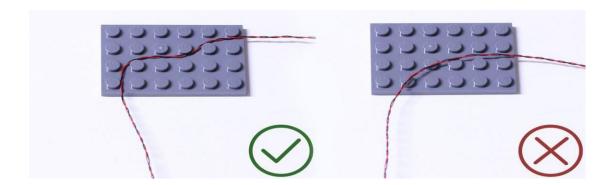


(Product Display)

# Note:

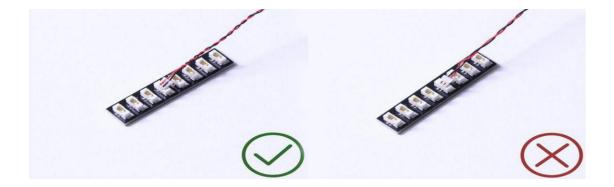
Place wires on the surface or under the building blocks.

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

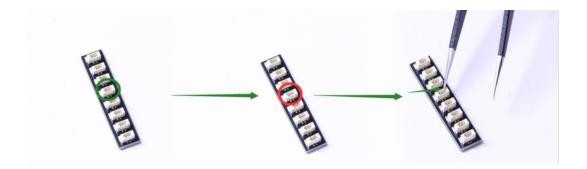


Insert the connectors to the ports.

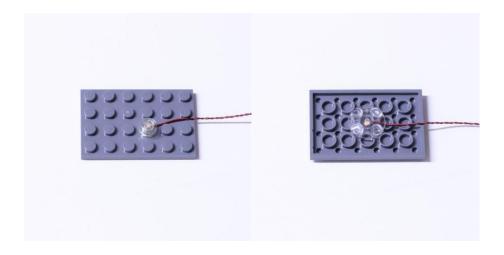
Be careful when you are operating, there's only one correct way to insert, make sure the expansion board is upward, find the soldered "=" sign on the left of the port. When you are inserting, the side which the wires can be seen should be faced to the "=" sign and if you feel hard to insert, please stop,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

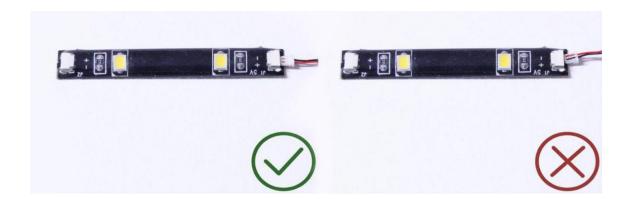


When installing dot lights, make sure they are correctly placed (Yellow LED package is exposed). You can put they either on the top of the studs or between studs.



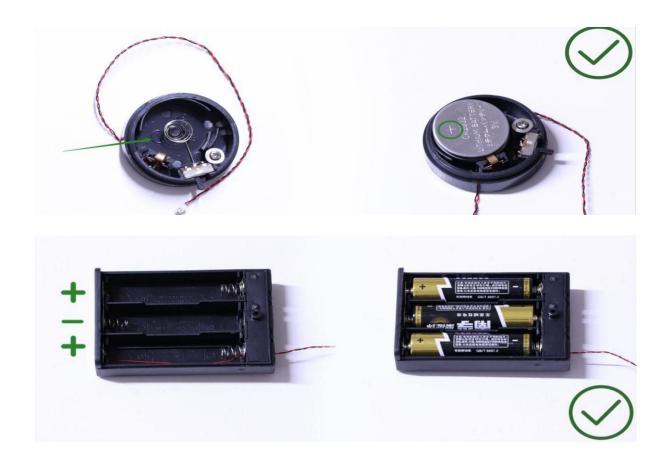
# Connecting cable connectors to Strip Lights

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:

Hogwarts Astronomy Tower Lighting Kit, 11 bags in total, 10 bags with labels, 1 bag without label, as per below:

Power supply: USB cable (you need to prepare power bank by yourself), or you can supply power through the power bank or mobile phone charger.



Firstly, take the power bank, connect the power bank, the expansion board and the USB cable together, then, connect the lights to the expansion board to verify the lights. a



After the verification, disconnect the lights, put them back to the package. (note: put the lights back to the bag after verification of lights in the same bag is done, then, continue to verify the lights in another bag.)

OK, Let's Begin! (you can use the tweezer if necessary.)

(Tips: the tweezer is sharp, you should be careful when using it, do not hurt yourself or scratch the pieces; be gentle and do not wear the cables.)

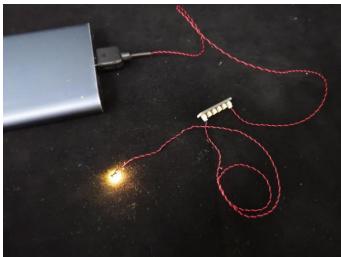
# Instructions for installing this kit:

Take a warm white 30cm dot light.

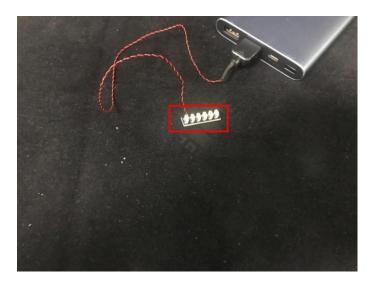


Take a 6-port expansion board, a USB cable, assemble them as per below. Connect the USB cable to the power bank to test the light.





After the test, disconnect the light as per below.



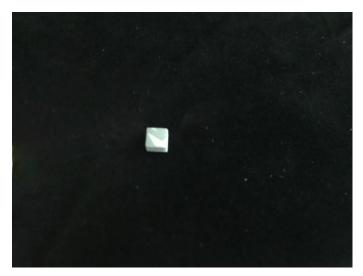
Take the building, disconnect the following house.



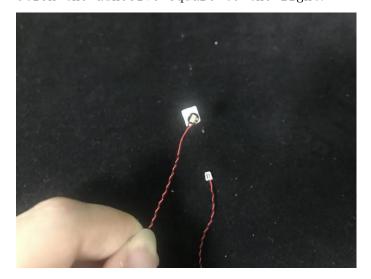
Disconnect the roof.



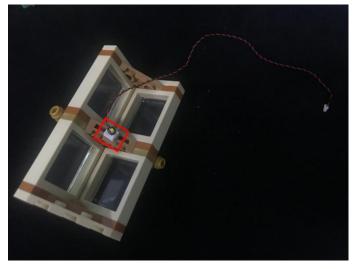
Take 2 adhesive squares.



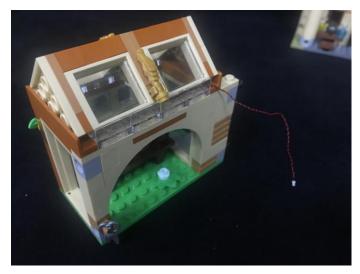
Stick the adhesive square to the light.



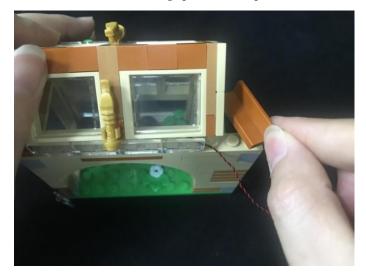
Take the roof, stick the light to the following place.  $\ensuremath{\mathbf{r}}$ 



Reconnect the roof.



