#### Leave the Imprints of the Autumn Plants



At the beginning of the activity, I gathered the children together and I asked them, "Fall is coming, and there are many interesting plants falling on the ground; have you noticed them? Have you ever contemplated the hidden textures within the plants? Today we are going to show them off by stamping."

I had the children go and pick up some of their favorite plants, then the children gathered in the activity area and put together a collection of fall plants that they had picked up in a variety of shapes, including leaves, pine cones, twigs, and pine needles, to name a few.

I picked up a leaf and asked the children, "Have you ever looked closely at the shape and texture of leaves? What are their edges, their leaf veins like?"

Torvi responded immediately, "The leaves have so many lines, like paths."

Olive added, "Some of the leaves have sharp edges and some are rounded."

Emily said, "The lines are like little rivers."

Nature's Imprir

Nova added, "Yes, lots of little rivers."

Next, I showed two ways of stamping plant veins. "In the first way, we can apply paint to the leaves or pine cones and then stamp them onto the paper so that the plant's grain will be clearly stamped." As I explained and demonstrated, I used a brush to gently apply the paint to one side of the leaf and then stamped the leaf onto white paper, which was uncovered, and the children saw that the grain of the leaf was clearly visible.

"The second way, we can put the leaf under the paper and then gently rub the pencil back and forth on the paper; you will see the texture of the plant slowly emerge." I placed a leaf under the paper and demonstrated how to gently rub a pencil across the paper, and the children were amazed to see the veins of the leaf emerge.

The children were intrigued and expressed their anticipation.

Maevis can't wait: "I want to try stamping leaves!"

Olive expresses amazement at the stamping: "I want to try them all, especially the pencil stamping where you can see the texture!"









The children began to actively participate in the creation process, and each one chose their favorite way to do it. Maevis began by trying to make a stamp with pinecone. She placed the pinecone underneath the paper and gently rubbed a pencil across the surface of the paper, but the texture wouldn't show up because the surface of the pinecone was too rough and bumpy. She was a little confused, so I walked over to her and asked, "Maevis, the pinecone doesn't look very good for developing; why do you think it doesn't develop well?"

Maevis frowned in thought and said, "It's too big for me to press it well and rub its texture on the paper."

I nodded my head in response, "Yes, the surface of the pinecone is too irregular, so it doesn't develop well. You could try stamping it on paper though; it might make interesting shapes!"



Olive and Nova, on the other hand, started to innovate, and they came up with a new idea: "We can put the leaf on the paper and then paint around the leaf so that it leaves the shape of the leaf!" They carefully applied the paint around the leaf, and when they took it away, the paper did leave a clear outline of the leaf.

Then Olive added, "We can also paint the leaf and stamp it in this outline."

Seeing their innovation, I encouraged, "You guys are so smart! This way you not only have the shape of the leaf, but you can also see its texture."



I saw that many children were beginning to develop plants on paper, so I began to discuss the textures and shapes of plants with the children to help them connect their creations to their knowledge of nature. Seeing Maevis' failed punch stamps, I asked the children, "Why do you think some plants are good for punching and others aren't?"

Coa answered, "Because the leaves are flat and easy to top out."

Emmett then added, "Pine cones don't work because they stick out too much."

I explained further, "Yes, smooth plants, like leaves, have surface textures that are easier to stamp out. And like pine cones and pine needles, they don't have a flat surface, and the texture of the stamp is not as distinct. You can try to see which plants have the clearest texture."



The children began to select plants more carefully and experiment with different materials. Olive dipped a twig into the paint and dabbed it on the paper. She also tried unsuccessfully to punch the leaves with a brush. Seeing her keep trying, I guided her to think, "Olive, why do you think the brush can't punch the leaves?"



Olive thought carefully, "I think it might be because the bristles of the brush are too soft to flatten the leaves."

I nodded my head. "Makes perfect sense! Developing requires a hard object to press the paper tightly so you can see the grain."

Nova added, "I think the imprint of the brush was too big, and the grain of the plant was brushed away."



Emmett found a special plant, the pine flower, and was so intrigued by the unique shape that he used it to make a stamp. Although the pine flower is not as smooth as a leaf, he still got an interesting shape imprint by pressing it.



I encouraged him by saying, "Emmett, the shape of the pinecone you found is unique in that it doesn't have a vein like a leaf but leaves its own shape."

Emmett: "It looks like a caterpillar crawling through it."





star-like edges!"





veins."



Me: "These fine lines are leaf



Torvi and Coa discussed their findings: "Some of the leaves had unclear veins, but the shape was nice." Coa added, "Yes, the leaves have the best veins, and you can see a lot of fine lines."

Me: "Do you know why tree leaves can grow to be big? It's all because of those leaf veins. Remember what we discussed earlier about what plants need to grow?"

Lots of kids say together, "Water, sunlight, and fertilizer!"

Me: "When the tree gets nutrients, these leaf veins transfer the nutrients to the leaves."

Nova stretched out her arm and said, "These veins look like our veins."

