

FIRST® LEGO® League Challenge BIOGLOW™ Building Instructions

Mission 3: Flip the Rock

This build is 132 pieces, and 67 building steps.

Welcome to text-based instructions from Bricks for the Blind. Before you start building, here are some terms we'll be using:

- In Front of/Front: towards you.
- Behind/Back: away from you.
- Up: towards the ceiling.
- Down: towards the floor.
- Stud: the bump on a LEGO brick. Example: A 2x1 brick has two studs on it.
- Vertically: going from front to behind.
- Horizontally: going from left to right.
- Upright: pointing up towards the ceiling.
- That one/ppp: previously placed piece.
- Plate: piece with studs.
- Tile: smooth piece without studs (unless otherwise specified)
- Symmetrically: a mirror image. Example: If you place a 2x1 brick with technic connector on the front wall at the right, connector to the front, and then place another such piece symmetrically on the back wall, at the right, the technic connector of the second piece should point to the back, since it will be placed symmetrically.
- Centered-vertically: even amount of space in front of and behind the piece
- Centered-horizontally: even amount of space left and right of the piece.
- Row: studs lined up horizontally (left to right/side to side).
- Column: studs lined up upright or vertically (top to bottom/back to front).
- Standing upright: the piece is perpendicular to the ground, like a wall.
- Lying flat: the piece is parallel to the ground, like a piece of toast which fell off the table.
- Anti-stud: the portion of a piece which accepts studs, like the bottom of a plate.
- Jumper plate: a 1x2 plate with a single stud on top, or a 1x3 plate with only two studs on top.

For builders with low vision, or a sighted building partner who may want to follow along with the printed visual instructions that come with each set. As low vision users may benefit from viewing the instructions on a personal device where they can zoom in on content and use assistive technologies to enhance the visuals.

A note on LEGO Technic™ part names. These parts are somewhat different from regular LEGO bricks. I'll include some definitions in case the builder or helper is not familiar with LEGO Technic™.

Axles - An axle is a connector which has an X shaped cross-section. Because their cross section is not round, anything connected to an axle using an axle-hole will rotate with that axle. Axles are longer than they are wide, and the length of an axle corresponds with how many bricks long it is. Aka a 3L axle is three bricks long. Axles come in a variety of lengths, with a 2L axle being the shortest available. They may be combined with pins, or have circular stops on them. A stop prevents the axle from sliding through an axle-hole at a specific point on the axle.

Pins - A pin is a connector which has a circular cross section and a flanged notch out of one or both ends. This flanged notch allows them to click into bricks with a pin-hole. Pins come with and without friction ridges, which are small bumps on the pin which prevent them from rotating freely. For standard pins, black is a high friction pin, and gray is a low friction pin. A standard length pin is two brick lengths long, with a stop in the middle. This prevents a brick from being pushed from one side of the pin to the other. A 1L pin is one brick long and still retains the stop, however it also includes a hollow stud at the other end. A 3L pin is three bricks long, and only contains a stop at one side, allowing two bricks to be pushed onto the other side of the pin. Pins may also have one side which is an axle.

Lifarms - A lifarm is a basic structural element, similar to a brick or a plate, but usually without any studs. It is a beam with rounded ends and with holes in it, with the same spacing as the studs on a LEGO brick. lifarms come in a variety of lengths, including a 1x1 lifarm which looks like a cylinder. Thick lifarms are as wide as a LEGO brick, and thin lifarms are half as wide as a LEGO brick, but not the same thickness as a LEGO plate! The holes in a lifarm arm may accept axles or pins. They also come in a variety of shapes, including tees, els and triangles.

Gears - A gear is a functional element. They are typically discs with teeth on the outside, there are also worm gears which look like a spiraling cylinder! Gears connected by axles transmit or even transform rotational motion!

Axle and Pin Connectors - These elements are typically smaller than lifarms, and are used to connect some combination of pins or axles. They might have pins or axles, as well as axle or pin-holes. They have a lot of different angle combinations! The simplest just connects two axles or pins together in a straight line.

