

Materials: Mixing bowl, spoon, rolling pin, circular pizza pan, glue, red food coloring, paint brush

Crust Ingredients: 2 cups flour, 2 cups salt, $\frac{3}{4}$ cup water (mix together)

Toppings: Small waste items in these categories – separate into containers:

Paper (various types), yard waste (grass, leaves, branches), textiles, rubber, leather, plastics (variety), metals, wood, food wastes (packaging to represent or fake food), glass (marbles), non-classified (crayons, candles, asphalt, wallboard, etc.)



Objectives: Students will construct a pizza that represents the percentage of materials thrown away in our garbage each day. Students will describe the composition of the waste stream, identify items within each category and the amount of the total waste stream each component comprises.

Procedures:

1. Ask the students to define the words garbage and trash. Garbage refers to only the organic or food waste thrown away. Trash represents broken, discarded or things that no one wants anymore. Have the students list on the board all of the waste items thrown away at home and school, using the categories listed above.
2. Draw a circle on the board. Ask the students to pretend that all of the waste thrown away from households in the SWANCC Region will fit into the circle. Using the “Chart” as your guide, discuss how much paper is thrown away by drawing a “slice” for paper. Repeat for all of the other categories. Emphasize the fact that paper is the largest piece of the pie means that there is more paper in our waste stream than any other item, next, etc. Ask the students why it might be important to know the amount and kinds of waste is thrown away. By knowing what kinds of waste and the amount of each kind generated by households, communities can better plan program to reduce the amount of waste thrown away.
3. Instruct the students that they are going to make a pizza using both garbage and trash. Collect items before activity begins.

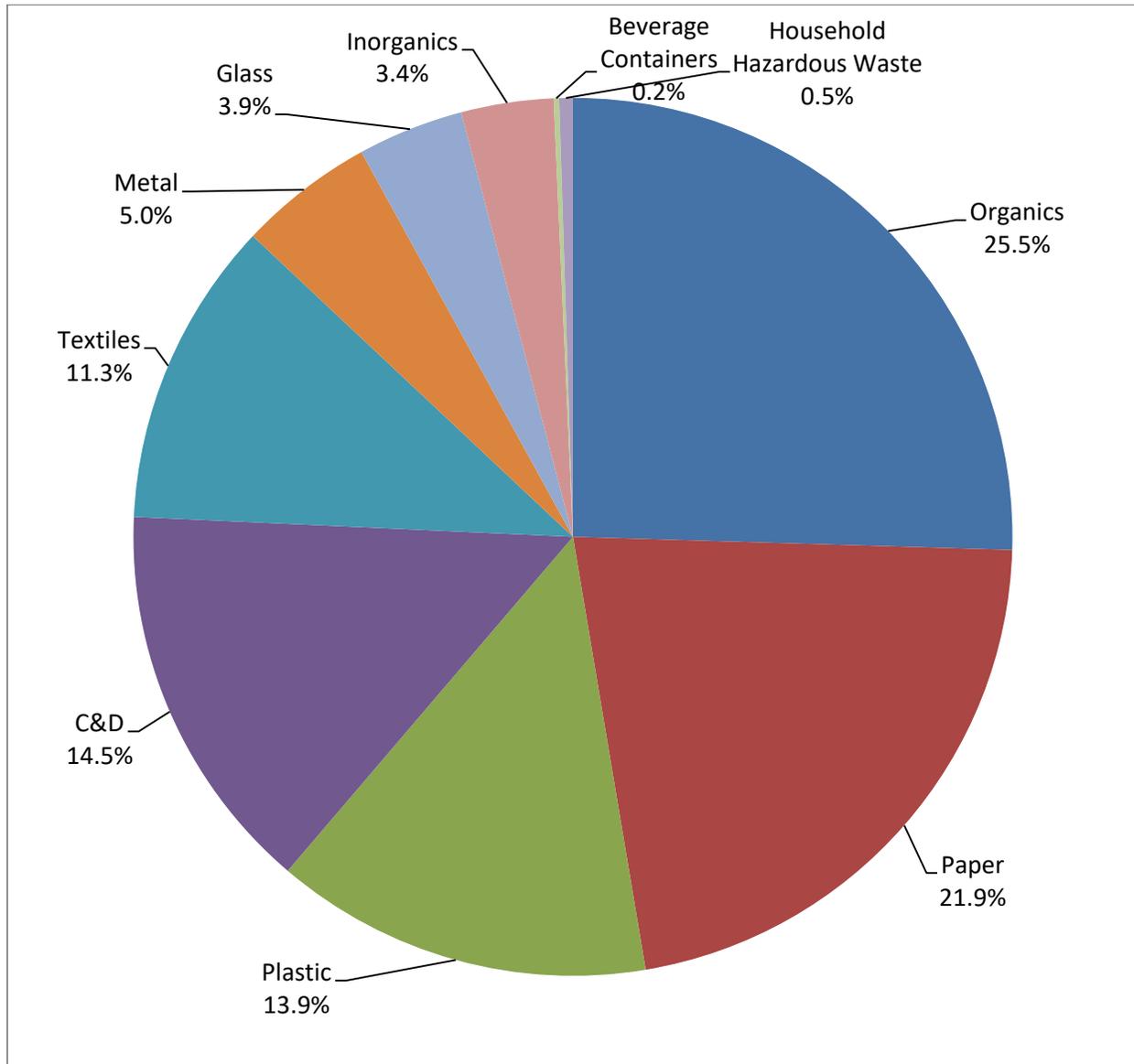
Making the Crust: Mix flour, salt and water together until it forms a dough. Flatten $\frac{3}{4}$ of the dough into a well greased pizza pan (do not use a disposable foil pan for this activity). Roll the remaining $\frac{1}{4}$ dough into a long “snake” piece – to fit around the outer edge of the pizza – flatten slightly.

1. Using the pie chart as a guide, cut the dough into the same sections or “slices”. Bake at 350 degrees for 10 to 15 minutes, taking the pizza out every 3 minutes to re-cut the sections. Remove the pizza and let cool. Dough should be hard before applying glue.

2. Mix glue with red food coloring until the desired “sauce” effect is achieved. Apply sauce with a small paint brush on one slice at a time, and apply corresponding toppings. Use additional uncolored glue when needed to secure items.
3. Have students discuss ways in which they can practice the 3 R’s of solid waste management – reduce, reuse, recycle – with each of the different categories.

Alternate: Draw a large garbage pizza on a bulletin board, or use cardboard for the crust. Have students cut pictures out of magazines for each category.

Note: Since 1990, landscape waste has been banned from being landfilled in Illinois, which is why it is not shown in this activity. It is collected separately and composted. All residential solid waste in Illinois is landfilled (buried in the ground) and not incinerated (burned).



Source: Department of Commerce and Economic Opportunity, commerce.state.il.us
Illinois Commodity - Waste Generation and Characterization Study, 2009