



PAINTED PLAY SPACES **PLAYGROUND ASSESSMENT** **AND PLANNING TOOLKIT**



OKLAHOMA
Education

Painted Play Spaces: Playground Assessment and Planning Toolkit

Developed through a partnership with the University of Central Oklahoma for Project SWITCH, this is a Centers for Disease Control and Prevention funded project.

Mission of Painted Play Spaces

The mission of painted play spaces is to enhance the play environments at schools by using colorful paint and stencils to create an array of recess games on existing hardscapes. Painted play spaces increase physical activity and student engagement on school campuses.

Introduction

Physical activity is an essential part of keeping students healthy and active. Research shows that physical activity helps students mentally decompress and refocus once they reenter the classroom. Also through play, students develop communication and social skills, both vital parts of education.

This toolkit has been designed to assist schools with implementing painted play spaces on school campuses. There are three phases to implementing painted play spaces: design phase, preparation phase and implementation phase. This toolkit supports schools with the design and preparation phases of implementing painted play spaces. The implementation phase is supported by *Painted Play Spaces: Playbook of Recess Games*, which provides the descriptions, directions and rules for recess games outlined in this document.

Guidance for the design phase includes instructions for the design layout of the selected space(s) and steps for ensuring the area is safe for students. The toolkit also provides a proposed timeline for organizing and implementing a painted play space.

Checklists for identifying and designing the selected play space is included in this toolkit for support. The “Checklist for Safety Assessment” will help identify suitable play areas with unobstructed views of students and to identify spaces free of hazards. The “Checklist for Design” provides a step-by-step process to determine the layout of the selected space. Following the completion of the provided checklists, it is recommended to proceed with the “Timeline to Organize the Painting Event” to begin the preparation phase. This timeline will assist with ordering and organizing paint and supplies, recruiting volunteers and stencil usage. The preparation phase and the following timeline is critical for successful project completion.



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Design Phase

Checklist for Safety Assessment

Safety is a priority when planning for a painted play space. Creating a safe play environment is an essential aspect for children's development, learning, and engagement levels. Use the questions on the checklist to identify suitable play areas to enable active supervision, identify spaces free of hazards, organize the equipment and play space to ensure social distancing, and examine possible accommodations.

- Do the adults monitoring the play space have unobstructed views of all students?
- Are there any areas or hazards that need to be addressed or avoided?
- Can students maintain social distancing protocols when playing or waiting?
- Could an alternate recess schedule limit the numbers of students enabling higher participation in the games?
- Could the play space be divided into zones?
- If so, could each zone have painted games on the blacktop or sidewalks that require no or limited equipment?
- If zones were utilized, would students be assigned to play zones, or could a rotation be developed after a certain amount of play time?
- Could rotation and line-up procedures be practiced to ensure social distancing?
- Is the play area's surface safe and clean of debris?
- Can students engage in physical, sensory and social play?
- Can everyone easily maneuver through the play area?
- Can children who use mobility devices move to and from the activities?
- Does the activity provide enough challenge for students?
- How is the equipment grouped or limited?
- Is social distancing possible?
- Is there shade?
- Is there a path around the play space for children who get overwhelmed to get oriented?

Checklist for Design

The checklist will provide detailed guidance for the layout of the selected play space and support the organization of the painting event. The information gathered with the checklist will be beneficial in formulating a scaled plan. This process will require some basic mathematic skills and some simple tools to complete the tasks.

- Develop a site plan by measuring the selected space to make a scaled drawing.
- Determine how many recess games the play space will accommodate.
 - Write down the dimensions of the perimeter and all markings already in use (i.e., basketball court).



- Decide how to make the scaled drawing of the identified play space. This can be accomplished by hand or through the use of the Digital Playground Layout Tool.
- If you choose to create a digital playground layout, obtain a [Google Maps](#) or [Google Earth](#) screenshot of your play space and use [Desmos](#) to make the picture to scale.
- Select the recess games and determine how many recess games will be incorporated into the play space.
- Create the playground layout by using the Digital Playground Layout Tool or drawing it by hand.

Develop a Sketch

Developing a sketch provides critical information about the size of the identified area, location of existing objects and cardinal directions. Use an aerial view when making the sketch, record the dimensions (i.e. perimeter), and include all markings already in use (i.e. basketball court). After creating the sketch, use the measurements on the site plan to determine the scale factor of the play space(s).

Refer to Figure 1 below.

