# SUMMER SIDEWALK CHALK: RECIPE & ACTIVITIES

Sidewalk chalk is one of the surest signs of warm weather fun and one of our favorite open-ended materials for play. We've tested out a recipe for making chalk at home (in case you have a hard time getting some) and come up with some ideas for play at home. We recommend these activities for children ages two years and up.



Homemade sidewalk chalk work just like store bought chalk! It's easy and simple to make at home.

#### **SUPPLIES**

- Old mixing bowl
- A whisk or fork for mixing
- A spatula to scrape out the bowl
- 1 cup of plaster of Paris
- ½ cup of lukewarm water
- 2-3 tablespoons of acrylic paint
- Ice cube tray, muffin tin, or baking/candy mold
- Optional: face mask to keep from breathing in plaster dust





Using a baking or candy mold means you can make chalk in fun shapes, like these bunnies!

### **ACCESSIBILITY NOTES**

For younger children, or those with issues gripping things, try using larger molds to create chalk in shapes that may be easier to hold and manipulate. We recommend looking for silicone molds used to shape candies and baked goods.

If you have any breathing or lung issues, make sure to wear a mask while working with dry plaster of Paris.

### **HOW TO MAKE CHALK**

Begin by measuring out 1 cup of plaster of Paris. Work slowly and carefully with the powdered plaster or Paris to keep from getting dust in the air. If you have breathing issues, you may want to wear a face mask for extra protection. Add the plaster of Paris to ½ cup of lukewarm water and use a whisk to blend it all together.

Once it's the consistency of pancake batter, you're ready to add in your paint to color the chalk. Before adding the paint, get your mold and spatula ready because the plaster will begin to get harder to work with once you add the paint. The more paint you add, the brighter and more intense the color of the finished chalk will be. Use the spatula to distribute the paint evenly in the plaster mixture and pour/scrape it into the molds. Gently shake and tap the molds to release air bubbles.

Leave the chalk to dry for 12-24 hour; the chalk will take longer to set in higher humidity weather. Once dry, tap your mold and flex it to loosen the chalk and enjoy your new homemade art materials!



Our friend drew what they think is below the sidewalk. What do you think might be going on underground?

# SIDEWALK CHALK X-RAY

We spend a lot of time on concrete in the city, whether we're biking, walking, or playing—even our homes are on top of concrete foundations. But what's going on under the concrete? Pick a section of concrete and draw a square around it- this is our X-Ray window! Use your imagination to think about what's going on underground. You can choose to go realistic (pipes, tree roots, worms), or more fantastical (dinosaur fossils, precious gemstones, secret tunnels). Draw what you imagine to create a window to the underground world!



Our friends are tracing poses. Does their shadow look like you thought it would?

## SHADOW TRACING

On a sunny day, go out to look for shadows on the sidewalk, and trace their outlines! You can trace shadows cast by tree branches and buildings—to see how they move over the course of a day, write down the time next to your tracing, and come back to check on it later!

You can also trace other people's shadows in silly poses! Part of why shadows are so interesting is their distortion, or the way their shape differs depending on the angle of light. Therefore, shadow tracings look much different than tracing a person laying on the sidewalk. Is your shadow taller than you, or a different shape than you'd imagine? Give your shadow self some clothing, add colors and patterns, or a silly face!

### LIFE-SIZE CHALK PLANTS

One of the best parts about seeing plants at the Conservatory is experiencing them in relation to our own bodies. We can feel their leaves and compare

them to our skin; we can smell their flowers and compare them to our own smells.

When we aren't experiencing plants in person it can be hard to appreciate their size! It can be hard to imagine the height of our tallest palms, or the length of our biggest banana leaves, or the size of our tiniest flowers, without comparing them to our own bodies and perspectives. This activity can help us wrap our heads around the diversity of the plant world, through sidewalk chalk!

