

## Cooperative Sensory Play

When children work together in pairs to fill the [Kodo Grinding Table](#) grinders and grind the grains into flour, they are naturally given reason to communicate, negotiate and appreciate one another. We find that without much adult prompting, children take turns and share the responsibilities of scooping grain, filling the grinder cup and turning the handle to grind. There is, in a word, *joy*, within this type of play. Parents, educators and therapists have long known that sensory experiences can support harmony. When children work together at the grinding table we find the play to be harmonious and satisfying.

Invite children to transfer the ground flour substance to your sensory table for additional play. This will require that the children produce a great deal of flour and is a terrific way for everyone to take a turn and make a contribution. We think that using the dry material is a nice alternative for children who might want or need a sensory experience but don't like wet or gloppy substances.

Even using a dust brush and dust pan gets children involved indirectly, helping to build a sense of community participation. The metal pails are easily removed which allow the children to carry and empty them. When the work is finished the metal bowl and scoops can be rinsed off or wiped out with a damp cloth. We're sure you have several children who love to do these kinds of important jobs when caring for the classroom space.

### **Transformation, Math and Science:**

As small grains are made into flour we can easily describe the process as transformation. This type of play lends itself to preschool science, cooking and math curriculum. Adults may wish to support children's inquiry about this process by incorporating similar tools/experiences to the area. For instance, a mortar and pestle or metate could be added nearby so that children might discover the similarities and differences between these various tools and processes. Grain pounded in a metate will differ slightly from that ground in the grinder. Invite speculation and help the children record their findings.

Baking projects are a natural extension of making flour. With baking, children have hands-on experiences with measurement, volume, consistency, temperature, leavening, chemistry, taste and smell.

## Questions to pose:

- How many scoops of grain would it take to fill the bowl?
- What if we used a different grain? Would we need the same number of scoops? or more? or less? Why?
- What happens inside the grinder? We can't see inside it, but we could draw what we think happens.
- How much flour comes out with only one turn of the handle? Two? What will we use to measure it?
- What other machines or devices work like a grinder?
- How is a pedal like a handle?
- Where does grain come from?
- Can we grow our own grain?
- What happens when we mix the grain with water or other substances?
- What kinds of foods are made from grains?

## More To Do:

Consider using the [Grinding Table](#) for other experiences.

- Remove the grinders and use the table for other sensory play or mixing experiences.
- Old fashioned Apple Peelers fit nicely on the grinding table and must, of course, be used with adult supervision.
- The Grinding Table can function as a snack station - fill the center bowl with fruit and the pails with napkins or utensils.

There is something very satisfying for a child when they feel in control, are trusted to use equipment that feels “grown-up” and have options for experiencing the natural world. Kodo's Grinding Table is sure to become a well-used and loved addition to your classroom, giving children just the right balance of freedom and responsibility, encouraging them to share and work together.

## **Children's Books:**

*Bread, Bread, Bread* by Ann Morris

*Bread Comes To Life: A Garden Of Wheat* by George Levenson

*See Inside How Things Work* by Conrad Mason

*Mr. Santizo's Tasty Treats* by Alice Flanagan

*Everybody Bakes Bread* by Norah Thornton Dooley

*Grains To Bread* by Inez Snyder

# From the Kodo Classroom

## Let's Bake:

The *No Knead Bread Recipe* is adapted from Mark Bittman of NY Times who got it from Sullivan Street Bakery. When the recipe first came out, it was the blogging community who took the bread to new heights, especially Rose Levy Beranbaum, author of *The Bread Bible*.

### Ingredients:

3 cups bread flour

1/4 teaspoon instant yeast

1 teaspoon fine table salt (or 3/4 tablespoon of kosher salt)

1 1/2 cups warm water

Covered pot (five-quart or larger cast iron, Pyrex, ceramic, enamel...something that can go into a 450F oven.)

### Directions:

1. Mix dough: The night before, combine all ingredients in a big bowl with a wooden spoon until the dough just comes together. It will be a shaggy, doughy mess. Cover with plastic wrap and let sit 12-20 hours on countertop.
2. Shape & preheat: The dough will now be wet, sticky and bubbly. With a wet spatula, dump the dough on a floured surface. Fold ends of dough over a few times with the spatula and nudge it into a ball shape. You can use your hands if you like, just keep your hands wet so that the dough does not stick. Place a large sheet of parchment paper on counter. Plop your dough onto parchment paper. Lift parchment paper up with dough and place into a large bowl. Cover bowl with a towel. Let it nap for 2 hours. When you've got about a half hour left, slip your covered pot into the oven and preheat to 450F.
3. Bake: Your dough should have doubled in size. Remove pot from oven. Grab the ends of the parchment paper and lift entire wobbly dough blob out of bowl into pot. Doesn't matter which way it lands. Shake to even dough out. Cover. Bake 30 minutes. Uncover, bake another 15-20 minutes or until the crust is beautifully golden and middle of loaf is 210F. Remove and let cool on wired rack. If not eating right away, you can re-crisp crust in 350F oven for 10 minutes. Best way to eat it? Smear a warm slice with some good butter (Kerrygold and Lurpac are both found in your grocery stores, usually on top shelf)

Like this idea? Did you take some great pictures of your children enjoying the [Kodo Grinding Table](#) activity? Share them with us on social media, or at [info@kodokids.com](mailto:info@kodokids.com)!