Equipment:

- Measurement tools (measuring tape, measurement wheel, etc.)
- Visual observation of the playground, courts and/or sidewalks
- Paper and pencil

Steps:

1. Choose a suitable play area for the games. Consider the physical size of the area, slope of the ground, location of utilities (e.g., poles, meters), site drainage, site access, trees and vegetation.
2. Establish the approximate boundaries of the proposed play space.
3. On the paper, sketch the boundary lines, existing courts/game markings, and any obstacles.
4. Measure and label your sketch with the measurements around the area's boundary. Measure additional courts, game markings, or obstacles and label them on your sketch.



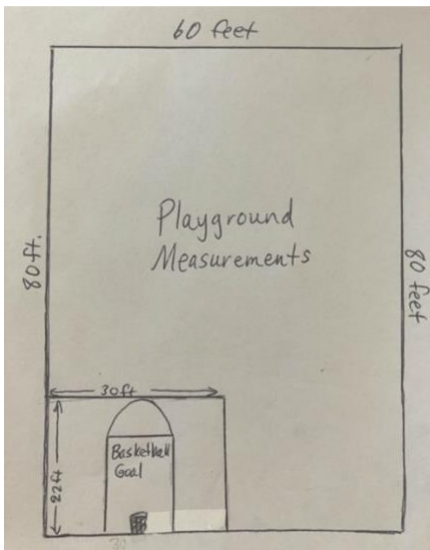


Figure 1: Sketch of Playground with Measurements

Prepare a Scale Drawing

The purpose for creating a scale drawing in this project is to reduce the size of the play space to fit on paper through a scale ratio.

The change in size between the play space and the scale drawing is represented by a ratio, such as 2:1. This example ration would represent 2 feet on the actual play space to 1 square on grid paper.

Option #1: Digitally

Go to [Digital Playground Layout Toolkit](#)

Option #2: By Hand

Equipment Needed:

- Sketch from “Measuring the Playground”
- Pencil
- [Grid Paper](#)
- Calculator
- Ruler

Steps:

1. Mark north on the site plan.
2. Use a ratio such as 2:1 for the scaled drawing. The stencils in Figure 3: Dimensions Table are relational to this scale ratio.
3. Convert the actual measurements with the ratio. (If the length of the play area is 80 feet, the length represented on the grid paper will be 40 squares.)
4. Draw the play space on the grid paper, starting with the playground perimeter.



5. Add the additional courts, game markings or obstacles.
6. Double check that all lines of the drawn images match the converted scale measurements.
7. Scan the image or snap a picture of the scaled drawing with a phone to make it digital.
8. Insert the image into the [Digital Playground Layout Toolkit](#) and select the activities that you want to incorporate on your playground.
9. Use the measurements in the Figure 3: Dimensions Table below in the “Select the Activities” section to create your playground layout or the pictures of the stencils in the [Digital Playground Layout Toolkit](#).
10. See an example of a hand-drawn playground layout with grid paper in Figure 2 below.



