



Working as a waiter/waitress is a popular job. To make it easiest to remember how to thoroughly take orders, wait staff learn a taxonomy of menu items, asking the same questions for many of them, and growing lists of ingredients. The taxonomy above shows 9 classes total, and some of their attributes.

1. The base of Meat Sandwich is (circle one) Grilled Cheese      Burger      Sandwich      Drink
2. Drink extends (circle one)      Order Item      Soda      Sandwich      ice
3. Sandwich is the subclass of \_\_\_\_\_ (fill in blank).
4. The parent of Grilled Cheese is \_\_\_\_\_ (fill in blank).
5. The super-super class of Soda is \_\_\_\_\_ (fill in blank).
6. Consider the code snippet shown below, then answer the questions given after each letter.

```

public class OrderItem
{
    String question;
    String ingredient;
    public OrderItem()
    {
        question = "What can I get you?"; // Will be used below in askOrder()
        ingredient = "";
    }
    public void askOrder() {

```

- a) Complete the class header for the Sandwich class to show the appropriate syntax used to establish an inheritance relationship with Sandwich's superclass.

public class Sandwich \_\_\_\_\_

- b) In the Sandwich constructor, the superclass constructor will be run in order to begin constructing a Sandwich. Write the one line of code to do this.

\_\_\_\_\_

- c) After using the line in (b), you decide to replace question's value with "White or Wheat?" If you are changing the value of the variable established by running this constructor (as in b), complete the line of code.

super. \_\_\_\_\_ = \_\_\_\_\_

- d) You decide to ask for the order the same procedural way as in the OrderItem class, but decide at the Burger level you need to change how you ask, as you need to ask extra questions. You decide to override the askOrder() method. This means what? (circle one)

- a. You'll use super.super.super.askOrder()      c. You'll use cancel.askOrder()  
b. You'll write askOrder() in the Burger class      d. You'll use askOrder(askOrder())

- e) In the code shown above, question is a \_\_\_\_\_ variable.(circle one)      field      local