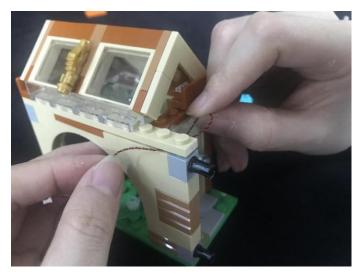
Remove the following piece shaped in 'L'



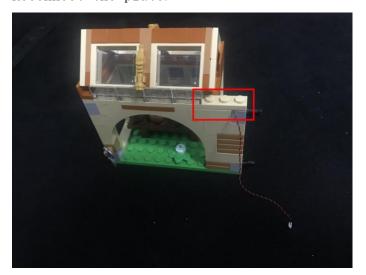
Create a space at the following place.



Thread the cable through the space.



Reconnect the plate.



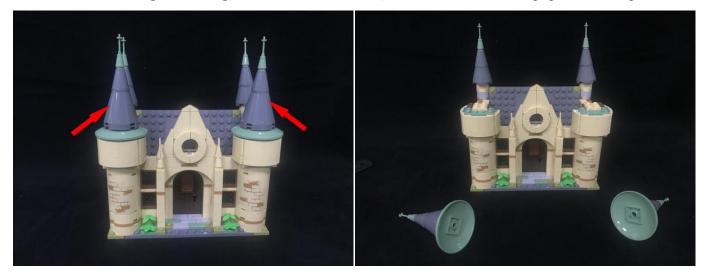
Reconnect the following piece, leave the house aside.



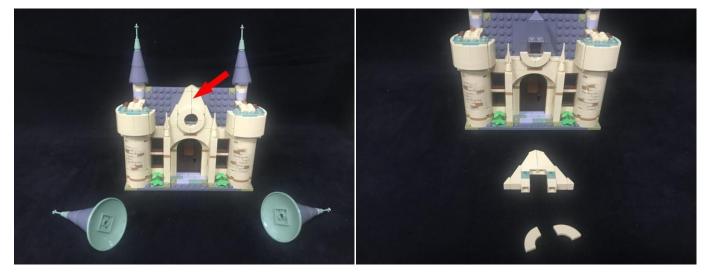
Disconnect the building at the right side.



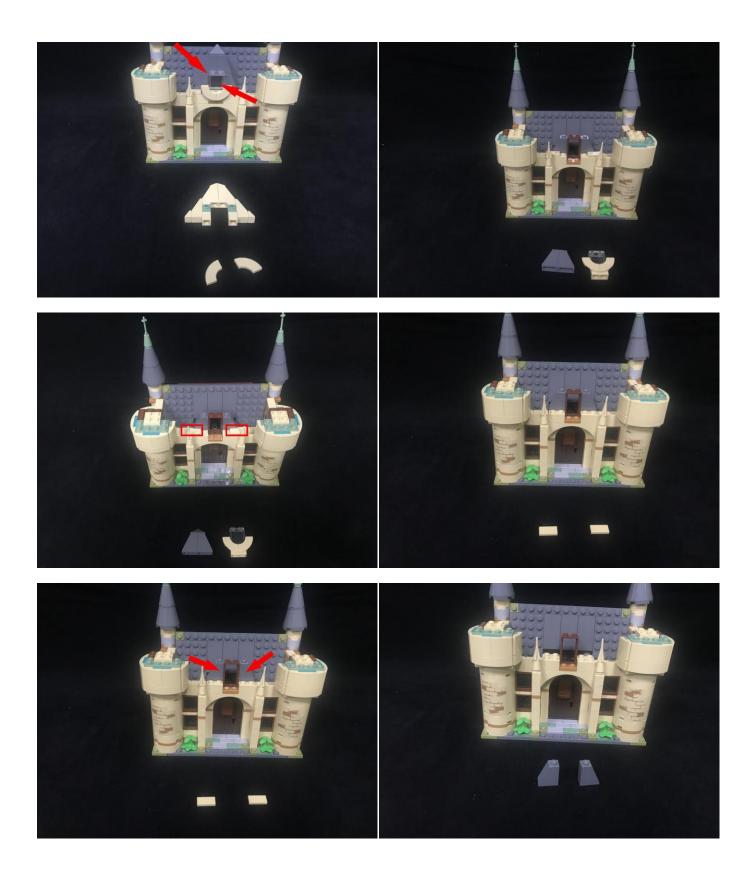
Take the following building, turn to the front, remove the two top pieces as per below.



Continue to remove the following pieces from the door.

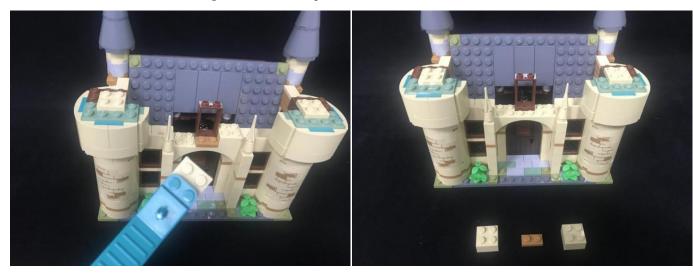


Disconnect the following pieces.





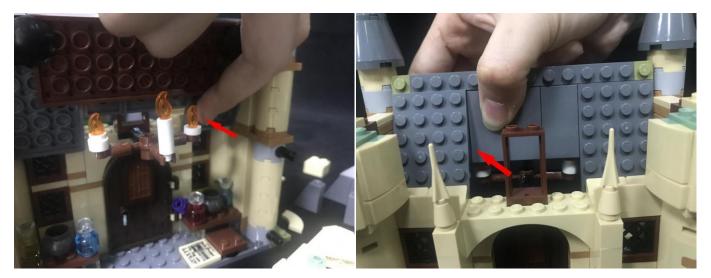
You can take the following tool to help.



These are pieces we removed from the door.



Turn to the back, follow the arrow to press the following place. Turn to the front, follow the arrow to press the following place to create a space.



Disconnect the 2 tiles.



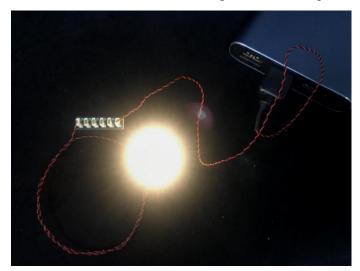
Take a top piece, disassemble it as per below.



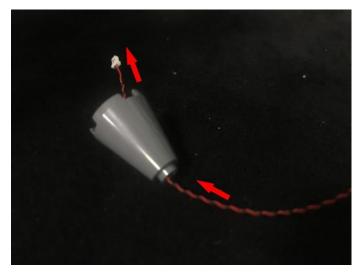
Take a warm white 30cm dot light, a trans yellow 1x1 round piece.



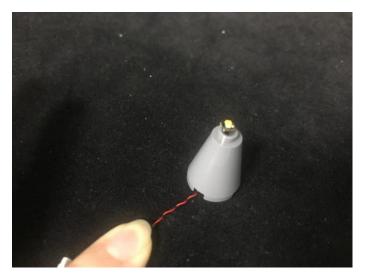
Connect the cable of the light to the expansion board, turn the power on to test the light.



(After the test, disconnect the light, leave the power source aside.) Thread the cable of the light through the following gray piece.



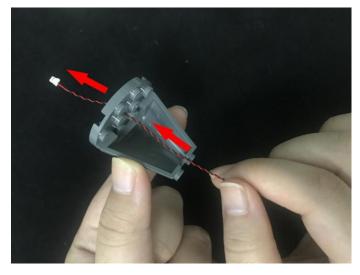
Pull the cable out till the light is placed over the hole with lighting part facing outside.