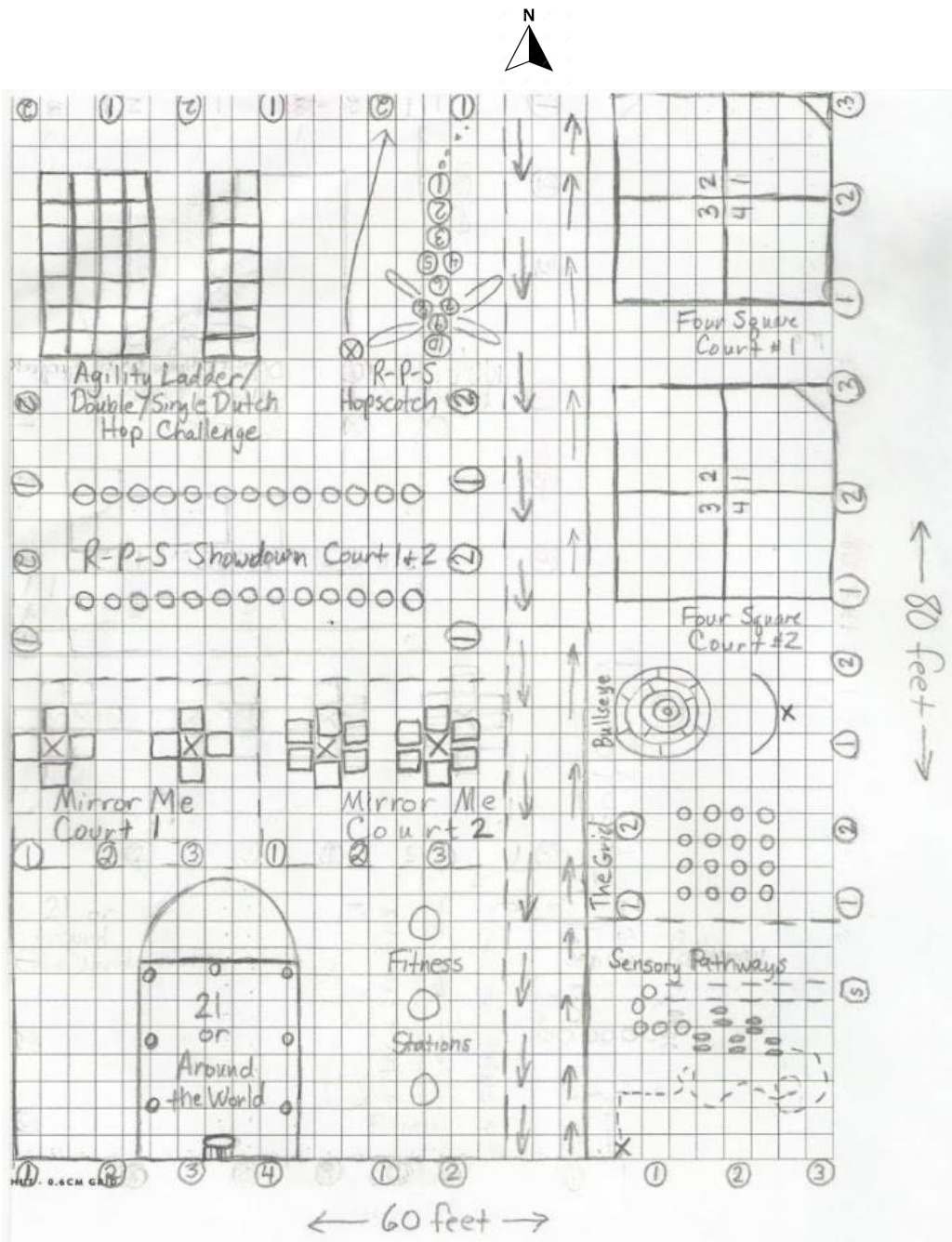


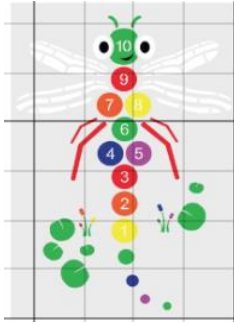
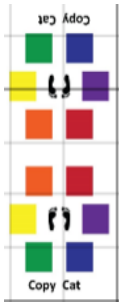

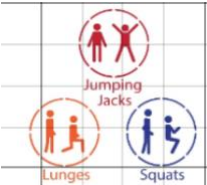
Figure 2: Hand Drawing of Playground Layout with Grid Paper

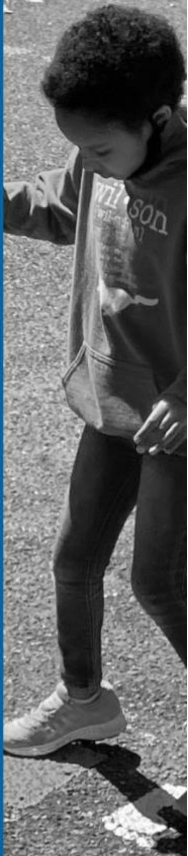
Select the Activities

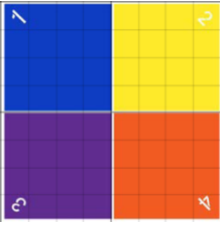

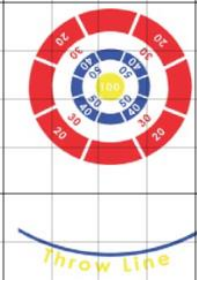
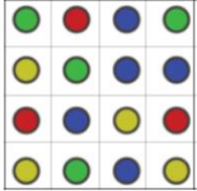

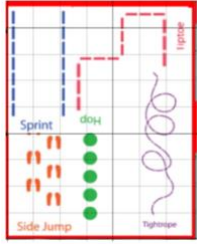
In the table below, find the dimensions for each activity, the estimated paint time, paint colors needed for the stencil and paint square footage to help you order paint for the stencils you are selecting.