To start, choose a plant from our list (or from your memory) and make a starting point. Work together with a ruler, tape measurer, or other tool to measure the full length, and then make a mark at the other end. Draw a line to connect the two points. Next, you can draw the plant at its real size using the line you made for guidance!

If you want to help build comparison skills, challenge each other to measure these plants in a different way. For example, a fern tree may be 15 teddy bears tall, or 3 hot dogs wide! You can draw these measurements next to the plants. You can also use your own body as a measuring tool! Trace each other, or draw yourselves, to see how many you's can be stacked up to reach the top of a tall plant!

Here are some plants and their measurements:

Maya the Century Plant! Agave americana

• When Maya flowered, the stalk was 38 feet!

Corpse Flower, Amorphophallus titanum

- This plant normally lives in the back greenhouses at the Conservatory until it blooms. When blooming, just the flower of the plant can be 8 feet tall!
- This is the largest unbranched flower structure in the world! It's also one of the smelliest, with a smell like rotting meat that attracts its fly pollinators from miles around.

Painted Bamboo, Bambusa vulgaris

- This one might be too long for the sidewalk you're drawing on—it can grow 50 feet tall!
- Bamboos are some of the fastest growing land plants in the world. There are some species capable of growing 36 inches in just one day!

Venus Flytrap, Dionaea muscipula

 Although these plants have a big personality, they only grow a few inches tall, and the biggest (natural) trap leaves are just 1 inch long!

Mimosa or Powder Puff Tree, Albizia julibrissin

- These trees grow up to 25 feet tall in the wild, but the ones in Show House are about 10 feet tall.
- This tree has striking and distinctive flowers that look like small puff balls. They bear a striking resemblance to the Truffula Trees in Dr. Suess's classic book "The Lorax."



Using a tape measure helped our friends draw their sidewalk Powder Puff Tree! Which Conservatory plant do you want to draw?

# SIDEWALK PLANT CHEERLEADER

Not all plants need a cozy greenhouse to grow—some plants are tough enough to sprout up just about anywhere! Have you ever noticed plants

growing through cracks in the sidewalk? This is a very hard place to grow, with shallow soil, hot sun, and people always stepping on them! These tough plants need some encouragement now and then.

Take your sidewalk chalk and add extra roots, leaves, and flowers to cheer them on! Try drawing your own made-up sidewalk plants to give them company as well. Can you draw a whole sidewalk chalk garden?

Some sidewalk species you may see in Chicago are dandelions (Taraxacum officinale), purslane (Portulaca oleracea), chickweed (Stellaria media), and pigweed (Chenopodium album). Most of these plants are usually considered "weeds". However, most weeds are just plants growing in a different



Plants like dandelions and purslane can grow in sidewalk cracks because they're resilient—that means that they are good at surviving even in challenging conditions.

place than people say they should! Some weeds can be harmful because they are not from Illinois and are competing with our native species (plants that are from Illinois) for nutrients, light, and water.

These weedy plants are still pretty cool! Dandelions and chickweed are used in herbal tea remedies. Purslane is pretty delicious, and archaeobotanists (scientists who investigate ancient plants) have found evidence of humans cultivating and eating this plant at least 2,400 years ago! Pigweed, though not edible itself, is part of the same family as quinoa and amaranth, which are important food crops around the world. Although you should not harvest or eat plants found on sidewalks or near roads, it's important to remember that these plants are more than just "weeds", and they can be just as fascinating as other plants in our neighborhoods.

#### QUESTIONS TO PONDER

- What textures do you notice when you're drawing with chalk? What sounds and smells do you notice?
- What other things can you think of to do with your chalk inspired by the plants you see around you?
- How does the chalk feel when it's in your hand?
   What about when it's on the ground?
- What happens if you add water to your chalk drawings?



Using sidewalk chalk is a great way to explore your world while you decorate it at the same time.

#### SHARE YOUR EXPERIENCE!

Post about your adventures and tag us at @gpconservatory or use the hashtag "#GPCatHome"! This work is supported in part by a grant from PNC Foundation.