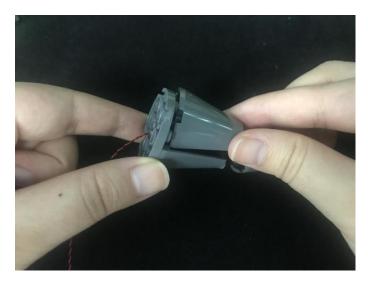
Secure the light with the 1x1 trans yellow piece.



Continue to thread the cable through the following piece.



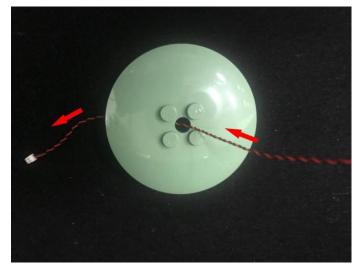
Reconnect the other half of the gray piece.



Reconnect the gray piece.



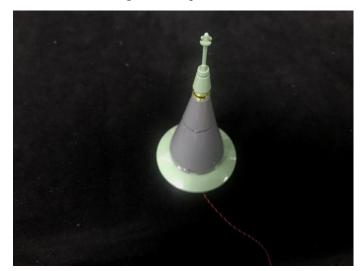
Thread the cable through the following green round piece.



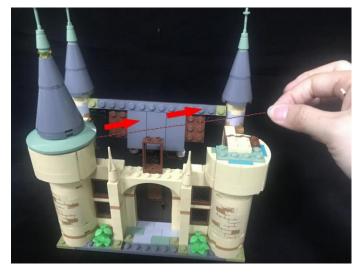
Reconnect the gray piece to the round piece.



Reconnect the green top.



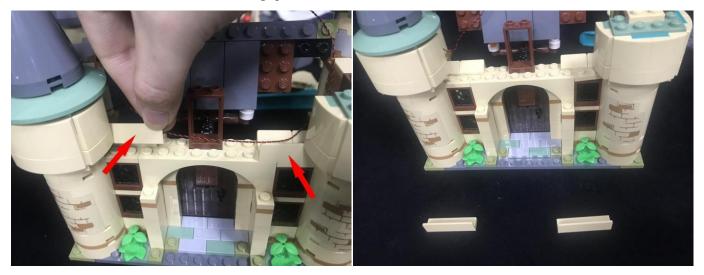
Reconnect the top piece, pull the cable rightward.



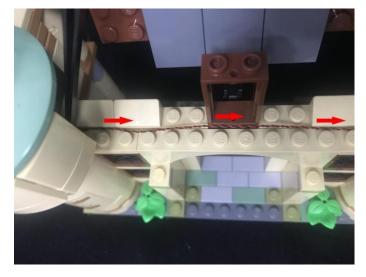
Follow the arrows to remove the following pieces.



Continue to remove the following pieces.



Place the cable alongside the wall in between study as per below.



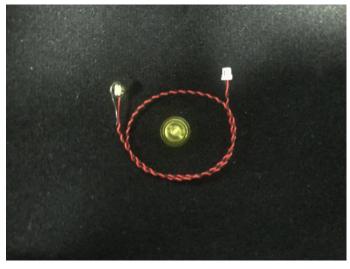
Reconnect the pieces we removed before to secure the cable.



Take another top piece and disassemble it as per below.



Take a warm white 15cm dot light, a trans yellow 1x1 round piece.



Thread the cable of the light through the following gray piece.



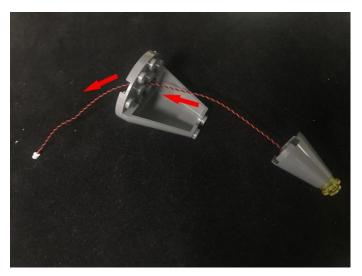
Pull the cable out till the light is placed over the hole with lighting part facing outside.



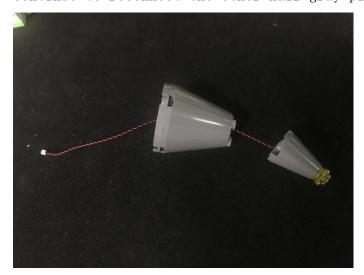
Secure the light with trans yellow round piece.



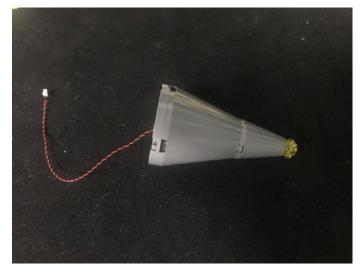
Thread the cable through the following piece.



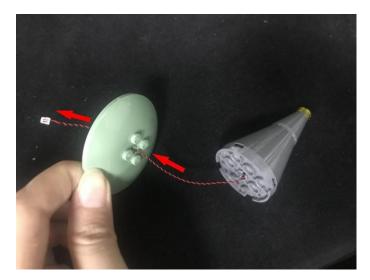
Continue to reconnect the other half gray piece.



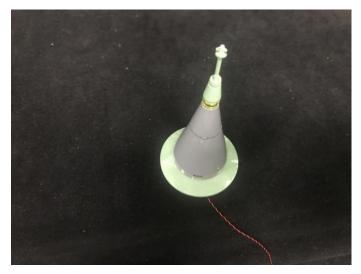
Connect the 2 pieces together.



Thread the cable through the green round plate.



Reconnect the green round plate, reconnect the green top piece.



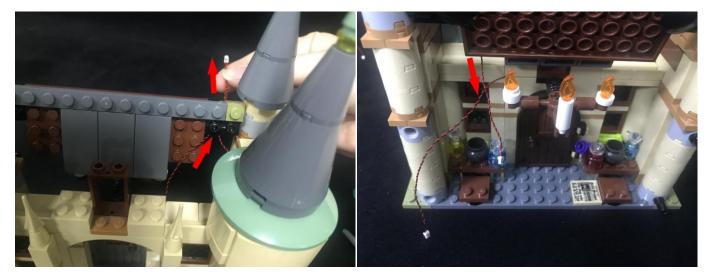
Reconnect the top piece, pull the cable out from the left.



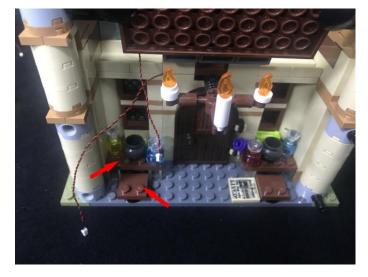
Continue to reconnect the following piece at right.



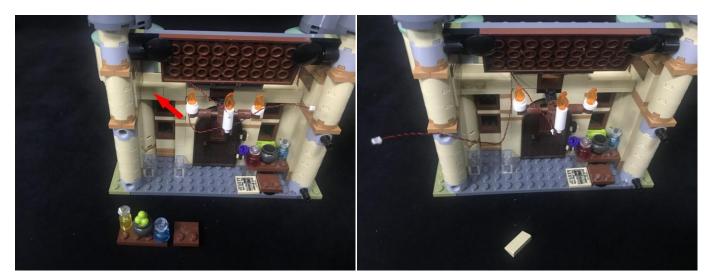
Pull the 2 cables to the inside.



Disconnect the desk and the chair at the left side.



Follow the arrow to disconnect the following piece.



Take the 6-port expansion board, connect the 15cm light cable to it.



Connect the 30cm cable of the light to it.



Connect the following 15cm connecting cable to it.