Bushes/Bushings - LEGO Technic™ uses bushes largely as spacers, but they also can reduce friction between rotating parts, or can form useful elements such as handles. Bushes are typically light gray, generally cylindrical, and have an axle-hole running through the middle. They have a flange at the front and back to make them easier to pull on and off.

Sorting Instructions:

This LEGO set comes in the bags labeled 4-5 and some large pieces from bag 0. Sort the pieces into groups as described below. Note that where there are multiple colors of the same brick in a step, the colors will be split across two groups to make telling the difference easier for the builder! LEGO includes a few spare parts in case you lose something. Set these into their own group away from the rest, in case you need them later.

Mission 3: Flip the Rock

Group A contains all of the black 2L pins from this bag. These pins have friction ridges.

Group B contains all of the blue 3L pins from this bag. These pins have friction ridges.

Group C contains all of the blue 2L axle/pin combos from this bag. These pins have friction ridges.

Bag 4 (3 groups of bricks)

Main Build

Group 1 contains the pieces for steps 1-7. Include a lime green 7x11 hollow frame from bag 0.

Group 2 contains the pieces for steps 8-14.

Group 3 contains the pieces for steps 15-26.

Bag 5 (4 groups of bricks)

Group 4 contains the pieces for steps 27-35.

Group 5 contains the pieces for steps 36-48.

Group 6 contains the pieces for steps 49-58.

Group 7 contains the pieces for steps 59-67.

Building Instructions:

Groups A, B, C and 1. You will use the pins from groups A, B and C throughout the build.

Mission 3: Flip the Rock

Main Build.

1.1. Let's start by making a base! Find a dark gray 5x11 panel. This piece has five pin holes on each short end, seven pin holes on each long side, and four pin holes on the top and bottom. One side is flat, and the other side is recessed between the two long rows of pin holes. Place this piece, horizontally with the flat side at the bottom, in front of you.

1.2. Push a black 2L pin from group A, from the front, into the center hole on the front side of the previous piece.

2.1. Find a light gray 3L axle and pin connector with a perpendicular pin hole. This looks like a 3L liftarm where the center hole is perpendicular to the two end holes. The end holes are both axle holes. Push the center hole of this piece, horizontally with the pin hole facing front and back, from the front onto the previous piece.

2.2. Push the axle side of a blue 2L axle/pin combo, with the pin side on top, into each of the two axle holes on the top side of the previous piece.

3. Find a lime green 7x11 hollow frame. This looks like two 11L liftarms connected by two 5L liftarms on the ends, forming an open rectangle. Rotate it so it's horizontal and laying flat, with the longest liftarms at the front and back. Push the middle two rows on the front liftarm of this piece, centered vertically and horizontally, onto the previous two pieces. The back liftarm of this piece should overhang to the back, but all the other sides should be even with the base below it.

4.1.1. Next, we'll extend the base. Place a lime green 2x4 L-shaped liftarm, vertically with the short leg upright at the back and the long leg at the bottom, in front of you.

4.1.2. Push the axle side of a dark blue 2L axle/pin combo from group C, with the pin side on the left, from the left into the front axle hole of the previous piece.

4.1.3. Push a blue 3L pin from group B, with the stop ring on the left, from the left into the second hole from the back of the L-shaped liftarm. Push it all the way to the right so it extends 1L to the left and right.

4.2. Push a blue 3L pin from group B, with the stop ring on the left, from the left into the top hole at the back of the L-shaped liftarm. Push it all the way to the right so it extends 1L to the left and right.

4.3. Push the left side of the previous piece into the back hole on the right side of the 7x11 hollow frame. The other two pins on the L-shaped liftarm should attach to the panel at the bottom of the base.

5.1.1. We'll add another L-shaped liftarm on this side. This one will be free to pivot. Place a lime green 2x4 L-shaped liftarm, vertically with the short leg upright at the front and the long leg at the bottom, in front of you.

