Play decks provide dry, raised, flat surfaces for multiple activities such as arts and crafts projects, or music and dramatic play performances. Different than regular decks, they are typically free-standing and smaller, standing only six to twelve inches off the ground.
### Highest degree of effort and planning

<table>
<thead>
<tr>
<th>Duration</th>
<th># of People</th>
<th>Required Effort</th>
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<tbody>
<tr>
<td>1 - 2 Days</td>
<td>2 - 4</td>
<td>Highest degree of effort and planning</td>
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### Materials

**For the posts:**
- Treated or sealed 4 x 4’s (actual 3.5” x 3.5”), cut into 24” lengths
- 60lb. bags of fast setting concrete mix, 1 per post

**For the beams and joists:**
- Treated or sealed 2 x 6’s (actual 1.5” x 5.5”) lumber boards
- 2 x 6 Galvanized joist hangers, 2 per joist

**For the decking:**
- Treated or sealed 2 x 4’s (actual 1.5” x 3.5”) or 2 x 6’s (actual 1.5” x 5.5”) lumber boards

**Fasteners:**
- 3”, #10 coarse thread wood screws for outdoor use
- Galvanized steel exterior joist hanger nails (116 per box, 4 needed per hanger)

**Miscellaneous:**
- Sand paper (80 - 100 grit)
- Access to power
- Access to water
- Non-toxic, water-based wood sealant
  OR Non-toxic, durable outdoor paint

- (Optional) Lattice sides
- (Optional) Storage
- (Optional) Shading device for full or semi-cover
- (Optional) Seating such as a bench
Implementation Steps

1. **Determine the desired location and dimensions of deck including the height, length, and width**

2. **Gather materials**

3. **Layout post locations**
   - Mark the post locations with marking paint.
   - Make sure that posts are spaced no farther than 6’ on center.

4. **Cut posts to 24” lengths**
   - Cut the 4 x 4’s at 24” lengths.

5. **Dig holes at 18” deep, 8” diameter**
   - To make for an easier time when faced with very hard, compacted ground, try loosening it with a rock bar or pick mattock, and removing the loose soil with the shovel or post-hole digger.

6. **Set posts**
   - Use the fast setting concrete mix to set posts, double checking spacing and verticality. Leave 6” of each post above grade.

7. **Allow a couple of hours for the concrete to set before fastening beams and joists.**

8. **Attach 2 x 6 beams to posts**
   - Use a level to ensure proper placement.

9. **Hang additional joists between beams**
   - Joists should be spaced no more than 16” apart.

10. **Attach galvanized joist hangers**
    - Fasten with the galvanized exterior joist hanger nails.

11. **Cut and attach decking**
    - Be sure to countersink screw heads beneath decking surface.

12. **Sand any sharp edges, splinters, or snags**
    - Be sure to round any pointy corners.

13. **Weatherproof or paint**

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**Tools**

- Miter or circular saw
- Extension cords with power strip
- Pencils
- Speed square
- Fence post level
- Measuring tapes
- Spray chalk marking paint
- Sharpshooter and spaded shovels
- Post-hole digger
- Rockbar(s)
- Screw gun/drill with proper screw bits
- Orbital power sanders
- Paint brushes
- Paint rollers
- Paint trays
- Tarps or drop cloth

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11. **(Optional) Attach lattice sides as necessary**

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13. **Weatherproof or paint**
Considerations

• **Call 811 before you dig to locate any buried utilities!**

• Sketching the deck plan ahead of time will help with visualizing the overall process to build, as well as estimating the amount of material needed.

• Typically, performance or activity decks found in an outdoor learning environment are freestanding, and at a 6” height.

• Composite lumber is the most durable decking material, however, it tends to be very expensive.

• For Licensed spaces, if a deck is placed next to an exterior fence that could potentially ‘shorten’ the height of it, **be sure to maintain the 48” minimum height per Licensing requirements.** Compliance can be achieved with attaching lattice or some other permanent barrier to extend the height of the fence where needed.

• If attaching lattice sides, consider leaving the corner posts at their full length/height, to be able to seamlessly attach side panels to the deck.

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Disclaimer

Before installing new play and learning components in your outdoor learning and play space, please check with local regulatory agencies to ensure compliance with health and safety requirements. While the intent is to provide a general resource for reconnecting children to nature, the authors and program sponsor disclaim any liability based upon this information. The National Wildlife Federation (NWF) assumes no responsibility for the design or installation of outdoor components for play and learning. In no event will NWF be liable for any loss or damage including without limitation, indirect or consequential loss or damage incurred during the construction or use of the outdoor learning environment.

For more outdoor project ideas, visit:

www.nwf.org/ECHO

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