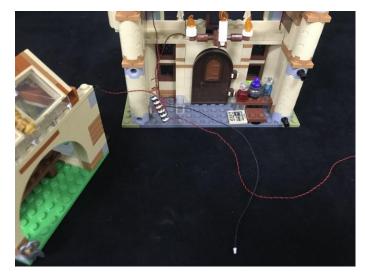
Turn the power on to verify the lights we installed.



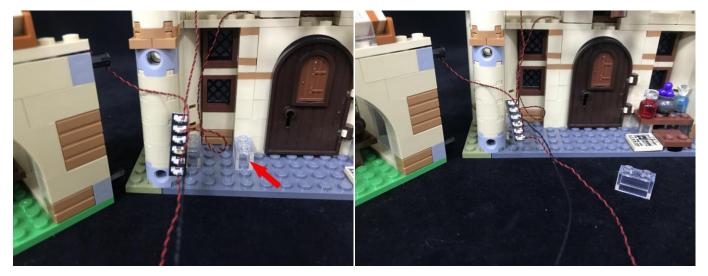
After the verification, turn the power off. Take a 15cm connecting cable.



Connect it to the 6-port expansion board.



Disconnect the 1x2 trans brick.



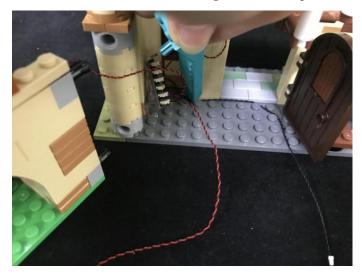
Thread the following 30cm light cable through the space, you can use the tool to help.



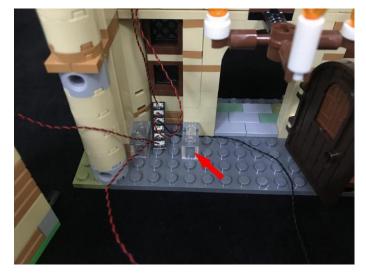
Reconnect the following piece to secure the cable.



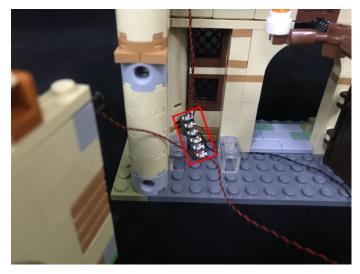
Thread the 15cm connecting cable as per below.



Reconnect the 1x2 trans brick.



Place the 6-port expansion board as per below.



Reconnect the desk.



Place the  $15 \mathrm{cm}$  connecting cable and the USB cable in parallel as per below.



Reconnect the chair to secure the cables.



Wind the cable around the following black piece as per below.



Connect the 2 buildings together.



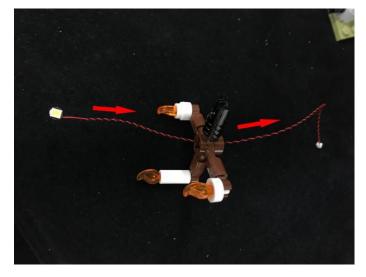
Reconnect the tile at the left, disconnect the candles.



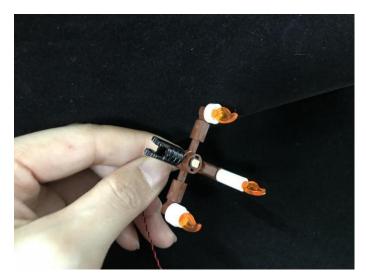
Take a 15cm head light.



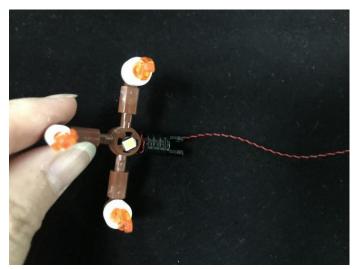
Thread it through the support of the candles as per below.



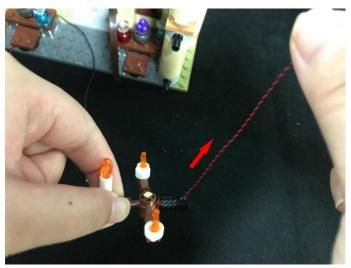
Stick the light at the cross as per below.



Wind the cable around the support as per below.



Thread the cable through the following piece.



Reconnect the candle piece.



Thread the cable through the following piece to the outside (you can take a tweezer to help).



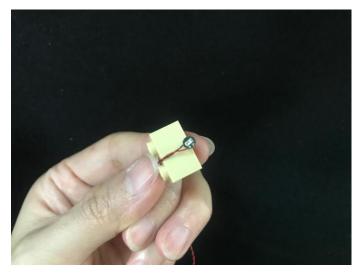
Take the following piece and disassemble it.



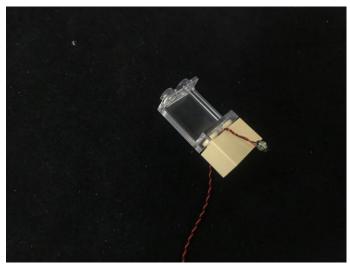
Take a 15cm Multi Colour Flashing Light.



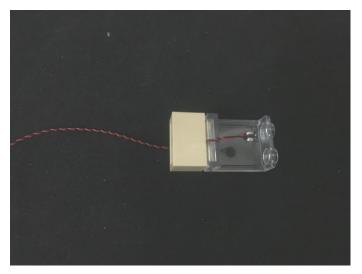
With lighting part facing up, connect the light to the following piece as per below.



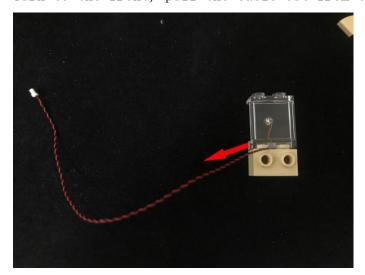
Reconnect the trans piece to secure the light (note: be careful, do not break the cable).



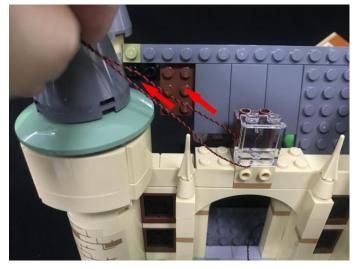
Move the light to make the lighting part facing the trans piece.



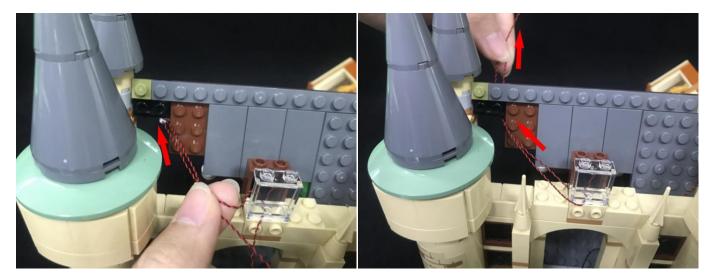
Turn to the front, pull the cable out from the left.



Reconnect the piece, pull the cable out from the left.



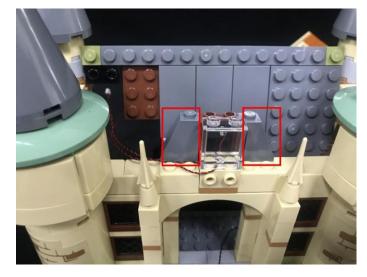
Thread the 2 cables through the following space to the inside.