Figure 3: Dimensions Table


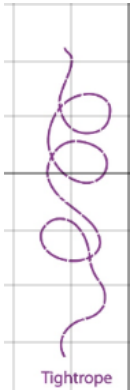





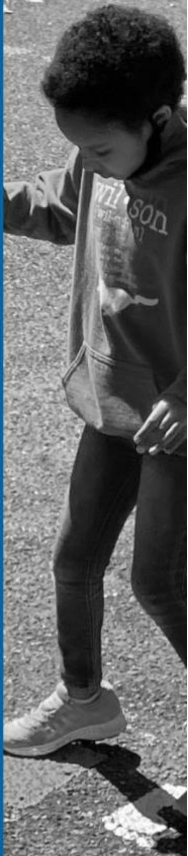
Name of Activity or Stencil	Dimensions	Estimated Paint Time	Colors of Paint Needed	Picture (each grid square = 2 ft.)	Paint Square Footage
Hopscotch	13 feet long x 9 feet wide	1-2 people for 1-2 hours	Minimum 2 and maximum 6 colors		Total= 24 ft 2 <u>3 colors</u> White- 10 ft2 Blue- 8 ft2 Yellow- 6 ft2 <u>6 colors</u> Green = 4 ft2 Red= 4 ft2 Blue= 1 ft2 Yellow= 2 ft2 Orange=2 ft 2 Purple= 1 ft2 White =10 ft 2
Copy Cat	4 feet 5 inches wide x 11 feet long	1-4 people for 1-2 hours	Minimum of 4 colors and maximum of 8 colors		Total = 32-48 square ft depending on many boxes are included Options: 4/6 boxes. Paint feet too.
Fitness Stations #1	Each stencil is 3 feet x 8 inches across	1-2 people for less than one hour	Minimum of 1 color and maximum of 3 colors		Each stencil = 3 square ft
Fitness Stations #2	Each stencil is 3 feet x 8 inches across	1-2 people for less than one hour	Minimum of 1 color and maximum of 3 colors		Each stencil = 3 square ft

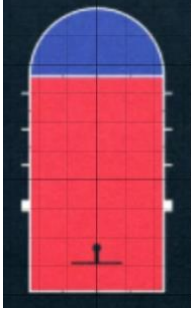
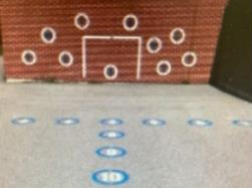



Four Square or T Box Challenge	Each side is 16 feet	2-4 people for 1-2 hours	Minimum of 2 colors and maximum of 4 colors		Total= 256 square feet. Each square= 64 square feet
Agility Ladder or Dutch Jump Challenge	1 foot 8 inches wide, the length can vary	1-2 people for 1-2 hours	Minimum of 2 colors and maximum of 6 colors		Total= 42 square feet. 21 square feet of one color and 21 square feet of another
Bullseye	7 feet in diameter and throwing line is 4 feet from bullseye	1-2 people for 2-4 hours	Minimum of 2 colors and maximum of 3 colors		Total=52 square feet Red= 32 square ft Blue= 16 square ft Yellow =4 square ft
Grid	Each side is 6 feet 8 inches	1-2 people for 2-4 hours	Minimum of 4 colors		16 square feet
Figure 8	7 feet 8 inches x 15 feet 10 inches long	1-2 people for less than one hour	One color needed		24 square ft
Sensory Pathways: Components Below	Varies depending on activities selected	1-2 people for less than one hour per activity	Varies by activities selected		Sensory Pathway: Use calculations of each movement below to calculate the amount of paint for the pathway.



Tiptoe	3 feet 6 inches wide and length can vary (8-14 ft)	1-2 people for less than one hour	One color needed		Tiptoe: (8-14 ft long) = 12 square ft
Tightrope	3 feet 6 inches wide and 15 feet long	1-2 people for less than one hour	One color needed		Tightrope: (15 feet long) 16 square feet
Hop	16 inches wide (each circle is 11.5 inches) and 6 feet long	1-2 people for less than one hour	One color needed		Hop-10 square ft
Side Jump	3 feet 6 inches wide (each print is 11 inches) and 8 feet long	1-2 people for less than one hour	One color needed		Jump-16 square ft
Sprint	3 feet 4 inches wide, length 15-20 ft	1-2 people for less than one hour	One color needed		Sprint (15-20 feet long) 12 square feet



Basketball Court	Regulation Size: Approximately 12 feet by 25 feet.	2-4 people for 1-2 hours	2-3 colors needed		<p>Total 300 square feet.</p> <p>Lane/Key: (red) 200 square feet</p> <p>Top of Key: (Blue) 60 square feet</p> <p>Lines: 40 square feet</p>
Wall Soccer	4 feet wide and 6 feet long (need a wall space)	1-2 people for one hour	2 colors minimum		<p>Total 24 square ft.</p> <p>Wall Targets= 14 square feet</p> <p>Shooting Spots = 10 square ft</p>
R-P-S Showdown	1-foot-wide length varies	1-2 people for one hour	1 color minimum		<p>One square foot for each spot.</p> <p>15 square feet of paint for 15 spots</p>



Preparation Phase

Timeline to Organize the Painting Event

The project timeline below provides a chronological overview for organizing a painting event. Some considerations listed may not be necessary for all projects. It is important to reflect on each component of the provided list to ensure a successful painting event.