5.1.2. Push the axle side of a tan 2L axle/pin combo, with the pin side on the left, from the left into the back axle hole of the previous piece. This piece does not have friction ridges.

5.1.3. Push a black 2L pin from group A from the left into the top hole at the front of the L-shaped liftarm.

5.2. Push a red 1L liftarm onto the left side of the previous piece. This piece looks just like a hollow cylinder.

5.3. Push the pin on the left side of this liftarm into the panel in front of the bottom leg of the first L-shaped liftarm.

6.1.1. We'll extend the left side of the base now. Place a lime green 2x4 L-shaped liftarm, vertically with the short leg upright at the back and the long leg at the bottom, in front of you.

6.1.2. Push the axle side of a dark blue 2L axle/pin combo from group C, with the pin side on the right, from the right into the front axle hole of the previous piece.

6.1.3. Push a blue 3L pin from group B, with the stop ring on the right, from the right into the second hole from the back of the L-shaped liftarm. Push it all the way to the left so it extends 1L to the left and right.

6.2. Push a blue 3L pin from group B, with the stop ring on the right, from the right into the top hole at the back of the L-shaped liftarm. Push it all the way to the left so it extends 1L to the left and right.

6.3. Push the right side of the previous piece into the back hole on the left side of the 7x11 hollow frame. The other two pins on the L-shaped liftarm should attach to the panel at the bottom of the base. This assembly will be symmetrically with the one on the right side.

7. Push a tan 3L pin, with the stop ring on the right, from the left, into the second hole from the front on the left side of the 7x11 hollow frame. It will extend 2L to the left. Repeat symmetrically on the right side. These pins do not have friction ridges and will spin freely.

Group 2.

8.1. Next, we'll build a rotating platform. This will have different things on each side, and can be spun to display either one. Set the base aside for now. Find a light gray 11L liftarm with perpendicular holes. This looks like a normal 11L liftarm, except that every hole is perpendicular to its neighbors. Place this piece, horizontally with the smooth side on top, in front of you. The left and rightmost holes should be facing the front.

8.2. Push a black 2L pin from group A, from the front, into the second hole from the left on the front side of the previous piece. Repeat symmetrically on the right side.

9. Push a red 1L pin with a stud, with the stud on top, from the top into the leftmost hole on top of the 11L liftarm. Repeat symmetrically on the right side.

10. Push a dark gray 5x11 panel, horizontally with the recessed side at the bottom, centered horizontally onto the two pins on the front of the assembly. These pins should attach to the row of seven holes on the back side of the panel.

11. Push a red 1L pin with a stud, with the stud at the bottom, from the bottom into the leftmost free hole on the bottom of the 11L liftarm. Repeat symmetrically on the right side. There will be one free hole between these two pieces.

12. Push a blue 3L pin from group B, with the stop ring near the back, from the front into the leftmost hole on the front side of the 5x11 panel. Repeat symmetrically on the right side.

13. Push a yellow 2L pin, from the left, into the back hole on the left side of the assembly. Repeat symmetrically on the right side. These pins do not have friction ridges and will spin freely.

14.1.1. Next, we'll add some studs to a couple of liftarms. Place a light gray 11L liftarm with perpendicular holes, horizontally with the smooth side on top, in front of you. The left and rightmost holes should be facing the front.

14.1.2. Push a red 1L pin with a stud, with the stud on top, from the top into the leftmost hole on top of the previous piece. Repeat symmetrically on the right side.

14.2. Push a red 1L pin with a stud, with the stud at the bottom, from the bottom into the leftmost free hole on the bottom of the 11L liftarm. Repeat symmetrically on the right side. There will be one free hole between these two pieces.

14.3. Repeat steps 14.1.1-14.2.

14.4. Push the two liftarms we just made, horizontally with the middle pair of studs on the bottom, centered horizontally onto the two pins at the front of the rotating platform so they completely cover the pins.

Group 3.

