Food Inheritance

There are all sorts of food. You are designing a virtual bake sale, so have designed a class Food as shown below.

```
public class Food
{
	protected String str;
	public Food()
	{
		str = new String("");
	}
	public Food (String prepMethod, String ingredient, String name)
	{
		str = "At the sale: " + name + "" + prepMethod + "with " + ingredient;
	}

	public void printForSale()
	{
		System.out.println(str);
	}
```

Food is just one class, and it will have subclasses that you define. To use your new classes, you call them from main(), which is in the class FoodTester, as shown below.

Code in main():

```
Food food1 = new Food ("baked", "banana", "muffins");
food1.printForSale();
Food food2 = new Food ("fried", "yam", "fritters");
food2.printForSale();
Pizza pizza = new Pizza ("pepperoni");
pizza.printForSale();
```

Terminal window output: (There are imaginary 3 blank lines here! Remember that we will not print in main – ever! ☺)

At the sale: muffins baked with bananas
At the sale: fritters fried with yams
At the sale: pizza baked with pepperoni

First, create a directory call *Food*, which is inside your Java directory/folder. All files must be in Food.

1) Write a subclass of Food called Pizza. All pizza is baked and is called pizza, so make the constructor for Pizza accept one variable (the ingredient). Be sure to use the commands super and extends in your class.
2) Write a subclass of Pizza called DeepDishPizza. All of the code used to get #1 working needs to remain unchanged! You will add code in order to get DeepDishPizza working with Pizza and thus Food. You have a lot of freedom with this one. Make parameters match. The minimum: it's name is deep dish pizza, not just pizza. You must write an overloaded constructor! You must also use overloaded constructors for #3.
3) First, use saveAs then add a 3 (for this version) to the end of each of the file names, i.e. Food3, FoodTester3, and Pizza3. Remember to add the 3 *in* the file as well. At the bake sale each piece will be sold. Modify the Food class (and subclasses) to use the number of pieces in each food and the cost per piece. Change the output so it will print the following sentences using table data. Note, you will need to use String.format() that I will explain in class.

   At the sale: muffins baked with bananas will be sold for 50 cents each. With 12 muffin(s), $6.00 can be made.
   At the sale: fritters baked with yams will be sold for 100 cents each. With 3 fritter(s), $3.00 can be made.
   At the sale: pizza baked with anchovies will be sold for 250 cents each. With 8 pizza(s), $20.00 can be made.

Food Type	Number of Pieces	Cost per Piece
Muffins	12	$0.50
Fritters	3	$1.00
Pizza of any kind	8	$2.50

***Be sure to modify the parent class first and keep subclasses as short as possible!**