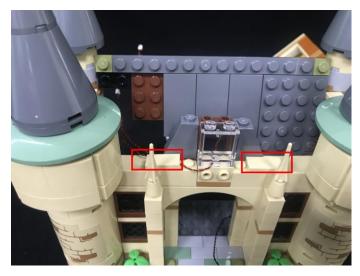
Place the cables in between studs.



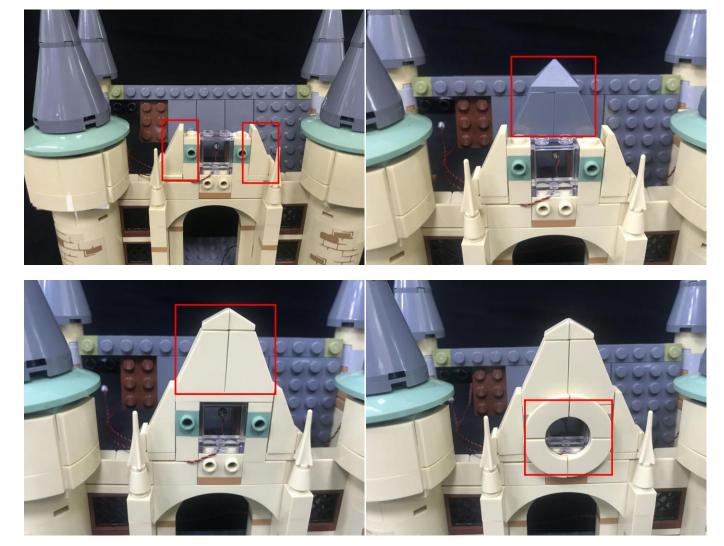
Reconnect the following 2 gray pieces.



Continue to reconnect the 2 beige 1x2 plates.



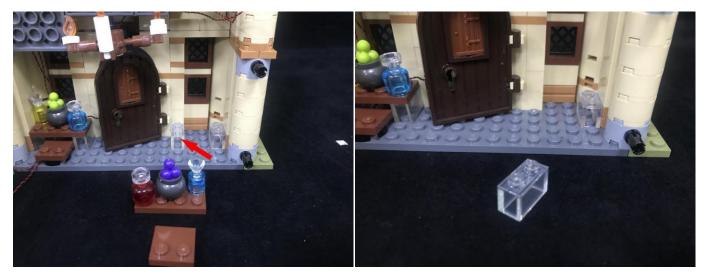
Continue to reconnect the following pieces.



Turn to the inside, disconnect the desk and chair from the right side.



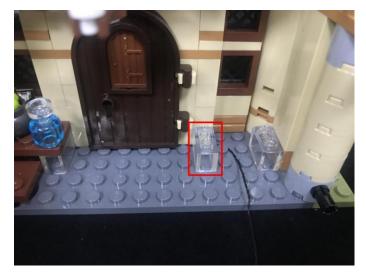
Disconnect the 1x2 trans brick.



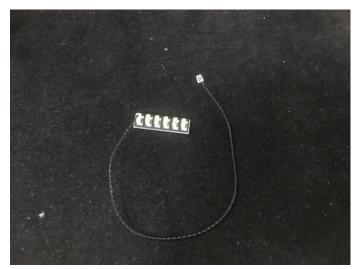
Place the 15cm connecting cable as per below.



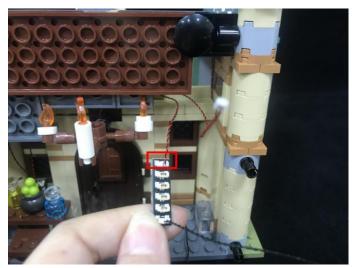
Reconnect the 1x2 trans brick to secure the cable.



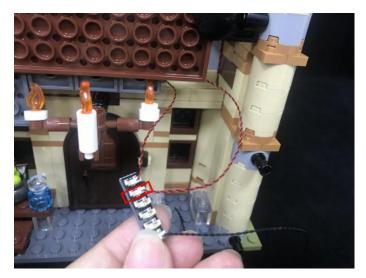
Take a 15cm connecting cable, a 6-port expansion board, assemble them as per below.



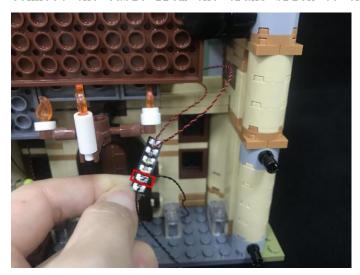
Connect the shorter light cable to the expansion board as per below.



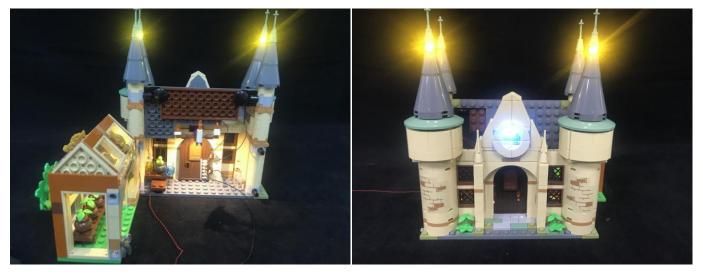
Connect the other cable to the expansion board.



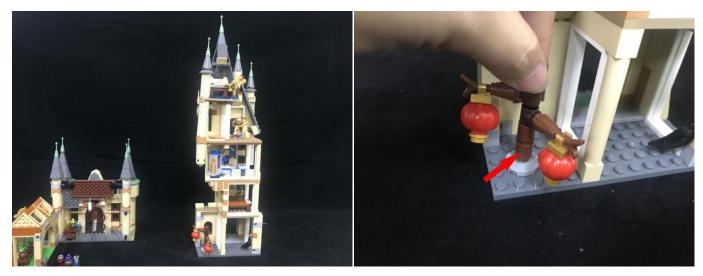
Connect the cable from the trans brick to the expansion board.



Turn the power on to see if all lights are working ok.



Turn the power off, take the building at the right side, disconnect the lanterns.



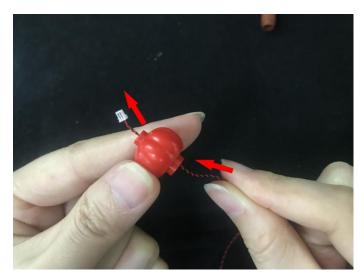
Disassemble the lanterns.



Take two 15cm head lights.



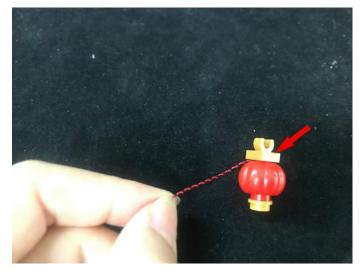
Thread the cable through the lantern piece as per below.



Pull the cable out till the light is placed inside.



Reconnect the golden piece to secure the light.



Repeat the steps above to install light for another lantern.



Reconnect the 2 lanterns to the support.



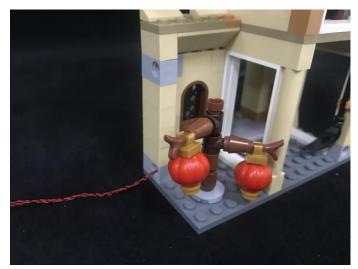
Group 2 cables together.



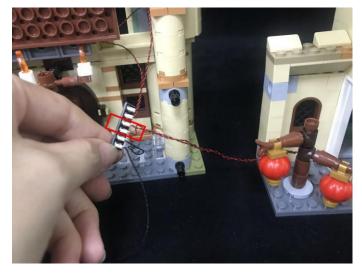
Thread the cables through the following space.