15. Push a green 1L pin with an anti-stud on one side, with the anti-stud at the front, from the front into each of the middle two holes on the front side of the assembly. There will be 1L gap between these pieces.

16. Push the back hole of a lime green 5L thick liftarm, vertically with the holes facing left and right, from the left onto the pin on the left side of the rotating platform. This pin doesn't have friction ridges so the liftarm will dangle.

17. Place the base, horizontally with the 7x11 hollow frame on top and the longest column at the right extending past the frame at the front, in front of you. Push the bottom hole of the 5L liftarm from the previous step onto the front pin that's on the left side of the hollow frame. The rotating platform should be right on top of the base.

18.1.1. Next, we'll make a lever for the rotating platform. Find a red 4x6 bent liftarm. This looks like a 6L liftarm and 4L liftarm connected at a 135 degree angle. It looks kind of like a hockey stick. The holes at each end are axle holes. Place it in front of you so the 7L liftarm is vertical and the 3L liftarm points forward and up.

18.1.2. Push a yellow 2L pin, from the left, into the corner hole of the previous piece. This pin does not have friction ridges and will spin freely.

18.2. Push the axle side of a tan 2L axle/pin combo, with the pin side on the right, from the right into the front axle hole of the bent liftarm.

18.3. Rotate the bent liftarm about 90 degrees so it's upright with the previous piece at the bottom with the pin side on the right. Push the pin at the bottom, from the left, into the second hole from the front on the left side of the rotating platform, then rotate the bent liftarm away from you until it rests on a 5L liftarm.

19.1.1. Find a dark gray 3x3x1 square liftarm. This piece is shaped like a square with five holes forming a cross on the flat sides. Two sides are rounded, and the other two sides have two holes each. Push the back and bottom holes on the right side of the cross, with the 3x3 square liftarm standing upright with the rounded sides on the top and bottom, onto the lower two pins on the left side of the combined base and platform.

19.1.2. Push a red 1L pin with a stud, with the stud at the front, from the front into the bottom hole on the front side of the previous piece.

19.2. Place a pink 1x1 round plate with a flower petal pattern on the stud of the previous piece.

20.1.1. Place a light gray 7L liftarm with perpendicular holes, horizontally with the smooth side on top, in front of you. The leftmost and rightmost holes should face forward and back.

20.1.2. Push a light gray 2L pin with a bushing on one side, with the bushing at the back, from the back into the leftmost hole on the back side of the previous piece. Only push it in 1L so the front side is even with the front side of the liftarm.

20.2. Push another light gray 2L pin with a bushing on one side, with the bushing at the back, from the back into the hole to the right of the previous piece.

20.3. Find the free pin on the left side of the combined assembly. This is on the 4x6 bent liftarm that forms a lever. Rotate the 7L liftarm with perpendicular holes so it's upright and vertical with the bushings at the back. Push the top hole on the right side onto the pin we just found. The two pins with bushings will line up with the holes on the back side of the square liftarm. Push the pins with bushings forward into these holes.

21. Find a black 3L pin connector with two pins. This looks like a 3L liftarm where the middle pin hole is perpendicular to the end holes. There are also two pins extending parallel to the middle pin hole on one side of the piece. When viewed from the front, it looks like a letter C. Rotate this piece so it's vertical with the pins on the right. Push the back pin into the bottom hole on the left side of the upright 7L liftarm with perpendicular holes that's behind the 3x3 square liftarm. The front hole will attach to the center hole on the left side of the square liftarm.

22. Now we'll do a bit of work on the other side of the combined assembly. Find the four pins on the right side. There will be one on the rotating platform, and three on the base. Push the bottom hole of a lime green 5L thick liftarm, with the holes facing left and right, onto the longest pin, which is on the right side of the base. Push the top hole of this liftarm onto the pin on the right side of the rotating platform. Push the liftarm all the way to the left so the bottom pin extends 1L past it.

23.1. Push a dark gray 3x3x1 square liftarm, upright and vertical with the rounded sides on the top and bottom, onto the three pins on the right side of the base. The bottom side will be even with the bottom of the base.