2 to 6 Months Prior to the Scheduled Painting Event

- Obtain permission from the principal for this project and discuss the budget of the project. Paint and supplies for one playground typically are around \$1,000.
- Contact [Shana Classen](#), Director of Health and Physical Education at the Oklahoma State Department of Education, to reserve a set of stencils that can be borrowed for your paint day. Stencils can be bought for repeated use.
- Complete the design phase of the project.
- Order the paint from a paint or hardware store. Paint should be suitable for concrete or pavement. Ask about parking lot paint which is typically water-based acrylic.
- Use the “Paint Square Footage” in the table above to calculate how much paint you need to order.
- Obtain or plan to borrow a power washer.

1 Month Prior to the Scheduled Painting Event

- Secure a list of volunteers.
- Buy paint supplies.
 - 3-inch flat and angled paintbrushes
 - 4-inch wire rollers
 - 9-inch wire rollers might be needed for large areas like basketball court.
 - Paint trays
 - Paint tray liners
 - Canvas drop cloths
 - Painters Tape or Duct Tape

1 Week Prior to the Scheduled Painting Event

- Prepare the area to be painted. It must be clean! Paint will not adhere to a dirty surface!
 - Sweep a couple of days before painting.
 - Power wash the area to clear it of all debris.
- Identify a paint station location (consult the principal/custodian) near or at a water source (water key and faucet with a hose).
 - Obtain a water key from the principal.



- Ability to wash paintbrushes.
- Make a sign-in sheet for volunteers.
- Make copies of the play area layout map (created digitally or by hand) and instructions for each stencil you are painting to make it easier on your paint volunteers.
- Assign volunteers to the stencils.
- Obtain milk crates to organize clean and dirty brushes.
- Obtain plastic bags (e.g., shopping bags) to wrap the paintbrushes or rollers in between uses. This will prevent the brushes/rollers from drying out or requiring you to wash out the brushes between uses.
- Take some “before” photographs.

Day of Scheduled Painting Event

- Set up a check-in table with sign-in sheet.
- Set up the paint station before volunteers arrive. Pour all paint at the paint station and use a drop cloth to avoid spills or messes on the playground surfaces.
- Obtain one or two trash cans.
- Turn on water with the key. Use a hose with a spray nozzle to wash out brushes. Consider having volunteers at the paint station to wash out brushes.
- Organize paint containers and open lids (but keep the lid slightly on).
- Organize the clean and dirty brushes.
 - Consider turning a milk crate upside down and place the brushes in the slots.
- When volunteers arrive, provide the “How to Paint the Stencils” instructions that are included below.
- Ask volunteers to sweep the area where the game will be painted on the surface. Brooms need to be available at paint station.
- Manage the process.
 - Ensure that you or one other person is overseeing the entire effort.
 - Always look for areas that need help and assign volunteers to the cleaning station as needed.
 - Provide instructions to volunteers about how to clean up and return supplies at the end of the day.
 - All stencils will need to be washed off and cleaned before volunteers leave. Also, the paintbrushes and roller pads will need to be cleaned or disposed of before volunteers leave. The lids of the paint will need to be secure.
- When the day is complete, take some “after” photographs.



How to Paint the Stencils

The following suggestions were generated to make painting with stencils as easy as possible.

- Get the necessary paint and paintbrushes from the paint station and stencil(s) for your assigned game.
- Carry the supplies to the assigned area according to the play area layout map.
- Double-check to make sure the surface is clean! Paint will not adhere to a dirty surface! May need to get a broom from the paint station.
- Lay the stencil(s) down in the play area and use the correct paint colors for the game's design.
- Use one brush for each color. Place the paintbrush in a plastic bag after use so it doesn't dry out.
- Remember, less paint is best. Use dabbing action with the paint brush to get the paint into the creases and crevices.
- Touch up any areas that didn't get full coverage of paint after 15-30 minutes after first coat.
- After painting, move the stencil very carefully by picking up all four corners to avoid dragging the stencil through the damp paint.
- At the end of the day, take all stencils, paint and all supplies back to paint station.
- All stencils will need to be washed off and cleaned before volunteers leave.
- All paintbrushes and roller pads will need to be cleaned or disposed of before volunteers leave.
- The paint cans need the lids to be secure.