Reconnect the support.



Connect the cables of the lights to the 6-port expansion board.



Place the expansion board underneath the desk, tuck excess cables.



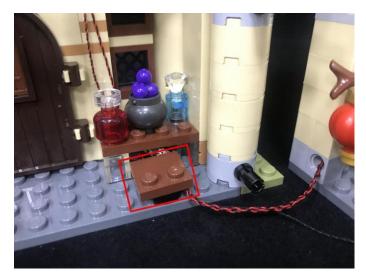
Reconnect the desk.



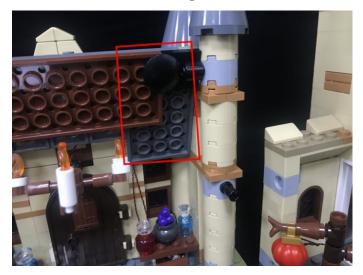
Place the  $15 \, \mathrm{cm}$  connecting cable and the cable from the lantern in parallel and place them in between study as per below.



Reconnect the chair.



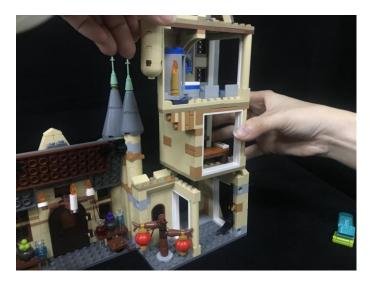
Reconnect the following tile.



Reconnect the building at the right, you can wind excess cables around the support.



Disconnect the second floor and the floors over it.



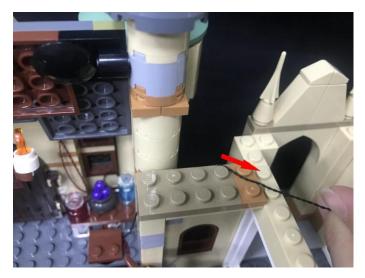
Continue to remove the following two 1x2 pieces.



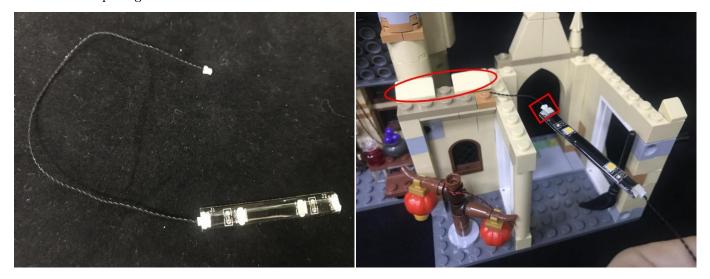
Thread the 15cm connecting cable through the following space.



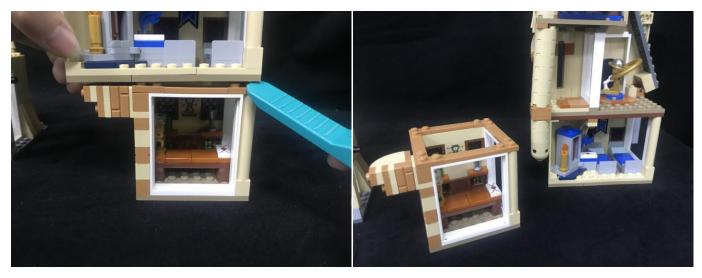
Continue to place the cable in between studs as per below.



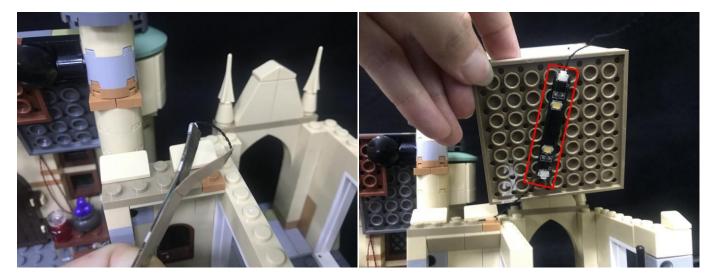
Reconnect the following pieces, take a 15cm connecting cable, a warm white strip light, assemble them together, connect the 15cm connecting cable from the wall to the other end of the strip light.



Disconnect the second roof and the third roof.



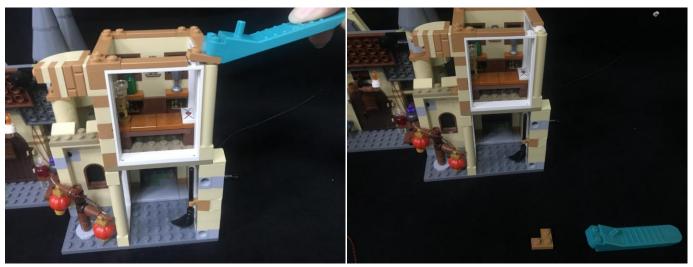
Stick the strip light to the bottom of the second floor.



Place the 15cm cable in between studs, reconnect the second floor.



Disconnect the following piece.



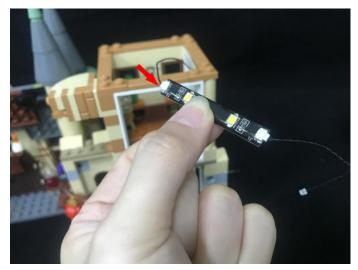
Thread the cable through the following space, secure the cable with the piece we removed before.



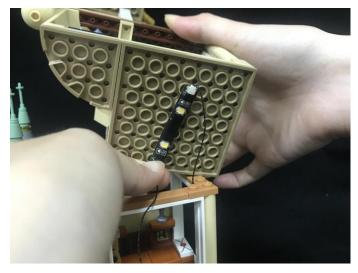
Take a 15cm connecting cable, a warm white strip light, assemble them together.



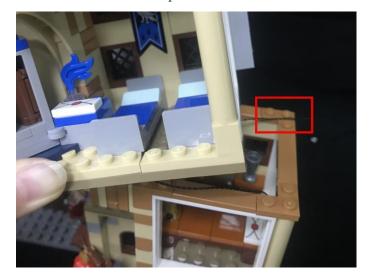
Connect the  $15 \mathrm{cm}$  connecting cable underneath the second floor to the other end of the strip light.



Stick the strip light to the bottom of the third floor.



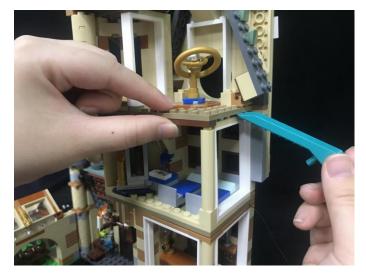
Place the cable as per below.



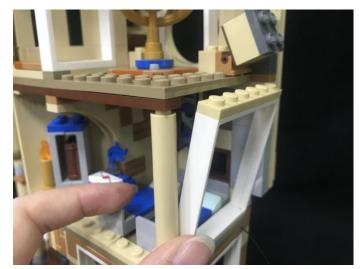
Reconnect the third floor.



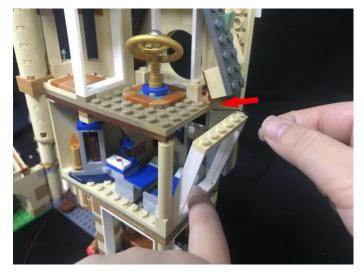
Create a space at the top of the third floor as per below.



Create a space at the wall as per below.