23.2. Push the pins of a black 3L pin connector with two pins, upright with the pins at the back, into the two holes on the front side of the 3x3x1 square liftarm.

24.1.1. Next, we'll make a lever for this side of the rotating platform. Place a red 4x6 bent liftarm in front of you so the 7L liftarm is vertical and the 3L liftarm points forward and up.

24.1.2. Push a yellow 2L pin, from the right, into the corner hole of the previous piece. This pin does not have friction ridges and will spin freely.

24.2. Push the axle side of a tan 2L axle/pin combo, with the pin side on the left from the left into the front axle hole of the bent liftarm.

24.3. Rotate the bent liftarm about 90 degrees so it's upright with the previous piece at the bottom with the pin side on the left. Push the pin at the bottom, from the right, into the second hole from the front on the right side of the rotating platform, then rotate the bent liftarm away from you until it rests on a 5L liftarm. It should be symmetrical to the one on the left side.

25.1.1. Place a light gray 7L liftarm with perpendicular holes, horizontally with the smooth side on top, in front of you. The leftmost and rightmost holes should face forward and back.

25.1.2. Push a light gray 2L pin with a bushing on one side, with the bushing at the back, from the back into the leftmost hole on the back side of the previous piece. Only push it in 1L so the front side is even with the front side of the liftarm.

25.2. Push another light gray 2L pin with a bushing on one side, with the bushing at the back, from the back into the hole to the right of the previous piece.

25.3. Find the free pin on the right side of the combined assembly. This is on the 4x6 bent liftarm that forms a lever. Rotate the 7L liftarm with perpendicular holes so it's upright with the bushings at the back. Push the top hole on the left side onto the pin we just found. The two pins with bushings will line up with the holes on the back side of the square liftarm on the right side of the base. Push the pins with bushings forward into these holes.

26. Push the back pin of a black 3L pin connector with two pins, vertically with the pins on the left, into the bottom hole on the right side of the upright 7L liftarm with perpendicular holes that's behind the 3x3 square liftarm. The front hole will attach to the center hole on the right side of the square liftarm.

Bag 5.

Group 4.

27.1. Now, we'll build the first scene for the rotating platform. Set the base and platform aside for now. Place a light gray 4x8 plate, horizontally, in front of you.

27.2. Place a transparent green 1x2 tile, horizontally, on the back row of the previous piece so the right sides are even.

28.1. Place a red 1x2 plate, vertically, in front of the previous piece so the right sides are even.

28.2. Place a green 1x2 plate with two studs hanging down from one long side, vertically with the side studs on the right, on the previous piece.

29. Place the right stud of a lime green 1x1 tile with a 1x1 slope tile on one side, horizontally with the slope on the left, on the front stud of the previous piece. Place another behind the first.

30. Place a light gray 1x2 inverted slope brick, vertically with the slope at the front, on the front right corner of the assembly.

31. Place a dark gray 2x3 slope brick, vertically with the slope at the back, to the left of the 1x2 tile on the back row so the back sides are even. There will be one free row in front of this piece.

32. Place a dark gray 2x2 corner slope brick, with the sloped corner at the front right so the studs form a braille letter F, in front of the previous piece and to the left of a 1x2 inverted slope brick. The front row of this piece will overhang and there will be five free studs to the left of the back row.

33.1. Place the back left stud of a dark gray 2x2 corner tile, with the corner at the back right, on the back right stud of the previous piece. The right column will attach to a 1x2 inverted slope brick.

33.2. Place a transparent green 1x2 tile, vertically, to the left of the previous piece so it extends one stud behind it.

34. Now, we'll extend this scene. Rotate the scene 90 degrees counter clockwise. There will be two overhanging studs to the right of the 4x8 plate. Place the left column of a light gray 4x8 plate, vertically, under the two overhanging studs and so the front and back sides are even with the first 4x8 plate.

35. Find the 2x3 slope brick that's on the left three columns of the scene. Place a transparent green 1x2 tile, horizontally, to the right of this piece so the front sides are even.

