Using Different Corn Products

Here are some corny recipes to use in the classroom! These recipes are good to use for math measuring units, science investigations, and art projects. So enjoy them and learn about corn products and their many uses!

Cornstarch Putty

Materials:

- $1\frac{1}{2}$ cup cornstarch
- 2 cups water
- 1 cup salt
- ½ cup flour
- 2 tsp cream of tarter
- 1 tblsp vegetable oil

Procedure:

Mix all ingredients together in a saucepan. Cook over medium heat, stirring constantly until mixture gathers on stirring spoon and forms dough (6 minutes). Turn onto waxed paper until cool enough to handle, knead to form a ball. Store in covered container or plastic bag. Food coloring may be added.

Biodegradable Plastic from Corn

Worksheet included for use with this recipe

Materials:

Tablespoon

Cornstarch

Paper cup or Plastic bag

Corn Oil

Water

Food Coloring

Procedure:

Place a tablespoon of cornstarch in a paper cup or plastic bag. Add 2 drops of corn oil to the cornstarch. Add a tablespoon of water to oil and cornstarch. Stir. Add 2 drops of food coloring to the mixture and stir.

This is biodegradable plastic. You can:

- Shape it and let it harden.
- 2. Break it down by dissolving it in water.

Corn-A-Goo

Materials:

Cornstarch

Water

Food coloring

Quart-size bowl

Fork

This is a slightly solid, slightly liquid cornstarch creation. Play with it like clay, then watch it become liquid again.

Procedure:

Put 1-cup cornstarch in a quart-size bowl. Add $\frac{1}{4}$ cup plus 1 tablespoon of water. Add a few drops food coloring. Blend mixture with fork. It should flow when you tip the bowl but feel solid when you hit it. If too thick, add a little water; if too runny, add a little cornstarch.

Cornstarch Clay

Materials:

Cornstarch

Baking soda

Cold water

Saucepan

Stove

Damp cloth

Plastic bag

Procedure:

Combine 1-cup cornstarch, $1\frac{1}{2}$ cups baking soda and 1-cup cold water in saucepan. Cook over medium heat until mixture boils and has a clay-like consistency. When cool enough to handle, knead on a cornstarch-dusted surface. Cover with damp cloth. Finish cooling. Form into shapes. Store in a plastic bag in a cool place. Can be baked at 250 degrees for $1\frac{1}{2}$ hours.

Making Chips from Corn

Materials:

Oven

 $3\frac{1}{2}$ cups water

2 tsp butter or margarine

1 cup cornmeal

1 tsp salt

Measuring spoons and cup

Mixing bowl

Vegetable shortening or spray

Spoon

Large cookie sheet

Procedure:

Preheat oven to 450 degrees. Grease cookie sheet. Heat water to boiling. Pour into mixing bowl. Add butter or margarine to water. Stir until melted. Add cornmeal and salt. Stir thoroughly. Drop spoonfuls of mixture (quarter size) onto a greased cookie sheet. Bake until golden brown (13-15 minutes). Makes about 75 chips.

Make Your Own Corn Art

Materials:

Dried corn kernels

Food coloring

Clear jars or large cups (one for each color)

Water

Waxed paper

Thread

Needle

Glue

Poster board or cardboard

Procedure:

Fill jars or cups 2/3 full with water. Add different food colorings to each jar. Color should be more intense. Place several dried kernels in each. Allow kernels to soak for several hours to several days. Amount of color change in kernel will vary with length of time it soaks. (Be careful not to soak kernels too long, or corn will mold.) Pour colored water off. Spread kernels on waxed paper.

To make jewelry or garlands from the colored corn, allow the kernels to dry to the touch, but use them before they lose their pliability. Using needle and thread, string multicolored kernels. Use different lengths of strings for necklaces, bracelets, or garlands. Allow finished strings to dry completely by hanging in a sunny window before using.

To make collages, allow the kernels to dry completely. Glue kernels on poster board or cardboard. Geometric designs work well, or try figure cutouts, such as a turkey for Thanksgiving.