Me: "That's a very good analogy! Our blood vessels function the same way as leaf veins."





Each of the children enjoyed the process of plant stamping, and I asked the children, "What did you all think was the most interesting thing about today's plant stamping?"

Emmett replied, "I think the pine flower stamping came out really special; it doesn't have a lot of fine lines like the leaves."

Coa: "It's easier to color with the leaves rubbing against the paint tray."

Nova: "I like seeing the leaf shapes and textures together!"

Maevis: "Pine cones are hard to stamp."

Emily: "When I put the leaves under the paper and then copy them on the paper, the shapes come out. Like magic."

Me: "We had a lot of fun today creating artwork through different plants, and we all discovered the different textures and shapes of plants. Fall brings us many gifts of nature, and we can not only observe them but also leave their mark through our artwork."





# what It Means

——*Children developed in many ways through observation, hands-on practice, discussion, and reflection.* 



#### Development of Perception and Observation **Skills**

At the beginning of the activity, I guided the children to carefully observe the shapes and textures of plants by asking the question, "Have you ever carefully observed the shapes and textures of leaves?" The children carefully observed the different features of the plant through direct visual perception and tactile experience. For example, Torvi noticed that the leaf veins looked like paths, Olive observed the different shapes of the edges of the leaves, and Emily associated the leaf veins with being like a small river. These detailed descriptions showed that their perceptual skills were well developed, and they were able to catch details of the appearance of the plants through observation.





#### Cognitive Skills and Reasoning

After the children observed the plants, I guided them to think more deeply through questions. For example, I asked Maevis to reflect on why pine cones were not suitable for stamping after her failed attempts to stamp on them. After comparing the other plants, she thought about it and came to the conclusion that "the pine cone is too big and the surface is not flat." This reflects her causal reasoning process through hands-on manipulation. In discussions with other children, such as "Why are some plants suitable for stamping and others not?" children gradually understood how the smoothness of the surface of plants affects the effect of stamping through repeated practice and discussion, which developed their logical thinking and analytical skills.



### • Development of Creativity and Problem Solving Skills

The children showed a great deal of creativity in their work. For example, the method of applying paint around the leaves and then stamping them to create a double layer effect, as well as experimenting with different tools to develop different plants. This not only demonstrated their creativity but also their spirit of exploration in artistic expression. During the process, I kept encouraging them to try new methods and gave them positive feedback, which promoted the further development of their creative thinking. When the children encountered challenges when trying different stamping methods, for example, Maevis found that the pine cones could not be stamped, Olive found that the brush could not stamp the leaves, and Coa and Torvi discussed the unclear texture of the tree branches, etc., I guided them to think about the causes of the problems by asking questions and encouraging them to solve the problems by adjusting the materials and methods. In this process, the children learned how to face the problems and find new solutions, enhancing their independent learning and problem-solving skills.

#### Development of Language Expression and Social Skills

During the activity, I guided the children to express their observations and ideas verbally through questions and discussions. When discussing the texture of plants, children used metaphors such as "like a path" and "like a river" to describe leaf veins, which not only helped them to better express their observations but also strengthened their language skills. "These veins are like our veins" was a very creative expression that showed her abstract thinking and language skills by drawing analogies between plants and body structures through language. In addition to my interactions with the children, they were also collaborating and discussing with each other. For example, Olive and Nova worked together to innovatively use paint to make a double layer of leaf imprints, while Torvi and Coa discussed branch and leaf textures. These collaborative interactions fostered the development of their social skills. They learned how to share their findings with others and how to be inspired by others' perspectives, further deepening their understanding of the activity.

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#### • Development of Hands-on Skills and Fine Motor

By stamping and copying plant textures, children got their hands on tools such as paints, brushes, and pencils, which helped them develop fine motor skills. For example, Maevis experimented with stamping pine cones with a pencil, Olive dipped a twig in paint and dotted it on the paper, Emily meticulously traced the textures on the leaves with a pencil, and Torvi and Coa painted all over the leaves to make sure the veins were clearly imprinted on the paper they were drawing on. These activities not only improved their hand-eye coordination but also honed their concentration and meticulousness through art creation.





## • Exploration and Understanding of Scientific Knowledge

During the activity, I helped the children connect their artwork to the science of plants. When the children observed the texture of the leaf veins, I guided them to recall the previously discussed conditions required for plant growth and further explained that the veins are responsible for transferring water and nutrients to the leaves. I also drew an analogy with the children to the function of blood vessels in humans. In this way, the children not only experienced the beauty of the structure of plants in a hands-on way but also deepened their understanding of the function and physiological structure of plants.





#### • Experience of Emotion and Fulfillment

Throughout the activity, children continued to experience success and the joy of exploration through creation, observation, and discussion. Whether it was Emmett's discovery of the unique shape of a pine flower or Torvi's stamping of star-like leaf outlines, the children gained a sense of accomplishment in every successful attempt. This positive emotional experience not only enhanced their interest in exploring nature but also fostered their self-confidence in creating art.

