

Bread in a Bag

This activity works best when students work in small groups or with a partner. If you are making bread as a microorganism experiment, vary the yeast, sugar, salt, or water temperature for interesting results. If you would like to do an entire unit on wheat, complete with curriculum, seeds, and a grinder, contact the AITC office.

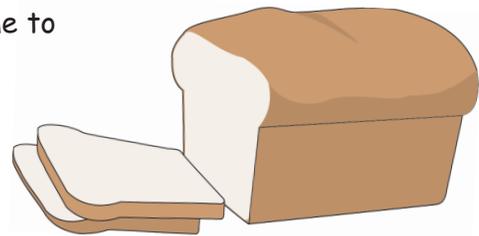
In a one gallon (heavy duty) Ziploc bag, mix:
1/2 cup all-purpose flour
1 pkg. or 2 1/4 teaspoons yeast
1/2 cup warm water
2 tablespoons sugar

Close bag and knead it with fingers until the ingredients are completely blended. Leave bag closed, with contents in the corner, and let dough rest 10 minutes (this is a good time to make butter, see next activity.) Then add:

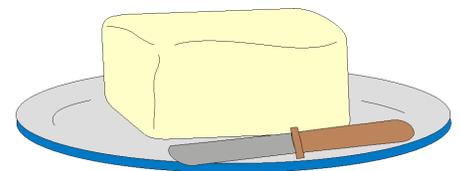
2 cups flour
3/4 cup warm water
1 tablespoon vegetable oil
2 teaspoons salt

Mix well.

Add enough all-purpose flour to make a stiff dough, about 1 or 1-1/2 cups. Close the bag and knead it (you may need to remove some air in the bag). Add more flour until dough no longer sticks to the bag. Let the dough rest for 5 minutes. Open the bag and allow the dough to fall out onto clean or gloved (food handler's gloves) hands. Spray the hands or gloves with oil so there will be no sticking. Form the dough into a loaf, place in a loaf pan or onto a cafeteria cookiesheet. Remember the dough will grow 1-1/2 times larger, so leave space between loaves if baking on a cookiesheet. Allow it to rise 30 (quick rise) to 45 minutes. Bake 30-35 minutes in a 350 degree oven. Delicious!



<u>Materials</u>	
<input checked="" type="checkbox"/>	4 cups flour
<input checked="" type="checkbox"/>	1 pkg. or 2 1/4 teaspoons yeast
<input checked="" type="checkbox"/>	Warm water
<input checked="" type="checkbox"/>	2 tablespoons sugar
<input checked="" type="checkbox"/>	2 teaspoons salt
<input checked="" type="checkbox"/>	1 tablespoon vegetable oil
<input checked="" type="checkbox"/>	Gallon Ziploc bag



Butter in a Jar

Pour heavy whipping cream into a jar (plastic or glass, small plastic 2 oz. cups with lids available from restaurant supply stores or your cafeteria, work great and then everyone can make their own butter). Fill the container 2/3 full, you'll need some air space. Make sure the lid is secure. Shake briskly, the more cream in a container, the longer it will take. Cream in 2 oz. containers should take 5-10 minutes. After butter is separated it is usually salted. For an experiment, try salting before shaking.

<u>Materials</u>	
<input checked="" type="checkbox"/>	Heavy whipping cream
<input checked="" type="checkbox"/>	Jar with lid or
<input checked="" type="checkbox"/>	2 oz. plastic cups with lids