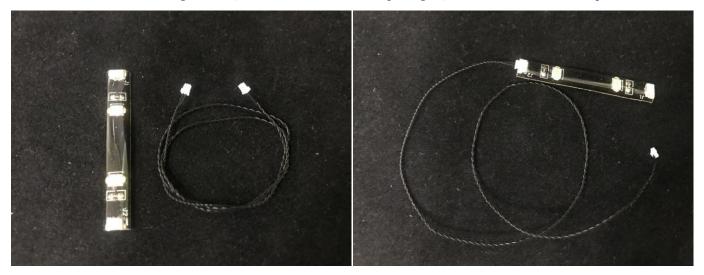
Thread the 15cm connecting cable through the space to the inside as per below.



Place the cable alongside the wall, reconnect the wall.



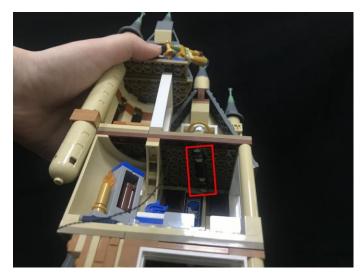
Take a 30cm connecting cable, a warm white strip light, assemble them as per below.



Connect the 15cm connecting cable from the third floor to the other end of the strip light.



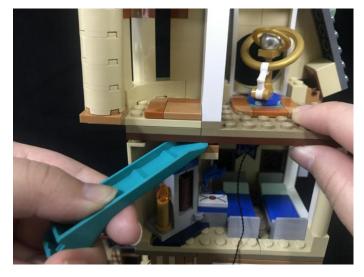
Stick the strip light to the ceiling of the third floor.



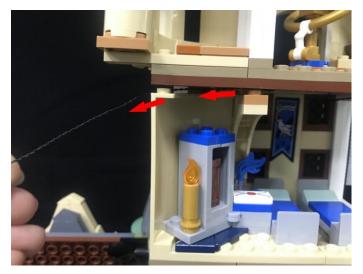
Disconnect the following column piece from the left side.



Create a space at the left side of the ceiling of the third floor as pre below.



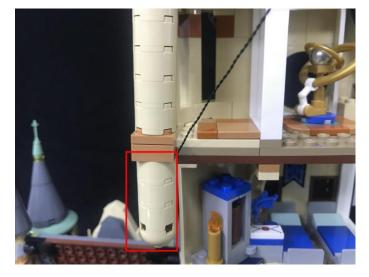
Thread the 30cm connecting cable through the space.



Close the space, pull the cable up.



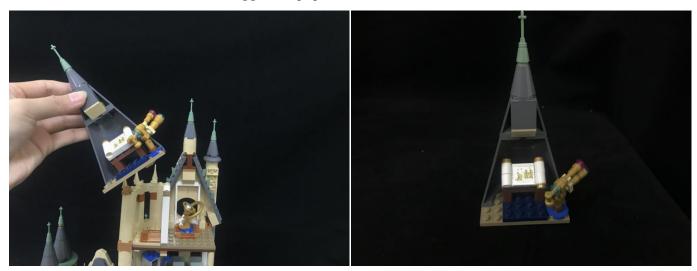
Reconnect the column.



Disconnect the top.



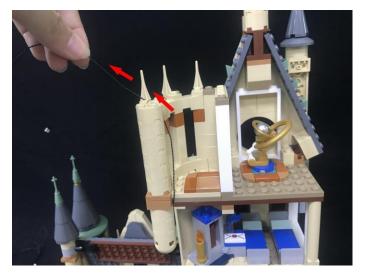
Continue to disconnect the bigger top piece.



Disconnect the 1x2 light brown piece.



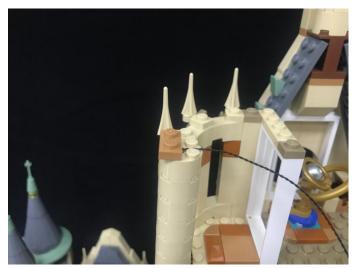
Place the 30cm connecting cable as per below.



Continue to thread the cable as per below.



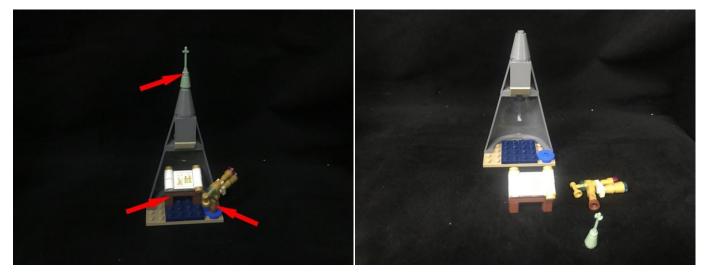
Reconnect the 1x2 light brown piece to secure the cable.



Pull the cable out and leave it aside.



Take the following top piece, and disconnect the following pieces.



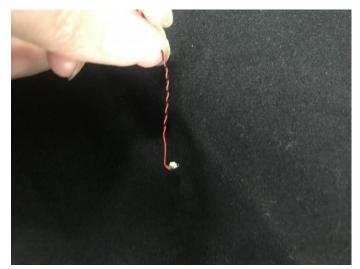
Disconnect the following trans light blue piece from the telescope.



Take a white 15cm dot light, a 1x1 trans light gray piece.



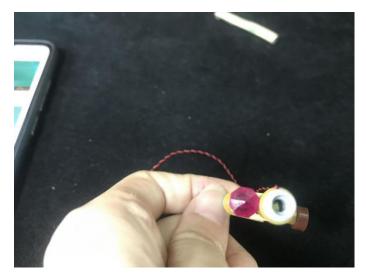
Wind the cable of the light a bit.



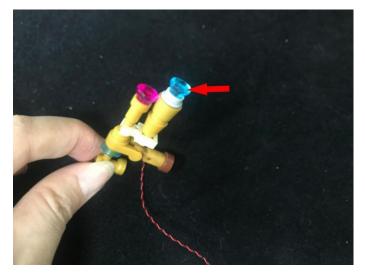
With lighting part facing outside, place the light inside the telescope.



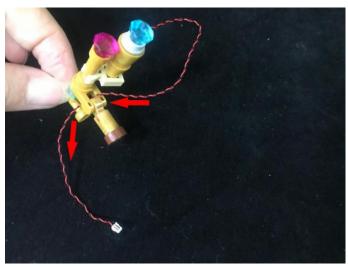
Secure the light with the 1x1 trans light gray piece.



Reconnect the trans light blue piece.



Thread the cable of the light through the following space underneath.



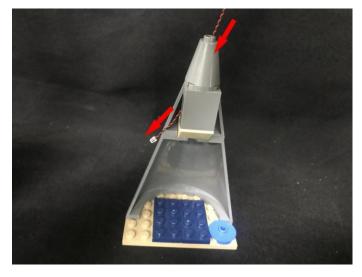
Put the telescope aside.



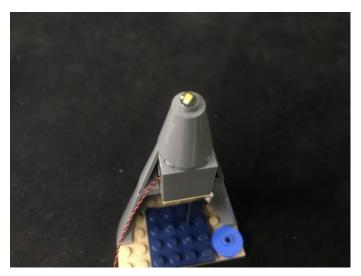
Take a warm white 15cm dot light, a trans yellow 1x1 round piece.



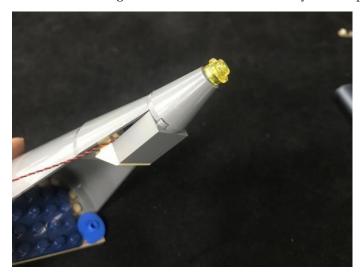
Thread the cable through the following gray piece.



