

From the Kodo Classroom



Outdoor STEM Ideas: Empty Frames

One of our favorite preschool STEM activities includes this investigation with empty frames. Will your children create works of art, or portals to another world?

For this activity, you'll want to have a lot of these materials available! This outdoor preschool STEM activity relies on using collections of natural materials such as flowers, leaves, twigs, bark, rocks, grasses, and so forth from your outdoor space.

This preschool STEM activity builds on the assumption that you have collections of natural materials available to children, or that you are amenable to them picking flowers and collecting leaves, twigs, bark, rocks, grasses, and so forth from your outdoor classrooms and gardens. For this activity, you'll want to have a lot of these materials available! Variety of color, texture, smell, shape, and size are very important. If you are the one to do the collecting, or are leading children in a collection activity, keep in mind that these materials should include those that activate all the senses.

Provide a basket or bin full of empty picture frames in your outdoor classroom. Be sure to have all glass removed. What else do you have that children could use to “frame” their ideas? Think about size and scale - mason jar rings, horseshoes, hoola hoops, and lattice are super ideas!

Tip: Sometimes frame shops make mistakes and give away frames that are measured incorrectly – Go get ‘em!

Place containers full of the collected natural materials in the same space. Some children may benefit from having a simple provocation waiting for them. A single frame placed on the ground or work surface with a few petals or leaves arranged beautifully within its walls is one way to provide a *visual* rather than *verbal* cue. Whenever we do this with a program, we notice that the frames are most often used for creating nature collages and compositions, and are often used to sort and classify materials. Occasionally we see the frames incorporated as doors and windows in tree-limb block construction, which we love! You'll be able to gage how best to access children's interests and identify the STEM based concepts in play.

Things to look for: arrangement of materials by color, size, and shape. Children's understanding of other material properties such as weight, flexibility, stackability, and rigidity, for example. Look for the inventive or unusual ways children use the frames or materials, or ways you may not have anticipated. Then look deeper, ask yourself what caused them to do that, what do they know about the material, and also ask, are they applying knowledge they have to a new situation. Listen for the ways children describe and identify materials. Record their vocabulary, stories, and conversations to further inform your future preschool activities.

Like this idea? Took some great pictures of your children enjoying this activity? Share them with us on social media, or at info@kodokids.com!