Group 5.

36.1. Place a light gray 2x4 slope brick, horizontally with the slope on the left, in front of the previous piece so the right sides are even.

36.2. Place a transparent green 1x2 tile, horizontally, in front of the previous piece so the left sides are even. There will be one free stud to the left of this piece.

37.1. Place a dark gray 1x4 slope brick, vertically with the slope at the back, on the third column from the right so there's one free stud behind it. This piece will be to the right of some slope bricks and tiles.

37.2. Place a transparent green 1x2 tile, horizontally, in front of the previous piece so the left sides are even. There will be one free stud to the right of this piece.

38.1. Place a light gray 2x2 plate, centered horizontally, on the front two rows of the scene. This piece will be in front of the right two columns of a 2x4 slope brick.

38.2. Place a dark gray 2x2 corner tile, with the corner at the back left, on the previous piece.

39.1. Place a red 1x2 plate, horizontally, on the back row of the scene so the right sides are even.

39.2. Place a green 1x2 plate with two studs hanging down from one long side, horizontally with the side studs at the back, on the previous piece.

40. Place the right stud of a lime green 1x1 tile with a 1x1 slope tile on one side, horizontally with the slope on the left, on the left stud of the previous piece. Place another symmetrically to the right of the first. The right stud of the right piece will overhang.

41. Place the back stud of a light gray 1x8 plate, vertically, under the overhanging stud of the right piece from the previous step.

42.1. Place the right column of a light gray 3x3 double slope, with the stud at the front left, on the previous piece, as far back as you can. There will be four free rows in front of this piece.

42.2. Place a light gray 1x3 slope brick, horizontally with the slope on the right, in front of the previous piece.

42.3. Place a light gray 2x2 double slope brick, with the stud at the back left, in front of the previous piece so the right sides are even.

43.1. Next, we'll add a mushroom! Find the 2x3 slope brick that's on the second and third rows from the back, all the way on the left. There is a 1x2 tile on the back stud of this piece. Place a transparent blue 1x1 cone on the free stud of the 2x3 slope brick.

43.2. Place a transparent blue 2x2 dish on the previous piece.

44.1. Find the 1x2 tile that's behind the mushroom. Place an olive green frog, with the head on the right, to the right of this tile. The head is the taller side of the front.

44.2. Find the 3x3 double slope brick that's even with the right side of the build. This piece only has a single stud and is to the right of the frog. Place a green 1x1 round plate with three leaves on one side, with the leaves pointing to the right, on the stud of this piece.

45.1. Move one stud in front, and one stud to the left of the previous piece and place another green 1x1 round plate with three leaves, with the leaves pointing to the front and right.

45.2. Place a pink 1x1 round plate with a flower petal pattern on the previous piece.

46. Next, we'll add the first scene to the main assembly. Place the base with rotating platform, horizontally with the longest column on the right, in front of you. The rotating platform should be flat on top, with the recessed side at the bottom. Rotate the scene so it's horizontal with the four side studs at the front. Place it, centered horizontally, on the rotating platform so the front sides are even.

47. Next, we'll flip the platform over so the scene is at the bottom. Find the two 4x6 bent liftarms that are on the left and right sides of the platform. Push these away from you. The platform should rotate up until it's upright.

48. Once the platform is upright, move the levers back forwards and push the top of the platform away from you. It should fall back flat with the recessed side on top.

Group 6.

49.1. Next, we'll build the second scene. Set the base and platform aside. Place a brown 1x8 plate, horizontally, in front of you.

49.2. Place the back row of a dark tan 2x3 plate, horizontally, on the back row of the previous piece so the left sides are even. The front row will overhang.

50. Place the back row of a brown 4x8 plate, horizontally, under the overhanging front row of the previous piece so the left sides are even.

51. Place a dark tan 2x3 plate, horizontally, on the previous piece and in front of the 2x3 plate we placed earlier. Place another in front of the first. The front row of the second piece will overhang.