Pull the cable out till the light is placed over the hole with lighting part facing outside.



Secure the light with the 1x1 trans yellow piece.



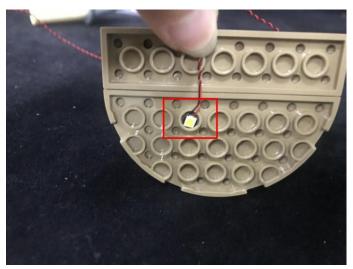
Reconnect the green top piece.



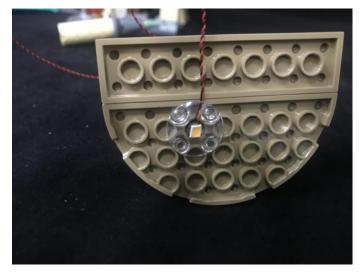
Take a 15 cm head light, a 2 x 2 trans round piece.



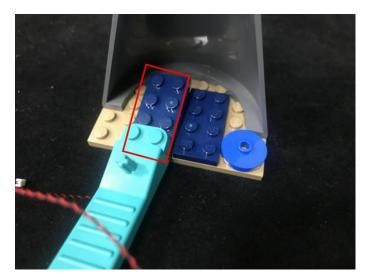
Place the light to the following place underneath the top.



Secure the light with the trans 2x2 round piece.



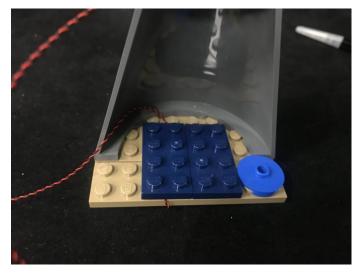
Turn the top piece over, disconnect the following 2x4 blue plate.



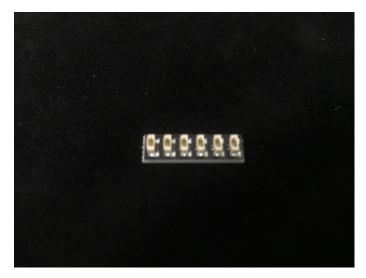
Place the cable in between studs as per below.



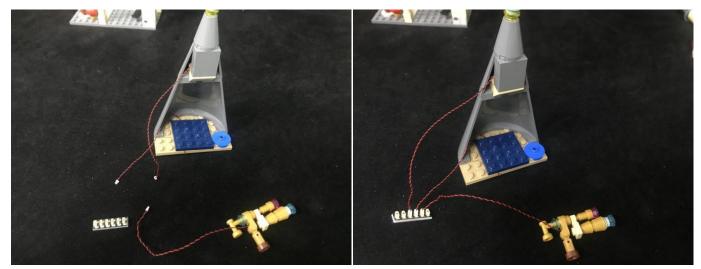
Reconnect the 2x4 blue plate to secure the cable.



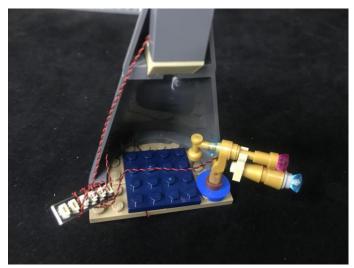
Take a 6-port expansion board.



Connect the 3 cables of the lights to the 6-port expansion board.



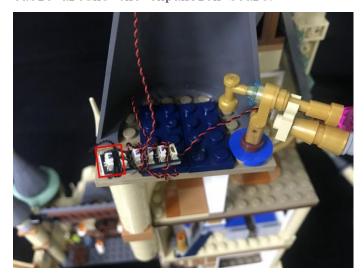
Tuck excess cables around the expansion board as per below.



Reconnect the top piece.



Connect the 30cm connecting cable from the left to the 6-port expansion board, tuck excess cable around the expansion board.



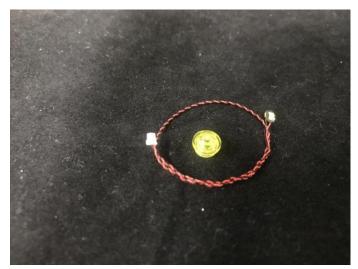
Disconnect the celestial globe.



Disassemble it.



Take a warm white 15cm dot light, a trans yellow 1x1 round piece.



With lighting part facing up, place the light at the following place.



Secure the light with the trans yellow 1x1 piece.



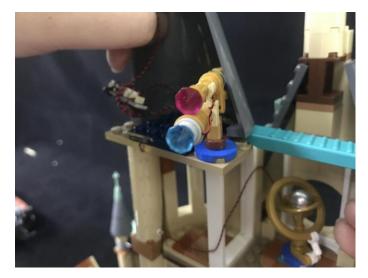
Reconnect the other pieces.



Reconnect the celestial globe.



Lift the following gray piece.



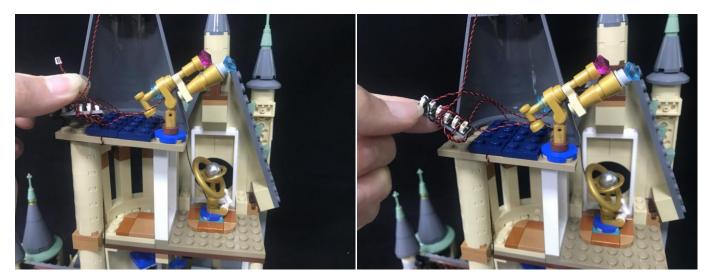
Thread the cable of the celestial globe through as per below.



Reconnect the top piece to secure the cable.  $\ensuremath{\mathsf{c}}$ 



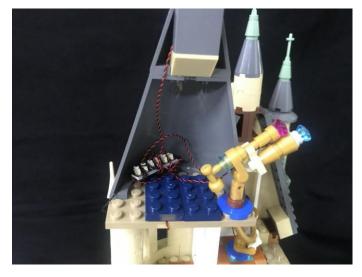
Connect the cable to the 6-port expansion board.



Turn the power on to test all the lights.



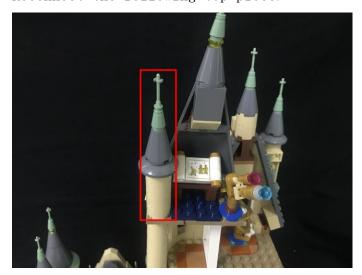
After the test, turn the power off, place the expansion board at the following place.



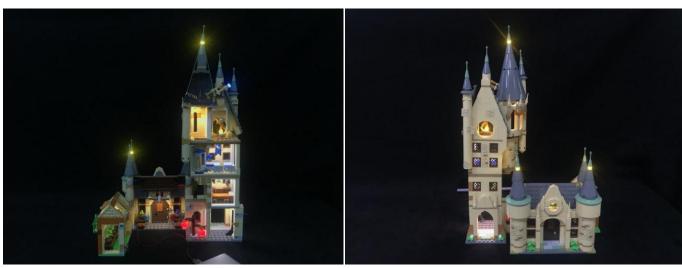
Reconnect the following piece.



Reconnect the following top piece.



This completes installation of this LED Lighting Kit. ENJOY!



The above are ideas and instructions provided by our designers. Please move on:

- 1: Do you have any suggestions about the material and quality of our products?
- 2: Do you have any suggestions on the installation instructions and the degree of difficulty of the installation?
- 3: If you have better installation method and ideas, please contact us in time.