



Example Outdoor Classroom Project Plan: Construction Instructions for Cardinal Directions Sign

❖ Construction Tools & Supplies for Outdoor Classroom Build Day:

- (1) Hammer (*if you are using nails*) or (1) Drill (*if you are using screws*) to attach planks to 4"x4"
- Shovel to dig hole for 4"x4"
- Bucket & Stick to mix Quikrete & water
- Level to make sure 4"x4" is straight (*not leaning*)
- Compass or Smart Phone to determine N, S, E & W
- Stencil for writing the words on the planks (optional)
- Paint brush(es) for painting sign

❖ Construction Instructions:

1. Purchase supplies and have them on-hand for the Outdoor Classroom Build Day.
2. Dig hole 12-18 inches deep and 6 inches wide where you want to place the 4"x4" post for the sign.
3. Cut the 4" x 4" post to the height you want (*typically no more than 4-6 ft tall*) allowing for 12-18 inches to be underground in the hole.
4. Paint or stain the 4"x4" post along with all of the 2"x6"s.
5. Paint "North", "South", "East" and "West" on four (4) of the 2"x6"s (using a color that will stand out from the color of the 2"x6"s). You may want to use stencils first to layout the words before painting them.
6. Attach the (4) 2"x6"s to the top portion of the 4"x4" post using the brackets. These will be the planks pointing North, South, East & West.
7. *Optional:* Paint the cities' names or other locations' names along with their mileage (*discussed above*) on the other four 2"x6"s and attach them to the 4"x4".
8. Determine which direction is North, South, East & West in your Outdoor Classroom area using a compass. (*Some smart phone compasses require you to move the phone in a "figure 8" to help set the magnetic sensors*). Then place the 4" x 4" post in the hole, making sure that the planks point to the appropriate direction (N, E, S & W). Also use a Level to make sure that the post is straight, not leaning. **Note:** *If the post begins to lean, then support the 4" x 4" post with string and/or 2" x 4"s until the Quikrete dries.*
9. Backfill the hole with dirt or concrete → If concrete, mix a portion of the bag of Quikrete with water (*per the directions on the bag*) in a bucket, and then pour the Quikrete around the post until it is two inches above the surrounding ground so that rain water will not pool in the hole and cause the post to rot. You may need to use a stick to get rid of any bubbles in the Quikrete.