52.1. Place the front row of a brown 2x2 corner tile, with the corner at the front left, on the back row of the front piece from the previous step so the right sides are even. There will be one free column to the left of this piece.

52.2. Place the right column of a brown 2x2 corner tile, with the corner at the back right, in the back of the left column of the previous piece.

53. Place a brown 1x2 triple slope tile, vertically with the tall side on the right, to the right of the back 2x3 plate. The back side should be even with the back of the scene.

54.1. Place a dark tan 2x2 slope brick, with the slope at the back, to the right of the previous piece.

54.2. Place a brown 1x2 triple slope tile, horizontally with the tall side at the back, in front of the previous piece.

55. Place the back row of a brown 4x8 plate, horizontally, under the overhanging 2x3 plate near the left side of the assembly. The left and right sides should be even.

56. Place the front stud of a white 1x3 plate with rounded ends, vertically, on the back row of the previous piece and to the right of two 2x3 plates. The front should be even with the front of the front 2x3 plate. Place two more to the right of the first. There will be two free columns to the right of the rightmost piece from this step.

57.1. Place a dark brown 1x2 slope brick, vertically with the slope at the back, to the right of the right piece from the previous step so the front sides are even.

57.2. Place another dark brown 1x2 slope brick, vertically with the slope at the front, behind the previous piece. Place another symmetrically behind the first. The last piece will be even with the back side of the scene.

58. Place the right column of a brown 2x2 corner tile, with the corner at the back right, on the previous two pieces. The left stud will attach to a dark tan 2x2 slope brick.

Group 7.

59. Place a light brown spider on the center stud of the center 1x3 plate with rounded ends from step 56.

60.1. Place a brown 2x4 slope brick, horizontally with the slope on the left, on the second and third rows from the front of the scene so there is one free column to the left of it. The studs will be in front of the spider.

60.2. Place a brown 1x2 triple slope tile, horizontally with the tall side at the back, in front of the previous piece so the right sides are even.

61.1.1. Next, we'll build an assembly to hold a clip. Place a light brown 1x2 brick with a hole, horizontally, in front of you.

61.1.2. Push a red 1L pin with a stud, with the stud at the front, from the front into the hole in the previous piece.

61.2. Push the bar of a red 1L bar with a clip, with the fingers of the clip on the left and right and the bar at the back, from the front into the hollow stud of the previous piece.

61.3. Place the assembly, with the clip at the front, on the third row from the front of the scene and to the right of a 2x4 slope brick.

62. Place the front row of a brown 2x2 corner tile, with the corner at the front right, on the 1x2 brick with a hole. The back stud will attach to a 1x2 slope brick.

63. Now we'll place this scene on the base and platform. Place the combined assembly, horizontally with the longest column on the left and extending to the back, in front of you. The recessed side of the platform should be on top. Rotate the second scene 90 degrees clockwise so the front row has nothing on it. Place it, centered horizontally, on the studs on top of the platform so the front side is even with the front of the platform.

64. Place a green 1x2 plate with two studs hanging down from one long side, horizontally with the side studs at the front, on the front row of the second scene so there's one free stud to the left of it. Repeat symmetrically on the right side. There should be three studs between these pieces.

65. Place the right stud of a brown 1x2 curved slope tile, horizontally with the tall side on the right, on the left stud of the left piece from the previous step. Place another symmetrically to the right of the first. Repeat these two pieces symmetrically on the right side. There will be one stud between the middle two pieces from this step.

66.1. There should now be four rows of two side studs on the front side of the combined assembly. Place a green 1x3 plate, upright, on the left studs on the left two rows of side studs so it connects the two rows.

66.2. Place a green 2x3 plate, upright, on the right two rows of side studs so it connects them.

67. Find the two anti-studs that are on the front of the assembly between the two plates you just placed. Place a green 1x1 round plate with three leaves on one side, with the stud at the back and the leaves facing down, on each of these two anti-studs.

Congratulations! Now this build is complete!

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